

## **APPENDIX 13**

### Study data for the 227 studies of children

Note that this report is based only on fields which provide positive information. Thus, for example, the card 'matching factors' is shown only for case-control studies, and only those factors actually used are shown. Other factors for this card, for which no output is shown, are taken not to be used.

Full details of the references corresponding to the reference IDs are given at the end of this Appendix (p. App13-158).

App13-2

ADDOYO Study description

Study title : Addo-Yobo  
 Full study title : Kumasi paediatric clinic CC (ca 1999?)  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 17  
 Study race : all (in country)  
 Continent : Africa  
 Country in Africa : Ghana  
 Location within country: Kumasi  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 2001  
 Reference ID of principal publication: ADDOYO2001  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : ADDOYO  
 Phase of IESAST project: Original

Study design

Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : all in given hosp/clinic(s)  
 Type of population - controls (if diff from cases): rndm at gvn schls no resp symp  
 Respondent : Child  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: attending asthma clinic with phys diag asthma, use of anti-asthma medication and symptoms (cough and/or wheeze) in last 12m  
 Number of current asthma cases: 50  
 Total number of subjects: 100

Matching factors

Cases and controls matched on sex: present  
 Cases and controls matched on age (CC): present

Confounders considered

Total number of adjustment factors used: 4  
 Adjusted for location within study: 1  
 Adjusted for household composition: 1  
 Adjusted for child other medical history/symptoms: 2  
 Other confounders considered but rejected: present  
 Comments : Adjustment for CMED(8=sensitivity to allergens), FMED(5), COHE, HOCO, PETS, ALGN(2) were rejected from step-wise MLR due to lack of significance

Derived 1 - RRs available

Number of RRs : 2  
 Household exposure RRs: 2

AGAB11 Study description

Study title : Agabiti 1  
 Full study title : SIDRIA 10 regions schools CS 1994-95 - children (SIDRIA = Studi Italiani sui Disturbi Respiratori nell'Infanzia e l'Ambiente)  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 7  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Italy  
 Location within country: 10 regions in northern and central Italy  
 Start year of study : 1994  
 End year of study : 1995  
 Principal publication year: 1999  
 Reference ID of principal publication: AGABIT1999  
 Reference ID of additional publication(s): SIDRIA1998, SIDRIA1997, RUSCON1999  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : AGAB11  
 Phase of IESAST project: Original

Study design

Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : random schoolchildren  
 Type of population - controls (if diff from cases): no resp symptms or hist asthma  
 Respondent : Parent  
 Child smokes : Assumed no smokers  
 Standard questionnaire: ISAAC  
 Comments : Conducted as a cross-sectional survey but analysed as a case-control, excluding subjects with respiratory symptoms or past history of asthma

App13-3

AGABI1

(continued)

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: history of asthma with wheezing in last 12m  
 Number of current asthma cases: 969  
 Total number of subjects: 15890

Confounders considered Total number of adjustment factors used: 15  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for type of respondent: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for cooking/heating methods: 2  
 Adjusted for damp/mould in home: 1  
 Adjusted for housing quality/age/size: 1  
 Adjusted for maternal smoking in pregnancy: 2  
 Adjusted for parental smoking current/since birth: 2  
 Adjusted for household ETS exposure: 1

Other results (not current db) Other definitions of asthma available: present Results available for past asthma (i.e. history of asthma but no symptoms in last 12m)  
 Wheezing/wheezing bronchitis available: present Results available for current wheeze not labelled as asthma; transient early wheezing; persistent wheezing; wheezing of late onset  
 Results by other stratifying factors available: present Results for maternal smoking available stratified by parental asthma

Derived 1 - RRs available Number of RRs : 75  
 Parental exposure RRs: 62  
 Household exposure RRs: 1  
 In utero x parent exposure combination RRs: 12

AGABI2

Study description Study title : Agabiti 2  
 Full study title : SIDRIA 10 regions schools CS 1994-95 - adolsecents (SIDRIA = Studi Italiani sui Disturbi Respiratori nell'Infanzia e l'Ambiente)  
 Study sex : both  
 Lowest age in study : 13  
 Highest age in study (at baseline): 14  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Italy  
 Location within country: 10 regions in northern and central Italy  
 Start year of study : 1994  
 End year of study : 1995  
 Principal publication year: 1999  
 Reference ID of principal publication: AGABIT1999  
 Reference ID of additional publication(s): SIDRIA1998  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : AGABI2  
 Phase of IESAST project: Original

Study design Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : random schoolchildren  
 Type of population - controls (if diff from cases): no resp symptms or hist asthma  
 Respondent : Parent  
 Child smokes : Smokers incl and adjusted for  
 Standard questionnaire: ISAAC  
 Comments : Conducted as a cross-sectional survey but analysed as a case-control, excluding subjects with respiratory symptoms or past history of asthma

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: history of asthma with wheezing in last 12m  
 Number of current asthma cases: 1306  
 Total number of subjects: 16445

App13-4

AGABI2  
(continued)

Confounders considered  
 Total number of adjustment factors used: 16  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for type of respondent: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for cooking/heating methods: 2  
 Adjusted for damp/mould in home: 1  
 Adjusted for housing quality/age/size: 1  
 Adjusted for child active smoking: 1  
 Adjusted for maternal smoking in pregnancy: 2  
 Adjusted for parental smoking current/since birth: 2  
 Adjusted for household ETS exposure: 1

Other results (not current db)  
 Other definitions of asthma available: present Results available for past asthma (i.e. history of asthma but no symptoms in last 12m)  
 Wheezing/wheezing bronchitis available: present Results available for current wheeze not labelled as asthma; transient early wheezing; persistent wheezing; wheezing of late onset  
 Results by other stratifying factors available: present Results for maternal smoking available stratified by parental asthma

Derived 1 - RRs available  
 Number of RRs : 75  
 Parental exposure RRs: 62  
 Household exposure RRs: 1  
 In utero x parent exposure combination RRs: 12

AGUDOT Study description  
 Study title : Agudo Trigueros  
 Full study title : Terrassa (Barcelona) schools CS 1997  
 Study sex : both  
 Lowest age in study : 14  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Spain  
 Location within country: Terrassa (Barcelona)  
 Start year of study : 1997  
 End year of study : 1997  
 Principal publication year: 2000  
 Reference ID of principal publication: AGUDOT2000  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : AGUDOT  
 Phase of IESAST project: Added Nov05

Study design  
 Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Child  
 Child smokes : Smokers excl questionnaire  
 Standard questionnaire: ISAAC  
 Comments : A few subjects were aged 16-17 (8.5%)

Asthma  
 Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Child report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: medication for asthma in last 12m  
 Number of lifetime asthma cases: not assessable  
 Number of current asthma cases: not assessable  
 Total number of subjects: 239  
 Comments : Number of subjects refers to never smokers, out of 789 children in total

Confounders considered  
 Total number of adjustment factors used: 5  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for parental smoking current/since birth: 2  
 Adjusted for other ETS exposure: 1 Refers to exposure more than once a week in means of transport and other public places

App13-5

AGUDOT

(continued)

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheezing ever, in last 12m, making speech difficult, nighttime waking and exercise induced  
Other exposures available: present Results available for exposure outside home (exposure more than once a week in means of transport and other public places)  
Other results for child smokers available: present

Derived 1 - RRs available Number of RRs : 4  
Parental exposure RRs: 4

AKCAKA Study description Study title : Akcakaya  
Full study title : Istanbul schools CS 1996-97  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 15  
Study race : all (in country)  
Continent : EEurope/Balkans  
Country in E Europe/Balkans: Turkey  
Location within country: 3 districts of Istanbul  
Start year of study : 1996  
End year of study : 1997  
Principal publication year: 2000  
Reference ID of principal publication: AKCAKA2000  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : AKCAKA  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 92  
Total number of subjects: 2276

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for ever wheezed. It is also stated that passive smoking was found not to be associated with any allergic disease, which included wheeze in last 12m; 4+ wheezing attacks in last 12m; frequent nocturnal wheeze; and exercise induced wheeze

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

ALBA Study description Study title : Alba  
Full study title : Barcelona primary care CC 1993  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 13  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Spain  
Location within country: Sanfeliu (Barcelona)  
Start year of study : 1993  
End year of study : 1993  
Principal publication year: 1996  
Reference ID of principal publication: ALBA1996  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : ALBA  
Phase of IESAST project: Original



App13-7

ALFRAL Study description

Study title : Al Frayh 1  
 Full study title : Jeddah & Damman population CS 1986-89  
 Study sex : both  
 Lowest age in study : 7  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Saudi Arabia  
 Location within country: Dammam, Jeddah  
 Start year of study : 1986  
 End year of study : 1989  
 Principal publication year: 1990  
 Reference ID of principal publication: ALFRAY1989  
 Reference ID of additional publication(s): BENER1991,ALFRAY1992  
 Overlap: ALFRAL/ALFRA2  
 Principal/subsidiary study: Principal  
 REF group : ALFRAL  
 Phase of IESAST project: Original  
 Comments : This study conducted in 2 regions, Jeddah and Damman, overlaps with ALFRA2 conducted in Damman and Riyadh. Some results available for all 3 regions combined (BENER1991) not used because of apparent inconsistencies. Result from ALFRAY1992 entered here also refers to all 3 regions

Study design

Study type : cross-sectional  
 Type of population : random children  
 Other exclusions : non-Saudis  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 106  
 Total number of subjects: 1953  
 Comments : Diagnosis is referred to as bronchial asthma in some tables

Confounders considered

Total number of adjustment factors used: 7  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for pets in household: 1  
 Adjusted for child other medical history/symptoms: 3  
 Adjusted for parental smoking current/since birth: 2  
 Other confounders considered but rejected: present  
 Comments : Other variables were not included in the MLR because they did not add explanatory power, but it is not specified what variables

Other results (not current db)

Other definitions of asthma available: present Results available for frequent asthma attack (>1/m) vs infrequent (<4/y) (BENER1991)  
 Wheezing/wheezing bronchitis available: present Results available for wheeze  
 Results by other stratifying factors available: present Results available for wheeze stratified by location

Derived 1 - RRs available

Number of RRs : 5  
 Parental exposure RRs: 5

ALFRA2 Study description

Study title : Al Frayh 2  
 Full study title : Riyadh & Damman population CS 1986-89  
 Study sex : both  
 Lowest age in study : 7  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Saudi Arabia  
 Location within country: Dammam, Jeddah  
 Start year of study : 1986  
 End year of study : 1989  
 Principal publication year: 1990  
 Reference ID of principal publication: ALFRAY1990  
 Reference ID of additional publication(s): BENER1991, ALFRAY1992  
 Overlap: ALFRAL/ALFRA2  
 Principal/subsidiary study: Subsidiary  
 REF group : ALFRAL  
 Phase of IESAST project: Original  
 Comments : This study conducted in 2 regions, Riyadh and Damman, overlaps with ALFRAL conducted in Damman and Jeddah. Some results available for all 3 regions

App13-8

ALFRA2  
(continued)

combined (BENER1991) not used because of apparent inconsistencies. One results from ALFRAY1992 referring to all three regions has been entered as ALFRAL

Study design    Study type            : cross-sectional  
                   Type of population    : random children  
                   Other exclusions     : non-Saudis  
                   Respondent           : Parent  
                   Child smokes         : No mention  
                   Standard questionnaire: Non std/NA/NK

Asthma            Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Parent report (physician diag)  
                   Timing of lifetime asthma: Lifetime  
                   Timing of incidence asthma: NA (prevalence analysis only)  
                   Description of lifetime asthma: asthma  
                   Number of lifetime asthma cases: 134  
                   Total number of subjects: 2006  
                   Comments             : Diagnosis is referred to as bronchial asthma in some tables

Other results    Wheezing/wheezing bronchitis available: present Results available for wheezy  
 (not current    bronchitis  
 db)

Derived 1 -      Number of RRs         : 2  
 RRs available    Parental exposure RRs: 2

ANDRAE Study            Study title            : Andrae  
           description    Full study title       : Rural Sweden (Norrkoping) CS 1985  
                           Study sex              : both  
                           Lowest age in study : 0  
                           Highest age in study (at baseline): 16  
                           Study race             : all (in country)  
                           Continent              : WEurope/Scandinavia  
                           Country in W Europe : Sweden  
                           Location within country: 7 rural areas near Norrkoping  
                           Start year of study : 1985  
                           End year of study     : 1985  
                           Principal publication year: 1988  
                           Reference ID of principal publication: ANDRAE1988  
                           Overlap: none  
                           Principal/subsidiary study: Principal  
                           REF group             : ANDRAE  
                           Phase of IESAST project: Original

Study design    Study type            : cross-sectional  
                   Type of population    : all children  
                   Respondent           : Parent  
                   Child smokes         : No mention  
                   Standard questionnaire: Non std/NA/NK

Asthma            Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
                   Timing of lifetime asthma: Lifetime  
                   Timing of incidence asthma: NA (prevalence analysis only)  
                   Description of lifetime asthma: allergic asthma (= ever had a 'breathing problem' with heavy breathing and wheezing, and this occurs when in contact with deciduous trees, grass, flowers or furred animals)  
                   Number of lifetime asthma cases: 264  
                   Total number of subjects: 4990  
                   Comments             : Number of cases from %

Confounders     Total number of adjustment factors used: 3  
 considered      Adjusted for location within study: 1  
                   Adjusted for SES (inc parental education): 1  
                   Adjusted for damp/mould in home: 1

Other results    Other definitions of asthma available: present Results available for birch pollen  
 (not current    induced asthma  
 db)              Results by other stratifying factors available: present Results available stratified for dampness in house

Derived 1 -      Number of RRs         : 2  
 RRs available    Parental exposure RRs: 2

App13-9

ANNES2 Study description

Study title : Annesi-Maesano2  
 Full study title : French 5-centre schools CS 1993-94  
 Study sex : both  
 Lowest age in study : 13  
 Highest age in study (at baseline): 14  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : France  
 Location within country: Bordeaux,Marseilles,Montpellier,Strasbourg,WMarne  
 Start year of study : 1993  
 End year of study : 1994  
 Principal publication year: 2004  
 Reference ID of principal publication: ANNESI2004  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : ANNES2  
 Phase of IESAST project: Added Nov05

Study design

Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Child  
 Child smokes : Smokers excl questionnaire  
 Standard questionnaire: ISAAC

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: current asthma (=chest wheezing or whistling in last 12m and ever had asthma)  
 Number of lifetime asthma cases: 1603  
 Number of current asthma cases: 735  
 Total number of subjects: 13224  
 Comments : Numbers of cases and of subjects from %, may be subject to rounding error

Confounders considered

Total number of adjustment factors used: 2  
 Adjusted for sex : present  
 Adjusted for age : 1

Other results (not current db)

Other definitions of asthma available: present Severe asthma (4+ speech limiting attacks or 1+ night-waking attack in last 12m) stated not related to passive smoking (text page 1019)  
 Wheezing/wheezing bronchitis available: present Results available for wheezing/whistling in last 12m  
 Other results for child smokers available: present  
 Results by other stratifying factors available: present sex-specific results are given in Figure 1 page 1020, but too small to be accurately extracted

Derived 1 - RRs available

Number of RRs : 4  
 Total exposure RRs : 4

ANNESI Study description

Study title : Annesi-Maesano  
 Full study title : Children with parent born 1958 CS 1991  
 Study sex : both  
 Lowest age in study : 1  
 Highest age in study (at baseline): 18  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: nationwide  
 Start year of study : 1991  
 End year of study : 1991  
 Principal publication year: 2001  
 Reference ID of principal publication: ANNESI2001  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : ANNESI  
 Phase of IESAST project: Original  
 Comments : This study includes children with a parent in study KAPLAN

## App13-10

## ANNESI

(continued)

Study design      Study type                : cross-sectional  
 Type of population : all chld rndm parent NCDS  
 Other exclusions    : restricted to children with a parent born 1958 who participated  
                          in the National Child Development Study (NCDS)  
 Respondent                : Parent  
 Child smokes             : No mention  
 Standard questionnaire: ISAAC

Asthma                Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: ever had attacks of asthma  
 Number of lifetime asthma cases: 419  
 Total number of subjects: 4153  
 Comments                : Number of cases based on %, may be subject to rounding error

Derived 1 -        Number of RRs                : 2  
 RRs available    Parental exposure RRs: 2

ARIF      Study                Study title                : Arif  
           description      Full study title            : South Plains/Pan Handle (Texas) household CS 2001  
                          Study sex                    : both  
                          Lowest age in study        : 0  
                          Highest age in study (at baseline): 16  
                          Study race                  : all (in country)  
                          Continent                  : NAmerica  
                          Country in N America: USA  
                          US state                    : Tex  
                          Location within country: South Plains/Pan Handle, Texas  
                          Start year of study        : 2001  
                          End year of study         : 2001  
                          Principal publication year: 2004  
                          Reference ID of principal publication: ARIF2004  
                          Overlap: none  
                          Principal/subsidiary study: Principal  
                          REF group                  : ARIF  
                          Phase of IESAST project: Added Nov05

Study design      Study type                : cross-sectional  
 Type of population : random children  
 Respondent                : Parent  
 Child smokes             : No mention  
 Standard questionnaire: ISAAC

Asthma                Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 207  
 Total number of subjects: 1500  
 Comments                : Number of cases based on %, may be subject to rounding error

Confounders        Total number of adjustment factors used: 10  
 considered        Adjusted for sex            : present  
                          Adjusted for age            : 1  
                          Adjusted for race          : 1  
                          Adjusted for location within study: 1  
                          Adjusted for SES (inc parental education): 1  
                          Adjusted for household composition: 1  
                          Adjusted for housing quality/age/size: 1  
                          Adjusted for pets in household: 1  
                          Adjusted for child other medical history/symptoms: 1  
                          Adjusted for obesity/BMI: 1

Other results      Wheezing/wheezing bronchitis available: present Results available for wheezing/  
 (not current        whistling in chest in last 12m  
 db)

Derived 1 -        Number of RRs                : 2  
 RRs available    Household exposure RRs: 2

ARSHAD Study description

Study title : Arshad  
 Full study title : Isle of Wight allergen avoidance prosp 1990-1995  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 4  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: Isle of Wight  
 Start year of study : 1990  
 End year of study : 1991  
 Final follow up year: 1995  
 Principal publication year: 1992  
 Reference ID of principal publication: ARSHAD1992A  
 Reference ID of additional publication(s): HIDE1994, HIDE1996  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : ARSHAD  
 Phase of IESAST project: Original

Study design

Study type : prospective  
 Type of population : all gvn hosp high allergy risk  
 Medical exclusions : restricted to subjects with high allergy risk  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Subjects were prenatally allocated to groups with either restricted exposure to potential allergens (food/house dust mite) or unrestricted

Asthma

Current asthma available: present  
 Repeat measures for current asthma: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current NOS  
 Description of current asthma: asthma (= 3+ separate episodes of cough & wheeze)  
 Number of current asthma cases: 36  
 Total number of subjects: 285

Confounders considered

Total number of adjustment factors used: 10  
 Adjusted for sex : present  
 Adjusted for family (parent/sibl) medical history: 3  
 Adjusted for SES (inc parental education): 1  
 Adjusted for pets in household: 1  
 Adjusted for exposure to food/housedust allergens: 1  
 Adjusted for child other medical history/symptoms: 1  
 Adjusted for parental smoking current/since birth: 2

Derived 1 - RRs available

Number of RRs : 7  
 Parental exposure RRs: 7

AZIZI Study description

Study title : Azizi  
 Full study title : Kuala Lumpur hospital CC 1989-90  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 5  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Malaysia  
 Location within country: Kualar Lumpur  
 Start year of study : 1989  
 End year of study : 1990  
 Principal publication year: 1995  
 Reference ID of principal publication: AZIZI1995  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : AZIZI  
 Phase of IESAST project: Original

App13-12

AZIZI  
(continued)

Study design      Study type                    : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: nonrespiratory disease  
 Type of population : all hosp/clinic patients  
 Medical exclusions : acute bronchiolitis, pneumonia, stridor, chronic and surgical  
                          respiratory conditions, heart disease, acute and chronic renal failure, oncological  
                          disorders, tuberculosis, immunological disorders, gross malnutrition  
 Type of population - controls (if diff from cases): no resp symptms or hist asthma  
 Respondent                    : Parent  
 Child smokes                 : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma                    Current asthma available: present  
 Current asthma is first occurrence: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: asthma (diagnosed if there was previous history of  
                          wheezing, and clinical findings and subsequent progress did not suggest other  
                          diagnosis)  
 Number of current asthma cases: 158  
 Total number of subjects: 359

Matching factors      Cases and controls matched on age (CC): present  
 Matched on hospital admission (ward, date etc): present

Other results (not current db)      Other exposures available: present Results available for sharing bedroom with an adult  
 smoker

Derived 1 -      Number of RRs                 : 2  
 RRs available      Parental exposure RRs: 2

BALL      Study description      Study title                    : Ball  
 Full study title               : Tucson newborns 1980-84 PS to 1997  
 Study sex                       : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 13  
 Study race                     : all (in country)  
 Continent                      : NAmerica  
 Country in N America: USA  
 US state                        : Nev,Ut,Ariz  
 Location within country: Tucson (Arizona)  
 Start year of study : 1980  
 End year of study : 1984  
 Final follow up year: 1997  
 Principal publication year: 2000  
 Reference ID of principal publication: BALL2000B  
 Reference ID of additional publication(s): BALL2000,TAUSSI1989,WRIGHT1989A  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group                      : BALL  
 Phase of IESAST project: Original

Study design      Study type                    : prospective  
 Type of population : all newborns at given hosp(s)  
 Medical exclusions : oxygen >6hrs, major congenital abnormalities, congenital chest  
                          or lung problems (e.g. cystic fibrosis), symptomatic congenital heart problems,  
                          severe systemic disease  
 Respondent                    : Parent  
 Child smokes                 : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma                    Current asthma available: present  
 Repeat measures for current asthma: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: phys diag asthma with exacerbation in last 12m  
 Number of current asthma cases: 192  
 Total number of subjects: 1035







App13-16

BERGMA

(continued)

Study design      Study type               : prospective  
 Type of population : rnd newborns gvn hosp(s)  
 Respondent         : Parent  
 Child smokes       : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments           : Subjects were 419 'high risk' (2 atopic family members and/or high cord blood IgE) newborns, and a random sample of 815 other newborns

Asthma             Current asthma available: present  
 Repeat measures for current asthma: present  
 Source of current asthma diagnosis: Med rec or par rep (phys diag)  
 Timing of current asthma: current NOS  
 Description of current asthma: asthma  
 Number of current asthma cases: not assessable  
 Total number of subjects: 1314  
 Comments           : Definition of asthma is unclear. BERGMA2000 refers to lifetime prevalence 'based on physical examination and parent report' but presents results for age 3-6y (during which period children were seen annually). LAU2002 refers to 'ever physician diagnosed' (i.e. also lifetime) but presentation of results for age 7 sounds as if it refers to current asthma

Confounders considered      Total number of adjustment factors used: 8  
 Adjusted for sex       : present  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 2  
 Adjusted for SES (inc parental education): 1  
 Adjusted for child other medical history/symptoms: 3  
 Other confounders considered but rejected: present  
 Comments            : Adjustment for HOCO and PAGE rejected from MLR due to lack of significance

Other results (not current db)      Wheezing/wheezing bronchitis available: present Results available for wheeze age <3

Derived 1 - RRs available      Number of RRs           : 2  
 Parental exposure RRs: 1  
 Household exposure RRs: 1

BRABIN

Study description      Study title               : Brabin  
 Full study title       : 1st Merseyside primary school dust expos CS 1991  
 Study sex               : both  
 Lowest age in study    : 5  
 Highest age in study (at baseline): 11  
 Study race              : all (in country)  
 Continent               : WEurope/Scandinavia  
 Country in W Europe    : UK  
 Location within country: 3 areas in Merseyside  
 Start year of study    : 1991  
 End year of study       : 1991  
 Principal publication year: 1994  
 Reference ID of principal publication: BRABIN1994  
 Overlap: KELLY/BRABIN  
 Principal/subsidiary study: Principal  
 REF group               : BRABIN  
 Phase of IESAST project: Original  
 Comments               : Overlaps with study KELLY which was conducted 2 years later at the same schools but including all (rather than 50%) children. 58% of children in this study were also included in study KELLY

Study design           Study type               : cross-sectional  
 Type of population     : random schoolchildren  
 Respondent             : Parent  
 Child smokes           : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma                 Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 318  
 Total number of subjects: 1819

BRABIN  
(continued)

Confounders considered Total number of adjustment factors used: 6  
Adjusted for sex : present  
Adjusted for location within study: 1  
Adjusted for family (parent/sibl) medical history: 2  
Adjusted for SES (inc parental education): 1  
Adjusted for child other medical history/symptoms: 1  
Other confounders considered but rejected: present  
Comments : Adjustment for LOC, DAMP, PETS rejected from stepwise MLR

Other results (not current db) Other definitions of asthma available: present Results available for well controlled asthma  
Wheezing/wheezing bronchitis available: present Results available for wheezing; for recent absenteeism from school due to cough wheeze or breathlessness  
Results by other stratifying factors available: present Results available stratified by location

Derived 1 - RRs available Number of RRs : 3  
Household exposure RRs: 3

BURCHF Study description Study title : Burchfiel  
Full study title : Tecumseh Community Health 2nd cycle CS 1962-65  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 19  
Study race : all (in country)  
Continent : N America  
Country in N America: USA  
US state : Mich,Ind,Oh,Tenn  
Location within country: Tecumseh (Michigan)  
Start year of study : 1962  
End year of study : 1965  
Principal publication year: 1986  
Reference ID of principal publication: BURCHF1986  
Reference ID of additional publication(s): HIGGIN1975  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : BURCHF  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all children  
Other exclusions : not living with both parents  
Respondent : Parent or child (dep age)  
Child smokes : Smkrs above given age excluded  
Standard questionnaire: Non std/NA/NK  
Comments : Only subjects age 16-19 were interviewed directly, and smokers excluded

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma (=asthma or wheeze with at least 2 of: SOB; allergen exposure; physician diagnosis of asthma or wheezy bronchitis)  
Number of lifetime asthma cases: 436  
Total number of subjects: 3482

Confounders considered Total number of adjustment factors used: 3  
Adjusted for age : 1  
Adjusted for child other medical history/symptoms: 2

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheeze

Derived 1 - RRs available Number of RRs : 14  
Parental exposure RRs: 14

BURR Study description Study title : Burr  
Full study title : South Wales valleys PS 1982 cohort to 1989  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 7  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: 2 valleys in South Wales  
Start year of study : 1982  
End year of study : 1982  
Final follow up year: 1989  
Principal publication year: 1993  
Reference ID of principal publication: BURR1993  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : BURR  
Phase of IESAST project: Original

Study design Study type : prospective  
Type of population : all gvn hosp high allergy risk  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : Subjects were infants born to mothers who reported that they,  
their husband or children had ever had asthma, eczema or hay fever

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Medical records  
Timing of lifetime asthma: NA (incidence only)  
Timing of incidence asthma: lifetime (recruit at birth)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 32  
Total number of subjects: 453

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheeze ever  
Results by other stratifying factors available: present Results for wheeze available  
stratified by atopy

Derived 1 - RRs available Number of RRs : 1  
Parental exposure RRs: 1

BUTZ Study description Study title : Butz  
Full study title : Pediatric practices (Baltimore?) CC 1989  
Study sex : both  
Lowest age in study : not assessable  
Highest age in study (at baseline): not assessable  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: USA  
US state : Pa,NJ,Md,WVa,Va,Del,WashDC  
Location within country: metropolitan area (Baltimore?)  
Start year of study : 1989  
End year of study : 1989  
Principal publication year: 1992  
Reference ID of principal publication: BUTZ1992  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : BUTZ  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : primary care NOS  
Medical exclusions : cystic fibrosis, rheumatoid arthritis  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : Age range unknown, average (including other diseases groups not  
used here) was 9.3 years



CELEDO Study description

Study title : Celedon  
Full study title : Costa Rica CC within schools CS 1998-99  
Study sex : both  
Lowest age in study : 10  
Highest age in study (at baseline): 13  
Study race : all (in country)  
Continent : SCAmerica  
Country in S/C America: Costa Rica  
Location within country: Nationwide  
Start year of study : 1998  
End year of study : 1999  
Principal publication year: 2001  
Reference ID of principal publication: CELEDO2001  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : CELEDO  
Phase of IESAST project: Added Nov05

Study design

Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : random schoolchildren  
Respondent : Child  
Child smokes : No mention  
Standard questionnaire: ISAAC  
Comments : Subjects were selected from an initial screening phase, heavily oversampling children with wheeze, with the intention of including approximately 50% with asthma

Asthma

Current asthma available: present  
Source of current asthma diagnosis: Child report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: ever diagnosed asthma, and either asthma attack or at least one symptom (cough without cold, wheeze, nocturnal cough/wheeze) in last 12m  
Number of current asthma cases: 114  
Total number of subjects: 214

Confounders considered

Total number of adjustment factors used: 6  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for location within study: 1  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 1  
Adjusted for child other medical history/symptoms: 1  
Other confounders considered but rejected: present  
Comments : Variables considered but not used (rejected from MLR) were breastfeeding, birth weight, siblings, SPT, IgE, allergic rhinitis

Other results (not current db)

Results by other stratifying factors available: present Results were said to be unchanged when restricted to subjects without rhinitis

Derived 1 - RRs available

Number of RRs : 2  
Parental exposure RRs: 2

CHEN1 Study description

Study title : Chen 1  
Full study title : Chang-Ning Shanghai population CS 1985  
Study sex : both  
Lowest age in study : 1  
Highest age in study (at baseline): 1  
Study race : all (in country)  
Continent : Asia  
Country in Asia : China  
Location within country: Chang-Ning (Shanghai)  
Start year of study : 1985  
End year of study : 1985  
Principal publication year: 1988  
Reference ID of principal publication: CHEN1988  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : CHEN1  
Phase of IESAST project: Original



CHEN2

(continued)

Derived 1 - Number of RRs : 52  
 RRs available Parental exposure RRs: 32  
 Household exposure RRs: 20

CHHABR Study description Study title : Chhabra  
 Full study title : Delhi schools CS (ca 1997?)  
 Study sex : both  
 Lowest age in study : 4  
 Highest age in study (at baseline): 17  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : India  
 Location within country: Delhi  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 1998  
 Reference ID of principal publication: CHHABR1998  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : CHHABR  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: current or probable asthmatic (= recurrent wheeze in last 12m or wheezing with exercise or wheezing with a cold)  
 Number of current asthma cases: 436  
 Total number of subjects: 2609

Derived 1 - Number of RRs : 1  
 RRs available Household exposure RRs: 1

CHINN Study description Study title : Chinn NSHG  
 Full study title : UK National Study on Health and Growth LS, 1987-88  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 11  
 Study race : whites (inc hispanic)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: 42 English and 14 Scottish areas  
 Start year of study : 1987  
 End year of study : 1988  
 Principal publication year: 1991  
 Reference ID of principal publication: CHINN1991  
 Reference ID of additional publication(s): CHINN2001  
 Overlap: MELIA/SOMERV/CHINN  
 Principal/subsidiary study: Principal  
 REF group : CHINN  
 Phase of IESAST project: Original  
 Comments : Part of a longitudinal study of children age 5-11 in selected areas. Same areas studied in 1977 (MELIA), 1982 (SOMERV) and 1988 (part of CHINN) but have been entered separately as analysis treats then as separate cross-sectional studies. Overlap is small (e.g. 5% of children in CHINN-1988 had been in SOMERV-1982). Although not altogether clear, it seems that areas studied in 1987 and 1988 were non-overlapping, so combined results for those years are entered (CHINN)

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : Discussed, but no data avail  
 Standard questionnaire: Non std/NA/NK  
 Comments : The study also included non-whites in Scotland

CHINN

(continued)

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: at least one asthma attack in last 12m  
 Number of current asthma cases: 689  
 Total number of subjects: 11981  
 Comments : Total sample size (and hence number of cases which is based on %) relates to sample responding for bronchitis, the sample for other diseases including asthma being 'slightly greater' (Table V). This appears discrepant with text page 193 where the total sample is described as 'nearly 10300'

Confounders considered Total number of adjustment factors used: 17  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for race : 1  
 Adjusted for family (parent/sibl) medical history: 2  
 Adjusted for parent's age: 1  
 Adjusted for SES (inc parental education): 4  
 Adjusted for household composition: 2  
 Adjusted for cooking/heating methods: 1  
 Adjusted for housing quality/age/size: 1  
 Adjusted for child other medical history/symptoms: 1  
 Adjusted for obesity/BMI: 1  
 Adjusted for maternal smoking in pregnancy: 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for chest ever wheezy of whistling; chest wheezy or whistling most days or nights  
 Results by other stratifying factors available: present Results for asthma available stratified by sex and location (England inner city, England representative, Scotland)

Derived 1 - RRs available Number of RRs : 1  
 Parental exposure RRs: 1

CLARK Study description Study title : Clark  
 Full study title : Southampton hospital CC (ca 1993?)  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 7  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: Southampton  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 1994  
 Reference ID of principal publication: CLARK1994  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : CLARK  
 Phase of IESAST project: Original

Study design Study type : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: surgical outpatients  
 Type of population : random in given hosp/clinic(s)  
 Respondent : Parent  
 Child smokes : Discussed, but no data avail  
 Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: asthmatic attending asthma or medical clinic  
 Number of current asthma cases: 19  
 Total number of subjects: 62

Derived 1 - RRs available Number of RRs : 2  
 Household exposure RRs: 1  
 Biochemical exposure RRs: 1

CSONKA Study description Study title : Csonka  
 Full study title : Tampere primary schools CS (ca 1999?)  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 13  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Finland  
 Location within country: Tampere  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 2000  
 Reference ID of principal publication: CSONKA2000  
 Overlap: JAAKK2/CSONKA  
 Principal/subsidiary study: Principal  
 REF group : CSONKA  
 Phase of IESAST project: Original but modified Nov05  
 Comments : JAAKK2 covers all 1987 singleton births in Finland, which probably includes some of the children in CSONKA (a study of 6-13 year olds at unknown date but published in 2000)

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma (= at least one of: wheezy breathing; ER or hospital treatment for acute asthma; regular anti-inflammatory therapy for chronic asthma)  
 Number of current asthma cases: 207  
 Total number of subjects: 1816

Confounders considered Total number of adjustment factors used: 5  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for child other medical history/symptoms: 3  
 Adjusted for parental smoking current/since birth: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for SEX, CMED(2) and passive smoking in last year were rejected from stepwise MLR model due to lack of significance

Derived 1 - RRs available Number of RRs : 5  
 Parental exposure RRs: 1  
 Household exposure RRs: 4

CUNNI1 Study description Study title : Cunningham 1  
 Full study title : 24 communities air pollution schools CS 1988-90  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 11  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA and Canada  
 US state : multi (not all)  
 Location within country: 18 US and 6 Canadian communities  
 Start year of study : 1988  
 End year of study : 1990  
 Principal publication year: 1996  
 Reference ID of principal publication: CUNNIN1996  
 Reference ID of additional publication(s): SPEIZE1989  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : CUNNI1  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all schoolchildren  
 Other exclusions : questionnaire not completed by biologic mother  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

## CUNNI1

(continued)

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: active diagnosed asthma (= ever diagnosed and experienced symptoms in last 12m)  
Number of current asthma cases: 806  
Total number of subjects: 11534

Confounders considered Total number of adjustment factors used: 11  
Adjusted for sex : present  
Adjusted for race : 1  
Adjusted for location within study: 1  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 2  
Adjusted for cooking/heating methods: 1  
Adjusted for damp/mould in home: 1  
Adjusted for housing quality/age/size: 1  
Adjusted for maternal smoking in pregnancy: 1  
Adjusted for household ETS exposure: 1

Other results (not current db) Other definitions of asthma available: present Results available for ever diagnosed asthma and taken medication in last 12m  
Wheezing/wheezing bronchitis available: present Results available for wheezing with colds, or without colds, or persistent wheeze; for attacks of wheezing with SOB, at night, with exercise; for treatment for wheeze by medication or at ER

Derived 1 - RRs available Number of RRs : 20  
Parental exposure RRs: 4  
Household exposure RRs: 13  
In utero x household combination exposure RRs: 3

## CUNNI2

Study description Study title : Cunningham 2  
Full study title : Philadelphia schools air pollution CS 1993  
Study sex : both  
Lowest age in study : 9  
Highest age in study (at baseline): 11  
Study race : whites and blacks  
Continent : N America  
Country in N America: USA  
US state : Pa,NJ,Md,WVa,Va,Del,WashDC  
Location within country: 3 urban districts of Philadelphia  
Start year of study : 1993  
End year of study : 1993  
Principal publication year: 1995  
Reference ID of principal publication: CUNNIN1995  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : CUNNI2  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all in given school(s)  
Medical exclusions : history of cystic fibrosis, heart disease, chest injury/operation, neonatal oxygen/ventilation; unable to perform spirometry  
Other exclusions : questionnaire not by biologic mother, height or weight outside limits  
Respondent : Parent  
Child smokes : Smokers excl questionnaire  
Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 91  
Total number of subjects: 876

Derived 1 - RRs available Number of RRs : 1  
Parental exposure RRs: 1

DAIGLE Study description Study title : Daigler  
Full study title : Springville NY pediatric practice CC 1986-87  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): not assessable  
Study race : all (in country)  
Continent : N America  
Country in N America: USA  
US state : Vt,Me,NY,NH,Mass,RI,Conn  
Location within country: Springville (New York)  
Start year of study : 1986  
End year of study : 1987  
Principal publication year: 1991  
Reference ID of principal publication: DAIGLE1991  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : DAIGLE  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : all at given primary care(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : Upper age not stated, but average 6 (cases) and 3 (controls)

Asthma Current asthma available: present  
Source of current asthma diagnosis: Medical records  
Timing of current asthma: last n months (6<=n<12)  
Description of current asthma: asthma req hospitalization or 2 primry care visits  
Number of current asthma cases: 137  
Total number of subjects: 383

Confounders considered Total number of adjustment factors used: 8  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for air conditioning/humidifier: 1  
Adjusted for pets in household: 1  
Adjusted for child other medical history/symptoms: 2  
Adjusted for parental smoking current/since birth: 1  
Other confounders considered but rejected: present  
Comments : Adjustment for HOUS(6), COHE(5), AIRC and Paternal Smoking not entered into MLR model due to lack of significance

Derived 1 - RRs available Number of RRs : 4  
Parental exposure RRs: 4

DEBENE Study description Study title : De Benedetto  
Full study title : Abruzzo schools CS (ca 1993?)  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Italy  
Location within country: 5 towns in Abruzzo region  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 1994  
Reference ID of principal publication: DEBENE1994  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : DEBENE  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : school NOS  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

## DEBENE

(continued)

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: bronchial asthma  
 Number of lifetime asthma cases: 406  
 Total number of subjects: 5291

Derived 1 - Number of RRs : 3  
 RRs available Parental exposure RRs: 3

DEKKER Study Study title : Dekker  
 description Full study title : Canadian Air Quality & Health study CC 1988  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 8  
 Study race : all (in country)  
 Continent : N America  
 Country in N America: Canada  
 Location within country: 30 communities nationwide  
 Start year of study : 1988  
 End year of study : 1988  
 Principal publication year: 1991  
 Reference ID of principal publication: DEKKER1991  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : DEKKER  
 Phase of IESAST project: Original

Study design Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : all schoolchildren  
 Medical exclusions : cystic fibrosis  
 Other exclusions : temporary dwelling (mobile home, boat etc)  
 Type of population - controls (if diff from cases): no resp symptms or hist asthma  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Conducted as a cross-sectional study but analysed as a  
 case-control. Controls are subjects without history of diagnosed asthma, persistent  
 cough wheezing or phlegm, or chest illness in last year

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: current NOS  
 Description of current asthma: ever phys diag asthma and still has asthma  
 Number of current asthma cases: 634  
 Total number of subjects: 9841

Confounders Total number of adjustment factors used: 9  
 considered Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for race : 1  
 Adjusted for location within study: 1  
 Adjusted for type of respondent: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for damp/mould in home: 1  
 Adjusted for housing quality/age/size: 1

Other results Wheezing/wheezing bronchitis available: present Results availalble for wheezing without  
 (not current diagnosis of asthma  
 db)

Derived 1 - Number of RRs : 6  
 RRs available Household exposure RRs: 6

DEKOK Study description Study title : de Kok  
Full study title : Two Dutch region primary schools CS 1993  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Netherlands  
Location within country: Melick/Herkenbosch Asenray and Leek  
Start year of study : 1993  
End year of study : 1993  
Principal publication year: 1996  
Reference ID of principal publication: DEKOK1996  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : DEKOK  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Respondent : Parent  
Child smokes : Assumed no smokers  
Standard questionnaire: WHO

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: asthma (= 2+ key symptoms (wheeze or SOB) in last 12m)  
Number of current asthma cases: 115  
Total number of subjects: 1123

Confounders considered Total number of adjustment factors used: 6  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for location within study: 1  
Adjusted for cooking/heating methods: 1  
Adjusted for damp/mould in home: 1  
Adjusted for pets in household: 1

Other results (not current db) Other definitions of asthma available: present See general comment under OTHRES  
Wheezing/wheezing bronchitis available: present See general comment under OTHRES  
Comments : MLR was carried out for a number of symptoms and potential risk factors, with the results reported as 'positive but not significant'. However it is not clear exactly which other symptoms (possibly various definitions of wheeze, SOB with wheeze (ever and current), ever physician diagnosed asthma, current asthma medication as well as 'current asthma defined' which has been entered here), or which other risk factors (possibly family smoking in the house as well as 'maternal smoking' entered here) were used

Derived 1 - RRs available Number of RRs : 1  
Parental exposure RRs: 1

DELL Study description Study title : Dell  
Full study title : National Longitudinal CS cycle 1 1995-95  
Study sex : both  
Lowest age in study : 1  
Highest age in study (at baseline): 1  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: Canada  
Location within country: nationwide  
Start year of study : 1994  
End year of study : 1995  
Principal publication year: 2001  
Reference ID of principal publication: DELL2001  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : DELL  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : random children  
Other exclusions : primary caregiver not the biological mother  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

DELL

(continued)

Asthma	<p>Lifetime/incidence/unspec asthma available: present  Source of lifetime asthma diagnosis: Parent report (physician diag)  Timing of lifetime asthma: Lifetime  Timing of incidence asthma: NA (prevalence analysis only)  Description of lifetime asthma: asthma  Number of lifetime asthma cases: 138  Total number of subjects: 2184  Comments : Number of cases based on %, may be subject to rounding error</p>
Confounders considered	<p>Total number of adjustment factors used: 4  Adjusted for sex : present  Adjusted for SES (inc parental education): 1  Adjusted for child other medical history/symptoms: 2</p>
Other results (not current db)	<p>Wheezing/wheezing bronchitis available: present Results available for wheeze in last year</p>
Derived 1 - RRs available	<p>Number of RRs : 3  Parental exposure RRs: 3</p>
DIJKST Study description	<p>Study title : Dijkstra  Full study title : Rural SE Netherlands schools PS 2nd phase 1986-87  Study sex : both  Lowest age in study : 6  Highest age in study (at baseline): 12  Study race : all (in country)  Continent : WEurope/Scandinavia  Country in W Europe : Netherlands  Location within country: rural area in SE Netherlands  Start year of study : 1986  End year of study : 1987  Principal publication year: 1990  Reference ID of principal publication: DIJKST1990  Reference ID of additional publication(s): DIJKST1988  Overlap: none  Principal/subsidiary study: Principal  REF group : DIJKST  Phase of IESAST project: Original</p>
Study design	<p>Study type : cross-sectional  Type of population : all in given school(s)  Other exclusions : non-NW European origin  Respondent : Parent  Child smokes : Smokers excl unspecified  Standard questionnaire: WHO</p>
Asthma	<p>Current asthma available: present  Source of current asthma diagnosis: Parent report (other/uns/mix)  Timing of current asthma: last n months (12&lt;=n&lt;24)  Description of current asthma: asthma (= SOB with wheezing in last 12m)  Number of current asthma cases: 39  Total number of subjects: 775</p>
Confounders considered	<p>Total number of adjustment factors used: 13  Adjusted for sex : present  Adjusted for age : 1  Adjusted for type of respondent: 1  Adjusted for SES (inc parental education): 1  Adjusted for cooking/heating methods: 4  Adjusted for damp/mould in home: 1  Adjusted for housing quality/age/size: 2  Adjusted for pets in household: 1  Adjusted for maternal smoking in pregnancy: 1</p>
Other results (not current db)	<p>Wheezing/wheezing bronchitis available: present Results available for wheeze in last 12m</p>
Derived 1 - RRs available	<p>Number of RRs : 4  Household exposure RRs: 4</p>

DODGE Study description Study title : Dodge  
Full study title : Arizona smelter towns school LS 1978-80  
Study sex : both  
Lowest age in study : 8  
Highest age in study (at baseline): not assessable  
Highest age in study at final followup: 12  
Study race : all (in country)  
Continent : N America  
Country in N America: USA  
US state : Nev,Ut,Ariz  
Location within country: Morenci, San Manuel, Kingman (Arizona)  
Start year of study : 1978  
End year of study : 1979  
Final follow up year: 1980  
Principal publication year: 1982  
Reference ID of principal publication: DODGE1982  
Reference ID of additional publication(s): DODGE1983  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : DODGE  
Phase of IESAST project: Original

Study design Study type : prospective  
Type of population : all in given school(s)  
Other exclusions : single parent families  
Respondent : Parent  
Child smokes : No smkrs found above gvn age  
Standard questionnaire: Non std/NA/NK  
Comments : Only sixth grade children (age 12 approx) were asked about active smoking - question related to daily smoking

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 33  
Total number of subjects: 628

Confounders considered Total number of adjustment factors used: 1  
Adjusted for race : 1  
Comments : Alternative results adjusted for location are also available

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for ever has wheezing or whistling in chest

Derived 1 - RRs available Number of RRs : 12  
Parental exposure RRs: 12

DOLD Study description Study title : Dold  
Full study title : Munich & South Bavaria primary schools CS 1989-90  
Study sex : both  
Lowest age in study : 9  
Highest age in study (at baseline): 11  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Germany  
Location within country: Munich and rural southern Bavaria  
Start year of study : 1989  
End year of study : 1990  
Principal publication year: 1992  
Reference ID of principal publication: DOLD1992  
Reference ID of additional publication(s): NICOLA1998  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : DOLD  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Other exclusions : non-Germans  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

DOLD

(continued)

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthmatic (= at least one episode of bronchial asthma, or several episodes of asthmatic bronchitis or spastic bronchitis)  
 Number of lifetime asthma cases: 512  
 Total number of subjects: 6432  
 Comments : Number of cases/subjects based on Table 4, although number of subjects exceeds number included according to Methods page 764 (=5971)

Confounders considered Total number of adjustment factors used: 3  
 Adjusted for child other medical history/symptoms: 1  
 Adjusted for parental smoking current/since birth: 2

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for repeated wheeze and shortness of breath  
 Results by other stratifying factors available: present Results available stratified by cough for more than 14 days; by cough on exertion; by night cough; by repeated wheezing

Derived 1 - RRs available Number of RRs : 21  
 Parental exposure RRs: 13  
 Household exposure RRs: 8

DOTTER Study description Study title : Dotterud  
 Full study title : Nikel schools CS 1994  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 17  
 Study race : all (in country)  
 Continent : EEurope/Balkans  
 Country in E Europe/Balkans: Russia  
 Location within country: Nikel (northern Russia)  
 Start year of study : 1994  
 End year of study : 1994  
 Principal publication year: 2001  
 Reference ID of principal publication: DOTTER2001  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : DOTTER  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all schoolchildren  
 Respondent : Parent and child  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent or child rep (oth/unsp)  
 Timing of current asthma: current NOS  
 Description of current asthma: has suffered from asthma, and wheezes, coughs or has attacks of breathlessness (asthma) after exposure to extrinsic factors (pollen, animals, food, infections)  
 Number of current asthma cases: 64  
 Total number of subjects: 1684

Confounders considered Total number of adjustment factors used: 6  
 Adjusted for cooking/heating methods: 3  
 Adjusted for damp/mould in home: 1  
 Adjusted for pets in household: 1  
 Adjusted for exposure to food/housedust allergens: 1

Derived 1 - RRs available Number of RRs : 2  
 Household exposure RRs: 2

DUHME1 Study description Study title : Duhme 1  
Full study title : Munster schools CS 1994-95 age 5-8  
Study sex : both  
Lowest age in study : 5  
Highest age in study (at baseline): 8  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Germany  
Location within country: Munster  
Start year of study : 1994  
End year of study : 1995  
Principal publication year: 1998  
Reference ID of principal publication: DUHME1998  
Overlap: DUHME1/BEHREN  
Principal/subsidiary study: Subsidiary  
REF group : BEHREN  
Phase of IESAST project: Added Nov05  
Comments : This study is a subset of study BEHREN, which additionally includes a later phase

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Other exclusions : non-German nationality  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: asthma symptoms (=wheezing in last 12m and at least one attack of wheezing, sleep disturbing wheezing or speech limiting wheezing)  
Number of current asthma cases: 294  
Total number of subjects: 3458  
Comments : Number of cases based on %

Confounders considered Total number of adjustment factors used: 2  
Adjusted for sex : present  
Adjusted for age : 1

Derived 1 - RRs available Number of RRs : 3  
Household exposure RRs: 3

DUHME2 Study description Study title : Duhme 2  
Full study title : Munster schools CS 1994-95 age 12-15  
Study sex : both  
Lowest age in study : 12  
Highest age in study (at baseline): 15  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Germany  
Location within country: Munster  
Start year of study : 1994  
End year of study : 1995  
Principal publication year: 1998  
Reference ID of principal publication: DUHME1998  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : DUHME2  
Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Other exclusions : non-German nationality  
Respondent : Child  
Child smokes : Smokers included  
Standard questionnaire: ISAAC

Asthma Current asthma available: present  
Source of current asthma diagnosis: Child report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: asthma symptoms (=wheezing in last 12m and at least one attack of wheezing, sleep disturbing wheezing or speech limiting wheezing)  
Number of current asthma cases: 491  
Total number of subjects: 3745  
Comments : Number of cases based on %

## DUHME2

(continued)

Confounders considered      Total number of adjustment factors used: 2  
                                  Adjusted for sex        : present  
                                  Adjusted for age        : 1

Other results (not current db)      Other definitions of asthma available: present Results also available based on video questionnaire (rather than self-completion)  
                                  Other results for child smokers available: present Results available for active smoking in last month

Derived 1 - RRs available      Number of RRs            : 1  
                                  Household exposure RRs: 1

## DUHME3

Study description      Study title                : Duhme 3  
                                  Full study title        : Greifswald schools CS 1995 age 5-8  
                                  Study sex                : both  
                                  Lowest age in study    : 5  
                                  Highest age in study (at baseline): 8  
                                  Study race               : all (in country)  
                                  Continent                : WEurope/Scandinavia  
                                  Country in W Europe : Germany  
                                  Location within country: Greifswald  
                                  Start year of study    : 1995  
                                  End year of study      : 1995  
                                  Principal publication year: 1998  
                                  Reference ID of principal publication: DUHME1998  
                                  Overlap: none  
                                  Principal/subsidiary study: Principal  
                                  REF group                : DUHME3  
                                  Phase of IESAST project: Added Nov05

Study design      Study type                : cross-sectional  
                                  Type of population     : random schoolchildren  
                                  Other exclusions       : non-German nationality  
                                  Respondent               : Parent  
                                  Child smokes            : No mention  
                                  Standard questionnaire: ISAAC

Asthma              Current asthma available: present  
                                  Source of current asthma diagnosis: Parent report (other/uns/mix)  
                                  Timing of current asthma: last n months (12<=n<24)  
                                  Description of current asthma: asthma symptoms (=wheezing in last 12m and at least one attack of wheezing, sleep disturbing wheezing or speech limiting wheezing)  
                                  Number of current asthma cases: 172  
                                  Total number of subjects: 2813  
                                  Comments                : Number of cases based on %

Confounders considered      Total number of adjustment factors used: 2  
                                  Adjusted for sex        : present  
                                  Adjusted for age        : 1

Derived 1 - RRs available      Number of RRs            : 3  
                                  Household exposure RRs: 3

## DUHME4

Study description      Study title                : Duhme 4  
                                  Full study title        : Greifswald schools CS 1995 age 12-15  
                                  Study sex                : both  
                                  Lowest age in study    : 12  
                                  Highest age in study (at baseline): 15  
                                  Study race               : all (in country)  
                                  Continent                : WEurope/Scandinavia  
                                  Country in W Europe : Germany  
                                  Location within country: Greifswald  
                                  Start year of study    : 1995  
                                  End year of study      : 1995  
                                  Principal publication year: 1998  
                                  Reference ID of principal publication: DUHME1998  
                                  Overlap: none  
                                  Principal/subsidiary study: Principal  
                                  REF group                : DUHME4  
                                  Phase of IESAST project: Added Nov05



ECE

(continued)

Derived 1 - Number of RRs : 8  
 RRs available Parental exposure RRs: 4  
 Household exposure RRs: 4

EHLI1 Study description Study title : Ehrlich 1  
 Full study title : Cape Town elementary schools CC 1993  
 Study sex : both  
 Lowest age in study : 7  
 Highest age in study (at baseline): 9  
 Study race : all (in country)  
 Continent : Africa  
 Country in Africa : South Africa  
 Location within country: Mitchell's Plain (Cape Town)  
 Start year of study : 1993  
 End year of study : 1993  
 Principal publication year: 1996  
 Reference ID of principal publication: EHLIC1996  
 Reference ID of additional publication(s): EHLIC1995, EHLIC1995A  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : EHLI1  
 Phase of IESAST project: Original

Study design Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : Biochem excl discussd not used  
 Standard questionnaire: ISAAC  
 Comments : A cross-sectional study (all children at randomly selected schools) was used to identify cases of asthma or wheeze, controls were randomly selected from the remainder. Only results for asthma are entered here. The study is described as referring to 'colored children' (i.e. of mixed descent), but this refers to the main population of the study district, not to selection criteria

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma with at least one in last 12m of: wheezing or whistling in chest; woken up by wheezing or whistling chest; wheezing or whistling chest prevented normal speech; wheezing or whistling chest after exercise; dry cough at night not from cold or chest infection; tight chest  
 Number of current asthma cases: 153  
 Total number of subjects: 620

Confounders considered Total number of adjustment factors used: 9  
 Adjusted for family (parent/sibl) medical history: 2  
 Adjusted for household composition: 1  
 Adjusted for damp/mould in home: 1  
 Adjusted for child other medical history/symptoms: 3  
 Adjusted for maternal smoking in pregnancy: 1  
 Adjusted for household ETS exposure: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for HOCO(n persons in house) and FMED(recent chest illness) rejected from stepwise MLR due to lack of significance

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for reported asthma or 4+ symptoms; symptoms but no reported asthma; severe symptoms (4+ symptoms or episode affecting speech)  
 Results by other stratifying factors available: present Results available stratified by maternal education

Derived 1 - Number of RRs : 2  
 RRs available Parental exposure RRs: 1  
 Household exposure RRs: 1

EHRLI2 Study description Study title : Ehrlich 2  
 Full study title : New York City hospital CC 1988-89  
 Study sex : both  
 Lowest age in study : 3  
 Highest age in study (at baseline): 14  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Vt,Me,NY,NH,Mass,RI,Conn  
 Location within country: New York City  
 Start year of study : 1988  
 End year of study : 1989  
 Principal publication year: 1992  
 Reference ID of principal publication: EHRLIC1992  
 Reference ID of additional publication(s): LILIEN1990, WARTEN1994  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : EHRLI2  
 Phase of IESAST project: Original

Study design Study type : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: not acute asthma  
 Type of population : all in given hosp/clinic(s)  
 Respondent : Accompanying adult  
 Child smokes : No smkrs found above gvn age  
 Standard questionnaire: Non std/NA/NK  
 Comments : Children age 10-14 were asked privately about smoking, none admitted to smoking. Subjects with unusually high CCR levels were mostly at the low end of the age range and unlikely to be active smokers

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Med rec or par rep (phys diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: acute (current diag at ER and at least one previous phys-diag acute asthma) or non-acute (history episodic or chronic airflow obstruction requiring medication, no acute attack in last 2 weeks)  
 Number of lifetime asthma cases: 107  
 Total number of subjects: 228

Confounders considered Total number of adjustment factors used: 1  
 Adjusted for race : 1

Other results (not current db) Other definitions of asthma available: present Results available separately for acute asthma

Derived 1 - RRs available Number of RRs : 14  
 Parental exposure RRs: 3  
 Household exposure RRs: 2  
 Biochemical exposure RRs: 9

FAGBUL Study description Study title : Fagbule  
 Full study title : Nigerian hospital CC (ca 1992?)  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 18  
 Study race : all (in country)  
 Continent : Africa  
 Country in Africa : Nigeria  
 Location within country: Ilorin and Sagamu  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 1994  
 Reference ID of principal publication: FAGBUL1994  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : FAGBUL  
 Phase of IESAST project: Original

FAGBUL  
(continued)

Study design    Study type            : case/control  
                   Type of controls (for CC studies): healthy  
                   Type of population : all in given hosp/clinic(s)  
                   Medical exclusions : family history asthma  
                   Respondent         : Unspec (parent/child)  
                   Child smokes         : No mention  
                   Standard questionnaire: Non std/NA/NK

Asthma            Current asthma available: present  
                   Source of current asthma diagnosis: Medical records  
                   Timing of current asthma: current diagnosis  
                   Description of current asthma: asthma (= presenting with severe SOB +/- cough &  
                   wheeze, and had wheezy attack in last 6m)  
                   Number of current asthma cases: 140  
                   Total number of subjects: 280

Matching         Cases and controls matched on sex: present  
   factors         Cases and controls matched on age (CC): present  
                   Matched on location (within study area): present  
                   Cases and controls matched on socioeconomic status: present

Confounders      Total number of adjustment factors used: 1  
   considered      Adjusted for location within study: 1

Derived 1 -      Number of RRs         : 2  
   RRs available    Parental exposure RRs: 2

FARBEL    Study            Study title            : Farber 1  
           description    Full study title       : Bogalusa Heart Study CS 1984-85  
                           Study sex             : both  
                           Lowest age in study : 7  
                           Highest age in study (at baseline): 17  
                           Study race            : whites and blacks  
                           Continent            : NAmerica  
                           Country in N America: USA  
                           US state             : Ark, Miss, La, Al  
                           Location within country: Bogalusa (Louisiana)  
                           Start year of study : 1984  
                           End year of study    : 1985  
                           Principal publication year: 1997  
                           Reference ID of principal publication: FARBEL1997  
                           Overlap: FARBEL/FARBE2/FARBE3  
                           Principal/subsidiary study: Subsidiary  
                           REF group            : FARBE2  
                           Phase of IESAST project: Original  
                           Comments            : Three studies covering all schoolchildren were conducted in a  
                           ten year period, therefore many students will have participated in two or three  
                           studies. The middle study FARBE2 has been marked as the principal study and the first  
                           (FARBEL1) and last (FARBE3) as subsidiary in order to avoid overlap

Study design    Study type            : cross-sectional  
                   Type of population : all schoolchildren  
                   Other exclusions    : female guardian not mother  
                   Respondent         : Parent  
                   Child smokes         : No mention  
                   Standard questionnaire: Non std/NA/NK

Asthma            Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
                   Timing of lifetime asthma: Lifetime  
                   Timing of incidence asthma: NA (prevalence analysis only)  
                   Description of lifetime asthma: asthma  
                   Number of lifetime asthma cases: 188  
                   Total number of subjects: 1942  
                   Comments            : Numbers estimated approximately taking into account subjects  
                           with missing data or with female guardian not mother from Tables 2,3 and Figure 1

Confounders      Total number of adjustment factors used: 3  
   considered      Adjusted for sex       : present  
                   Adjusted for age     : 1  
                   Adjusted for race    : 1

Derived 1 -      Number of RRs         : 2  
   RRs available    Parental exposure RRs: 2

FARBE2 Study description

Study title : Farber 2  
 Full study title : Bogalusa Heart Study CS 1987-88  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 17  
 Study race : whites and blacks  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Ark, Miss, La, Al  
 Location within country: Bogalusa (Louisiana)  
 Start year of study : 1987  
 End year of study : 1988  
 Principal publication year: 1997  
 Reference ID of principal publication: FARBER1997  
 Overlap: FARBE1/FARBE2/FARBE3  
 Principal/subsidiary study: Principal  
 REF group : FARBE2  
 Phase of IESAST project: Original  
 Comments : Three studies covering all schoolchildren were conducted in a ten year period, therefore many students will have participated in two or three studies. The middle study FARBE2 has been marked as the principal study and the first (FARBE1) and last (FARBE3) as subsidiary in order to avoid overlap

Study design

Study type : cross-sectional  
 Type of population : all schoolchildren  
 Other exclusions : female guardian not mother  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 225  
 Total number of subjects: 2041  
 Comments : Numbers estimated approximately taking into account subjects with missing data or with female guardian not mother from Tables 2,3 and Figure 1

Confounders considered

Total number of adjustment factors used: 3  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for race : 1

Derived 1 - RRs available

Number of RRs : 2  
 Parental exposure RRs: 2

FARBE3 Study description

Study title : Farber 3  
 Full study title : Bogalusa Heart Study CS 1992-94  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 17  
 Study race : whites and blacks  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Ark, Miss, La, Al  
 Location within country: Bogalusa (Louisiana)  
 Start year of study : 1992  
 End year of study : 1994  
 Principal publication year: 1997  
 Reference ID of principal publication: FARBER1997  
 Overlap: FARBE1/FARBE2/FARBE3  
 Principal/subsidiary study: Subsidiary  
 REF group : FARBE2  
 Phase of IESAST project: Original  
 Comments : Three studies covering all schoolchildren were conducted in a ten year period, therefore many students will have participated in two or three studies. The middle study FARBE2 has been marked as the principal study and the first (FARBE1) and last (FARBE3) as subsidiary in order to avoid overlap

Study design

Study type : cross-sectional  
 Type of population : all schoolchildren  
 Other exclusions : female guardian not mother  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

## FARBE3

(continued)

Asthma	Lifetime/incidence/unspec asthma available: present Source of lifetime asthma diagnosis: Parent report (other/uns/mix) Timing of lifetime asthma: Lifetime Timing of incidence asthma: NA (prevalence analysis only) Description of lifetime asthma: asthma Number of lifetime asthma cases: 337 Total number of subjects: 2077 Comments : Numbers estimated approximately taking into account subjects with missing data or with female guardian not mother from Tables 2,3 and Figure 1
Confounders considered	Total number of adjustment factors used: 3 Adjusted for sex : present Adjusted for age : 1 Adjusted for race : 1
Derived 1 - RRs available	Number of RRs : 2 Parental exposure RRs: 2
FAROOQ Study description	Study title : Farooqi Full study title : Oxfordshire GP 1975-84 birth cohort retrospect 1996 Study sex : both Lowest age in study : 0 Highest age in study (at baseline): 21 Study race : all (in country) Continent : WEurope/Scandinavia Country in W Europe : UK Location within country: Oxfordshire Start year of study : 1975 End year of study : 1996 Principal publication year: 1998 Reference ID of principal publication: FAROOQ1998 Overlap: none Principal/subsidiary study: Principal REF group : FAROOQ Phase of IESAST project: Original
Study design	Study type : cross-sectional Type of population : all at given primary care(s) Medical exclusions : atopic disorder before completion of immunisations Other exclusions : ever changed GP, or died during study period Respondent : Medical records Child smokes : No mention Standard questionnaire: Non std/NA/NK Comments : Retrospective study during 1996, following birth cohort 1975-84 throughout life
Asthma	Lifetime/incidence/unspec asthma available: present Source of lifetime asthma diagnosis: Medical records Timing of lifetime asthma: from age 2 Timing of incidence asthma: NA (prevalence analysis only) Description of lifetime asthma: asthma (= recurrent episodes of wheeze) Number of lifetime asthma cases: 484 Total number of subjects: 1934 Comments : Number of cases based on %, may be subject to rounding error
Derived 1 - RRs available	Number of RRs : 1 Parental exposure RRs: 1

FERGUS Study description

Study title : Fergusson  
 Full study title : Christchurch Child Development 1977 cohort to 1983  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 6  
 Study race : all (in country)  
 Continent : Australasia  
 Country in Australasia: New Zealand  
 Location within country: Christchurch  
 Start year of study : 1977  
 End year of study : 1977  
 Final follow up year: 1983  
 Principal publication year: 1985  
 Reference ID of principal publication: FERGUS1985  
 Reference ID of additional publication(s): HORWOO1985  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : FERGUS  
 Phase of IESAST project: Original

Study design

Study type : prospective  
 Type of population : all newborns at given hosp(s)  
 Other exclusions : died or left NZ before age 6  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Medical records  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: attended phys for wheeze diagnosed as asthma or wheezy bronchitis. (Based on conclusion by Williams & McNicol that the two conditions are indistinguishable)  
 Number of lifetime asthma cases: 134  
 Total number of subjects: 1032

Confounders considered

Total number of adjustment factors used: 10  
 Adjusted for sex : present  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 1  
 Adjusted for pets in household: 1  
 Adjusted for child other medical history/symptoms: 3  
 Adjusted for parental smoking current/since birth: 2

Other results (not current db)

Other definitions of asthma available: present Results available for maternal report of asthmatic attack (irrespective of medical treatment); for at least 2 medical consultations diagnosed as asthma or wheezy bronchitis (HORWOO1985); results for at least 2 medical consultations for asthma (excl wheezy bronchitis) are stated not to differ from the combination of asthma and wheezy bronchitis  
 Results by other stratifying factors available: present Results for at least two medical consultations for asthma or wheezy bronchitis are available for sexes separately

Derived 1 - RRs available

Number of RRs : 23  
 Parental exposure RRs: 23

FIELDE Study description

Study title : Fielder  
 Full study title : W Glamorgan primary schools CS 1995  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 11  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: 3 locations (assumed to be in W Glamorgan)  
 Start year of study : 1995  
 End year of study : 1995  
 Principal publication year: 1999  
 Reference ID of principal publication: FIELDE1999  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : FIELDE  
 Phase of IESAST project: Original

## FIELD

(continued)

Study design	Study type : cross-sectional Type of population : all in given school(s) Respondent : Parent Child smokes : No mention Standard questionnaire: ISAAC
Asthma	Lifetime/incidence/unspec asthma available: present Source of lifetime asthma diagnosis: Parent report (physician diag) Timing of lifetime asthma: Lifetime Timing of incidence asthma: NA (prevalence analysis only) Description of lifetime asthma: asthma Current asthma available: present Source of current asthma diagnosis: Parent report (other/uns/mix) Timing of current asthma: last n months (n<6) Description of current asthma: asthma treated in last 4w Number of lifetime asthma cases: 84 Number of current asthma cases: 26 Total number of subjects: 427
Confounders considered	Total number of adjustment factors used: 5 Adjusted for sex : present Adjusted for age : 1 Adjusted for location within study: 1 Adjusted for cooking/heating methods: 1 Adjusted for pets in household: 1
Other results (not current db)	Wheezing/wheezing bronchitis available: present Results available for wheeze in last year; wheeze with exercise
Derived 1 - RRs available	Number of RRs : 2 Household exposure RRs: 2
FLYNN1 Study description	Study title : Flynn 1 Full study title : Suva City schools CS 1990 Study sex : both Lowest age in study : 9 Highest age in study (at baseline): 10 Study race : fijians and indians Continent : Australasia Country in Australasia: Fiji Location within country: Suva City Start year of study : 1990 End year of study : 1990 Principal publication year: 1994 Reference ID of principal publication: FLYNN1994A Overlap: none Principal/subsidiary study: Principal REF group : FLYNN1 Phase of IESAST project: Original
Study design	Study type : cross-sectional Type of population : all schoolchildren Respondent : Parent Child smokes : No mention Standard questionnaire: Non std/NA/NK
Asthma	Lifetime/incidence/unspec asthma available: present Source of lifetime asthma diagnosis: Parent report (physician diag) Timing of lifetime asthma: Lifetime Timing of incidence asthma: NA (prevalence analysis only) Description of lifetime asthma: asthma Number of lifetime asthma cases: 136 Total number of subjects: 1624 Comments : Number of cases based on %, may be subject to rounding error
Other results (not current db)	Wheezing/wheezing bronchitis available: present results available for wheeze ever; wheeze in last 12m
Derived 1 - RRs available	Number of RRs : 1 Household exposure RRs: 1

FLYNN2 Study description Study title : Flynn 2  
Full study title : Nausori rural schools CS 1991  
Study sex : both  
Lowest age in study : 9  
Highest age in study (at baseline): 10  
Study race : all (in country)  
Continent : Australasia  
Country in Australasia: Fiji  
Location within country: Nausori (Viti Levu)  
Start year of study : 1991  
End year of study : 1991  
Principal publication year: 1994  
Reference ID of principal publication: FLYNN1994  
Reference ID of additional publication(s): FLYNN1994A  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : FLYNN2  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Other exclusions : urban schools  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 36  
Total number of subjects: 487  
Comments : Number of cases based on %, may be subject to rounding error

Other results (not current db) Wheezing/wheezing bronchitis available: present results available for wheeze ever; for wheeze in last 12m and by frequency of wheeze

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

FORAST Study description Study title : Forastiere  
Full study title : Latium air pollution schools CS 1987  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 11  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Italy  
Location within country: Rome, Civitavecchia & 3 rural communities (Latium)  
Start year of study : 1987  
End year of study : 1987  
Principal publication year: 1992  
Reference ID of principal publication: FORAST1992  
Reference ID of additional publication(s): FORAST1992A, WONG1992  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : FORAST  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ATS/NHLI/ESP

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma (= phys diag asthma, or 3+ symptoms from: wheeze with colds, wheeze apart from colds, dyspnoea with wheeze, wheeze after exercise)  
Number of lifetime asthma cases: 216  
Total number of subjects: 2797

## FORAST

(continued)

Confounders considered Total number of adjustment factors used: 11  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for type of respondent: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for housing quality/age/size: 1  
 Adjusted for mobility (par/ch brn abrd, moved hous: 1  
 Adjusted for parental smoking current/since birth: 2

Other results (not current db) Results by other stratifying factors available: present Results available stratified by location (air pollution)

Derived 1 - RRs available Number of RRs : 26  
 Parental exposure RRs: 26

FORSB1 Study description Study title : Forsberg 1  
 Full study title : Oslo PEACE (polln effect asthm chdrn Eur) CS 1993  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Norway  
 Location within country: Oslo  
 Start year of study : 1993  
 End year of study : 1993  
 Principal publication year: 1997  
 Reference ID of principal publication: FORSB1997  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : FORSB1  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all in given school(s)  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (physician diag)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma treatment by physician  
 Number of current asthma cases: 188  
 Total number of subjects: 3769  
 Comments : Number of cases based on %, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 15  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for day care: 1  
 Adjusted for cooking/heating methods: 2  
 Adjusted for damp/mould in home: 2  
 Adjusted for pets in household: 2  
 Adjusted for exposure to food/housedust allergens: 2  
 Adjusted for parental smoking current/since birth: 2

Other results (not current db) Other definitions of asthma available: present Results available for recent asthma attacks (attacks of SOB with wheezing in last 12m)

Derived 1 - RRs available Number of RRs : 2  
 Household exposure RRs: 2

FORSB2 Study description Study title : Forsberg 2  
 Full study title : Kuopio PEACE (polln effct asthm chdrn Eur) CS 1993  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Finland  
 Location within country: Kuopio  
 Start year of study : 1993  
 End year of study : 1993  
 Principal publication year: 1997  
 Reference ID of principal publication: FORSBE1997  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : FORSB2  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all in given school(s)  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (physician diag)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma treatment by physician  
 Number of current asthma cases: 76  
 Total number of subjects: 2540  
 Comments : Number of cases based on %, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 15  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for day care: 1  
 Adjusted for cooking/heating methods: 2  
 Adjusted for damp/mould in home: 2  
 Adjusted for pets in household: 2  
 Adjusted for exposure to food/housedust allergens: 2  
 Adjusted for parental smoking current/since birth: 2

Other results (not current db) Other definitions of asthma available: present Results available for recent asthma attacks (attacks of SOB with wheezing in last 12m)

Derived 1 - RRs available Number of RRs : 2  
 Household exposure RRs: 2

FORSB3 Study description Study title : Forsberg 3  
 Full study title : Sweden PEACE (polln effct asthm chdrn Eur) CS 1993  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: Malmo and Umea  
 Start year of study : 1993  
 End year of study : 1993  
 Principal publication year: 1997  
 Reference ID of principal publication: FORSBE1997  
 Overlap: FORSB3/WILLE2  
 Principal/subsidiary study: Principal  
 REF group : FORSB3  
 Phase of IESAST project: Original  
 Comments : WILLE2 is a subset of this study, selecting all cases from one region and a small number of controls and using biochemical assessment

Study design Study type : cross-sectional  
 Type of population : all children  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

## FORSB3

(continued)

Asthma	<p>Current asthma available: present  Source of current asthma diagnosis: Parent report (physician diag)  Timing of current asthma: last n months (12&lt;=n&lt;24)  Description of current asthma: asthma treatment by physician  Number of current asthma cases: 405  Total number of subjects: 9653  Comments : Number of cases based on %, may be subject to rounding error</p>
Confounders considered	<p>Total number of adjustment factors used: 16  Adjusted for sex : present  Adjusted for age : 1  Adjusted for location within study: 2  Adjusted for family (parent/sibl) medical history: 1  Adjusted for day care: 1  Adjusted for cooking/heating methods: 2  Adjusted for damp/mould in home: 2  Adjusted for pets in household: 2  Adjusted for exposure to food/housedust allergens: 2  Adjusted for parental smoking current/since birth: 2</p>
Other results (not current db)	<p>Other definitions of asthma available: present Results available for recent asthma attacks (attacks of SOB with wheezing in last 12m)  Results by other stratifying factors available: present Results also available stratified by region</p>
Derived 1 - RRs available	<p>Number of RRs : 2  Household exposure RRs: 2</p>
FREEM1 Study description	<p>Study title : Freeman 1  Full study title : Passaic Asthma Reductn Effort school-age 1998-2001  Study sex : both  Lowest age in study : 7  Highest age in study (at baseline): 11  Study race : all (in country)  Continent : NAmerica  Country in N America: USA  US state : Pa,NJ,Md,WVa,Va,Del,WashDC  Location within country: Passaic, New Jersey  Start year of study : 1998  End year of study : 2001  Principal publication year: 2003  Reference ID of principal publication: FREEMA2003  Reference ID of additional publication(s): FREEMA2002  Overlap: none  Principal/subsidiary study: Principal  REF group : FREEM1  Phase of IESAST project: Added Nov05</p>
Study design	<p>Study type : cross-sectional  Type of population : all schoolchildren  Respondent : Parent and child  Child smokes : No mention  Standard questionnaire: Non std/NA/NK  Comments : Age approximate (school grades 2-5)</p>
Asthma	<p>Lifetime/incidence/unspec asthma available: present  Source of lifetime asthma diagnosis: Med rec or par rep (phys diag)  Timing of lifetime asthma: unspecified  Timing of incidence asthma: NA (prevalence analysis only)  Description of lifetime asthma: asthma diagnosis (determined from both biomarker and parental survey data)  Number of lifetime asthma cases: 611  Total number of subjects: 4634  Comments : Numbers of cases based on percentage distribution by race/origin and year of study, and may be subject to rounding error. In addition, there is a discrepancy in the numbers studied for two of the years</p>

## FREEM1

(continued)

Confounders considered Total number of adjustment factors used: 4  
 Adjusted for damp/mould in home: 2 Refers to bathroom mold, and any mold  
 Adjusted for pets in household: 1  
 Adjusted for exposure to food/housedust allergens: 1 Refers to presence of roaches  
 Other confounders considered but rejected: present  
 Comments : Variables considered but not used (as not significant in bivariate analysis) were pets in bedroom, pesticide use, feather pillow, carpet.  
 Other variable rejected from stepwise MLRs was multiple mold sites

Other results (not current db) Other definitions of asthma available: present Results are also presented for medication use, but it is not clearly defined and is probably not restricted to asthma medication  
 Results by other stratifying factors available: present Results also presented by country of origin for Hispanics (RR/CI available for Puerto Rico and Dominican Republic, but excluded from MLR regression for Mexico, therefore an overall result for Hispanics cannot be calculated)

Derived 1 - RRs available Number of RRs : 4  
 Household exposure RRs: 4

## FREEM2

Study description Study title : Freeman 2  
 Full study title : Passaic Asthma Reductn Effort preschool 1998  
 Study sex : both  
 Lowest age in study : 4  
 Highest age in study (at baseline): 5  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Pa,NJ,Md,WVa,Va,Del,WashDC  
 Location within country: Passaic, New Jersey  
 Start year of study : 1998  
 End year of study : 1998  
 Principal publication year: 2003  
 Reference ID of principal publication: FREEMA2003  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : FREEM2  
 Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
 Type of population : all in given school(s)  
 Respondent : Parent and child  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Age not stated, children were in two preschool programs

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Med rec or par rep (phys diag)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma diagnosis (determined from both biomarker and parental survey)  
 Number of lifetime asthma cases: 59  
 Total number of subjects: 240  
 Comments : Number of cases from %

Confounders considered Total number of adjustment factors used: 2  
 Adjusted for damp/mould in home: 2 refers to any mold, and damp bathroom  
 Other confounders considered but rejected: present  
 Comments : Variables considered but not used (either not significant in bivariate analysis, or rejected from MLR) were multiple mold sites, pets, roaches, pets in bedroom, pesticide use, feather pillow, carpet

Derived 1 - RRs available Number of RRs : 1  
 Household exposure RRs: 1

FUJI Study description Study title : Fuji  
Full study title : 4 communities air pollution schools CS 1994  
Study sex : both  
Lowest age in study : 8  
Highest age in study (at baseline): 11  
Study race : all (in country)  
Continent : Asia  
Country in Asia : Japan  
Location within country: Osaka, Kimitsu, Obitsu and Miyazaki  
Start year of study : 1994  
End year of study : 1994  
Principal publication year: 2002  
Reference ID of principal publication: FUJI2002  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : FUJI  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ATS/NHLI/ESP

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n years (2<=n<5)  
Description of current asthma: asthma (= ever had 2+ episodes of wheeze with dyspnoea, and asthma attack or need for medical treatment for asthma in last 2 years)  
Number of current asthma cases: 65  
Total number of subjects: 1037

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for asthma or wheeze, using a sex-, age- and location- matched subset of the symptom-free children as controls; also for 2+ episodes of wheeze in last 2 years without history of asthma

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

GILLIL Study description Study title : Gilliland CHS  
Full study title : Califrna Children's Health St school basln 1993,96  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 19  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: USA  
US state : Cal,Wash,Oreg  
Location within country: 12 Southern California communities  
Start year of study : 1993  
End year of study : 1996  
Principal publication year: 2001  
Reference ID of principal publication: GILLIL2001  
Reference ID of additional publication(s): PETERS1999, GILLIL2002, LI2000, GILLIL2003A, LONDON2001  
Overlap: MCCON1/GILLIL  
Principal/subsidiary study: Principal  
REF group : GILLIL  
Phase of IESAST project: Original but modified Nov05  
Comments : Results from GILLIL2002 not used because that is a subset of the study with genotyping available. Asthma-free subjects are the baseline for prospective study MCCON1

Study design Study type : cross-sectional  
Type of population : random in given school(s)  
Respondent : Parent and child  
Child smokes : Smokers excl questionnaire  
Standard questionnaire: Non std/NA/NK  
Comments : The treatment of child smokers in GILLIL2000 is unclear - methods say that they were either excluded or modelled as a potential confounder, but as none of the tables presented mention this as an adjusting variable, they have been assumed to have been excluded. Recruitment was of 4th graders in 1993 and 1996, and of 7th and 10th graders in 1993 only

## GILLIL

(continued)

Asthma                   Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (6<=n<12)  
Description of current asthma: ever phys-diag asthma and symptoms/illness last yr  
Number of lifetime asthma cases: 841  
Number of current asthma cases: 487  
Total number of subjects: 5762  
Comments                   : Number of cases based on %, may be subject to rounding error

Confounders considered   Total number of adjustment factors used: 12  
Adjusted for sex           : present  
Adjusted for age           : 2  
Adjusted for race          : 2  
Adjusted for location within study: 1  
Adjusted for family (parent/sibl) medical history: 2  
Adjusted for child other medical history/symptoms: 2  
Adjusted for maternal smoking in pregnancy: 1  
Adjusted for household ETS exposure: 1

Other results (not current db)   Other definitions of asthma available: present Results also available for medication for asthma (GILLIL2001), and for early-onset (=up to age 3) persistent asthma, early-onset transient asthma, late-onset asthma (LONDON2001)  
Wheezing/wheezing bronchitis available: present Results available for wheeze in last 12m: with/without cold, persistent, attacks with SOB, at night, with exercise  
Results by other stratifying factors available: present Results for lifetime asthma stratified by age at diagnosis; by family history asthma; by family history atopy; by family history asthma or allergy

Derived 1 - RRs available   Number of RRs               : 67  
Parental exposure RRs: 16  
Household exposure RRs: 33  
In utero x household combination exposure RRs: 18

GOLD Study description   Study title                : Gold (6 Cities)  
Full study title           : 6 US Cities Longitudinal 1974-  
Study sex                   : both  
Lowest age in study        : 6  
Highest age in study (at baseline): not assessable  
Highest age in study at final followup: 18  
Study race                 : whites and blacks  
Continent                  : NAmerica  
Country in N America       : USA  
US state                   : multi (not all)  
Location within country: 6 cities (in MA, TN, OH, MO, WI, KS)  
Start year of study        : 1974  
End year of study          : 1979  
Final follow up year: 1987  
Principal publication year: 1993  
Reference ID of principal publication: GOLD1993A  
Reference ID of additional publication(s): FERRIS1979,WARE1984,WANG1994A,NEAS1994, GOLD2003  
Overlap: none  
Principal/subsidiary study: Principal  
REF group                  : GOLD  
Phase of IESAST project: Original but modified Nov05

Study design             Study type                 : prospective  
Type of population         : all schoolchildren  
Respondent                 : Parent and child  
Child smokes               : Smokers incl and adjusted for  
Standard questionnaire: ATS/NHLI/ESP

GOLD

(continued)

Asthma	<p>Lifetime/incidence/unspec asthma available: present  Source of lifetime asthma diagnosis: Parent or child rep (oth/unsp)  Timing of lifetime asthma: Lifetime  Timing of incidence asthma: NA (prevalence analysis only)  Description of lifetime asthma: asthma  Current asthma available: present  Repeat measures for current asthma: present  Source of current asthma diagnosis: Parent report (other/uns/mix)  Timing of current asthma: last n months (12&lt;=n&lt;24)  Description of current asthma: asthma  Number of lifetime asthma cases: 968  Number of current asthma cases: 470  Total number of subjects: 9378  Comments : Number of current cases based on %, may be subject to rounding error</p>
Confounders considered	<p>Total number of adjustment factors used: 11  Adjusted for sex : present  Adjusted for age : 1  Adjusted for race : 1  Adjusted for location within study: 1  Adjusted for family (parent/sibl) medical history: 1  Adjusted for SES (inc parental education): 1  Adjusted for household composition: 2  Adjusted for air conditioning/humidifier: 1  Adjusted for obesity/BMI: 1  Adjusted for child active smoking: 1  Other confounders considered but rejected: present  Comments : Adjustment for COHE, SES, HOUS(2) rejected in stepwise MLR</p>
Other results (not current db)	<p>Other definitions of asthma available: present Results available for incident doctor-diagnosed asthma with wheeze in same/previous year. These results are only in the form of risk per 10 cigarettes smoked by the mother (GOLD2003 Table 4)  Wheezing/wheezing bronchitis available: present Results available for persistent wheeze; any wheeze; shortness of breath with wheeze  Other exposures available: present Results available for respirable particulate matter (shown to correspond to household smoking)(NEAS1994)  Other results for child smokers available: present Results available for child (active) smoking  Results by other stratifying factors available: present Results available stratified by sex (for exposure respirable particulate matter only)</p>
Derived 1 - RRs available	<p>Number of RRs : 11  Parental exposure RRs: 11</p>
GOREN1 Study description	<p>Study title : Goren 1  Full study title : Sharonim power plant schools (grades 2&amp;5) CS 1980  Study sex : both  Lowest age in study : 7  Highest age in study (at baseline): 11  Study race : all (in country)  Continent : Asia  Country in Asia : Israel  Location within country: within 19km of Sharonim power plant  Start year of study : 1980  End year of study : 1980  Principal publication year: 1986  Reference ID of principal publication: GOREN1986  Reference ID of additional publication(s): GOREN1991A  Overlap: GOREN1/GOREN3/4/5/6  Principal/subsidiary study: Principal  REF group : GOREN1  Phase of IESAST project: Original  Comments : This study includes baseline results for 2nd and 5th grade pupils. This overlaps with GOREN4 and GOREN5 which includes the same pupils when they were in grade 8 (1983 and 1986). 8th grade pupils for 1980 are entered separately as GOREN3</p>



GOREN2  
(continued)

Derived 1 - Number of RRs : 6  
RRs available Parental exposure RRs: 6

GOREN3 Study description Study title : Goren 3  
Full study title : Sharonim power plant schools (grade 8) CS 1980  
Study sex : both  
Lowest age in study : 13  
Highest age in study (at baseline): 14  
Study race : all (in country)  
Continent : Asia  
Country in Asia : Israel  
Location within country: within 19km of Sharonim power plant  
Start year of study : 1980  
End year of study : 1980  
Principal publication year: 1997  
Reference ID of principal publication: GOREN1997  
Reference ID of additional publication(s): GOREN1991A  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : GOREN3  
Phase of IESAST project: Original  
Comments : Same study as GOREN1 but separate age group. No overlap (either within year or with later studies)

Study design Study type : cross-sectional  
Type of population : school NOS  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ATS/NHLI/ESP  
Comments : Age approximate, refers to 8th grade pupils

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 42  
Total number of subjects: 737  
Comments : Number of cases based on %, may be subject to rounding error.  
There is a minor discrepancy in the % between the text and the abstract

Confounders considered Total number of adjustment factors used: 5  
Adjusted for location within study: 1  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 1  
Adjusted for cooking/heating methods: 1  
Adjusted for housing quality/age/size: 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheezing with SOB

Derived 1 - Number of RRs : 1  
RRs available Parental exposure RRs: 1

GOREN4 Study description Study title : Goren 4  
Full study title : Sharonim power plant schools (grade 8) CS 1983  
Study sex : both  
Lowest age in study : 13  
Highest age in study (at baseline): 14  
Study race : all (in country)  
Continent : Asia  
Country in Asia : Israel  
Location within country: within 19km of Sharonim power plant  
Start year of study : 1983  
End year of study : 1983  
Principal publication year: 1997  
Reference ID of principal publication: GOREN1997  
Reference ID of additional publication(s): GOREN1991A  
Overlap: GOREN1/GOREN3/4/5/6  
Principal/subsidiary study: Subsidiary  
REF group : GOREN1  
Phase of IESAST project: Original

## GOREN4

(continued)

Comments : Followup study of pupils previously included in GOREN1 when they were in grade 5

Study design Study type : cross-sectional  
 Type of population : school NOS  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP  
 Comments : Age approximate, refers to 8th grade pupils

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 50  
 Total number of subjects: 698  
 Comments : Number of cases approximate (based on % read from graph)

Confounders considered Total number of adjustment factors used: 5  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for housing quality/age/size: 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheezing with SOB

Derived 1 - RRs available Number of RRs : 1  
 Parental exposure RRs: 1

## GOREN5

Study description Study title : Goren 5  
 Full study title : Sharonim power plant schools (grade 8) CS 1986  
 Study sex : both  
 Lowest age in study : 13  
 Highest age in study (at baseline): 14  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Israel  
 Location within country: within 19km of Sharonim power plant  
 Start year of study : 1986  
 End year of study : 1986  
 Principal publication year: 1997  
 Reference ID of principal publication: GOREN1997  
 Reference ID of additional publication(s): GOREN1991A  
 Overlap: GOREN1/GOREN3/4/5/6  
 Principal/subsidiary study: Subsidiary  
 REF group : GOREN1  
 Phase of IESAST project: Original  
 Comments : Followup study of pupils previously included in GOREN1 when they were in grade 2

Study design Study type : cross-sectional  
 Type of population : school NOS  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP  
 Comments : Age approximate, refers to 8th grade pupils

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 97  
 Total number of subjects: 993  
 Comments : Number of cases approximate (based on % read from graph)



GORTM1 Study description

Study title : Gortmaker 1  
Full study title : Genesee County household CS 1977  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 17  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: USA  
US state : Mich,Ind,Oh,Tenn  
Location within country: Genesee County (Michigan)  
Start year of study : 1977  
End year of study : 1977  
Principal publication year: 1982  
Reference ID of principal publication: GORTMA1982  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : GORTM1  
Phase of IESAST project: Original

Study design

Study type : cross-sectional  
Type of population : random children  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : Respondent was adult family member, usually mother

Asthma

Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 188  
Total number of subjects: 3072  
Comments : Asthma was as reported by respondent, but all reporting asthma also reported having seen a doctor about it

Confounders considered

Total number of adjustment factors used: 8  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for SES (inc parental education): 2  
Adjusted for child other medical history/symptoms: 2  
Adjusted for parental smoking current/since birth: 2  
Other confounders considered but rejected: present  
Comments : Adjustment for RACE, LOC, HOCO, HOUS, SES rejected from final model of MLR

Other results (not current db)

Other definitions of asthma available: present Results available for functionally impairing asthma (Does it affect his/her ability to attend school or do any of the things a child his/her age usualy does?)

Derived 1 - RRs available

Number of RRs : 4  
Parental exposure RRs: 4

GORTM2 Study description

Study title : Gortmaker 2  
Full study title : Berkshire County household CS 1980  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 17  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: USA  
US state : Vt,Me,NY,NH,Mass,RI,Conn  
Location within country: Berkshire County (Massachusetts)  
Start year of study : 1980  
End year of study : 1980  
Principal publication year: 1982  
Reference ID of principal publication: GORTMA1982  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : GORTM2  
Phase of IESAST project: Original

Study design

Study type : cross-sectional  
Type of population : random children  
Respondent : Household member  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

## GORTM2

(continued)

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 29  
 Total number of subjects: 894

Other results (not current db) Other definitions of asthma available: present Results available for functionally impairing asthma (Does it affect his/her ability to attend school or do any of the things a child his/her age usually does?)

Derived 1 - RRs available Number of RRs : 2  
 Parental exposure RRs: 2

## GUPTA

Study description Study title : Gupta  
 Full study title : Chandigarh schools CS 1997-99  
 Study sex : both  
 Lowest age in study : 9  
 Highest age in study (at baseline): 20  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : India  
 Location within country: Chandigarh  
 Start year of study : 1997  
 End year of study : 1999  
 Principal publication year: 2001  
 Reference ID of principal publication: GUPTA2001  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : GUPTA  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Child  
 Child smokes : No mention  
 Standard questionnaire: IUATLD

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: either wheezing or tightness in chest, and at least one of: previous diagnosis of asthma, asthma attack in last 12m, use of medication for asthma  
 Number of current asthma cases: 205  
 Total number of subjects: 9090

Confounders considered Total number of adjustment factors used: 2  
 Adjusted for sex : present  
 Adjusted for age : 1

Derived 1 - RRs available Number of RRs : 2  
 Household exposure RRs: 2

## GURKAN

Study description Study title : Gurkan  
 Full study title : Dicle hospital CC 1995-97  
 Study sex : both  
 Lowest age in study : 3  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : EEurope/Balkans  
 Country in E Europe/Balkans: Turkey  
 Location within country: Dicle  
 Start year of study : 1995  
 End year of study : 1997  
 Principal publication year: 2002  
 Reference ID of principal publication: GURKAN2002  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : GURKAN  
 Phase of IESAST project: Original

GURKAN  
(continued)

Study design     Study type             : case/control  
                   Type of controls (for CC studies): diseased/hospital  
                   Control diseases/cause of death: attending pediatric outpatient clinic  
                   Type of population   : all in given hosp/clinic(s)  
                   Respondent           : Parent  
                   Child smokes         : No mention  
                   Standard questionnaire: Non std/NA/NK

Asthma           Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Med rec or par rep (oth/unsp)  
                   Timing of lifetime asthma: Lifetime  
                   Timing of incidence asthma: NA (prevalence analysis only)  
                   Description of lifetime asthma: ever phys-diag asthma or asthmatic symptoms such as  
                   SOB with wheezing  
                   Number of lifetime asthma cases: 140  
                   Total number of subjects: 236

Derived 1 -     Number of RRs           : 1  
   RRs available   Total exposure RRs   : 1

HABY     Study             Study title             : Haby  
           description     Full study title       : New South Wales 2 cities pre-school CS 1995  
                           Study sex               : both  
                           Lowest age in study   : 3  
                           Highest age in study (at baseline): 5  
                           Study race             : all (in country)  
                           Continent             : Australasia  
                           Country in Australasia: Australia  
                           Location within country: Wagga Wagga and Lismore (New South Wales)  
                           Start year of study    : 1995  
                           End year of study     : 1995  
                           Principal publication year: 2001  
                           Reference ID of principal publication: HABY2001  
                           Overlap: none  
                           Principal/subsidiary study: Principal  
                           REF group             : HABY  
                           Phase of IESAST project: Original

Study design     Study type             : cross-sectional  
                   Type of population   : random children  
                   Respondent           : Parent  
                   Child smokes         : No mention  
                   Standard questionnaire: Non std/NA/NK  
                   Comments             : Due to lack of unique register of preschool children,  
                                       recruitment was through immunisation records, day care, preschools and playgroups -  
                                       random sample in one city and all children in other

Asthma           Current asthma available: present  
                   Source of current asthma diagnosis: Parent report (other/uns/mix)  
                   Timing of current asthma: last n months (12<=n<24)  
                   Description of current asthma: ever phys diag asthma and medication in last 12m and  
                   symptoms of cough or wheeze in last 12m  
                   Number of current asthma cases: 190  
                   Total number of subjects: 974

Confounders     Total number of adjustment factors used: 10  
   considered     Adjusted for sex           : present  
                   Adjusted for location within study: 1  
                   Adjusted for family (parent/sibl) medical history: 1  
                   Adjusted for household composition: 1  
                   Adjusted for child other medical history/symptoms: 4  
                   Adjusted for maternal smoking in pregnancy: 1  
                   Adjusted for parental smoking current/since birth: 1

Derived 1 -     Number of RRs           : 4  
   RRs available   Parental exposure RRs: 4

HAJNAL Study description

Study title : Hajnal  
 Full study title : Swiss nationwide SCARPOL schools CS 1992-93 (SCARPOL=Swiss Study on Childhood Allergy and Respiratory Symptoms with Respect to Air Pollution, Climate and Pollen)  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 14  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Switzerland  
 Location within country: 10 communities nationwide  
 Start year of study : 1992  
 End year of study : 1993  
 Principal publication year: 1999  
 Reference ID of principal publication: HAJNAL1999  
 Reference ID of additional publication(s): BRAUNF1997  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : HAJNAL  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : Smokers excl questionnaire  
 Standard questionnaire: ISAAC  
 Comments : Children were in 3 age-groups: 6-7, 9-11 and 13-14. In the smaller communities, all schoolchildren were included

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 407  
 Total number of subjects: 4441

Confounders considered

Total number of adjustment factors used: 13  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 1  
 Adjusted for cooking/heating methods: 2  
 Adjusted for damp/mould in home: 1  
 Adjusted for pets in household: 1  
 Adjusted for exposure to food/housedust allergens: 1  
 Adjusted for farming: 1  
 Adjusted for mobility (par/ch brn abrd, moved hous: 1

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for wheezing in last 12m, and for wheezing after exercise in last 12m

Derived 1 - RRs available

Number of RRs : 4  
 Parental exposure RRs: 1  
 Household exposure RRs: 2  
 In utero x parent exposure combination RRs: 1

HALONE Study description

Study title : Halonen  
 Full study title : Tucson Children's Respiratory 1980-84 birth cohort  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 11  
 Study race : all (in country)  
 Continent : N America  
 Country in N America: USA  
 US state : Nev,Ut,Ariz  
 Location within country: Tucson  
 Start year of study : 1980  
 End year of study : 1984  
 Final follow up year: 1995  
 Principal publication year: 1999  
 Reference ID of principal publication: HALONE1999  
 Reference ID of additional publication(s): MARTIN1995, WRIGHT1996  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : HALONE  
 Phase of IESAST project: Added Nov05

Study design

Study type : prospective  
 Type of population : all gvn health insurnce scheme  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: physician diagnosed asthma and 1+ exacerbation in last 12m  
 Number of current asthma cases: 80  
 Total number of subjects: 741

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for wheezing (early transient, late-onset or persistent) (MARTIN1995)

Derived 1 - RRs available

Number of RRs : 1  
 Parental exposure RRs: 1

HJERN1 Study description

Study title : Hjern 1  
 Full study title : Swedish Surv Living Conditions CS 1996-97, mothers  
 Study sex : both  
 Lowest age in study : 3  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: nationwide  
 Start year of study : 1996  
 End year of study : 1997  
 Principal publication year: 2001  
 Reference ID of principal publication: HJERN2001  
 Overlap: HJERN1/HJERN2  
 Principal/subsidiary study: Principal  
 REF group : HJERN1  
 Phase of IESAST project: Original  
 Comments : Study included a random sample of adults age 16-49, and results presented here relate to their children. These have been entered separately according to whether the adult respondent was the mother (HJERN1) or the father (HJERN2), since these are effectively independent subsets. However an apparent discrepancy in the numbers suggests that 10 children (0.2%) may have been in both parts

Study design

Study type : cross-sectional  
 Type of population : all children rndm households  
 Other exclusions : mother age 50+  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

## HJERN1

(continued)

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Child report (physician diag)  
 Timing of current asthma: current NOS  
 Description of current asthma: allergic asthma (=gets asthma when in contact with pollen or furred animals)  
 Number of current asthma cases: 119  
 Total number of subjects: 2543

Confounders considered Total number of adjustment factors used: 9  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 2  
 Adjusted for parent's age: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 2  
 Adjusted for mobility (par/ch brn abrd, moved hous: 1

Derived 1 - Number of RRs : 16  
 RRs available Parental exposure RRs: 16

## HJERN2

Study description Study title : Hjern 2  
 Full study title : Swedish Surv Living Conditions CS 1996-97, fathers  
 Study sex : both  
 Lowest age in study : 3  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: nationwide  
 Start year of study : 1996  
 End year of study : 1997  
 Principal publication year: 2001  
 Reference ID of principal publication: HJERN2001  
 Overlap: HJERN1/HJERN2  
 Principal/subsidiary study: Principal  
 REF group : HJERN2  
 Phase of IESAST project: Original  
 Comments : Study included a random sample of adults age 16-49, and results presented here relate to their children. These have been entered separately according to whether the adult respondent was the mother (HJERN1) or the father (HJERN2), since these are effectively independent subsets. However an apparent discrepancy in the numbers suggests that 10 children (0.2%) may have been in both parts

Study design Study type : cross-sectional  
 Type of population : all children rndm households  
 Other exclusions : father age 50+  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Child report (physician diag)  
 Timing of current asthma: current NOS  
 Description of current asthma: allergic asthma (=gets asthma when in contact with pollen or furred animals)  
 Number of current asthma cases: 78  
 Total number of subjects: 1939

Confounders considered Total number of adjustment factors used: 9  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 2  
 Adjusted for parent's age: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 2  
 Adjusted for mobility (par/ch brn abrd, moved hous: 1

Derived 1 - Number of RRs : 16  
 RRs available Parental exposure RRs: 16

HOST Study description Study title : Host  
Full study title : Nordborg schools CS 1990  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 17  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Denmark  
Location within country: Nordborg  
Start year of study : 1990  
End year of study : 1990  
Principal publication year: 1993  
Reference ID of principal publication: HOST1993  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : HOST  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all in given school(s)  
Medical exclusions : previous asthmatic bronchitis  
Respondent : Parent and child  
Child smokes : Smokers included  
Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (physician diag)  
Timing of current asthma: current NOS  
Description of current asthma: current/active physician diagnosed asthma  
Number of current asthma cases: 34  
Total number of subjects: 776

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for past recurrent asthmatic bronchitis

Derived 1 - RRs available Number of RRs : 1  
Parental exposure RRs: 1

HU1 Study description Study title : Hu 1  
Full study title : Chicago AA Youth Health Behavior Project CS 1994  
Study sex : both  
Lowest age in study : 10  
Highest age in study (at baseline): 11  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: USA  
US state : Minn,Ia,Wis,Ill,Mo  
Location within country: Chicago  
Start year of study : 1994  
End year of study : 1994  
Principal publication year: 1997  
Reference ID of principal publication: HU1997B  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : HU1  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : Smokers incl and adjusted for  
Standard questionnaire: ISAAC



HU2

(continued)

Asthma                   Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Child report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Current asthma available: present  
Source of current asthma diagnosis: Child report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: ever phys diag asthma and, in last 12m, either taking  
asthma medication or episode of cough/wheeze/SOB lasting 3+ days  
Number of lifetime asthma cases: 242  
Number of current asthma cases: 165  
Total number of subjects: 1476  
Comments                   : Number of subjects based on Table 2, although this exceeds  
number stated in text (by 7)

Confounders            Total number of adjustment factors used: 3  
considered               Adjusted for sex           : present  
Adjusted for race       : 1  
Adjusted for SES (inc parental education): 1  
Comments                 : SES refers to child's own educational level

Other results           Other results for child smokers available: present Results available for child  
(not current            (active) smoking  
db)

Derived 1 -            Number of RRs            : 24  
RRs available          Parental exposure RRs: 24

HUGHES Study           Study title               : Hughes  
description            Full study title         : Plymouth GP CS 1993-94  
Study sex               : both  
Lowest age in study    : 4  
Highest age in study (at baseline): 16  
Study race             : all (in country)  
Continent              : WEurope/Scandinavia  
Country in W Europe   : UK  
Location within country: Estover (Plymouth)  
Start year of study    : 1993  
End year of study      : 1994  
Principal publication year: 1995  
Reference ID of principal publication: HUGHES1995  
Overlap: none  
Principal/subsidiary study: Principal  
REF group              : HUGHES  
Phase of IESAST project: Original

Study design           Study type                : case/control  
Type of controls (for CC studies): healthy  
Type of population     : all at given primary care(s)  
Type of population - controls (if diff from cases): no atopy  
Respondent             : Unspec (parent/child)  
Child smokes           : No mention  
Standard questionnaire: Non std/NA/NK

Asthma                   Current asthma available: present  
Source of current asthma diagnosis: Medical records  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: receiving treatment for asthma in last year  
Number of current asthma cases: 44  
Total number of subjects: 88

Matching               Cases and controls matched on sex: present  
factors                 Cases and controls matched on age (CC): present

Derived 1 -            Number of RRs            : 1  
RRs available          Parental exposure RRs: 1



JAAKK2 Study description

Study title : Jaakkola 2  
Full study title : Finland all 1987 births prosp 1987-94  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 7  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Finland  
Location within country: nationwide  
Start year of study : 1987  
End year of study : 1987  
Final follow up year: 1994  
Principal publication year: 2004  
Reference ID of principal publication: JAAKKO2004  
Overlap: JAAKK2/CSONKA  
Principal/subsidiary study: Principal  
REF group : JAAKK2  
Phase of IESAST project: Added Nov05  
Comments : JAAKK2 covers all 1987 singleton births in Finland, which probably includes some of the children in CSONKA (a study of 6-13 year olds at unknown date but published in 2000)

Study design

Study type : prospective  
Type of population : all children  
Other exclusions : multiple births  
Respondent : Medical records  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma

Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Medical records  
Timing of lifetime asthma: NA (incidence only)  
Timing of incidence asthma: lifetime (recruit at birth)  
Description of lifetime asthma: hospitalization, medication or entitlement to special care support for asthma  
Number of lifetime asthma cases: 1951  
Total number of subjects: 56632

Confounders considered

Total number of adjustment factors used: 7  
Adjusted for sex : present  
Adjusted for parent's age: 1  
Adjusted for SES (inc parental education): 1  
Adjusted for household composition: 2  
Adjusted for child other medical history/symptoms: 2

Other results (not current db)

Results by other stratifying factors available: present Results available by low/normal birth weight

Derived 1 - RRs available

Number of RRs : 6  
Parental exposure RRs: 6

JAAKKO Study description

Study title : Jaakkola  
Full study title : Oslo birth cohort 1992-93 PS to 1996  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 4  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Norway  
Location within country: Oslo  
Start year of study : 1992  
End year of study : 1993  
Final follow up year: 1996  
Principal publication year: 2001  
Reference ID of principal publication: JAAKKO2001A  
Reference ID of additional publication(s): NAFSTA1997A  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : JAAKKO  
Phase of IESAST project: Original

JAAKKO  
(continued)

Study design      Study type            : prospective  
 Type of population : all newborns at given hosp(s)  
 Medical exclusions : birthwt <2000gm, serious neonatal respiratory, cardiovascular,  
 neuromuscular or metabolic disease, assisted ventilation >6hrs  
 Other exclusions   : not permanent Oslo resident, plans to move away, non-Norwegian  
 speaking, not living with any biologic parent, history of drug abuse in family  
 Respondent         : Parent  
 Child smokes       : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma             Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: phys diag asthma, and symptoms in last 12m  
 Number of current asthma cases: 164  
 Total number of subjects: 2531

Confounders considered      Total number of adjustment factors used: 7  
 Adjusted for sex            : present  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for parent's age: 1  
 Adjusted for SES (inc parental education): 2  
 Adjusted for household composition: 1  
 Adjusted for child other medical history/symptoms: 1

Other results (not current db)      Other definitions of asthma available: present Results available for early onset  
 asthma (bronchial obstruction as defined for WHEEZE before age 2, physician diagnosed  
 asthma, symptoms of asthma in 12m to age 4)  
 Wheezing/wheezing bronchitis available: present Results available for bronchial  
 obstruction (physician diagnosed, at least 3 of: wheezing, chest recession, rhonchi  
 during auscultation, forced expiration, rapid breathing; at least 2 episodes or 1  
 episode lasting more than 1 month) at age 2  
 Results by other stratifying factors available: present Results available stratified  
 by parental atopy

Derived 1 - RRs available      Number of RRs            : 2  
 Household exposure RRs: 2

JANG      Study description      Study title            : Jang  
 Full study title       : Korean schools CS (ca 2002?)  
 Study sex              : both  
 Lowest age in study   : 10  
 Highest age in study (at baseline): 12  
 Study race             : all (in country)  
 Continent             : Asia  
 Country in Asia       : Korea  
 Location within country: not assessable  
 Start year of study   : not assessable  
 End year of study     : not assessable  
 Principal publication year: 2004  
 Reference ID of principal publication: JANG2004  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group             : JANG  
 Phase of IESAST project: Added Nov05

Study design      Study type            : cross-sectional  
 Type of population   : school NOS  
 Respondent           : Child  
 Child smokes         : No mention  
 Standard questionnaire: ISAAC

Asthma             Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma symptoms (= wheeze, sleep-disturbing wheeze or  
 speech-limiting wheeze)  
 Number of current asthma cases: 279  
 Total number of subjects: 507  
 Comments             : Number of subjects taken from distribution by parental smoking,  
 but elsewhere given as 503

Derived 1 - RRs available      Number of RRs            : 1  
 Parental exposure RRs: 1

JENKIN Study description Study title : Jenkins  
Full study title : Tasmania schools 1961 cohort CS 1968  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 7  
Study race : all (in country)  
Continent : Australasia  
Country in Australasia: Australia  
Location within country: Tasmania  
Start year of study : 1968  
End year of study : 1968  
Principal publication year: 1993  
Reference ID of principal publication: JENKIN1993  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : JENKIN  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma (= attacks of asthma or wheezy breathing)  
Number of lifetime asthma cases: 1349  
Total number of subjects: 8585

Confounders considered Total number of adjustment factors used: 8  
Adjusted for sex : present  
Adjusted for family (parent/sibl) medical history: 2  
Adjusted for child other medical history/symptoms: 4  
Adjusted for parental smoking current/since birth: 1  
Other confounders considered but rejected: present  
Comments : Adjustment for FMED(2) and paternal smoking were rejected due to lack of significance at p=0.01 in forward selection in MLR

Derived 1 - RRs available Number of RRs : 6  
Parental exposure RRs: 6

JONES Study description Study title : Jones  
Full study title : Plymouth GP CC 1996  
Study sex : both  
Lowest age in study : 4  
Highest age in study (at baseline): 16  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: Roborough (Plymouth)  
Start year of study : 1996  
End year of study : 1996  
Principal publication year: 1999  
Reference ID of principal publication: JONES1999B  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : JONES  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : random primary care patients  
Other exclusions : sibling also in study  
Type of population - controls (if diff from cases): no atopy  
Respondent : Unspec (parent/child)  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

## JONES

(continued)

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: on practice asthma register (clinical diagnosis supported by response to treatment and/or peak flow measurement)  
 Number of current asthma cases: 100  
 Total number of subjects: 200  
 Comments : All cases had received treatment within the last year, but it is not clear that this was a requirement to be on the register

Matching factors Cases and controls matched on sex: present  
 Cases and controls matched on age (CC): present

Derived 1 - RRs available Number of RRs : 3  
 Parental exposure RRs: 3

KABESC Study description Study title : Kabesch  
 Full study title : Munich and Dresden genotyping CS 1995-96  
 Study sex : both  
 Lowest age in study : 9  
 Highest age in study (at baseline): 11  
 Study race : whites (inc hispanic)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Germany  
 Location within country: Munich and Dresden  
 Start year of study : 1995  
 End year of study : 1996  
 Principal publication year: 2004  
 Reference ID of principal publication: KABESC2004  
 Reference ID of additional publication(s): WEILAN1999  
 Overlap: KABESC/NICOLA  
 Principal/subsidiary study: Principal  
 REF group : KABESC  
 Phase of IESAST project: Added Nov05  
 Comments : Subjects from Munich part of the study (37% of subjects) may also be included in study NICOLA

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Other exclusions : non-German nationality or origin  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: ever diagnosed asthma or recurrent asthmatic/spastic/obstructive bronchitis and wheeze in last 12m  
 Number of current asthma cases: 74  
 Total number of subjects: 1571  
 Comments : Numbers of cases and of subjects is based on Table 1 and is assumed to omit those with ETS exposure of 1-19 cigs. Total number of subjects is 3054

Confounders considered Total number of adjustment factors used: 7  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for child other medical history/symptoms: 3

Other results (not current db) Other definitions of asthma available: present Results available for asthma diagnosis, atopic asthma, non-atopic asthma, current doctor's visit due to asthma, current medication for asthma, but only within GSTM1+ and GSTT1+ subgroups (online Table E2, E3)  
 Wheezing/wheezing bronchitis available: present Results available for wheeze ever and current wheeze. Also for wheeze with exercise, speech limiting wheeze adn current wheeze at night, but only within GSTM1+ and GSTT1+ subgroups (online Table E2, E3)  
 Other exposures available: present Results available for in utero exposure, but only within GSTM1+ and GSTT1+ subgroups (online Table E2, E3)  
 Results by other stratifying factors available: present Results available stratified by GSTM1 or GSTT1 genotypes

## KABESC

(continued)

Derived 1 - Number of RRs : 2  
RRs available Household exposure RRs: 2

KALY01 Study description Study title : Kalyoncu 1  
Full study title : Ankara single school CS 1992  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : EEurope/Balkans  
Country in E Europe/Balkans: Turkey  
Location within country: Ankara  
Start year of study : 1992  
End year of study : 1992  
Principal publication year: 1994  
Reference ID of principal publication: KALYON1994  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : KALY01  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: ever phys diag asthma and symptoms in last 12m  
Number of lifetime asthma cases: 180  
Number of current asthma cases: 86  
Total number of subjects: 1036

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheezing (observed by parents) ever, and in last 12m

Derived 1 - Number of RRs : 2  
RRs available Household exposure RRs: 2

KALY02 Study description Study title : Kalyoncu 2  
Full study title : Ankara single school CS 1997  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 13  
Study race : all (in country)  
Continent : EEurope/Balkans  
Country in E Europe/Balkans: Turkey  
Location within country: Ankara  
Start year of study : 1997  
End year of study : 1997  
Principal publication year: 1999  
Reference ID of principal publication: KALYON1999  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : KALY02  
Phase of IESAST project: Original  
Comments : Conducted at same school as study KALY01, but all pupils included in that study had graduated, so there is no overlap

Study design Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

KALYO2

(continued)

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: ever phys diag asthma and symptoms in last 12m  
 Number of current asthma cases: 72  
 Total number of subjects: 738

Confounders considered Total number of adjustment factors used: 5  
 Adjusted for sex : present  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for pets in household: 1  
 Adjusted for child other medical history/symptoms: 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheeze (observed by parents) in last 12m

Derived 1 - RRs available Number of RRs : 1  
 Household exposure RRs: 1

KAPLAN Study description Study title : Kaplan (NCDS)  
 Full study title : National Child Development Study PS 1958-1964  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 7  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: nationwide  
 Start year of study : 1958  
 End year of study : 1958  
 Final follow up year: 1964  
 Principal publication year: 1985  
 Reference ID of principal publication: KAPLAN1985  
 Reference ID of additional publication(s): ANDERS1986,FOGELM1980,LEWIS1996,STRACH1988,STRACH1996,ANDERS1987,STRACH1995B,ANDERS1992B  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : KAPLAN  
 Phase of IESAST project: Original  
 Comments : Children of participants in this study were included in study ANNESI

Study design Study type : prospective  
 Type of population : all children  
 Respondent : Parent  
 Child smokes : No mention anal (but in quest)  
 Standard questionnaire: Non std/NA/NK  
 Comments : Subjects were all children born in a given week in 1958, subsequent immigrants with the same birth week were recruited later. Questions about child smoking may have been in later follow-ups than those used here

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: ever had attacks of asthma  
 Number of lifetime asthma cases: 430  
 Total number of subjects: 18559

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for 'asthma, or bronchitis with wheezing'. These were combined in most analyses because 'there are no good clinical or pathological grounds for distinguishing them'  
 Results by other stratifying factors available: present Results for asthma or bronchitis with wheezing are available by various strata

Derived 1 - RRs available Number of RRs : 1  
 Parental exposure RRs: 1

KARUNA Study description

Study title : Karunasekera  
 Full study title : Gampaha hospital CC 1996-1997  
 Study sex : both  
 Lowest age in study : 1  
 Highest age in study (at baseline): 10  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Sri Lanka  
 Location within country: Gampala district (Western Province)  
 Start year of study : 1996  
 End year of study : 1997  
 Principal publication year: 2001  
 Reference ID of principal publication: KARUNA2001  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : KARUNA  
 Phase of IESAST project: Original

Study design

Study type : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: any inpatients  
 Type of population : random in given hosp/clinic(s)  
 Type of population - controls (if diff from cases): no history asthma  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: inpatient admission, 2+ episodes of asthma, more severe than cough and wheeze  
 Number of current asthma cases: 300  
 Total number of subjects: 600

Matching factors

Cases and controls matched on age (CC): present

Confounders considered

Total number of adjustment factors used: 10  
 Adjusted for family (parent/sibl) medical history: 6  
 Adjusted for SES (inc parental education): 1  
 Adjusted for exposure to food/housedust allergens: 1  
 Adjusted for child other medical history/symptoms: 2  
 Other confounders considered but rejected: present  
 Comments : Adjustment for CMED(2), DAMP, PETS, SES(2) rejected due to lack of significance in MLR

Derived 1 - RRs available

Number of RRs : 2  
 Total exposure RRs : 2

KASPER Study description

Study title : Kasperczyk  
 Full study title : Katowice schools LS (stage I) 1996-98  
 Study sex : both  
 Lowest age in study : 10  
 Highest age in study (at baseline): 11  
 Study race : all (in country)  
 Continent : EEurope/Balkans  
 Country in E Europe/Balkans: Poland  
 Location within country: Katowice (Silesia)  
 Start year of study : 1996  
 End year of study : 1998  
 Principal publication year: 2002  
 Reference ID of principal publication: KASPER2002  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : KASPER  
 Phase of IESAST project: Added Nov05

Study design

Study type : cross-sectional  
 Type of population : school NOS  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

KASPER

(continued)

Asthma                   Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: not assessable  
 Total number of subjects: 5246  
 Comments               : Referred to as asthma induction and probability of asthma  
                           appearing, but seems more likely to be prevalence of ever asthma

Derived 1 -           Number of RRs               : 1  
 RRs available       Household exposure RRs: 1

KAY                   Study title               : Kay  
 description           Full study title         : Birmingham GP CS (ca 1994?)  
                           Study sex                : both  
                           Lowest age in study     : 3  
                           Highest age in study (at baseline): 11  
                           Study race               : all (in country)  
                           Continent               : WEurope/Scandinavia  
                           Country in W Europe    : UK  
                           Location within country: Birmingham  
                           Start year of study     : not assessable  
                           End year of study       : not assessable  
                           Principal publication year: 1995  
                           Reference ID of principal publication: KAY1995  
                           Overlap: none  
                           Principal/subsidiary study: Principal  
                           REF group               : KAY  
                           Phase of IESAST project: Original

Study design           Study type               : cross-sectional  
                           Type of population     : all primary care patients  
                           Respondent             : Parent  
                           Child smokes           : No mention  
                           Standard questionnaire: Non std/NA/NK

Asthma                   Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 211  
 Total number of subjects: 1077

Confounders           Total number of adjustment factors used: 3  
 considered           Adjusted for child other medical history/symptoms: 1  
                           Adjusted for parental smoking current/since birth: 2

Other results           Results by other stratifying factors available: present Results available stratified  
 (not current           by child's eczema; and by social class  
 db)

Derived 1 -           Number of RRs               : 26  
 RRs available       Parental exposure RRs: 26

KEARNE Study description Study title : Kearney  
Full study title : Cork CS of travelling and settled families 1997  
Study sex : male  
Lowest age in study : 6  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Ireland  
Location within country: Cork  
Start year of study : 1997  
End year of study : 1997  
Principal publication year: 1998  
Reference ID of principal publication: KEARNE1998  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : KEARNE  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all travellers + all gvn schl  
Other exclusions : away at time of study  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC  
Comments : Subjects were all children from all travelling families living in Cork (apart from a few families that were travelling at the time), plus settled children from a primary school

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 37  
Total number of subjects: 173

Other results (not current db) Other definitions of asthma available: present Result available for exercise induced asthma  
Wheezing/wheezing bronchitis available: present Results available for wheeze ever; for wheeze in last 12m

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

KELLY Study description Study title : Kelly  
Full study title : 2nd Merseyside primary school dust expos CS 1993  
Study sex : both  
Lowest age in study : 5  
Highest age in study (at baseline): 11  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: 3 areas in Merseyside  
Start year of study : 1993  
End year of study : 1993  
Principal publication year: 1995  
Reference ID of principal publication: KELLY1995  
Reference ID of additional publication(s): BRABIN1994  
Overlap: KELLY/BRABIN  
Principal/subsidiary study: Subsidiary  
REF group : BRABIN  
Phase of IESAST project: Original  
Comments : Overlaps with study BRABIN which was conducted 2 years earlier at the same schools but including only 50% (rather than all) children. 29% of children in this study had previously been included in study BRABIN

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

KELLY

(continued)

Asthma                   Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma or bronchial asthma  
Number of lifetime asthma cases: 748  
Total number of subjects: 3746  
Comments                   : Number of asthma cases is approximate (numbers included in an  
analysis of maternal asthma x full/pre term birth)

Other results            Wheezing/wheezing bronchitis available: present Results available for presence of  
(not current            cough wheeze and breathlessness  
db)

Derived 1 -            Number of RRs            : 2  
RRs available        Parental exposure RRs: 1  
Parental passive smoking exposure RRs: 1

KENDIR Study            Study title               : Kendirli  
description            Full study title         : Adana schools CS 1993-94  
Study sex               : both  
Lowest age in study : 6  
Highest age in study (at baseline): 14  
Study race              : all (in country)  
Continent               : EEurope/Balkans  
Country in E Europe/Balkans: Turkey  
Location within country: Adana  
Start year of study : 1993  
End year of study     : 1994  
Principal publication year: 1998  
Reference ID of principal publication: KENDIR1998  
Overlap: none  
Principal/subsidiary study: Principal  
REF group               : KENDIR  
Phase of IESAST project: Original

Study design           Study type               : cross-sectional  
Type of population     : random schoolchildren  
Respondent             : Parent  
Child smokes           : No mention  
Standard questionnaire: Non std/NA/NK

Asthma                   Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 304  
Total number of subjects: 2334  
Comments                : Number of cases is shown as 302 in Table 2 but 304 in Table 3  
(page 348 KENDIR1998)

Other results           Wheezing/wheezing bronchitis available: present results available for ever wheezing  
(not current            (as observed by parents)  
db)

Derived 1 -            Number of RRs            : 1  
RRs available        Household exposure RRs: 1

KERSHA Study description

Study title : Kershaw  
 Full study title : Gosport Naval hospital CC 1983-85  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 5  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: Gosport  
 Start year of study : 1983  
 End year of study : 1985  
 Principal publication year: 1987  
 Reference ID of principal publication: KERSHA1987  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : KERSHA  
 Phase of IESAST project: Original

Study design

Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : all in given hosp/clinic(s)  
 Medical exclusions : cystic fibrosis, tracheal-oesophageal fistula, congenital collapsing bronchus, immotile cilia syndrome  
 Type of population - controls (if diff from cases): all newborns  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Controls were age 4 weeks, interviews 1983-1984

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Medical records  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthmatic (= presenting any resp illness, had had 3+ bouts of bronchitis or bronchiolitis in any 6m period, and also had either definite intermittent wheeze or chronic night cough)  
 Number of lifetime asthma cases: 86  
 Total number of subjects: 1285

Confounders considered

Total number of adjustment factors used: 1  
 Adjusted for SES (inc parental education): 1  
 Comments : Refers to father's occupation (services/civilian)

Other results (not current db)

Results by other stratifying factors available: present Results available stratified by father's occupation (services/civilian)

Derived 1 - RRs available

Number of RRs : 8  
 Parental exposure RRs: 4  
 Household exposure RRs: 4

KIVITY Study description

Study title : Kivity  
 Full study title : Zichron Yaakov & Paradis schools CS (ca 1998?)  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 17  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Israel  
 Location within country: Zichron Yaakov and Paradis  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 2001  
 Reference ID of principal publication: KIVITY2001  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : KIVITY  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

KIVITY  
(continued)

Asthma                   Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: bronchial asthma  
 Number of lifetime asthma cases: 140  
 Total number of subjects: 1243  
 Comments                 : Number of cases based on %, may be subject to rounding error

Confounders            Total number of adjustment factors used: 4  
 considered             Adjusted for sex         : present  
                           Adjusted for race       : 1  
                           Adjusted for family (parent/sibl) medical history: 1  
                           Adjusted for household composition: 1  
 Comments               : Race refers to town of residence, the towns being Jewish and Arab respectively

Derived 1 -            Number of RRs            : 5  
 RRs available         Parental exposure RRs: 5

KNIGHT Study           Study title               : Knight  
 description            Full study title         : Toronto pediatrician CS 1993  
                           Study sex                : both  
                           Lowest age in study     : 2  
                           Highest age in study (at baseline): 18  
                           Study race               : all (in country)  
                           Continent                : NAmerica  
                           Country in N America: Canada  
                           Location within country: Toronto  
                           Start year of study     : 1993  
                           End year of study       : 1993  
                           Principal publication year: 1998  
                           Reference ID of principal publication: KNIGHT1998  
                           Overlap: none  
                           Principal/subsidiary study: Principal  
                           REF group                : KNIGHT  
                           Phase of IESAST project: Original

Study design           Study type                : cross-sectional  
                           Type of population     : primary care NOS  
                           Medical exclusions     : history of chronic cough or wheeze, exercise-induced cough or wheeze, or SOB without current diagnosis of asthma  
                           Respondent              : Parent and child  
                           Child smokes            : Smkrs above given age excluded  
                           Standard questionnaire: Non std/NA/NK  
                           Comments                : Subjects age 7+ completed confidential questionnaire and 4 active smokers were excluded

Asthma                   Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: asthma (= clinic diagnosis of repeated reversible episodes of bronchoconstriction manifested as cough or wheeze, verified by pulmonary function tests)  
 Number of current asthma cases: 78  
 Total number of subjects: 164

Derived 1 -            Number of RRs            : 4  
 RRs available         Household exposure RRs: 1  
                           Biochemical exposure RRs: 3

KUEHR Study description Study title : Kuehr  
Full study title : SW Germany schools baseline CS 1990  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 8  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Germany  
Location within country: Freiburg, Kehl & Lorrach/Weil  
Start year of study : 1990  
End year of study : 1990  
Principal publication year: 1992  
Reference ID of principal publication: KUEHR1992  
Reference ID of additional publication(s): MEINER1994, HENSCH1997, KUEHR1992A, FRISCH1993 FRISCH1992A  
Overlap: KUEHR/SPIEKE  
Principal/subsidiary study: Principal  
REF group : KUEHR  
Phase of IESAST project: Original  
Comments : KUEHR is baseline study. A subset of subjects were included in two follow-ups which included cotinine assessment, and have been entered as SPIEKE

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma (= asthma or recurrent wheezy bronchitis)  
Number of lifetime asthma cases: 162  
Total number of subjects: 1401

Confounders considered Total number of adjustment factors used: 1  
Adjusted for child other medical history/symptoms: 1

Other results (not current db) Other definitions of asthma available: present Results available for allergic asthma (= as sensitization in SPT to 1+ aeroallergen, and either physician diagnosed bronchial asthma or at least one symptom: frequent cough after exercise/when exposed to cold; ever wheezing; cough or SOB at night; ever had attacks of SOB or breathlessness)  
Other exposures available: present Results available for mother started/quit smoking between child's age 1 and age 7 (FRISCH1993)  
Results by other stratifying factors available: present Results available stratified by atopy (FRISCH1993); by bronchial hyper-reactivity (MEINER1994)

Derived 1 - RRs available Number of RRs : 8  
Parental exposure RRs: 8

KUHR Study description Study title : Kuhr  
Full study title : Freiburg & Black Forest air poll family CS 1987-88  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 16  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Germany  
Location within country: Freiburg city and two Black Forest communities  
Start year of study : 1987  
End year of study : 1988  
Principal publication year: 1991  
Reference ID of principal publication: KUHR1991  
Reference ID of additional publication(s): MATTES1999  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : KUHR  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all children rndm households  
Medical exclusions : acute infection  
Respondent : Parent  
Child smokes : Smokers excl questionnaire  
Standard questionnaire: Non std/NA/NK

KUHR

(continued)

Asthma	<p>Lifetime/incidence/unspec asthma available: present  Source of lifetime asthma diagnosis: Parent report (physician diag)  Timing of lifetime asthma: Lifetime  Timing of incidence asthma: NA (prevalence analysis only)  Description of lifetime asthma: answered Yes or Dont know to ever phys diag asthma  Number of lifetime asthma cases: 41  Total number of subjects: 704</p>
Confounders considered	<p>Total number of adjustment factors used: 6  Adjusted for sex : present  Adjusted for location within study: 2  Adjusted for cooking/heating methods: 1  Adjusted for housing quality/age/size: 1  Adjusted for child other medical history/symptoms: 1  Other confounders considered but rejected: present  Comments : HOUS refers to an index based on house construction, insulation, damp and ventilation. Adjustment for NO2 (in district), FMED(4), CMED, SES, AGE rejected from MLR</p>
Derived 1 - RRs available	<p>Number of RRs : 6  Parental exposure RRs: 6</p>
LAMI	<p>Study description</p> <p>Study title : Lam 1  Full study title : Nationwide secondary schools CS 1994  Study sex : both  Lowest age in study : 12  Highest age in study (at baseline): 15  Study race : all (in country)  Continent : Asia  Country in Asia : HongKong  Location within country: nationwide  Start year of study : 1994  End year of study : 1994  Principal publication year: 1998  Reference ID of principal publication: LAM1998  Overlap: none  Principal/subsidiary study: Principal  REF group : LAM1  Phase of IESAST project: Original</p>
Study design	<p>Study type : cross-sectional  Type of population : random schoolchildren  Other exclusions : English-speaking and International schools  Respondent : Child  Child smokes : Smokers excl questionnaire  Standard questionnaire: Non std/NA/NK</p>
Asthma	<p>Lifetime/incidence/unspec asthma available: present  Source of lifetime asthma diagnosis: Child report (physician diag)  Timing of lifetime asthma: Lifetime  Timing of incidence asthma: NA (prevalence analysis only)  Description of lifetime asthma: asthma  Current asthma available: present  Source of current asthma diagnosis: Child report (other/uns/mix)  Timing of current asthma: last n months (n&lt;6)  Description of current asthma: use of asthma medication in last 2 days  Number of lifetime asthma cases: 363  Number of current asthma cases: 67  Total number of subjects: 4482  Comments : Number of cases based on %, may be subject to rounding error</p>
Confounders considered	<p>Total number of adjustment factors used: 4  Adjusted for sex : present  Adjusted for age : 1  Adjusted for location within study: 1  Adjusted for SES (inc parental education): 1</p>
Other results (not current db)	<p>Wheezing/wheezing bronchitis available: present Results available for wheezing ever; for wheezing in last 3 months  Other results for child smokers available: present Results available for child (active) smoking</p>

## LAM1

(continued)

Derived 1 -       Number of RRs       : 20  
 RRs available    Parental exposure RRs: 4  
                   Household exposure RRs: 16

## LAM2

Study description    Study title           : Lam 2  
                     Full study title       : Nationwide primary schools CS 1995-96  
                     Study sex             : both  
                     Lowest age in study   : 8  
                     Highest age in study (at baseline): 13  
                     Study race            : all (in country)  
                     Continent            : Asia  
                     Country in Asia       : HongKong  
                     Location within country: nationwide  
                     Start year of study   : 1995  
                     End year of study     : 1996  
                     Principal publication year: 1999  
                     Reference ID of principal publication: LAM1999  
                     Overlap: none  
                     Principal/subsidiary study: Principal  
                     REF group            : LAM2  
                     Phase of IESAST project: Original

Study design        Study type            : cross-sectional  
                     Type of population     : random schoolchildren  
                     Respondent            : Child  
                     Child smokes         : Smokers excl questionnaire  
                     Standard questionnaire: Non std/NA/NK

Asthma             Lifetime/incidence/unspec asthma available: present  
                     Source of lifetime asthma diagnosis: Child report (physician diag)  
                     Timing of lifetime asthma: Lifetime  
                     Timing of incidence asthma: NA (prevalence analysis only)  
                     Description of lifetime asthma: asthma  
                     Current asthma available: present  
                     Source of current asthma diagnosis: Child report (other/uns/mix)  
                     Timing of current asthma: last n months (n<6)  
                     Description of current asthma: use of asthma medication in last 2 days  
                     Number of lifetime asthma cases: 237  
                     Number of current asthma cases: 70  
                     Total number of subjects: 3480  
                     Comments            : Number of cases based on %, may be subject to rounding error

Confounders considered   Total number of adjustment factors used: 4  
                           Adjusted for sex       : present  
                           Adjusted for age       : 1  
                           Adjusted for location within study: 1  
                           Adjusted for mobility (par/ch brn abrd, moved hous: 1

Other results (not current db)   Wheezing/wheezing bronchitis available: present Results available for wheezing ever;  
   for seen doctor for wheezing in last 3m  
                           Other results for child smokers available: present Results available separately for  
   ever smoking children, and with ever smoking children included (as well as never  
   smoking)

Derived 1 -       Number of RRs       : 14  
 RRs available    Parental exposure RRs: 2  
                   Household exposure RRs: 12

LAU Study description Study title : Lau  
 Full study title : HK Isld & New Terr schools & kindergartens CS 1989  
 Study sex : both  
 Lowest age in study : 3  
 Highest age in study (at baseline): 10  
 Study race : chinese  
 Continent : Asia  
 Country in Asia : HongKong  
 Location within country: Hong Kong Island and New Territories  
 Start year of study : 1989  
 End year of study : 1989  
 Principal publication year: 1995  
 Reference ID of principal publication: LAU1995  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : LAU  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: current NOS  
 Description of current asthma: asthma  
 Number of current asthma cases: 28  
 Total number of subjects: 433

Derived 1 - RRs available Number of RRs : 1  
 Parental exposure RRs: 1

LEE1 Study description Study title : Lee 1  
 Full study title : National Korean elementary schools CS 1995  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Korea  
 Location within country: nationwide  
 Start year of study : 1995  
 End year of study : 1995  
 Principal publication year: 2001  
 Reference ID of principal publication: LEE2001A  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : LEE1  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: ever diagnosed asthma and symptoms in last 12m  
 Number of current asthma cases: 774  
 Total number of subjects: 24174  
 Comments : Number of cases refers to treatment of asthma in last 12m, so  
 may be lower than cases as analysed. Based on %, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 8  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 2  
 Adjusted for SES (inc parental education): 1  
 Adjusted for pets in household: 1  
 Adjusted for exposure to food/housedust allergens: 1  
 Adjusted for obesity/BMI: 1

LEE1

(continued)

Derived 1 - Number of RRs : 1  
 RRs available Household exposure RRs: 1

LEE2

Study description Study title : Lee 2  
 Full study title : National Korean middle schools CS 1995  
 Study sex : both  
 Lowest age in study : 12  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Korea  
 Location within country: nationwide  
 Start year of study : 1995  
 End year of study : 1995  
 Principal publication year: 2001  
 Reference ID of principal publication: LEE2001A  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : LEE2  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Child  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: ever diagnosed asthma and symptoms in last 12m  
 Number of current asthma cases: 148  
 Total number of subjects: 14781  
 Comments : Number of cases refers to treatment of asthma in last 12m, so  
 may be lower than cases as analysed. Based on %, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 8  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 2  
 Adjusted for SES (inc parental education): 1  
 Adjusted for pets in household: 1  
 Adjusted for exposure to food/housedust allergens: 1  
 Adjusted for obesity/BMI: 1

Derived 1 - Number of RRs : 1  
 RRs available Household exposure RRs: 1

LEE3

Study description Study title : Lee 3  
 Full study title : Taiwan nationwide air pollution CS 2001  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Taiwan  
 Location within country: Nationwide, within 1km of air-monitoring stations  
 Start year of study : 2001  
 End year of study : 2001  
 Principal publication year: 2003  
 Reference ID of principal publication: LEE2003I  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : LEE3  
 Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Other exclusions : schools more than 1km from air-monitoring station  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

App13-81

LEE3

(continued)

Asthma                   Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 2224  
 Total number of subjects: 35036  
 Comments                   : Number of cases based on %, may be subject to rounding error

Derived 1 -               Number of RRs               : 5  
 RRs available            Parental exposure RRs: 1  
                           Household exposure RRs: 4

LEEDER Study             Study title                : Leeder  
 description             Full study title         : Harrow 1963-65 birth cohort prosp 1963-70  
                           Study sex                 : both  
                           Lowest age in study     : 0  
                           Highest age in study (at baseline): 0  
                           Highest age in study at final followup: 5  
                           Study race                : all (in country)  
                           Continent                 : WEurope/Scandinavia  
                           Country in W Europe     : UK  
                           Location within country: Harrow (NW London)  
                           Start year of study     : 1963  
                           End year of study        : 1965  
                           Final follow up year: 1970  
                           Principal publication year: 1976  
                           Reference ID of principal publication: LEEDER1976  
                           Reference ID of additional publication(s): LEEDER1976A  
                           Overlap: none  
                           Principal/subsidiary study: Principal  
                           REF group                 : LEEDER  
                           Phase of IESAST project: Original

Study design             Study type                 : prospective  
                           Type of population       : all children  
                           Medical exclusions       : died within 7 days of birth  
                           Other exclusions         : not full 5-year followup  
                           Respondent                : Parent  
                           Child smokes             : No mention  
                           Standard questionnaire: Non std/NA/NK

Asthma                   Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 59  
 Total number of subjects: 1878  
 Comments                   : Number of cases based on %, may be subject to rounding error

Confounders             Total number of adjustment factors used: 9  
 considered               Adjusted for sex            : present  
                           Adjusted for location within study: 1  
                           Adjusted for family (parent/sibl) medical history: 4  
                           Adjusted for SES (inc parental education): 1  
                           Adjusted for household composition: 1  
                           Adjusted for child other medical history/symptoms: 1

Other results            Wheezing/wheezing bronchitis available: present Results available for wheeze  
 (not current            Other exposures available: present Results available for change in parental smoking  
 db)                      habit  
                           Results by other stratifying factors available: present Results available stratified  
                           by parental cough-phlegm

Derived 1 -               Number of RRs               : 3  
 RRs available            Parental exposure RRs: 3

LEEN Study description Study title : Leen  
Full study title : Galway primary school CC 1991-92  
Study sex : both  
Lowest age in study : 9  
Highest age in study (at baseline): 9  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Ireland  
Location within country: Galway city  
Start year of study : 1991  
End year of study : 1992  
Principal publication year: 1994  
Reference ID of principal publication: LEEN1994  
Reference ID of additional publication(s): MEMON1993  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : LEEN  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : all schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : A cross-sectional study of all schoolchildren was used to identify cases, and matched controls were chosen for the 118 (/134) cases who participated in the second phase of the study. The third phase reported here invited the controls and all the original cases (i.e. including those who did not have a matched control)

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: current NOS  
Description of current asthma: asthma (= current wheeze)  
Number of current asthma cases: 115  
Total number of subjects: 211  
Comments : Among the cases, 77% had asthma diagnosis according to the parents, or 68% according to the children

Matching factors Cases and controls matched on sex: present  
Cases and controls matched on age (CC): present

Derived 1 - RRs available Number of RRs : 1  
Parental exposure RRs: 1

LEROUX Study description Study title : Le Roux  
Full study title : Le Havre primary schools CS 1990-91  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 7  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : France  
Location within country: Le Havre and Fecamp  
Start year of study : 1990  
End year of study : 1991  
Principal publication year: 1995  
Reference ID of principal publication: LEROUX1995  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : LEROUX  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Other exclusions : parent did not attend school medical examination  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

LEROUX

(continued)

Asthma                   Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma (= acute recurring attacks of SOB with wheeze  
 which end spontaneously or respond to treatment)  
 Number of lifetime asthma cases: 99  
 Total number of subjects: 1193

Confounders            Total number of adjustment factors used: 10  
 considered             Adjusted for sex       : present  
                           Adjusted for race     : 1  
                           Adjusted for location within study: 1  
                           Adjusted for family (parent/sibl) medical history: 3  
                           Adjusted for SES (inc parental education): 1  
                           Adjusted for household composition: 1  
                           Adjusted for child other medical history/symptoms: 2

Derived 1 -            Number of RRs           : 2  
 RRs available        Parental exposure RRs: 2

LEVES1 Study            Study title             : Levesque 1  
 description            Full study title       : Quebec schools CS (HSSCY) age 9 1999  
                           Study sex             : both  
                           Lowest age in study : 9  
                           Highest age in study (at baseline): 9  
                           Study race            : all (in country)  
                           Continent             : NAmerica  
                           Country in N America: Canada  
                           Location within country: Quebec  
                           Start year of study : 1999  
                           End year of study    : 1999  
                           Principal publication year: 2004  
                           Reference ID of principal publication: LEVESQ2004  
                           Overlap: none  
                           Principal/subsidiary study: Principal  
                           REF group             : LEVES1  
                           Phase of IESAST project: Added Nov05

Study design           Study type             : cross-sectional  
                           Type of population    : random schoolchildren  
                           Respondent            : Parent  
                           Child smokes          : No mention  
                           Standard questionnaire: ISAAC

Asthma                   Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 186  
 Total number of subjects: 1267

Other results           Wheezing/wheezing bronchitis available: present Results available for wheeze  
 (not current           db)

Derived 1 -            Number of RRs           : 1  
 RRs available        Household exposure RRs: 1

LEVES2 Study description Study title : Levesque 2  
Full study title : Quebec schools CS (HSSCY) age 13 1999  
Study sex : both  
Lowest age in study : 13  
Highest age in study (at baseline): 13  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: Canada  
Location within country: Quebec  
Start year of study : 1999  
End year of study : 1999  
Principal publication year: 2004  
Reference ID of principal publication: LEVESQ2004  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : LEVES2  
Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : Smokers included  
Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 180  
Total number of subjects: 1186

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheeze  
Other results for child smokers available: present It is reported that no relationship  
between smoking and asthma was found

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

LEVES3 Study description Study title : Levesque 3  
Full study title : Quebec schools CS (HSSCY) age 16 1999  
Study sex : both  
Lowest age in study : 16  
Highest age in study (at baseline): 16  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: Canada  
Location within country: Quebec  
Start year of study : 1999  
End year of study : 1999  
Principal publication year: 2004  
Reference ID of principal publication: LEVESQ2004  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : LEVES3  
Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : Smokers included  
Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 164  
Total number of subjects: 1160

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheeze  
Other results for child smokers available: present It is reported that no relationship  
between smoking and asthma was found

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

LILLJE Study description

Study title : Lilljeqvist  
 Full study title : Oslo birth cohort 1981-84 CS 1991  
 Study sex : both  
 Lowest age in study : 7  
 Highest age in study (at baseline): 10  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Norway  
 Location within country: Oslo  
 Start year of study : 1991  
 End year of study : 1991  
 Principal publication year: 1997  
 Reference ID of principal publication: LILLJE1997  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : LILLJE  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : all newborns at given hosp(s)  
 Medical exclusions : symptoms or diagnosis of allergies but not asthma  
 Other exclusions : not traceable at original address  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ICHPPC

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: current NOS  
 Description of current asthma: asthma symptoms  
 Number of current asthma cases: 293  
 Total number of subjects: 706  
 Comments : 57 (19%) of the children with asthma symptoms had an asthma diagnosis

Derived 1 -  
 RRs available

Number of RRs : 1  
 Parental exposure RRs: 1

LINDFO Study description

Study title : Lindfors  
 Full study title : Stockholm hospital CC 1990-92  
 Study sex : both  
 Lowest age in study : 1  
 Highest age in study (at baseline): 4  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: Stockholm  
 Start year of study : 1990  
 End year of study : 1992  
 Principal publication year: 1995  
 Reference ID of principal publication: LINDFO1995  
 Reference ID of additional publication(s): LINDFO1994  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : LINDFO  
 Phase of IESAST project: Original

Study design

Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : all in given hosp/clinic(s)  
 Type of population - controls (if diff from cases): rndm from hosp catchment area  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: referral to specialist allergy clinic for evaluation of bronchial asthma, and 3+ episodes of airway obstruction with asthmatic symptoms such as wheezing, cough etc  
 Number of current asthma cases: 193  
 Total number of subjects: 511

LINDFO  
(continued)

Matching factors           Cases and controls matched on age (CC): present  
 Comments                 : Matching for age refers to matching by date of birth, however as the controls were selected in the later part of the study period, their age was about 9m higher on average than the cases at time of inclusion

Other results (not current db)   Results by other stratifying factors available: present Results are available for cases subdivided on +ve skin prick test to cat and/or dog, versus combined controls. Results are also available for the age group <30m, and for those with damp housing, but only for the separate SPT groups (and with insufficient information to be able to combine)

Derived 1 - RRs available   Number of RRs           : 1  
 Parental exposure RRs: 1

LIS Study description       Study title               : Lis  
 Full study title         : Krakow schools CS 1992-95  
 Study sex                 : both  
 Lowest age in study     : 12  
 Highest age in study (at baseline): 14  
 Study race               : all (in country)  
 Continent                : EEurope/Balkans  
 Country in E Europe/Balkans: Poland  
 Location within country: Krakow  
 Start year of study     : 1992  
 End year of study       : 1995  
 Principal publication year: 1997  
 Reference ID of principal publication: LIS1997  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group                : LIS  
 Phase of IESAST project: Original

Study design            Study type                : cross-sectional  
 Type of population     : random schoolchildren  
 Respondent             : Child  
 Child smokes           : No mention  
 Standard questionnaire: ISAAC

Asthma                 Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Child report (physician diag)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: bronchial asthma  
 Number of lifetime asthma cases: not assessable  
 Total number of subjects: 6696

Other results (not current db)   Wheezing/wheezing bronchitis available: present Results available for symptoms of dyspnoea and wheezing ever; symptoms of dyspnoea or wheezing in last 12m; symptoms of dyspnoea or wheezing during or after exercise

Derived 1 - RRs available   Number of RRs           : 2  
 Parental exposure RRs: 2

LISTER Study description   Study title               : Lister  
 Full study title         : ABS National Health Survey 1989-90  
 Study sex                 : both  
 Lowest age in study     : 0  
 Highest age in study (at baseline): 4  
 Study race               : all (in country)  
 Continent                : Australasia  
 Country in Australasia: Australia  
 Location within country: nationwide  
 Start year of study     : 1989  
 End year of study       : 1990  
 Principal publication year: 1998  
 Reference ID of principal publication: LISTER1998  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group                : LISTER  
 Phase of IESAST project: Original

LISTER  
(continued)

Study design	Study type : cross-sectional Type of population : all children rndm households Respondent : Parent Child smokes : No mention Standard questionnaire: Non std/NA/NK
Asthma	Lifetime/incidence/unspec asthma available: present Source of lifetime asthma diagnosis: Parent report (other/uns/mix) Timing of lifetime asthma: unspecified Timing of incidence asthma: NA (prevalence analysis only) Description of lifetime asthma: asthma Number of lifetime asthma cases: 399 Total number of subjects: 4281
Confounders considered	Total number of adjustment factors used: 9 Adjusted for sex : present Adjusted for location within study: 1 Adjusted for SES (inc parental education): 3 Adjusted for household composition: 1 Adjusted for mobility (par/ch brn abrd, moved hous: 1 Adjusted for parental smoking current/since birth: 2 Other confounders considered but rejected: present Comments : Adjustment for SES(maternal employment) and LOC rejected from MLR as not significant
Other results (not current db)	Other definitions of asthma available: present Results available for use of health services for asthma (doctor, outpatient or emergency consultation in last 2 weeks, or hospital admission in last year) Wheezing/wheezing bronchitis available: present Results available for asthma or wheeze
Derived 1 - RRs available	Number of RRs : 9 Parental exposure RRs: 8 Household exposure RRs: 1
LOPEZC Study description	Study title : Lopez Campos Full study title : Lagunera hospital CC (ca 2000?) Study sex : both Lowest age in study : 6 Highest age in study (at baseline): 10 Study race : all (in country) Continent : SCAmerica Country in S/C America: Mexico Location within country: Lagunera Start year of study : not assessable End year of study : not assessable Principal publication year: 2001 Reference ID of principal publication: LOPEZC2001 Overlap: none Principal/subsidiary study: Principal REF group : LOPEZC Phase of IESAST project: Original
Study design	Study type : case/control Type of controls (for CC studies): diseased/hospital Control diseases/cause of death: attending Family Medicine Clinic Type of population : hospital NOS Respondent : Parent Child smokes : No mention Standard questionnaire: Non std/NA/NK
Asthma	Current asthma available: present Source of current asthma diagnosis: Medical records Timing of current asthma: current diagnosis Description of current asthma: allergic asthma Number of current asthma cases: 58 Total number of subjects: 175
Matching factors	Cases and controls matched on sex: present Cases and controls matched on age (CC): present Cases and controls matched on socioeconomic status: present
Derived 1 - RRs available	Number of RRs : 3 Parental exposure RRs: 2 Household exposure RRs: 1

MAIER Study description

Study title : Maier  
 Full study title : Seattle primary schools CS 1994  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 9  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Cal,Wash,Oreg  
 Location within country: Seattle (Washington)  
 Start year of study : 1994  
 End year of study : 1994  
 Principal publication year: 1997  
 Reference ID of principal publication: MAIER1997  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : MAIER  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : school NOS  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 106  
 Total number of subjects: 925

Confounders considered

Total number of adjustment factors used: 8  
 Adjusted for sex : present  
 Adjusted for race : 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for damp/mould in home: 2  
 Adjusted for child other medical history/symptoms: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for AGE, CMED(2), IVST rejected from backwards MLR due to lack of significance at p=0.2

Other results (not current db)

Wheezing/wheezing bronchitis available: present Result available for current wheeze without diagnosis of asthma  
 Results by other stratifying factors available: present Results available restricted to those with history of chronic sore throat

Derived 1 - RRs available

Number of RRs : 6  
 Household exposure RRs: 2  
 Total exposure RRs : 4

MARTIN Study description

Study title : Martinez/Tucson  
 Full study title : Tucson COLD prosp 1972-1988  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 5  
 Highest age in study at final followup: 12  
 Study race : whites excluding hispanics  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Nev,Ut,Ariz  
 Location within country: Tucson (Arizona)  
 Start year of study : 1972  
 End year of study : 1973  
 Final follow up year: 1988  
 Principal publication year: 1992  
 Reference ID of principal publication: MARTIN1992  
 Reference ID of additional publication(s): LEBOWI1976, LEBOWI1992  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : MARTIN  
 Phase of IESAST project: Original



## MAVALE

(continued)

Derived 1 - Number of RRs : 13  
 RRs available Parental exposure RRs: 13

MCCON1 Study Study title : McConnell CHS  
 description Full study title : Califrna Children's Health St school prosp 1993-98  
 Study sex : both  
 Lowest age in study : 9  
 Highest age in study (at baseline): 16  
 Highest age in study at final followup: 18  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Cal,Wash,Oreg  
 Location within country: 12 Southern California communities  
 Start year of study : 1993  
 End year of study : 1996  
 Final follow up year: 1998  
 Principal publication year: 2002  
 Reference ID of principal publication: MCCONN2002  
 Reference ID of additional publication(s): PETERS1999, GILLIL2003B  
 Overlap: MCCON1/GILLIL  
 Principal/subsidiary study: Principal  
 REF group : MCCON1  
 Phase of IESAST project: Original but modified Nov05  
 Comments : Prospective study using subjects without asthma at baseline;  
 baseline prevalence forms study GILLIL

Study design Study type : prospective  
 Type of population : random in given school(s)  
 Medical exclusions : cystic fibrosis, severe chest injury, chest surgry  
 Respondent : Parent and child  
 Child smokes : Smokers incl but few (bio/qu)  
 Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Child report (physician diag)  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: since baseline (earlier excl)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 288  
 Total number of subjects: 3535

Confounders Total number of adjustment factors used: 5  
 considered Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for race : 1  
 Adjusted for location within study: 1  
 Adjusted for child other medical history/symptoms: 1

Other results Other results for child smokers available: present Results available for child  
 (not current (active) smoking  
 db) Results by other stratifying factors available: present Results available stratified  
 by wheeze at baseline

Derived 1 - Number of RRs : 4  
 RRs available Parental exposure RRs: 2  
 Household exposure RRs: 2

MCCON2 Study description

Study title : McConnochie  
Full study title : Rochester NY pediatric practice CS 1980-81  
Study sex : both  
Lowest age in study : 5  
Highest age in study (at baseline): 9  
Study race : all (in country)  
Continent : N America  
Country in N America: USA  
US state : Vt,Me,NY,NH,Mass,RI,Conn  
Location within country: Rochester (New York)  
Start year of study : 1980  
End year of study : 1981  
Principal publication year: 1986  
Reference ID of principal publication: MCCONN1986  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MCCON2  
Phase of IESAST project: Original  
Comments : Overlaps with study reported by MCCONN1989 which included an additional 51 subjects with history of bronchiolitis, reported later followup and reported on physician-diagnosed asthma requiring medication in last 2 years. No detailed results given, but a multivariate model found no significant association between passive smoking and asthma

Study design

Study type : cross-sectional  
Type of population : random at given prim care(s)  
Medical exclusions : premature birth, cardiac/neuromuscular disorder, esophageal atresia, bronchiolitis  
Other exclusions : adopted  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ATS/NHLI/ESP  
Comments : Sample had originally been selected as matched controls for an earlier study of bronchiolitis (MCCONN1984)

Asthma

Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: current NOS  
Description of current asthma: ever phys diag and currently taking medication  
Number of lifetime asthma cases: 15  
Number of current asthma cases: 8  
Total number of subjects: 223

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for current wheezing; wheezing without colds; wheezing with and without colds

Derived 1 - RRs available

Number of RRs : 6  
Parental exposure RRs: 4  
Household exposure RRs: 2

MCKEEV Study description

Study title : McKeever  
Full study title : West Midlands GPRD incidence study (ca 1989-2000?)  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 11  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: West Midlands  
Start year of study : not assessable  
End year of study : not assessable  
Final follow up year: not assessable  
Principal publication year: 2001  
Reference ID of principal publication: MCKEEV2001  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MCKEEV  
Phase of IESAST project: Original

MCKEEV

(continued)

Study design    Study type            : prospective  
 Type of population : all at given primary care(s)  
 Respondent        : Medical records  
 Child smokes      : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments          : Parents were identified by record linkage (mother for 84%,  
 father for 57%)

Asthma            Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Medical records  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: asthma (including asthma and wheezing)  
 Number of lifetime asthma cases: 5842  
 Total number of subjects: 29238

Derived 1 -      Number of RRs            : 10  
 RRs available    Parental exposure RRs: 10

MELIA    Study                    Study title            : Melia NSHG  
 description            Full study title        : UK National Study of Health & Growth LS - 1977  
                           Study sex                : both  
                           Lowest age in study : 5  
                           Highest age in study (at baseline): 11  
                           Study race               : all (in country)  
                           Continent                : WEurope/Scandinavia  
                           Country in W Europe : UK  
                           Location within country: 21 English and 4 Scottish areas  
                           Start year of study : 1977  
                           End year of study        : 1977  
                           Principal publication year: 1981  
                           Reference ID of principal publication: MELIA1981  
                           Reference ID of additional publication(s): SOMERV1988  
                           Overlap: MELIA/SOMERV/CHINN  
                           Principal/subsidiary study: Principal  
                           REF group                : MELIA  
                           Phase of IESAST project: Original  
                           Comments                : Part of a longitudinal study of children age 5-11 in selected  
                                   areas. Same areas studied in 1977 (MELIA), 1982 (SOMERV) and 1988 (part of CHINN) but  
                                   have been entered separately as analysis treats them as separate cross-sectional  
                                   studies. Overlap is small (e.g. 5% of children in CHINN-1988 had been in  
                                   SOMERV-1982). Although not altogether clear, it seems that areas studied in 1987 and  
                                   1988 were non-overlapping, so combined results for those years are entered (CHINN)

Study design    Study type            : cross-sectional  
 Type of population : random schoolchildren  
 Respondent        : Parent  
 Child smokes      : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma            Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: at least one asthma attack in last 12m  
 Number of current asthma cases: not assessable  
 Total number of subjects: not assessable Number of subjects probably several thousands

Other results    Wheezing/wheezing bronchitis available: present Results available for chest ever sound  
 (not current    wheezy of whistling; chest wheezy or whistling most days or nights  
 db)

Derived 1 -      Number of RRs            : 1  
 RRs available    Household exposure RRs: 1

MELSOM Study description

Study title : Melsom  
Full study title : Katmandu Valley schools CC 1997  
Study sex : both  
Lowest age in study : 11  
Highest age in study (at baseline): 17  
Study race : all (in country)  
Continent : Asia  
Country in Asia : Nepal  
Location within country: Katmandu Valley  
Start year of study : 1997  
End year of study : 1997  
Principal publication year: 2001  
Reference ID of principal publication: MELSOM2001  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MELSOM  
Phase of IESAST project: Original

Study design

Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : Smokers included  
Standard questionnaire: ISAAC  
Comments : Cases were all those identified in a screening CS, controls were randomly selected from the remainder

Asthma

Current asthma available: present  
Source of current asthma diagnosis: Child report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: asthma (= at least one symptom in last year from both written and video questionnaires- Written: wheeze; dry cough at night apart from with cold. Video: moderate wheeze at rest; woken by nocturnal wheeze; woken by nocturnal cough; severe wheeze at rest)  
Number of current asthma cases: 121  
Total number of subjects: 247

Matching factors

Cases and controls matched on race: present  
Matched on location (within study area): present

Confounders considered

Total number of adjustment factors used: 3  
Adjusted for cooking/heating methods: 1  
Adjusted for pets in household: 2

Other results (not current db)

Other results for child smokers available: present Results available for child (active) smoking  
Results by other stratifying factors available: present Results available stratified by urban/rural; by use of smoky fuels

Derived 1 - RRs available

Number of RRs : 6  
Household exposure RRs: 6

MILLER Study description

Study title : Miller  
Full study title : Manhattan birth cohort PAH to age 2 (ca 2000?)  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 2  
Study race : whites and blacks  
Continent : N America  
Country in N America: USA  
US state : Vt,Me,NY,NH,Mass,RI,Conn  
Location within country: Manhattan  
Start year of study : not assessable  
End year of study : not assessable  
Final follow up year: not assessable  
Principal publication year: 2004  
Reference ID of principal publication: MILLER2004A  
Reference ID of additional publication(s): PERERA2002A  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MILLER  
Phase of IESAST project: Added Nov05



## MOHAME

(continued)

Matching factors Cases and controls matched on sex: present  
Cases and controls matched on age (CC): present  
Matched on location (within study area): present

Confounders considered Total number of adjustment factors used: 4  
Adjusted for cooking/heating methods: 1  
Adjusted for damp/mould in home: 1  
Adjusted for exposure to food/housedust allergens: 1  
Adjusted for child other medical history/symptoms: 1  
Other confounders considered but rejected: present  
Comments : Adjustment for outdoor air pollution, mud wall and mud floor were rejected from MLR due to lack of significance

Derived 1 - RRs available Number of RRs : 5  
Parental exposure RRs: 2  
Household exposure RRs: 3

## MONTEF

Study description Study title : Montefort  
Full study title : Nationwide schools CS (ca 1995?)  
Study sex : both  
Lowest age in study : 5  
Highest age in study (at baseline): 8  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Malta  
Location within country: nationwide  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 2002  
Reference ID of principal publication: MONTEF2002  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MONTEF  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : random children  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 263  
Total number of subjects: 3506

Other results (not current db) Other definitions of asthma available: present Results available for very severe attacks of asthma  
Wheezing/wheezing bronchitis available: present Results available for wheeze ever; wheeze in last 12m; nocturnal wheeze; exercise-induced wheeze

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

MONTEI Study description

Study title : Monteil  
Full study title : Trinidad & Tobago schools CS 2002  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 7  
Study race : all (in country)  
Continent : SCAmerica  
Country in S/C America: Trinidad & Tobago  
Location within country: Nationwide  
Start year of study : 2002  
End year of study : 2002  
Principal publication year: 2004  
Reference ID of principal publication: MONTEI2004  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MONTEI  
Phase of IESAST project: Added Nov05

Study design

Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC

Asthma

Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 322  
Total number of subjects: 3170  
Comments : Number of cases based on %s in Table 2, and not on the numbers given in Tables 1,2 which are discrepant. Although the authors state that as in other ISAAC surveys, symptoms of wheeze are considered synonymous with asthma in this age group, results for wheeze in last 12m are not entered for current asthma in this database

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for wheeze and exercise-induced wheeze in last 12m

Derived 1 - RRs available

Number of RRs : 2  
Parental exposure RRs: 1  
Household exposure RRs: 1

MOUSSA Study description

Study title : Moussa  
Full study title : Al Ain city schools CC 1992-93  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 18  
Study race : all (in country)  
Continent : Asia  
Country in Asia : UAE  
Location within country: Al Ain city  
Start year of study : 1992  
End year of study : 1993  
Principal publication year: 1996  
Reference ID of principal publication: MOUSSA1996  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MOUSSA  
Phase of IESAST project: Original  
Comments : Two studies conducted in Al-Ain in same period: BENER (urban and rural) and MOUSSA (city). However none of the authors or their affiliations are in common, so assume no overlap

Study design

Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : random schoolchildren  
Type of population - controls (if diff from cases): rndm schlch no asthma medicatn  
Respondent : Parent and child  
Child smokes : Smokers included  
Standard questionnaire: Non std/NA/NK

## MOUSSA

(continued)

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current NOS  
 Description of current asthma: known asthmatics regularly receiving medication  
 Number of current asthma cases: 203  
 Total number of subjects: 406

Matching factors Cases and controls matched on sex: present  
 Cases and controls matched on age (CC): present

Other results (not current db) Other results for child smokers available: present Results available for child (active) smoking

Derived 1 - RRs available Number of RRs : 2  
 Parental exposure RRs: 2

## MOYES1

Study description Study title : Moyes 1  
 Full study title : Bay of Plenty primary schools CS (ca 1993?)  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 7  
 Study race : all (in country)  
 Continent : Australasia  
 Country in Australasia: New Zealand  
 Location within country: Eastern Bay of Plenty and Rotorua city  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 1995  
 Reference ID of principal publication: MOYES1995  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : MOYES1  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all schoolchildren  
 Other exclusions : very small rural village schools  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 653  
 Total number of subjects: 2556  
 Comments : Number of cases based on %, may be subject to rounding error

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for the following symptoms in the last 12 months: wheeze, wheeze more than 4 times, awake with wheeze, wheeze after exercise

Derived 1 - RRs available Number of RRs : 1  
 Household exposure RRs: 1

MOYES2 Study description Study title : Moyes 2  
Full study title : Bay of Plenty secondary schools CS (ca 1993?)  
Study sex : both  
Lowest age in study : 13  
Highest age in study (at baseline): 14  
Study race : all (in country)  
Continent : Australasia  
Country in Australasia: New Zealand  
Location within country: Eastern Bay of Plenty and Rotorua city  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 1995  
Reference ID of principal publication: MOYES1995  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MOYES2  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Other exclusions : very small rural village schools  
Respondent : Child  
Child smokes : Discussed, but no data avail  
Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Child report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 615  
Total number of subjects: 2742  
Comments : Number of cases based on %, may be subject to rounding error

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for the following symptoms in the last 12 months, based on self-completed questionnaire: wheeze, wheeze at least 4 times, awake with wheeze, wheeze after exercise. Also based on video questions for wheeze, wheeze after exercise, woken short of breath

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

MUMCUO Study description Study title : Mumcuoglu  
Full study title : Gaza Strip CC 1986-87  
Study sex : both  
Lowest age in study : 3  
Highest age in study (at baseline): 15  
Study race : all (in country)  
Continent : Asia  
Country in Asia : Israel  
Location within country: Gaza Strip  
Start year of study : 1986  
End year of study : 1987  
Principal publication year: 1994  
Reference ID of principal publication: MUMCUO1994  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MUMCUO  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : all at given primary care(s)  
Type of population - controls (if diff from cases): no chest/resp symptoms  
Respondent : Unspec (parent/child)  
Child smokes : No mention  
Standard questionnaire: MRC

Asthma Current asthma available: present  
Source of current asthma diagnosis: Medical records  
Timing of current asthma: current diagnosis  
Description of current asthma: asthma (= history of cough, SOB and wheeze, as well as low PF with at least 10% improvement after bronchodilator)  
Number of current asthma cases: 300  
Total number of subjects: 400

MUMCUO

(continued)

Matching factors Cases and controls matched on sex: present  
Cases and controls matched on age (CC): present  
Matched on location (within study area): present

Derived 1 - Number of RRs : 6  
RRs available Parental exposure RRs: 2  
Household exposure RRs: 4

MURRAY Study description Study title : Murray  
Full study title : Vancouver allergy clinic CC 1986-88  
Study sex : both  
Lowest age in study : 1  
Highest age in study (at baseline): 17  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: Canada  
Location within country: Vancouver (British Columbia)  
Start year of study : 1986  
End year of study : 1988  
Principal publication year: 1990  
Reference ID of principal publication: MURRAY1990A  
Reference ID of additional publication(s): MURRAY1989, MURRAY1992, MURRAY1993  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : MURRAY  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all in given hosp/clinic(s)  
Medical exclusions : cystic fibrosis, marked gastroesophageal reflux  
Respondent : Parent and child  
Child smokes : Smokers excl questionnaire  
Standard questionnaire: Non std/NA/NK  
Comments : All subjects were attending allergy clinic. Biochemical validation confirmed non-smoking status for some children age 9+

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Unspecified  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 292  
Total number of subjects: 620

Confounders considered Total number of adjustment factors used: 6  
Adjusted for sex : present  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for pets in household: 1  
Adjusted for child other medical history/symptoms: 3  
Other confounders considered but rejected: present  
Comments : Adjustment for COHE, HOCO and a number of interaction terms were rejected from stepwise MLR due to lack of significance

Other results (not current db) Results by other stratifying factors available: present Results available stratified by atopic dermatitis

Derived 1 - Number of RRs : 9  
RRs available Parental exposure RRs: 9

NHANE3 Study description

Study title : NHANES III  
Full study title : 3rd National Health & Nutrition Exam Surv 1988-94  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 17  
Study race : all (in country)  
Continent : N America  
Country in N America: USA  
US state : all  
Location within country: nationwide  
Start year of study : 1988  
End year of study : 1994  
Principal publication year: 2001  
Reference ID of principal publication: MANNIN2001  
Reference ID of additional publication(s): GERGEN1998, MANNIN1998A, RODRIG2002, MANNIN2002A, LANPHE2001, CHULAD2003, HARIKK2004  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : NHANE3  
Phase of IESAST project: Original but modified Nov05

Study design

Study type : cross-sectional  
Type of population : random children  
Respondent : Parent and child  
Child smokes : Smokers excl biochemically  
Standard questionnaire: Non std/NA/NK  
Comments : Children age 12+ were also excluded on self-report of smoking.  
Analyses of children age 2m-5y (GERGEN1998, LANPHE2001, CHULAD2003) and of children 6-17y (HARIKK2004) do not mention child smoking. Minimum age in study is 2m.  
Respondent was 'knowledgeable proxy usually parent or guardian'

Asthma

Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: current NOS  
Description of current asthma: ever physician-diag asthma and still has asthma  
Number of lifetime asthma cases: 1025  
Number of current asthma cases: not assessable  
Total number of subjects: 13944  
Comments : Number of current asthma cases unknown, but was 443 for age group 4-16 (based on % so may be subject to rounding error)

Confounders considered

Total number of adjustment factors used: 27  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for race : 1  
Adjusted for location within study: 2  
Adjusted for family (parent/sibl) medical history: 2  
Adjusted for SES (inc parental education): 3  
Adjusted for household composition: 1  
Adjusted for day care: 1  
Adjusted for housing quality/age/size: 1  
Adjusted for pets in household: 1  
Adjusted for child other medical history/symptoms: 11  
Adjusted for maternal smoking in pregnancy: 1  
Adjusted for household ETS exposure: 1

Other results (not current db)

Other definitions of asthma available: present Results available for moderate or severe asthma; any hospital visit or any physician visit in last year; medication in past month  
Wheezing/wheezing bronchitis available: present Results available for 3+ episodes of wheezing in last year; wheezing without colds

Derived 1 - RRs available

Number of RRs : 81  
Parental exposure RRs: 9  
Household exposure RRs: 24  
Biochemical exposure RRs: 30  
In utero x household combination exposure RRs: 6  
In utero x biochemical combination exposure RRs: 12

NICOLA Study description

Study title : Nicolai  
 Full study title : Munich schools traffic CS 1995-96  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 11  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Germany  
 Location within country: Munich  
 Start year of study : 1995  
 End year of study : 1996  
 Principal publication year: 2003  
 Reference ID of principal publication: NICOLA2003  
 Overlap: KABESC/NICOLA  
 Principal/subsidiary study: Principal  
 REF group : NICOLA  
 Phase of IESAST project: Added Nov05  
 Comments : This study includes 5-7 and 9-11 year olds. The 9-11 year olds may also be included in study KABESC

Study design

Study type : cross-sectional  
 Type of population : random schoolchildren  
 Other exclusions : non-German nationality  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: diagnosis of asthma or recurrent diagnosis of asthmatic/spastic/obstructive bronchitis  
 Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: diagnosis of asthma or recurrent diagnosis of asthmatic/spastic/obstructive bronchitis with symptoms in last 12m  
 Number of lifetime asthma cases: 318  
 Number of current asthma cases: 157  
 Total number of subjects: 3953  
 Comments : It is unclear why only about 3100 subjects were included in analysis out of 3953 total

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for current wheeze  
 Results by other stratifying factors available: present Results available by traffic exposure, but only in subgroup (about 20%) with traffic counts <50m from home

Derived 1 - RRs available

Number of RRs : 2  
 Household exposure RRs: 2

NILSSO Study description

Study title : Nilsson  
 Full study title : Ostergotland population CS (ca 1998?)  
 Study sex : both  
 Lowest age in study : 13  
 Highest age in study (at baseline): 14  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: Ostergotland county (SE Sweden)  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 1999  
 Reference ID of principal publication: NILSSO1999  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : NILSSO  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : all children  
 Other exclusions : residence in first year not in same region  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

## NILSSO

(continued)

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 173  
 Total number of subjects: 1855

Confounders considered Total number of adjustment factors used: 7  
 Adjusted for sex : present  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for damp/mould in home: 1  
 Adjusted for housing quality/age/size: 1  
 Adjusted for pets in household: 1  
 Adjusted for parental smoking current/since birth: 1

Other results (not current db) Results by other stratifying factors available: present Some results are available for the interaction with urban/rural residence

Derived 1 - RRs available Number of RRs : 3  
 Parental exposure RRs: 3

NITTA Study description Study title : Nitta  
 Full study title : Tokyo and Ibaraki schools pollution CS 1995  
 Study sex : both  
 Lowest age in study : 7  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Japan  
 Location within country: Tokyo and Ibaraki  
 Start year of study : 1995  
 End year of study : 1995  
 Principal publication year: 1996  
 Reference ID of principal publication: NITTA1996  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : NITTA  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all in given school(s)  
 Respondent : Child  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: current NOS  
 Description of current asthma: current asthma not clearly defined, but based on attacks of SOB with cough, phlegm and/or wheeze, and phys-diag asthma  
 Number of current asthma cases: 77  
 Total number of subjects: 1232

Confounders considered Total number of adjustment factors used: 5  
 Adjusted for cooking/heating methods: 1  
 Adjusted for housing quality/age/size: 2  
 Adjusted for pets in household: 2  
 Comments : Adjusting factors not clearly specified

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for persistent wheeze

Derived 1 - RRs available Number of RRs : 1  
 Household exposure RRs: 1

NYSTAD Study description Study title : Nystad  
 Full study title : Oslo schools CS 1994-95  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 16  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Norway  
 Location within country: Oslo  
 Start year of study : 1994  
 End year of study : 1995  
 Principal publication year: 1999  
 Reference ID of principal publication: NYSTAD1999  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : NYSTAD  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : school NOS  
 Other exclusions : non-Norwegians (immigrants)  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ISAAC  
 Comments : There were two questionnaires, with asthma status taken from the first and risk factors from the second sent a year later to those who could be traced

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: from age 3  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: ever had asthma and it began after age 3  
 Number of lifetime asthma cases: 163  
 Total number of subjects: 1447  
 Comments : Number of cases based on %. Children with asthma beginning up to age 3 appear to have been included with the disease-free group in the analysis

Confounders considered Total number of adjustment factors used: 10  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for family (parent/sibl) medical history: 2  
 Adjusted for SES (inc parental education): 2  
 Adjusted for household composition: 1  
 Adjusted for day care: 1  
 Adjusted for child other medical history/symptoms: 2  
 Other confounders considered but rejected: present  
 Comments : Adjustment for birthweight and pets not included in final model due to lack of significance

Derived 1 - RRs available Number of RRs : 2  
 Parental exposure RRs: 2

OCONNNE Study description Study title : O'Connell  
 Full study title : Minnesota clinic CC 1969-1971  
 Study sex : both  
 Lowest age in study : 2  
 Highest age in study (at baseline): 16  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA  
 US state : Minn,Ia,Wis,Ill,Mo  
 Location within country: Rochester (Minnesota)  
 Start year of study : 1969  
 End year of study : 1971  
 Principal publication year: 1974  
 Reference ID of principal publication: OCONNNE1974  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : OCONNNE  
 Phase of IESAST project: Original

OCONNE

(continued)

Study design      Study type                    : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: not asthma, allergic rhinitis or atopic dermatitis  
 Type of population   : random in given hosp/clinic(s)  
 Type of population - controls (if diff from cases): no siblings with allergic dis  
 Respondent            : Medical records  
 Child smokes         : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma              Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Medical records  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthmatic  
 Number of lifetime asthma cases: 400  
 Total number of subjects: 628

Other results      Other definitions of asthma available: present Results available for exacerbation of  
 (not current      asthma  
 db)

Derived 1 -        Number of RRs                : 1  
 RRs available    Parental exposure RRs: 1

ODDY

Study              Study title                    : Oddy  
 description       Full study title               : Western Australia pregnancy cohort 1989-92 to 1998  
 Study sex           : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 6  
 Study race          : all (in country)  
 Continent           : Australasia  
 Country in Australasia: Australia  
 Location within country: Western Australia  
 Start year of study : 1989  
 End year of study   : 1992  
 Final follow up year: 1998  
 Principal publication year: 1999  
 Reference ID of principal publication: ODDY1999  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group          : ODDY  
 Phase of IESAST project: Original

Study design      Study type                    : prospective  
 Type of population   : all newborns at given hosp(s)  
 Medical exclusions   : died before age 6  
 Respondent           : Parent  
 Child smokes         : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma              Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 669  
 Total number of subjects: 2162

Confounders        Total number of adjustment factors used: 4  
 considered        Adjusted for sex               : present  
 Adjusted for day care: 1  
 Adjusted for child other medical history/symptoms: 2

Other results      Wheezing/wheezing bronchitis available: present Results available for 3+ episodes  
 (not current      wheezing since age 1; for wheeze in last year; for sleep disturbance in past year due  
 db)                to wheeze

Derived 1 -        Number of RRs                : 1  
 RRs available    Household exposure RRs: 1

OHARA Study description Study title : Ohara  
Full study title : Sendai & Fukushima schools & nurseries CS 2001  
Study sex : both  
Lowest age in study : 3  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : Asia  
Country in Asia : Japan  
Location within country: Sendai & Fukushima  
Start year of study : 2001  
End year of study : 2001  
Principal publication year: 2002  
Reference ID of principal publication: OHARA2002  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : OHARA  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : school NOS  
Respondent : Parent  
Child smokes : No smokers NOS  
Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: diagnosed asthma and wheezing in last 12m  
Number of current asthma cases: 141  
Total number of subjects: 2141

Confounders considered Total number of adjustment factors used: 4  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for household composition: 1

Derived 1 - RRs available Number of RRs : 6  
Parental exposure RRs: 6

OLIVET Study description Study title : Oliveti  
Full study title : Cleveland AA hospital CC 1993-94  
Study sex : both  
Lowest age in study : 4  
Highest age in study (at baseline): 9  
Study race : blacks  
Continent : NAmerica  
Country in N America: USA  
US state : Mich,Ind,Oh,Tenn  
Location within country: inner city Cleveland (Ohio)  
Start year of study : 1993  
End year of study : 1994  
Principal publication year: 1996  
Reference ID of principal publication: OLIVET1996  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : OLIVET  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : all prim care & born same hosp  
Medical exclusions : bronchopulmonary dysplasia, cystic fibrosis, anatomic lung abnormality, neonatal oxygen/ventilation >14 days  
Respondent : Medical records  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
Source of current asthma diagnosis: Medical records  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: phys-diag asthma and wheeze or cough requiring asthma medication in last 12m  
Number of current asthma cases: 131  
Total number of subjects: 262

## OLIVET

(continued)

Matching factors Cases and controls matched on sex: present  
Cases and controls matched on age (CC): present  
Cases and controls matched on race: present  
Matched on location (within study area): present

Confounders considered Total number of adjustment factors used: 5  
Adjusted for family (parent/sibl) medical history: 2  
Adjusted for child other medical history/symptoms: 3  
Other confounders considered but rejected: present  
Comments : Adjustment for CMED(3) rejected from MLR due to lack of  
significance at p=0.05

Other results (not current db) Results by other stratifying factors available: present Results available stratified  
by maternal history asthma; premature birth; bronchiolitis before age 2

Derived 1 - RRs available Number of RRs : 5  
Parental exposure RRs: 5

PALMIE Study description Study title : Palmieri  
Full study title : Italy (Naples?) CC (ca 1988?)  
Study sex : both  
Lowest age in study : 1  
Highest age in study (at baseline): 12  
Study race : whites (inc hispanic)  
Continent : WEurope/Scandinavia  
Country in W Europe : Italy  
Location within country: not stated (Naples?)  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 1990  
Reference ID of principal publication: PALMIE1990  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : PALMIE  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : primary care NOS  
Medical exclusions : history of atopic disease  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Current asthma available: present  
Source of current asthma diagnosis: Medical records  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: 3+ asthma attacks in last 12m  
Number of current asthma cases: 302  
Total number of subjects: 735

Matching factors Comments : Described as matched, but no details given (assumed to mean that  
controls as well as cases were white and aged 1-12)

Confounders considered Total number of adjustment factors used: 5  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for SES (inc parental education): 1  
Adjusted for housing quality/age/size: 1  
Adjusted for child other medical history/symptoms: 1

Other results (not current db) Results by other stratifying factors available: present Results available for cases  
subdivided on SPT, against combined control group

Derived 1 - RRs available Number of RRs : 10  
Parental exposure RRs: 10

PETERS Study description

Study title : Peters  
 Full study title : 2 districts air pollution schools PS 1989-91  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 12  
 Highest age in study at final followup: 14  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : HongKong  
 Location within country: Kwai Tsing and Southern  
 Start year of study : 1989  
 End year of study : 1989  
 Final follow up year: 1991  
 Principal publication year: 1996  
 Reference ID of principal publication: PETERS1996  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : PETERS  
 Phase of IESAST project: Original

Study design

Study type : prospective  
 Type of population : random schoolchildren  
 Respondent : Parent and child  
 Child smokes : Smokers incl but few (bio/qu)  
 Standard questionnaire: Non std/NA/NK

Asthma

Current asthma available: present  
 Repeat measures for current asthma: present  
 Source of current asthma diagnosis: Parent or child rep (phys dg)  
 Timing of current asthma: current NOS  
 Description of current asthma: asthmatic diagnosis  
 Number of current asthma cases: 254  
 Total number of subjects: 3521  
 Comments : Timing of asthma is unspecified, but as its prevalence decreased in successive followups, it is assumed to be current. Number of cases estimated from prevalence at baseline

Confounders considered

Total number of adjustment factors used: 6  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for year of diagnosis: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for housing quality/age/size: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for COHE(2), SES found not to be associated with symptoms and not included in final model. Adjustment for schooling (full vs part-time) is mentioned in Methods but does not appear in Table

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for asthma or wheezing; for wheezing

Derived 1 - RRs available

Number of RRs : 6  
 Household exposure RRs: 6

PIC Study description

Study title : Pic  
 Full study title : Auvergne schools CS 1999-2000  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : France  
 Location within country: Auvergne region  
 Start year of study : 1999  
 End year of study : 2000  
 Principal publication year: 2002  
 Reference ID of principal publication: PIC2002  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : PIC  
 Phase of IESAST project: Original

PIC

(continued)

Study design    Study type            : cross-sectional  
 Type of population : random schoolchildren  
 Respondent        : Parent  
 Child smokes      : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments          : Ages were 5-6 and 14-15 only

Asthma            Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma attacks in last 12m  
 Number of current asthma cases: 113  
 Total number of subjects: 2009  
 Comments          : Number of cases based on %, may be subject to rounding error

Derived 1 -      Number of RRs        : 1  
 RRs available    Parental exposure RRs: 1

PIROGO Study      Study title            : Pirogowicz  
 description      Full study title      : Family Practice CS (ca 2003? Wroclaw?)  
                   Study sex             : both  
                   Lowest age in study : 0  
                   Highest age in study (at baseline): 15  
                   Study race            : all (in country)  
                   Continent            : EEurope/Balkans  
                   Country in E Europe/Balkans: Poland  
                   Location within country: Wroclaw?  
                   Start year of study : not assessable  
                   End year of study    : not assessable  
                   Principal publication year: 2004  
                   Reference ID of principal publication: PIROGO2004A  
                   Overlap: none  
                   Principal/subsidiary study: Principal  
                   REF group            : PIROGO  
                   Phase of IESAST project: Added Nov05

Study design      Study type            : cross-sectional  
 Type of population : all children rndm households  
 Respondent        : Parent  
 Child smokes      : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma            Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: bronchial asthma  
 Number of lifetime asthma cases: 17  
 Total number of subjects: 136

Derived 1 -      Number of RRs        : 3  
 RRs available    Household exposure RRs: 3

POKHAR Study      Study title            : Pokharel  
 description      Full study title      : Haryana village schools CC 1995-96  
                   Study sex             : both  
                   Lowest age in study : 11  
                   Highest age in study (at baseline): 15  
                   Study race            : all (in country)  
                   Continent            : Asia  
                   Country in Asia      : India  
                   Location within country: Dalyalpur and Chhainsa (Haryana)  
                   Start year of study : 1995  
                   End year of study    : 1996  
                   Principal publication year: 2001  
                   Reference ID of principal publication: POKHAR2001  
                   Overlap: none  
                   Principal/subsidiary study: Principal  
                   REF group            : POKHAR  
                   Phase of IESAST project: Original



## PONSON

(continued)

Confounders considered Total number of adjustment factors used: 6  
 Adjusted for sex : present  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for child other medical history/symptoms: 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for recent wheeze  
 Other exposures available: present Results included here are for presence of smokers in the household, but results also available broken down by whether smoking was sometimes, or usually, in the same room as child, at age 1m. Results also available for ETS exposure outside the home at age 1m  
 Results by other stratifying factors available: present Results available for babies with shared bedrooms by whether the bedroom door was closed or not

Derived 1 - RRs available Number of RRs : 11  
 Parental exposure RRs: 5  
 Household exposure RRs: 6

## QIAN

Study description Study title : Qian  
 Full study title : Three Chinese city school CS 1988-89  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 14  
 Study race : han chinese  
 Continent : Asia  
 Country in Asia : China  
 Location within country: Guangzhou, Wuhan, Lanzhou  
 Start year of study : 1988  
 End year of study : 1989  
 Principal publication year: 2000  
 Reference ID of principal publication: QIAN2000  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : QIAN  
 Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
 Type of population : all in given school(s)  
 Other exclusions : lived > 1km from school, resident <2 years  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Description of lifetime asthma: Asthma  
 Number of lifetime asthma cases: 29  
 Total number of subjects: 2060  
 Comments : Number of cases based on district-specific %s, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 7  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for air conditioning/humidifier: 1  
 Adjusted for cooking/heating methods: 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheeze ( =ever wheeze with cold, or occasionally wheeze without cold)

Derived 1 - RRs available Number of RRs : 1  
 Parental exposure RRs: 1

RASANE Study description

Study title : Rasanen  
 Full study title : Finnish twins birth cohort 1975-79 CS 1995  
 Study sex : both  
 Lowest age in study : 16  
 Highest age in study (at baseline): 16  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Finland  
 Location within country: nationwide  
 Start year of study : 1991  
 End year of study : 1995  
 Principal publication year: 2000  
 Reference ID of principal publication: RASANE2000  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : RASANE  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : all twins born same country  
 Other exclusions : co-twin died or not living in Finland  
 Respondent : Parent and child  
 Child smokes : Smkrs inc, adj reje as not sig  
 Standard questionnaire: Non std/NA/NK

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 179  
 Total number of subjects: 4578

Confounders considered

Total number of adjustment factors used: 3  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for household composition: 1  
 Adjusted for child other medical history/symptoms: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for CMED(1), PAGE, SEX, FMED(1), SES were rejected from the MLR model due to lack of significance. Variables CMED(7), FMED(6), PSMC(smoking by either parent <age 7), CHSM(active smoking by child) were not entered into the model due to lack of significance in the univariate model

Other results (not current db)

Other results for child smokers available: present Child (active) smoking not significant (OR close to one)

Derived 1 - RRs available

Number of RRs : 3  
 Parental exposure RRs: 3

RATAGE Study description

Study title : Ratageri  
 Full study title : Delhi hospital CC 1996-98  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : India  
 Location within country: Delhi  
 Start year of study : 1996  
 End year of study : 1998  
 Principal publication year: 2000  
 Reference ID of principal publication: RATAGE2000  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : RATAGE  
 Phase of IESAST project: Original

## RATAGE

(continued)

Study design      Study type                    : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: not asthma  
 Type of population : all in given hosp/clinic(s)  
 Medical exclusions : bronchiectasis, acute exacerbation of asthma  
 Other exclusions    : not local resident  
 Type of population - controls (if diff from cases): no history recurrent wheeze  
 Respondent           : Unspec (parent/child)  
 Child smokes         : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma             Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Medical records  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma (= 3+ episodes cough/wheeze with reversible  
 airway obstruction with aerosolized salbutamol inhalation)  
 Number of lifetime asthma cases: 120  
 Total number of subjects: 180

Other results      Other definitions of asthma available: present Results available for severe asthma (as  
 (not current      asthma but with troublesome wheeze most days/nights, affecting activity and growth  
 db)                and requiring frequent medication), and for severe vs mild asthma

Derived 1 -        Number of RRs                : 7  
 RRs available     Parental exposure RRs: 2  
 Household exposure RRs: 5

RENNIE Study      Study title                 : Rennie  
 description      Full study title            : Saskatchewan farming/Hutterite CS 1993  
                    Study sex                    : both  
                    Lowest age in study : 6  
                    Highest age in study (at baseline): 11  
                    Study race                  : all (in country)  
                    Continent                   : N America  
                    Country in N America: Canada  
                    Location within country: farms in area Saskatchewan with Hutterite communes  
                    Start year of study : 1993  
                    End year of study         : 1993  
                    Principal publication year: 2002  
                    Reference ID of principal publication: RENNIE2002  
                    Overlap: none  
                    Principal/subsidiary study: Principal  
                    REF group                  : RENNIE  
                    Phase of IESAST project: Original

Study design      Study type                    : cross-sectional  
 Type of population : all schlich living on farms  
 Other exclusions    : restricted to those living on farms or acreages  
 Respondent           : Parent  
 Child smokes         : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments             : Approximate ages corresponding to grades 1-5

Asthma             Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 71  
 Total number of subjects: 830

Confounders        Total number of adjustment factors used: 6  
 considered        Adjusted for sex             : present  
                    Adjusted for age            : 1  
                    Adjusted for damp/mould in home: 1  
                    Adjusted for pets in household: 1  
                    Adjusted for farming: 1  
                    Adjusted for religion: 1  
                    Comments                   : Religion refers to Hutterite (an Anabaptist communal group)

Derived 1 -        Number of RRs                : 1  
 RRs available     Parental exposure RRs: 1

RIBEIR Study description

Study title : Ribeiro  
Full study title : Sao Paulo kindergarten/elementary school 1996  
Study sex : both  
Lowest age in study : 4  
Highest age in study (at baseline): 9  
Study race : all (in country)  
Continent : SCAmerica  
Country in S/C America: Brazil  
Location within country: Sao Paulo  
Start year of study : 1996  
End year of study : 1996  
Principal publication year: 2002  
Reference ID of principal publication: RIBEIR2002  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : RIBEIR  
Phase of IESAST project: Original

Study design

Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : Number of cases derived from %, and is suspect (% given seems not to correspond to whole number).

Asthma

Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (n<6)  
Description of current asthma: asthma attack  
Number of current asthma cases: 25  
Total number of subjects: 183

Derived 1 - RRs available

Number of RRs : 1  
Parental exposure RRs: 1

RONCH1 Study description

Study title : Ronchetti 1  
Full study title : Rome primary schools CS 1974  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 13  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Italy  
Location within country: Rome  
Start year of study : 1974  
End year of study : 1974  
Principal publication year: 2001  
Reference ID of principal publication: RONCHE2001  
Reference ID of additional publication(s): BONCI1993, RONCHE1982  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : RONCH1  
Phase of IESAST project: Original

Study design

Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : Maximum age is given as 15 by RONCH1982

Asthma

Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: ever physician diagnosed asthma, or ever had asthmatic attack (SOB with audible wheezing) and when playing becomes more breathless than other children  
Number of lifetime asthma cases: 123  
Total number of subjects: 2138

Confounders considered

Total number of adjustment factors used: 2  
Adjusted for family (parent/sibl) medical history: 2

Derived 1 - RRs available

Number of RRs : 7  
Household exposure RRs: 7

RONCH2 Study            Study title            : Ronchetti 2  
       description      Full study title       : Rome primary schools CS 1992  
                          Study sex               : both  
                          Lowest age in study : 6  
                          Highest age in study (at baseline): 14  
                          Study race             : all (in country)  
                          Continent              : WEurope/Scandinavia  
                          Country in W Europe : Italy  
                          Location within country: Rome  
                          Start year of study : 1992  
                          End year of study    : 1992  
                          Principal publication year: 2001  
                          Reference ID of principal publication: RONCHE2001  
                          Reference ID of additional publication(s): BONCI1993, RONCHE2002  
                          Overlap: none  
                          Principal/subsidiary study: Principal  
                          REF group             : RONCH2  
                          Phase of IESAST project: Original

Study design            Study type             : cross-sectional  
                          Type of population    : all in given school(s)  
                          Respondent            : Parent  
                          Child smokes          : No mention  
                          Standard questionnaire: Non std/NA/NK

Asthma                 Lifetime/incidence/unspec asthma available: present  
                          Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
                          Timing of lifetime asthma: Lifetime  
                          Timing of incidence asthma: NA (prevalence analysis only)  
                          Description of lifetime asthma: ever physician diagnosed asthma, or ever had asthmatic  
                                                 attack (SOB with audible wheezing) and when playing becomes more breathless than  
                                                 other children  
                          Number of lifetime asthma cases: 153  
                          Total number of subjects: 1229

Derived 1 -            Number of RRs         : 3  
       RRs available    Household exposure RRs: 3

RONCH3 Study            Study title            : Ronchetti 3  
       description      Full study title       : Rome primary schools CS 1998  
                          Study sex               : both  
                          Lowest age in study : 6  
                          Highest age in study (at baseline): 14  
                          Study race             : all (in country)  
                          Continent              : WEurope/Scandinavia  
                          Country in W Europe : Italy  
                          Location within country: Rome  
                          Start year of study : 1998  
                          End year of study    : 1998  
                          Principal publication year: 2001  
                          Reference ID of principal publication: RONCHE2001  
                          Reference ID of additional publication(s): RONCHE2002  
                          Overlap: none  
                          Principal/subsidiary study: Principal  
                          REF group             : RONCH3  
                          Phase of IESAST project: Original

Study design            Study type             : cross-sectional  
                          Type of population    : all in given school(s)  
                          Other exclusions      : participated in earlier study (RONCH2)  
                          Respondent            : Parent  
                          Child smokes          : No mention  
                          Standard questionnaire: Non std/NA/NK

Asthma                 Lifetime/incidence/unspec asthma available: present  
                          Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
                          Timing of lifetime asthma: Lifetime  
                          Timing of incidence asthma: NA (prevalence analysis only)  
                          Description of lifetime asthma: ever physician diagnosed asthma, or ever had asthmatic  
                                                 attack (SOB with audible wheezing) and when playing becomes more breathless than  
                                                 other children  
                          Number of lifetime asthma cases: 131  
                          Total number of subjects: 1139

Derived 1 -            Number of RRs         : 3  
       RRs available    Household exposure RRs: 3

RONMA1	Study description	Study title : Ronmark 1 Full study title : Norrbotten primary school baseline 1996 Study sex : both Lowest age in study : 7 Highest age in study (at baseline): 8 Study race : all (in country) Continent : WEurope/Scandinavia Country in W Europe : Sweden Location within country: 3 towns in Norrbotten (northernmost province) Start year of study : 1996 End year of study : 1996 Principal publication year: 1998 Reference ID of principal publication: RONMAR1998 Reference ID of additional publication(s): RONMAR1999, RONMAR2001, PERZAN2002, RONMAR2002 Overlap: RONMA1/RONMA2/RONMA3 Principal/subsidiary study: Principal REF group : RONMA1 Phase of IESAST project: Original but modified Nov05 Comments : In a series of annual surveys, all children (of the relevant grades) were interviewed each year, with no attempt to restrict participation to those who enrolled at baseline, or to trace any who may have moved away. RONMA1 is baseline prevalence survey (1996), and RONMA3 is follow-up of those who were asthma-free in 1996. RONMA2 is the second year (1997) prevalence, and is marked as subsidiary to the other two surveys
	Study design	Study type : cross-sectional Type of population : all schoolchildren Respondent : Parent Child smokes : No mention Standard questionnaire: ISAAC
	Asthma	Current asthma available: present Source of current asthma diagnosis: Parent report (other/uns/mix) Timing of current asthma: last n months (12<=n<24) Description of current asthma: phys diag asthma with either symptoms or use of asthma medication in last 12m Number of current asthma cases: 182 Total number of subjects: 3431
	Confounders considered	Total number of adjustment factors used: 5 Adjusted for sex : present Adjusted for location within study: 1 Adjusted for family (parent/sibl) medical history: 1 Adjusted for damp/mould in home: 1 Adjusted for pets in household: 1
	Other results (not current db)	Other definitions of asthma available: present Results available for asthma profile (current asthma or wheezing or use of asthma medicines in last 12m); for asthma medication in last 12m
	Derived 1 - RRs available	Number of RRs : 1 Parental exposure RRs: 1
RONMA2	Study description	Study title : Ronmark 2 Full study title : Norrbotten primary school CS 1997 Study sex : both Lowest age in study : 8 Highest age in study (at baseline): 9 Study race : all (in country) Continent : WEurope/Scandinavia Country in W Europe : Sweden Location within country: 3 towns in Norrbotten (northernmost province) Start year of study : 1997 End year of study : 1997 Principal publication year: 2001 Reference ID of principal publication: RONMAR2001 Reference ID of additional publication(s): RONMAR1998, RONMAR1999, RONMAR2002, PERZAN2002 Overlap: RONMA1/RONMA2/RONMA3 Principal/subsidiary study: Subsidiary REF group : RONMA1 Phase of IESAST project: Original but modified Nov05 Comments : In a series of annual surveys, all children (of the relevant grades) were interviewed each year, with no attempt to restrict participation to those who enrolled at baseline, or to trace any who may have moved away. RONMA1 is baseline prevalence survey (1996), and RONMA3 is follow-up of those who were asthma-free in 1996. RONMA2 is the second year (1997) prevalence, and is marked as subsidiary to the other two surveys

RONMA2  
(continued)

Study design      Study type            : cross-sectional  
                   Type of population : all schoolchildren  
                   Respondent         : Parent  
                   Child smokes       : No mention  
                   Standard questionnaire: ISAAC

Asthma            Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
                   Timing of lifetime asthma: Lifetime  
                   Timing of incidence asthma: NA (prevalence analysis only)  
                   Description of lifetime asthma: asthma  
                   Number of lifetime asthma cases: 266  
                   Total number of subjects: 3453

Confounders considered      Total number of adjustment factors used: 7  
                                   Adjusted for sex         : present  
                                   Adjusted for family (parent/sibl) medical history: 1  
                                   Adjusted for damp/mould in home: 1  
                                   Adjusted for pets in household: 1  
                                   Adjusted for child other medical history/symptoms: 3

Other results (not current db)      Other definitions of asthma available: present Results available for small subset for physician validated asthma  
                                   Wheezing/wheezing bronchitis available: present Results available for wheeze in last 12m  
                                   Results by other stratifying factors available: present Results available for a small subset stratified by +ve skin prick test

Derived 1 -            Number of RRs         : 1  
 RRs available      Parental exposure RRs: 1

RONMA3 Study description      Study title            : Ronmark 3  
                   Full study title     : Norrbotten primary school PS 1996-99  
                   Study sex            : both  
                   Lowest age in study : 7  
                   Highest age in study (at baseline): 8  
                   Highest age in study at final followup: 11  
                   Study race           : all (in country)  
                   Continent            : WEurope/Scandinavia  
                   Country in W Europe : Sweden  
                   Location within country: 3 towns in Norrbotten (northernmost province)  
                   Start year of study : 1996  
                   End year of study    : 1996  
                   Final follow up year: 1999  
                   Principal publication year: 2002  
                   Reference ID of principal publication: RONMAR2002  
                   Reference ID of additional publication(s): RONMAR1998, RONMAR1999, RONMAR2001, PERZAN2002  
                   Overlap: RONMA1/ RONMA2/ RONMA3  
                   Principal/subsidiary study: Principal  
                   REF group            : RONMA3  
                   Phase of IESAST project: Original but modified Nov05  
                   Comments            : In a series of annual surveys, all children (of the relevant grades) were interviewed each year, with no attempt to restrict participation to those who enrolled at baseline, or to trace any who may have moved away. RONMA1 is baseline prevalence survey (1996), and RONMA3 is follow-up of those who were asthma-free in 1996. RONMA2 is the second year (1997) prevalence, and is marked as subsidiary to the other two surveys

Study design      Study type            : prospective  
                   Type of population : all schoolchildren  
                   Respondent         : Parent  
                   Child smokes       : No mention  
                   Standard questionnaire: ISAAC

Asthma            Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
                   Timing of lifetime asthma: NA (incidence only)  
                   Timing of incidence asthma: since baseline (earlier excl)  
                   Description of lifetime asthma: asthma  
                   Number of lifetime asthma cases: 91  
                   Total number of subjects: 3247





SARRAZ

(continued)

Study design      Study type                : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: attending allergy clinic  
 Type of population : hospital NOS  
 Medical exclusions : immunodeficiency, congenital heart disease, cystic fibrosis, autoimmune disease, mental impairment  
 Other exclusions    : lived <2 years at current address  
 Type of population - controls (if diff from cases): no resp symptms or hist asthma  
 Respondent            : Parent  
 Child smokes         : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma              Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: asthma (clinical history and lung function tests)  
 Number of current asthma cases: 14  
 Total number of subjects: 35

Derived 1 -        Number of RRs            : 1  
 RRs available     Household exposure RRs: 1

SCHENK

Study description      Study title                : Schenker  
 Full study title        : Chestnut Ridge school CS 1979  
 Study sex                : both  
 Lowest age in study     : 5  
 Highest age in study (at baseline): 14  
 Study race                : all (in country)  
 Continent                : N America  
 Country in N America: USA  
 US state                 : Pa,NJ,Md,WVa,Va,Del,WashDC  
 Location within country: Chestnut Ridge region (Pennsylvania)  
 Start year of study     : 1979  
 End year of study        : 1979  
 Principal publication year: 1983  
 Reference ID of principal publication: SCHENK1983  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group                : SCHENK  
 Phase of IESAST project: Original

Study design        Study type                : cross-sectional  
 Type of population     : random schoolchildren  
 Other exclusions        : single parent families  
 Respondent              : Parent and child  
 Child smokes            : Smokers incl but few (bio/qu)  
 Standard questionnaire: ATS/NHLI/ESP

Asthma              Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 143  
 Total number of subjects: 4071

Confounders considered      Total number of adjustment factors used: 3  
 Adjusted for sex          : present  
 Adjusted for family (parent/sibl) medical history: 2  
 Other confounders considered but rejected: present  
 Comments                 : Adjustment for age, mother as respondent, SES, gas cooking rejected from stepwise MLR

Other results (not current db)      Wheezing/wheezing bronchitis available: present Results available for persistent wheeze

Derived 1 -        Number of RRs            : 1  
 RRs available     Parental exposure RRs: 1

SCHMIT Study description

Study title : Schmitzberger  
Full study title : Austrian Tyrol air pollution schools CS 1989  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 15  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Austria  
Location within country: Austrian Tyrolian alps  
Start year of study : 1989  
End year of study : 1989  
Principal publication year: 1993  
Reference ID of principal publication: SCHMIT1993  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : SCHMIT  
Phase of IESAST project: Original

Study design

Study type : cross-sectional  
Type of population : school NOS  
Medical exclusions : respiratory tract infection in last 3w  
Other exclusions : lived in region <3y  
Respondent : Parent and child  
Child smokes : Smokers incl but few (bio/qu)  
Standard questionnaire: Non std/NA/NK

Asthma

Current asthma available: present  
Source of current asthma diagnosis: Parent report (physician diag)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: phys diag asthma with medication and attack rates in last 12m evaluated (although criteria used not stated)  
Number of current asthma cases: 67  
Total number of subjects: 1626

Confounders considered

Total number of adjustment factors used: 4  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for SES (inc parental education): 1  
Adjusted for cooking/heating methods: 1

Other results (not current db)

Results by other stratifying factors available: present Results available stratified by location (air pollution zones)

Derived 1 - RRs available

Number of RRs : 2  
Parental exposure RRs: 2

SELCUK Study description

Study title : Selcuk  
Full study title : Edirne schools CS 1994  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : EEurope/Balkans  
Country in E Europe/Balkans: Turkey  
Location within country: Edirne and environs  
Start year of study : 1994  
End year of study : 1994  
Principal publication year: 1997  
Reference ID of principal publication: SELCUK1997  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : SELCUK  
Phase of IESAST project: Original

Study design

Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : In city schools, all children in randomly selected classes from all schools were included; in villages, only the 24 (65%) of schools with 20+ pupils were included, and all pupils at those schools were included

## SELCUK

(continued)

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: bronchial asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Parent report (physician diag)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: phys diag bronchial asthma with sympts in last 12m  
 Number of lifetime asthma cases: 882  
 Number of current asthma cases: 308  
 Total number of subjects: 5412  
 Comments : Numbers of cases based on %s by passive smoke exposure, and differ slightly from overall prevalences given

Confounders Total number of adjustment factors used: 6  
 considered Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for pets in household: 1  
 Adjusted for child other medical history/symptoms: 1

Other results Wheezing/wheezing bronchitis available: present Results available for wheeze (as  
 (not current witnessed by parents) ever, and in last 12m  
 db)

Derived 1 - Number of RRs : 4  
 RRs available Household exposure RRs: 4

SENNHA Study Study title : Sennhauser  
 description Full study title : Swiss household CS 1990  
 Study sex : both  
 Lowest age in study : 1  
 Highest age in study (at baseline): 16  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Switzerland  
 Location within country: German and French areas  
 Start year of study : 1990  
 End year of study : 1990  
 Principal publication year: 1992  
 Reference ID of principal publication: SENNHA1992  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : SENNHA  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all children rndm households  
 Other exclusions : non-Swiss nationals  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: bronchial asthma  
 Number of lifetime asthma cases: 251  
 Total number of subjects: 4156

Other results Other definitions of asthma available: present Results available for asthma symptom (=   
 (not current frequent nighttime irritable cough)  
 db)

Derived 1 - Number of RRs : 1  
 RRs available Household exposure RRs: 1

SHAMS2 Study description Study title : Shamssain 2  
Full study title : NE England schools CS age 13-14 (ca 1998?)  
Study sex : both  
Lowest age in study : 13  
Highest age in study (at baseline): 14  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: North east England  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 2001  
Reference ID of principal publication: SHAMSS2001  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : SHAMS2  
Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
Type of population : random children  
Respondent : Child  
Child smokes : No mention  
Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 669  
Total number of subjects: 3000  
Comments : Number of cases based on %, may be subject to rounding error

Other results (not current db) Other definitions of asthma available: present Text refers to 'severe asthma attack', but results are only presented for various wheezing symptoms and it is not clear which of these is referred to  
Wheezing/wheezing bronchitis available: present Results available for wheeze ever; for limitation of speech during wheezing attack in last 12m; for wheeze in 1st 12m; for wheeze with exercise in last 12m

Derived 1 - RRs available Number of RRs : 4  
Parental exposure RRs: 4

SHAMSS Study description Study title : Shamssain 1  
Full study title : NE England schools CS age 6-7 (ca 1998?)  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 7  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: North east England  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 1999  
Reference ID of principal publication: SHAMSS1999  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : SHAMSS  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Number of lifetime asthma cases: 681  
Total number of subjects: 3000  
Comments : Number of cases based on %, may be subject to rounding error

## SHAMSS

(continued)

Other results (not current db) Other definitions of asthma available: present Text refers to 'severe asthma attack', but results are only presented for various wheezing symptoms and it is not clear which of these is referred to  
 Wheezing/wheezing bronchitis available: present Results available for wheeze ever; for limitation of speech during wheezing attack in last 12m; for wheeze in 1st 12m; for wheeze with exercise in last 12m

Derived 1 - RRs available Number of RRs : 4  
 Parental exposure RRs: 4

## SHERMA

Study description Study title : Sherman  
 Full study title : East Boston school LS 1975-88  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 9  
 Highest age in study at final followup: 23  
 Study race : all (in country)  
 Continent : N America  
 Country in N America: USA  
 US state : Vt,Me,NY,NH,Mass,RI,Conn  
 Location within country: East Boston (Massachusetts)  
 Start year of study : 1975  
 End year of study : 1975  
 Final follow up year: 1988  
 Principal publication year: 1990  
 Reference ID of principal publication: SHERMA1990  
 Reference ID of additional publication(s): TAGER1979,WEISS1980,OCONNO1987,CAREY1996  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : SHERMA  
 Phase of IESAST project: Original

Study design Study type : prospective  
 Type of population : random schoolchildren  
 Respondent : Parent and child  
 Child smokes : Smokers included  
 Standard questionnaire: ATS/NHLI/ESP

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent or child rep (phys dg)  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (retrospective)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 91  
 Total number of subjects: 770  
 Comments : Baseline questionnaire asked about previous asthma, subsequent questionnaires asked about asthma since last interview

Confounders considered Total number of adjustment factors used: 2  
 Adjusted for sex : present  
 Adjusted for age : 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for persistent wheeze cough and phlegm  
 Other results for child smokers available: present Results available for child (active) smoking

Derived 1 - RRs available Number of RRs : 4  
 Parental exposure RRs: 4

SHIVA Study description

Study title : Shiva  
 Full study title : Tehran hospital CS 2001  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 4  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Iran  
 Location within country: Tehran  
 Start year of study : 2001  
 End year of study : 2001  
 Principal publication year: 2003  
 Reference ID of principal publication: SHIVA2003  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : SHIVA  
 Phase of IESAST project: Added Nov05

Study design

Study type : cross-sectional  
 Type of population : all in given hosp/clinic(s)  
 Medical exclusions : cardiorespiratory disease (except asthma), abnormality which would decrease respiratory reserve or make child susceptible to respiratory infections  
 Other exclusions : household smoker other than father  
 Respondent : Accompanying adult  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Minimum age 6 months

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Parent report (physician diag)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: physician diagnosed asthma in last 12m  
 Number of current asthma cases: 18  
 Total number of subjects: 595

Other results (not current db)

Other exposures available: present Results also available by whether father smoked in presence of child or not

Derived 1 - RRs available

Number of RRs : 1  
 Parental exposure RRs: 1

SHOHAT Study description

Study title : Shohat  
 Full study title : National schools CS 1997  
 Study sex : both  
 Lowest age in study : 13  
 Highest age in study (at baseline): 14  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Israel  
 Location within country: nationwide  
 Start year of study : 1997  
 End year of study : 1997  
 Principal publication year: 2002  
 Reference ID of principal publication: SHOHAT2002  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : SHOHAT  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Child  
 Child smokes : No mention  
 Standard questionnaire: ISAAC

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: current NOS  
 Description of current asthma: asthma (= asthma or spastic bronchitis. The term 'spastic bronchitis' was described as 'more commonly used by the public for asthma')  
 Number of current asthma cases: 708  
 Total number of subjects: 10057  
 Comments : Number of cases based on %

## SHOHAT

(continued)

Confounders considered	Total number of adjustment factors used: 13 Adjusted for sex : present Adjusted for race : 1 Adjusted for location within study: 1 Adjusted for family (parent/sibl) medical history: 1 Adjusted for parent's age: 1 Adjusted for SES (inc parental education): 2 Adjusted for household composition: 1 Adjusted for housing quality/age/size: 1 Adjusted for pets in household: 1 Adjusted for obesity/BMI: 1 Adjusted for parental smoking current/since birth: 2
Other results (not current db)	Wheezing/wheezing bronchitis available: present Results available for current wheeze Results by other stratifying factors available: present Results for current wheeze available stratified by sex and race (Jewish/Arab)
Derived 1 - RRs available	Number of RRs : 4 Parental exposure RRs: 4
SIGURS Study description	Study title : Sigurs Full study title : Boras hospital bronchiolitis prosp study 1989-93 Study sex : both Lowest age in study : 0 Highest age in study (at baseline): 1 Highest age in study at final followup: 3 Study race : all (in country) Continent : WEurope/Scandinavia Country in W Europe : Sweden Location within country: Boras Start year of study : 1989 End year of study : 1990 Final follow up year: 1993 Principal publication year: 1995 Reference ID of principal publication: SIGURS1995 Overlap: none Principal/subsidiary study: Principal REF group : SIGURS Phase of IESAST project: Original
Study design	Study type : prospective Type of population : bronchiolitis gvn hosp+pop con Respondent : Parent Child smokes : No mention Standard questionnaire: Non std/NA/NK Comments : Subjects were 47 infants (age <1) hospitalized for bronchiolitis without concomitant chronic respiratory, cardiac or other disease, plus 93 sex- age- and district- matched population controls, but analysis relevant to asthma is based on combined groups, and is analysed as a prospective study
Asthma	Lifetime/incidence/unspec asthma available: present Source of lifetime asthma diagnosis: Parent report (physician diag) Timing of lifetime asthma: NA (incidence only) Timing of incidence asthma: lifetime (recruit at birth) Description of lifetime asthma: asthma (= 3 episodes of bronchial obstruction) verified by physician Number of lifetime asthma cases: 12 Total number of subjects: 140 Comments : Recruitment was at age <1, and there was no pre-existing asthma
Matching factors	Comments : Subjects were originally matched as Bronchiolitis cases and population controls on sex, age and district, but this is not relevant to the analysis of asthma
Other results (not current db)	Wheezing/wheezing bronchitis available: present Results available for recurrent wheezing (i.e. 3 episodes but not verified by physician); any wheezing (i.e. asthma, recurrent wheezing or <3 epsiodes of wheezing)
Derived 1 - RRs available	Number of RRs : 1 Parental exposure RRs: 1

SOMERV Study description

Study title : Somerville NSHG  
 Full study title : UK National Study of Health & Growth LS - 1982  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 11  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: 22 English areas  
 Start year of study : 1982  
 End year of study : 1982  
 Principal publication year: 1988  
 Reference ID of principal publication: SOMERV1988  
 Reference ID of additional publication(s): CHINN2001  
 Overlap: MELIA/SOMERV/CHINN  
 Principal/subsidiary study: Principal  
 REF group : SOMERV  
 Phase of IESAST project: Original  
 Comments : Part of a longitudinal study of children age 5-11 in selected areas. Same areas studied in 1977 (MELIA), 1982 (SOMERV) and 1988 (part of CHINN) but have been entered separately as analysis treats them as separate cross-sectional studies. Overlap is small (e.g. 5% of children in CHINN-1988 had been in SOMERV-1982). Although not altogether clear, it seems that areas studied in 1987 and 1988 were non-overlapping, so combined results for those years are entered (CHINN)

Study design

Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : Discussed, but no data avail  
 Standard questionnaire: Non std/NA/NK  
 Comments : The study also included 5 areas in Scotland but no results are presented

Asthma

Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: at least one asthma attack in last 12m  
 Number of current asthma cases: 209  
 Total number of subjects: 5922

Confounders considered

Total number of adjustment factors used: 11  
 Adjusted for age : 1  
 Adjusted for parent's age: 1  
 Adjusted for SES (inc parental education): 3  
 Adjusted for household composition: 2  
 Adjusted for housing quality/age/size: 1  
 Adjusted for child other medical history/symptoms: 1  
 Adjusted for obesity/BMI: 1  
 Adjusted for maternal smoking in pregnancy: 1  
 Comments : Use of maternal smoking in pregnancy as a potential confounder is unclear

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for chest ever sound wheezy of whistling; chest wheezy or whistling most days or nights

Derived 1 - RRs available

Number of RRs : 4  
 Parental exposure RRs: 4

SOTOQU Study description

Study title : Soto-Quiros  
 Full study title : Costa Rica schools CS 1987  
 Study sex : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 17  
 Study race : all (in country)  
 Continent : SCAmerica  
 Country in S/C America: Costa Rica  
 Location within country: throughout Costa Rica  
 Start year of study : 1987  
 End year of study : 1987  
 Principal publication year: 1994  
 Reference ID of principal publication: SOTOQU1994  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : SOTOQU  
 Phase of IESAST project: Original

## SOTOQU

(continued)

Study design	Study type : cross-sectional Type of population : random schoolchildren Respondent : Parent Child smokes : No mention Standard questionnaire: Non std/NA/NK
Asthma	Current asthma available: present Source of current asthma diagnosis: Parent report (other/uns/mix) Timing of current asthma: current NOS Description of current asthma: asthma (= symptom score 3, based on symptoms after URTI, symptoms after exercise, frequent cough), or symptom score 2 + physician diagnosis of asthma) Number of current asthma cases: 594 Total number of subjects: 2534
Derived 1 - RRs available	Number of RRs : 3 Parental exposure RRs: 2 Household exposure RRs: 1
SOYSET Study description	Study title : Soyseth Full study title : Western Norway schools CS 1989-92 Study sex : both Lowest age in study : 7 Highest age in study (at baseline): 13 Study race : all (in country) Continent : WEurope/Scandinavia Country in W Europe : Norway Location within country: 2 valleys in western Norway (Ardal?) Start year of study : 1989 End year of study : 1992 Principal publication year: 1995 Reference ID of principal publication: SOYSET1995 Overlap: none Principal/subsidiary study: Principal REF group : SOYSET Phase of IESAST project: Original
Study design	Study type : cross-sectional Type of population : all schoolchildren Respondent : Parent Child smokes : No mention Standard questionnaire: Non std/NA/NK Comments : Refers to all children in alternate school grades (1st, 3rd, 5th)
Asthma	Lifetime/incidence/unspec asthma available: present Source of lifetime asthma diagnosis: Parent report (other/uns/mix) Timing of lifetime asthma: Lifetime Timing of incidence asthma: NA (prevalence analysis only) Description of lifetime asthma: asthma Number of lifetime asthma cases: 51 Total number of subjects: 618
Confounders considered	Total number of adjustment factors used: 8 Adjusted for sex : present Adjusted for age : 1 Adjusted for family (parent/sibl) medical history: 1 Adjusted for child other medical history/symptoms: 1 Adjusted for maternal smoking in pregnancy: 1 Adjusted for parental smoking current/since birth: 3 Other confounders considered but rejected: present Comments : Adjustment for parental smoking refers to mother/postnatal, mother/postnatal/>7yrs, father/postnatal/>7yrs. Father smoked postnatally was not included in final model due to lack of significance in bivariate analysis
Other results (not current db)	Other exposures available: present Results available for mother smoked for >7 yrs; for father smoked for >7yrs
Derived 1 - RRs available	Number of RRs : 15 Parental exposure RRs: 15

SPENGL Study description

Study title : Spengler  
Full study title : Sverdlovsk 9 city housing CS (ca 2002?)  
Study sex : both  
Lowest age in study : 8  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : EEurope/Balkans  
Country in E Europe/Balkans: Russia  
Location within country: 8 cities in Sverdlovsk, and Cherepovets in Vologda  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 2004  
Reference ID of principal publication: SPENGL2004  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : SPENGL  
Phase of IESAST project: Added Nov05

Study design

Study type : cross-sectional  
Type of population : all in given school(s)  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: MRC

Asthma

Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: doctor diagnosed asthma, and SOB, wheeze or asthma medication in last 12m  
Number of current asthma cases: 89  
Total number of subjects: 5915  
Comments : Number of cases based on % and may be subject to rounding error

Confounders considered

Total number of adjustment factors used: 5  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 1  
Adjusted for child other medical history/symptoms: 1  
Comments : Results additionally adjusted for SES(income) PETS, HOUS were not presented and did not alter basic findings

Other results (not current db)

Other definitions of asthma available: present Results also available for current asthma-like symptoms (asthma symptoms, asthma medication use, awakening by asthma, wheeze on exercise, hospital care for wheeze in last 12m). The authors state that asthma may be underdiagnosed or not clearly remembered by parent  
Wheezing/wheezing bronchitis available: present Results also available for current wheeze  
Other exposures available: present Results for other smoking variables (ETS exposure age <2, age 2-6, and currently) were reported to be positive for all outcomes, but were not presented in detail. Smoking variables similar to smoking during pregnancy were reported to show few statistically significant positive associations

Derived 1 - RRs available

Number of RRs : 2  
Parental exposure RRs: 2

SPIEKE Study description

Study title : Spiekerkotter  
Full study title : SW Germany schools cotinine PS 1990-92  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 8  
Highest age in study at final followup: 10  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Germany  
Location within country: Freiburg, Kehl & Lorrach/Weil  
Start year of study : 1990  
End year of study : 1990  
Final follow up year: 1992  
Principal publication year: 1994  
Reference ID of principal publication: SPIEKE1994  
Reference ID of additional publication(s): HENSCH1997,KUEHR1998  
Overlap: KUEHR/SPIEKE  
Principal/subsidiary study: Subsidiary  
REF group : KUEHR  
Phase of IESAST project: Original  
Comments : KUEHR is baseline study. A subset of subjects were included in

## SPIEKE

(continued)

two follow-ups which included urinary cotinine assessment, and have been entered as SPIEKE

Study design    Study type               : prospective  
                   Type of population   : random schoolchildren  
                   Respondent               : Parent  
                   Child smokes               : No mention  
                   Standard questionnaire: Non std/NA/NK

Asthma           Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Parent report (physician diag)  
                   Timing of lifetime asthma: up to baseline  
                   Timing of incidence asthma: NA (prevalence analysis only)  
                   Description of lifetime asthma: bronchial asthma based on physician diagnosis either  
   of asthma or of recurrent wheezy bronchitis  
                   Number of lifetime asthma cases: 69  
                   Total number of subjects: 602  
                   Comments                : Results for asthma are taken from SPIEKE1994 but definition and  
   number of cases (based on %) assumed same as given by HENSCH1997

Derived 1 -     Number of RRs               : 1  
 RRs available   Biochemical exposure RRs: 1

SQUILL Study           Study title               : Squillace  
           description   Full study title         : Central Virginia schools CC 1992-93  
                           Study sex                   : both  
                           Lowest age in study     : 8  
                           Highest age in study (at baseline): 12  
                           Study race               : all (in country)  
                           Continent                : NAmerica  
                           Country in N America: USA  
                           US state                 : Pa,NJ,Md,WVa,Va,Del,WashDC  
                           Location within country: central Virginia  
                           Start year of study     : 1992  
                           End year of study       : 1993  
                           Principal publication year: 1997  
                           Reference ID of principal publication: SQUILL1997  
                           Overlap: none  
                           Principal/subsidiary study: Principal  
                           REF group                : SQUILL  
                           Phase of IESAST project: Original

Study design    Study type               : case/control  
                   Type of controls (for CC studies): healthy  
                   Type of population   : all in given school(s)  
                   Respondent               : Parent  
                   Child smokes               : No mention  
                   Standard questionnaire: ATS/NHLI/ESP  
                   Comments                : Age unknown, refers to middle school. All students participated  
   in initial screening and controls were randomly selected from asymptomatic subjects

Asthma           Lifetime/incidence/unspec asthma available: present  
                   Source of lifetime asthma diagnosis: Parent or child rep (oth/unsp)  
                   Timing of lifetime asthma: unspecified  
                   Timing of incidence asthma: NA (prevalence analysis only)  
                   Description of lifetime asthma: 3+ symptoms suggestive of asthma  
                   Number of lifetime asthma cases: 135  
                   Total number of subjects: 441

Other results    Other definitions of asthma available: present Results available (from a subset of the  
 (not current    study) for 3+ symptoms suggestive of asthma and responded to histamine  
 db)                bronchoprovocation  
                   Results by other stratifying factors available: present Results also available for  
   subset of study undergoing further tests

Derived 1 -     Number of RRs               : 1  
 RRs available   Household exposure RRs: 1

STANHO Study description

Study title : Stanhope  
 Full study title : Wairoa school CS 1975  
 Study sex : both  
 Lowest age in study : 12  
 Highest age in study (at baseline): 18  
 Study race : all (in country)  
 Continent : Australasia  
 Country in Australasia: New Zealand  
 Location within country: Wairoa  
 Start year of study : 1975  
 End year of study : 1975  
 Principal publication year: 1979  
 Reference ID of principal publication: STANHO1979  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : STANHO  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : random in given school(s)  
 Respondent : Child  
 Child smokes : Smokers excl questionnaire  
 Standard questionnaire: Non std/NA/NK  
 Comments : Results were originally presented including active smokers, but in sufficient detail to allow maternal smoking among non-smokers to be extracted

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: one or more episodes labelled asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: one or more episodes labelled asthma in last 12m  
 Number of lifetime asthma cases: 27  
 Number of current asthma cases: 21  
 Total number of subjects: 389

Other results (not current db)

Other definitions of asthma available: present Results available for subclinical asthma (= 1+ episodes of wheeze not labelled as asthma and not associated with respiratory infection)  
 Wheezing/wheezing bronchitis available: present Results available for wheeze associated with respiratory infection (in last 12m and ever)  
 Other results for child smokers available: present Results for maternal smoking also available for active smokers; for paternal smoking and smoking by elder siblings, results are only available for child smokers and non-smokers combined, and are not significant

Derived 1 - RRs available

Number of RRs : 2  
 Parental exposure RRs: 2

STAZI Study description

Study title : Stazi  
 Full study title : Basilicata infant vaccination CS 1993-94  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 5  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Italy  
 Location within country: 3 towns in Basilicata  
 Start year of study : 1993  
 End year of study : 1994  
 Principal publication year: 2002  
 Reference ID of principal publication: STAZI2002  
 Reference ID of additional publication(s): ANNESI1996  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : STAZI  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : all children  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Infants were recruited at vaccination centres

## STAZI

(continued)

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 6  
 Total number of subjects: 201  
 Comments : Number of cases based on %, may be subject to rounding error

Confounders Total number of adjustment factors used: 7  
 considered Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for child other medical history/symptoms: 4  
 Adjusted for maternal smoking in pregnancy: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for CMED(9), SES(2), DAMP, PETS, ALGN, COHE, DAYC, FMED, vehicular traffic, diet and parental smoking since birth (both mother and father, both questionnaire and biochemical) were not included in MLR due to lack of significance in age- and sex- adjusted analysis

Other results Wheezing/wheezing bronchitis available: present Results available for frequent  
 (not current wheezing  
 db) Results by other stratifying factors available: present Results also available  
 restricted to subjects with frequent infantile colic

Derived 1 - Number of RRs : 10  
 RRs available Parental exposure RRs: 10

STERN1 Study Study title : Stern 1  
 description Full study title : Ontario & Manitoba air pollution schools CS 1983  
 Study sex : both  
 Lowest age in study : 7  
 Highest age in study (at baseline): 12  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: Canada  
 Location within country: Tillsonburg Ontario & Portage La Prairie Manitoba  
 Start year of study : 1983  
 End year of study : 1983  
 Principal publication year: 1989  
 Reference ID of principal publication: STERN1989A  
 Overlap: STERN1/STERN2  
 Principal/subsidiary study: Principal  
 REF group : STERN1  
 Phase of IESAST project: Original  
 Comments : STERN1/STERN2 may overlap as Tillsonburg is one of 2 towns studied by STERN1 in 1983, and one of 10 towns studied by STERN2. The timing of STERN2 is not stated but not likely to relate to the same survey year, as STERN1 commented on the lack of lifetime asthma data which was available in STERN2. However it is likely that STERN2 was conducted only a few years later and younger children would therefore have been included again

Study design Study type : cross-sectional  
 Type of population : all schoolchildren  
 Other exclusions : outlying school near military base  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: ATS/NHLI/ESP

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma attack in past year  
 Number of current asthma cases: 50  
 Total number of subjects: 1317  
 Comments : Number of subjects is derived from tables, and exceeds number (38) stated in text page 35

Other results Wheezing/wheezing bronchitis available: present Results available for wheeze in last  
 (not current year  
 db)

Derived 1 - Number of RRs : 2  
 RRs available Parental exposure RRs: 2

STERN2 Study description

Study title : Stern 2  
Full study title : Ontario & Saskatchewan schools CS (ca 1986?)  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: Canada  
Location within country: 10 communities in Ontario & Saskatchewan  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 1989  
Reference ID of principal publication: STERN1989  
Reference ID of additional publication(s): STERN1987  
Overlap: STERN1/STERN2  
Principal/subsidiary study: Principal  
REF group : STERN2  
Phase of IESAST project: Original  
Comments : STERN1/STERN2 may overlap as Tillsonburg is one of 2 towns studied by STERN1 in 1983, and one of 10 towns studied by STERN2. The timing of STERN2 is not stated but not likely to relate to the same survey year, as STERN1 commented on the lack of lifetime asthma data which was available in STERN2. However it is likely that STERN2 was conducted only a few years later and younger children would therefore have been included again

Study design

Study type : cross-sectional  
Type of population : school NOS  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma

Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma  
Current asthma available: present  
Source of current asthma diagnosis: Parent report (physician diag)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: asthma in previous year  
Number of lifetime asthma cases: not assessable  
Number of current asthma cases: not assessable  
Total number of subjects: 4099

Confounders considered

Total number of adjustment factors used: 3  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 1  
Adjusted for cooking/heating methods: 1

Other results (not current db)

Wheezing/wheezing bronchitis available: present Results available for wheeze

Derived 1 - RRs available

Number of RRs : 8  
Parental exposure RRs: 4  
In utero x parent exposure combination RRs: 4

STODDA Study description

Study title : Stoddard  
Full study title : US National Medical Expenditure household CS 1987  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 17  
Study race : all (in country)  
Continent : NAmerica  
Country in N America: USA  
US state : all  
Location within country: nationwide  
Start year of study : 1986  
End year of study : 1987  
Principal publication year: 1995  
Reference ID of principal publication: STODDA1995  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : STODDA  
Phase of IESAST project: Original

STODDA  
(continued)

Study design      Study type            : cross-sectional  
                     Type of population    : random children  
                     Respondent            : Household member  
                     Child smokes         : No mention  
                     Standard questionnaire: Non std/NA/NK

Asthma            Current asthma available: present  
                     Source of current asthma diagnosis: Parent report (other/uns/mix)  
                     Timing of current asthma: last n months (12<=n<24)  
                     Description of current asthma: asthma (= asthma or wheezing in last 12m)  
                     Number of current asthma cases: 667  
                     Total number of subjects: 7529

Confounders considered      Total number of adjustment factors used: 10  
                                   Adjusted for sex        : present  
                                   Adjusted for age       : 1  
                                   Adjusted for race      : 1  
                                   Adjusted for location within study: 2  
                                   Adjusted for SES (inc parental education): 2  
                                   Adjusted for household composition: 1  
                                   Adjusted for parental smoking current/since birth: 2

Derived 1 -      Number of RRs            : 11  
 RRs available    Parental exposure RRs: 11

STRACH Study      Study title            : Strachan  
 description      Full study title       : Sheffield schools CC 1993  
                     Study sex             : both  
                     Lowest age in study : 13  
                     Highest age in study (at baseline): 18  
                     Study race            : all (in country)  
                     Continent             : WEurope/Scandinavia  
                     Country in W Europe : UK  
                     Location within country: Sheffield  
                     Start year of study : 1993  
                     End year of study    : 1993  
                     Principal publication year: 1995  
                     Reference ID of principal publication: STRACH1995A  
                     Overlap: none  
                     Principal/subsidiary study: Principal  
                     REF group            : STRACH  
                     Phase of IESAST project: Original

Study design      Study type            : case/control  
                     Type of controls (for CC studies): healthy  
                     Type of population    : all schoolchildren  
                     Other exclusions      : changed address in last 3 years  
                     Type of population - controls (if diff from cases): no history asthma  
                     Respondent            : Parent  
                     Child smokes         : No mention  
                     Standard questionnaire: ISAAC  
                     Comments             : A cross-sectional study of all schoolchildren 19 months earlier was used to identify cases, matched controls were drawn from those with no history of asthma or wheezing

Asthma            Current asthma available: present  
                     Source of current asthma diagnosis: Parent report (other/uns/mix)  
                     Timing of current asthma: last n months (12<=n<24)  
                     Description of current asthma: severe asthma (= in last 12m, 12+ episodes of wheezing or wheezing that limited speech to only 1 or 2 words between breaths)  
                     Number of current asthma cases: 486  
                     Total number of subjects: 961  
                     Comments             : Timing of asthma refers to initial screening phase of study. The term severe asthma was only used in the title, refers to wheezing in the main paper

Matching factors      Cases and controls matched on age (CC): present  
                                   Matched on location (within study area): present

## STRACH

(continued)

Confounders considered Total number of adjustment factors used: 4  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for cooking/heating methods: 1  
Adjusted for housing quality/age/size: 1  
Comments : It is unclear whether results are also adjusted by DAMP, ALGN(3) and PETS(2)

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for frequent attacks (12+) in last 12m; for attack that limited speech in last 12m

Derived 1 - RRs available Number of RRs : 15  
Parental exposure RRs: 15

## STURM

Study description Study title : Sturm  
Full study title : North Carolina schools CS 1999-2000  
Study sex : both  
Lowest age in study : 12  
Highest age in study (at baseline): 14  
Study race : all (in country)  
Continent : N America  
Country in N America: USA  
US state : Fla,Ga,SC,NC  
Location within country: statewide North Carolina  
Start year of study : 1999  
End year of study : 2000  
Principal publication year: 2004  
Reference ID of principal publication: STURM2004  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : STURM  
Phase of IESAST project: Added Nov05

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Respondent : Child  
Child smokes : Smokers incl and adjusted for  
Standard questionnaire: ISAAC  
Comments : Ages approximate, children were all in school grades 7-8

Asthma Current asthma available: present  
Source of current asthma diagnosis: Child report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: active phys-diag asthma (=ever diagnosed asthma and wheezing symptoms in last 12m)  
Number of current asthma cases: 11378  
Total number of subjects: 115516

Confounders considered Total number of adjustment factors used: 7  
Adjusted for sex : present  
Adjusted for race : 1  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 1  
Adjusted for cooking/heating methods: 1  
Adjusted for child other medical history/symptoms: 1  
Adjusted for child active smoking: 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results also available for wheeze without diagnosis of asthma  
Other results for child smokers available: present Results also available for child active smoking (n cigs/day)  
Results by other stratifying factors available: present Results stratified for allergy, parental history of asthma, race, gender and SES are reported not to differ significantly, and the pattern of increasing odds with increasing tobacco smoke exposure persisted in all stratified analyses

Derived 1 - RRs available Number of RRs : 10  
Household exposure RRs: 4  
Total exposure RRs : 6

TARIQ Study description

Study title : Tariq  
Full study title : Isle of Wight birth cohort 1989-90 PS to 2000  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 10  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: Isle of Wight  
Start year of study : 1989  
End year of study : 1990  
Final follow up year: 1994  
Principal publication year: 2000  
Reference ID of principal publication: TARIQ2000  
Reference ID of additional publication(s): ARSHAD1992, ARSHAD1993, TARIQ1995, TARIQ1998, KURUK2002, KURUKU2004  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : TARIQ  
Phase of IESAST project: Original but modified Nov05

Study design

Study type : prospective  
Type of population : all children  
Medical exclusions : perinatal deaths  
Other exclusions : adoptions, moved away from Isle of Wight  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma

Current asthma available: present  
Repeat measures for current asthma: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: asthma (= 3+ episodes of cough&wheeze per year, each 3+ days)  
Number of current asthma cases: 181  
Total number of subjects: 1218  
Comments : Numbers of subjects and numbers of cases are at age 4. It is unclear why earlier followup (ARSHAD1992, ARSHAD1993) are based on fewer subjects

Confounders considered

Total number of adjustment factors used: 15  
Adjusted for sex : present  
Adjusted for family (parent/sibl) medical history: 5  
Adjusted for SES (inc parental education): 1  
Adjusted for pets in household: 1  
Adjusted for child other medical history/symptoms: 5  
Adjusted for maternal smoking in pregnancy: 1  
Adjusted for parental smoking current/since birth: 1

Other results (not current db)

Other definitions of asthma available: present Results available for medication for asthma; for nocturnal asthmatic symptoms; for atopic and nonatopic asthma (i.e. with or without +ve SPT)(TARIQ2000)  
Wheezing/wheezing bronchitis available: present Results available for frequent (10+) cough & wheeze; wheezing on exertion (TARIQ2000). Infantile wheeze; persistent wheeze; new wheeze after infancy (TARIQ1998). Early onset (=onset up to age 4) persistent wheeze, late onset (=onset after age 4) persistent wheeze (KURUKU2004)

Derived 1 - RRs available

Number of RRs : 17  
Parental exposure RRs: 13  
Household exposure RRs: 1  
In utero x parent exposure combination RRs: 3

TAYLOR Study description Study title : Taylor  
Full study title : British Births Survey PS 1970 cohort to 1986  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 16  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : UK  
Location within country: nationwide  
Start year of study : 1970  
End year of study : 1970  
Final follow up year: 1986  
Principal publication year: 1983  
Reference ID of principal publication: TAYLOR1983  
Reference ID of additional publication(s): NEUSPI1989,LEWIS1996  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : TAYLOR  
Phase of IESAST project: Original but modified Nov05

Study design Study type : prospective  
Type of population : all children  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK  
Comments : Subjects were all children born in a single week in the UK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: NA (incidence only)  
Timing of incidence asthma: lifetime (recruit at birth)  
Description of lifetime asthma: any episodes of wheezing on the chest, diagnosed as asthma (question did not prompt with asthma, this was only if mentioned as diagnosis by the parent)  
Number of lifetime asthma cases: 252  
Total number of subjects: 12608

Confounders considered Total number of adjustment factors used: 2  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 1

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for asthma or wheezy bronchitis (age 16, LEWIS1996); for wheezy bronchitis (age 10, NEUSPI1989)

Derived 1 - RRs available Number of RRs : 4  
Parental exposure RRs: 4

TIMONE Study description Study title : Timonen  
Full study title : Kuopio schools pollution CS 1993  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Finland  
Location within country: Kuopio (E Finland)  
Start year of study : 1993  
End year of study : 1993  
Principal publication year: 1995  
Reference ID of principal publication: TIMONE1995  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : TIMONE  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: WHO  
Comments : Initial screening phase of PEACE (Pollution Effects on Asthmatic Children in Europe) study

## TIMONE

(continued)

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthmatic symptoms (= physician diagnosed asthma, or wheezing/SOB with wheezing in last 12m)  
 Number of lifetime asthma cases: 180  
 Total number of subjects: 2544

Derived 1 - Number of RRs : 2  
 RRs available Household exposure RRs: 2

## TOMINA

Study description Study title : Tominaga  
 Full study title : Aichi clinic CS 1978-79  
 Study sex : both  
 Lowest age in study : 3  
 Highest age in study (at baseline): 3  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Japan  
 Location within country: Tokai, Chita and Tokoname (Aichi)  
 Start year of study : 1978  
 End year of study : 1979  
 Principal publication year: 1985  
 Reference ID of principal publication: TOMINA1985  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : TOMINA  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all hosp/clinic patients  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Subjects were all children attending routine health check and were 98% of all children

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: bronchial asthma  
 Number of current asthma cases: 86  
 Total number of subjects: 7885

Other results Wheezing/wheezing bronchitis available: present Results available for asthmatic  
 (not current bronchitis  
 db)

Derived 1 - Number of RRs : 2  
 RRs available Parental exposure RRs: 2

## TSIMOY

Study description Study title : Tsimoyianis  
 Full study title : Nassau county athletes CS 1985  
 Study sex : both  
 Lowest age in study : 12  
 Highest age in study (at baseline): 17  
 Study race : all (in country)  
 Continent : N America  
 Country in N America: USA  
 US state : Vt,Me,NY,NH,Mass,RI,Conn  
 Location within country: Nassau County (New York)  
 Start year of study : 1985  
 End year of study : 1985  
 Principal publication year: 1987  
 Reference ID of principal publication: TSIMOY1987  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : TSIMOY  
 Phase of IESAST project: Original

TSIMOY  
(continued)

Study design      Study type                : cross-sectional  
                          Type of population        : rndm in gvn school(s) athletes  
                          Other exclusions         : restricted to athletes  
                          Respondent                : Child  
                          Child smokes             : Smokers excl questionnaire  
                          Standard questionnaire: Non std/NA/NK

Asthma              Lifetime/incidence/unspec asthma available: present  
                          Source of lifetime asthma diagnosis: Child report (physician diag)  
                          Timing of lifetime asthma: unspecified  
                          Timing of incidence asthma: NA (prevalence analysis only)  
                          Description of lifetime asthma: asthma  
                          Number of lifetime asthma cases: 13  
                          Total number of subjects: 193

Other results      Wheezing/wheezing bronchitis available: present Results available for wheeze  
 (not current  
 db)

Derived 1 -        Number of RRs            : 1  
 RRs available    Total exposure RRs      : 1

ULRIK      Study                    Study title                : Ulrik  
                          description              Full study title          : Copenhagen district PS 1986-1992  
                                                     Study sex                 : both  
                                                     Lowest age in study      : 7  
                                                     Highest age in study (at baseline): 17  
                                                     Highest age in study at final followup: 23  
                                                     Study race                : all (in country)  
                                                     Continent                 : WEurope/Scandinavia  
                                                     Country in W Europe     : Denmark  
                                                     Location within country: district of Copenhagen  
                                                     Start year of study      : 1986  
                                                     End year of study        : 1986  
                                                     Final follow up year: 1992  
                                                     Principal publication year: 1996  
                                                     Reference ID of principal publication: ULRIK1996  
                                                     Reference ID of additional publication(s): ULRIK1998  
                                                     Overlap: none  
                                                     Principal/subsidiary study: Principal  
                                                     REF group                : ULRIK  
                                                     Phase of IESAST project: Original

Study design      Study type                : prospective  
                          Type of population        : random children  
                          Respondent                : Parent and child  
                          Child smokes             : Smkrs inc, adj reje as not sig  
                          Standard questionnaire: ATS/NHLI/ESP

Asthma              Lifetime/incidence/unspec asthma available: present  
                          Source of lifetime asthma diagnosis: Child report (other/uns/mix)  
                          Timing of lifetime asthma: NA (incidence only)  
                          Timing of incidence asthma: since baseline (earlier excl)  
                          Description of lifetime asthma: asthma (= at least one of a) breath ever wheezy or  
                          whistling, b) attacks of SOB with wheezing, c) wheezing, chest tightness, cough,  
                          breathlessness with any of: at rest, with exertion, with emotional stress, with  
                          exposure to cold air, with chest infections or head cold, d) wheezing after exposure  
                          to: dust, fumes, moulds, pollen, pets, drugs)  
                          Number of lifetime asthma cases: 41  
                          Total number of subjects: 386

Confounders        Total number of adjustment factors used: 4  
 considered        Adjusted for child other medical history/symptoms: 4  
                          Other confounders considered but rejected: present  
                          Comments                 : Adjustment for SEX, AGE, CMED(6), FMED, active smoking rejected  
                          from MLR by backward elimination due to lack of significace

Other results      Other results for child smokers available: present Child (active) smoking rejected  
 (not current      from MLR due to lack of significance  
 db)

Derived 1 -        Number of RRs            : 1  
 RRs available    Parental exposure RRs: 1

VARELA Study description Study title : Varela Delgado  
Full study title : Mexico City schools SPT CS 1999-2000  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 15  
Study race : all (in country)  
Continent : SCAmerica  
Country in S/C America: Mexico  
Location within country: Mexico City  
Start year of study : 1999  
End year of study : 2000  
Principal publication year: 2001  
Reference ID of principal publication: VARELA2001  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : VARELA  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent and child  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent or child rep (oth/unsp)  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthmatic  
Number of lifetime asthma cases: 34  
Total number of subjects: 57

Other results (not current db) Other exposures available: present Results available according to whether mother was main active smoker

Derived 1 - RRs available Number of RRs : 1  
Household exposure RRs: 1

VAVILI Study description Study title : Vavilin  
Full study title : Genotyping CC (Novosibirsk ca 1999?)  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 15  
Study race : whites (inc hispanic)  
Continent : EEurope/Balkans  
Country in E Europe/Balkans: Russia  
Location within country: Novosibirsk?  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 2000  
Reference ID of principal publication: VAVILI2000  
Reference ID of additional publication(s): VAVILI2002  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : VAVILI  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : unspecified  
Type of population - controls (if diff from cases): no signs of sensitisation  
Respondent : Parent and child  
Child smokes : No mention anal (but in quest)  
Standard questionnaire: Non std/NA/NK  
Comments : Controls were aged 4-14

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Unspecified  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: bronchial asthma  
Number of lifetime asthma cases: 100  
Total number of subjects: 204

## VAVILI

(continued)

Other results (not current db) Results by other stratifying factors available: present Results available by genotype strata (but no CIs)

Derived 1 - Number of RRs : 1  
RRs available Household exposure RRs: 1

VENNER Study description Study title : Venners  
Full study title : Anqing CS of asthma index families 1995-98  
Study sex : both  
Lowest age in study : 8  
Highest age in study (at baseline): 15  
Study race : all (in country)  
Continent : Asia  
Country in Asia : China  
Location within country: Rural Anqing (Anhui Province)  
Start year of study : 1995  
End year of study : 1998  
Principal publication year: 2001  
Reference ID of principal publication: VENNER2001  
Reference ID of additional publication(s): XU1999A  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : VENNER  
Phase of IESAST project: Original

Study design Study type : cross-sectional  
Type of population : all chld all asthmatic famlies  
Medical exclusions : both parents have asthma  
Other exclusions : single parent family, no siblings, sibling (age<20) ever smoked, coal heating/cooking  
Respondent : Unspec (parent/child)  
Child smokes : Smokers excl questionnaire  
Standard questionnaire: ATS/NHLI/ESP  
Comments : Eligible families were all those with at least one asthma patient (age 8+) and at least one sibling

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Medical records  
Timing of lifetime asthma: unspecified  
Timing of incidence asthma: NA (prevalence analysis only)  
Description of lifetime asthma: asthma diag on basis of history of repeated onset of wheeze with dyspnea, but without symptoms between events and symptoms improved by bronchodilator  
Number of lifetime asthma cases: 529  
Total number of subjects: 1718

Derived 1 - Number of RRs : 6  
RRs available Parental exposure RRs: 6

VERHOE Study description Study title : Verhoeff  
Full study title : School respiratory CC (Amsterdam ca 1990?)  
Study sex : both  
Lowest age in study : 7  
Highest age in study (at baseline): 11  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Netherlands  
Location within country: not stated (Amsterdam?)  
Start year of study : not assessable  
End year of study : not assessable  
Principal publication year: 1992  
Reference ID of principal publication: VERHOE1992  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : VERHOE  
Phase of IESAST project: Original

## VERHOE

(continued)

Study design      Study type                    : case/control  
                          Type of controls (for CC studies): healthy  
                          Type of population        : school NOS  
                          Type of population - controls (if diff from cases): no chest/resp symptoms  
                          Respondent                 : Parent  
                          Child smokes              : No mention  
                          Standard questionnaire: Non std/NA/NK

Asthma              Lifetime/incidence/unspec asthma available: present  
                          Source of lifetime asthma diagnosis: Unspecified  
                          Timing of lifetime asthma: unspecified  
                          Timing of incidence asthma: NA (prevalence analysis only)  
                          Description of lifetime asthma: asthma (subset of chronic respiratory symptoms)  
                          Number of lifetime asthma cases: 117  
                          Total number of subjects: 374

Derived 1 -        Number of RRs                : 4  
 RRs available     Parental exposure RRs: 4

VOLKME Study                    Study title                    : Volkmer  
 description       Full study title               : South Australia preschool CS 1993  
                          Study sex                    : both  
                          Lowest age in study        : 4  
                          Highest age in study (at baseline): 5  
                          Study race                  : all (in country)  
                          Continent                  : Australasia  
                          Country in Australasia: Australia  
                          Location within country: South Australia statewide  
                          Start year of study        : 1993  
                          End year of study         : 1993  
                          Principal publication year: 1995  
                          Reference ID of principal publication: VOLKME1995  
                          Reference ID of additional publication(s): VOLKME1995A  
                          Overlap: none  
                          Principal/subsidiary study: Principal  
                          REF group                  : VOLKME  
                          Phase of IESAST project: Original

Study design      Study type                    : cross-sectional  
                          Type of population        : all preschool routine hlth chk  
                          Other exclusions         : heating by kerosene, multiple types or none  
                          Respondent                 : Parent  
                          Child smokes              : No mention  
                          Standard questionnaire: IUATLD  
                          Comments                  : Covered all children attending routine pre-school health check, which includes approximately 80% of all children

Asthma              Lifetime/incidence/unspec asthma available: present  
                          Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
                          Timing of lifetime asthma: Lifetime  
                          Timing of incidence asthma: NA (prevalence analysis only)  
                          Description of lifetime asthma: asthma  
                          Number of lifetime asthma cases: 3178  
                          Total number of subjects: 14124  
                          Comments                  : Number of cases based on %, may be subject to rounding error

Confounders       Total number of adjustment factors used: 7  
 considered        Adjusted for SES (inc parental education): 1  
                          Adjusted for air conditioning/humidifier: 2  
                          Adjusted for cooking/heating methods: 4

Other results      Wheezing/wheezing bronchitis available: present Results available for ever wheeze; and  
 (not current      for wheeze in last 12m  
 db)                Results by other stratifying factors available: present Results available restricted  
                          to greater Adelaide (urban)

Derived 1 -        Number of RRs                : 2  
 RRs available     Parental exposure RRs: 2

VONMAF Study description

Study title : von Maffei  
 Full study title : Virginia & Connecticut family hosp CS 1993-1996  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 17  
 Study race : blacks  
 Continent : NAmerica  
 Country in N America: USA  
 US state : multi (not all)  
 Location within country: 12 hospitals in Virginia and Connecticut  
 Start year of study : 1993  
 End year of study : 1996  
 Principal publication year: 2001  
 Reference ID of principal publication: VONMAF2001  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : VONMAF  
 Phase of IESAST project: Original  
 Comments : Part of same overall study as BECKET, but no overlap as results for blacks have not been entered for BECKET

Study design

Study type : cross-sectional  
 Type of population : all fam newborn deliv gvn hosp  
 Medical exclusions : birth complications/neonatal deaths, low birthwt  
 Other exclusions : non-English speakers, newborns given for adoption  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Unit of study is the family. Eligible families were those where the mother gave birth at participating hospital, but excluding non-English speakers and those with serious medical complications, and had at least one other child. Other children (i.e. excluding the newborn) were assessed for asthma.

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: at least one child in family with phys-diag asthma  
 Number of lifetime asthma cases: 383  
 Total number of subjects: 2409

Confounders considered

Total number of adjustment factors used: 8  
 Adjusted for location within study: 3  
 Adjusted for family (parent/sibl) medical history: 2  
 Adjusted for household composition: 1  
 Adjusted for air conditioning/humidifier: 1  
 Adjusted for cooking/heating methods: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for other (unspecified) variables was rejected in stepwise MLR

Derived 1 - RRs available

Number of RRs : 3  
 Parental exposure RRs: 1  
 Household exposure RRs: 2

WANG Study description

Study title : Wang  
 Full study title : 2 areas schools air pollution CS 1995-96  
 Study sex : both  
 Lowest age in study : 11  
 Highest age in study (at baseline): 16  
 Study race : all (in country)  
 Continent : Asia  
 Country in Asia : Taiwan  
 Location within country: Kaoshiung & Pintong  
 Start year of study : 1995  
 End year of study : 1996  
 Principal publication year: 1999  
 Reference ID of principal publication: WANG1999B  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : WANG  
 Phase of IESAST project: Original

WANG

(continued)

Study design      Study type                : cross-sectional  
 Type of population : all schoolchildren  
 Medical exclusions : past (but not current) asthmatic symptoms  
 Respondent         : Parent  
 Child smokes        : Smokers incl and adjusted for  
 Standard questionnaire: ISAAC

Asthma             Current asthma available: present  
 Source of current asthma diagnosis: Child report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma (= any one of 5 symptoms in last year: moderate wheeze at rest; wheeze and SOB after exercise; nocturnal waking with wheeze; nocturnal waking with cough; severe wheeze and SOB at rest)  
 Number of current asthma cases: 20637  
 Total number of subjects: 155284  
 Comments            : Number of subjects based on Table 3, exceeds number stated in text (by 1)

Confounders considered      Total number of adjustment factors used: 8  
 Adjusted for sex        : present  
 Adjusted for age        : 1  
 Adjusted for location within study: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for exercise: 1  
 Adjusted for diet/alcohol: 1  
 Adjusted for child active smoking: 1

Derived 1 -            Number of RRs                : 2  
 RRs available      Household exposure RRs: 2

WARKE

Study description      Study title                : Warke  
 Full study title        : Belfast hospital CC (ca 2002?)  
 Study sex                : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 14  
 Study race                : all (in country)  
 Continent                : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: Belfast  
 Start year of study : not assessable  
 End year of study        : not assessable  
 Principal publication year: 2003  
 Reference ID of principal publication: WARKE2003  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group                : WARKE  
 Phase of IESAST project: Added Nov05

Study design            Study type                : case/control  
 Type of controls (for CC studies): diseased/hospital  
 Control diseases/cause of death: elective surgery  
 Type of population     : hospital NOS  
 Respondent              : Parent  
 Child smokes            : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma                Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: unspecified  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthmatic (=doctor diagnosed asthma and 2+ episodes wheeze precipitated by infection, exercise or allergen exposure)  
 Number of lifetime asthma cases: 174  
 Total number of subjects: 253

Derived 1 -            Number of RRs                : 1  
 RRs available      Parental exposure RRs: 1

WEITZ1 Study description Study title : Weitzman NHIS 1  
 Full study title : Natl Health Interview Survey Suppl 1981 Age 0-5  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 5  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA  
 US state : all  
 Location within country: nationwide  
 Start year of study : 1981  
 End year of study : 1981  
 Principal publication year: 1990  
 Reference ID of principal publication: WEITZM1990  
 Reference ID of additional publication(s): WEITZM1990A  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : WEITZ1  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : random children  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: current NOS  
 Description of current asthma: ever had asthma lasting 3m+, not been cured  
 Number of lifetime asthma cases: not assessable  
 Number of current asthma cases: 117  
 Total number of subjects: 4331

Confounders considered Total number of adjustment factors used: 8  
 Adjusted for sex : present  
 Adjusted for race : 1  
 Adjusted for SES (inc parental education): 2  
 Adjusted for household composition: 2  
 Adjusted for housing quality/age/size: 1  
 Adjusted for child other medical history/symptoms: 1  
 Other confounders considered but rejected: present  
 Comments : Adjustment for CMED(breastfeeding), LOC(2=urban/rural, region)  
 rejected from MLR due to lack of significance

Other results (not current db) Other definitions of asthma available: present Results available for physician-prescribed medication in last 2 weeks

Derived 1 - RRs available Number of RRs : 12  
 Parental exposure RRs: 12

WEITZ2 Study description Study title : Weitzman NHIS 2  
 Full study title : Natl Health Interview Survey Suppl 1981 Age 6-17  
 Study sex : both  
 Lowest age in study : 6  
 Highest age in study (at baseline): 17  
 Study race : all (in country)  
 Continent : NAmerica  
 Country in N America: USA  
 US state : all  
 Location within country: nationwide  
 Start year of study : 1981  
 End year of study : 1981  
 Principal publication year: 1990  
 Reference ID of principal publication: WEITZM1990A  
 Reference ID of additional publication(s): WEITZM1990  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : WEITZ2  
 Phase of IESAST project: Original

WEITZ2

(continued)

Study design      Study type            : cross-sectional  
 Type of population : random children  
 Respondent        : Parent  
 Child smokes      : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma            Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: current NOS  
 Description of current asthma: asthma onset > age 5 lasting 3m+, not been cured  
 Number of current asthma cases: not assessable  
 Total number of subjects: 10386

Confounders considered      Other confounders considered but rejected: present  
 Comments                    : None of the social or environmental variables were statistically significant so rejected from MLR (assumed to include SEX, RACE, HOCO(both parents, family size), HOUS, CMED(low birthweight), SES(extreme poverty)

Derived 1 -            Number of RRs            : 1  
 RRs available      Parental exposure RRs: 1

WICKMA Study            Study title            : Wickman  
 description            Full study title        : Stockholm BAMSE birth cohort 1994-96 for 2 years (BAMSE  
                           B=children, A=allergy, M=environment, S=Stockholm, E=epidemiology)  
 Study sex              : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 2  
 Study race             : all (in country)  
 Continent              : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: Central and NW Stockholm  
 Start year of study : 1994  
 End year of study     : 1996  
 Final follow up year: 1998  
 Principal publication year: 2003  
 Reference ID of principal publication: WICKMA2003  
 Reference ID of additional publication(s): LANNER2002  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group              : WICKMA  
 Phase of IESAST project: Added Nov05

Study design            Study type            : prospective  
 Type of population    : random children  
 Medical exclusions    : severe disabling disease  
 Other exclusions      : planning to move within 1 year of birth, non-Swedish speaking,  
                           older sibling also in study  
 Respondent            : Parent  
 Child smokes         : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma            Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (other/uns/mix)  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: asthma (=3+ episodes wheeze after age 3m with  
                           treatment by inhaled glucocorticoids, or signs of suspected hyperactivity (cough,  
                           wheeze at excitement or emotional stress) without URI)  
 Number of lifetime asthma cases: 314  
 Total number of subjects: 3692  
 Comments              : Number of cases from %, may be subject to rounding error

Confounders considered      Total number of adjustment factors used: 8  
 Adjusted for sex        : present  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for parent's age: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for damp/mould in home: 1  
 Adjusted for housing quality/age/size: 1  
 Adjusted for pets in household: 1  
 Adjusted for child other medical history/symptoms: 1

## WICKMA

(continued)

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for any wheeze after age 3m, and for recurrent wheeze (3+ episodes after age 3m)

Derived 1 - Number of RRs : 2  
RRs available Parental exposure RRs: 2

## WIJGA

Study description Study title : Wijga  
Full study title : Netherlands PIAMA PS to age 3 1996-2000 (PIAMA= Prevention and Incidence of Asthma and Mite Allergy)  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 3  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Netherlands  
Location within country: 3 regions  
Start year of study : 1996  
End year of study : 1997  
Final follow up year: 2000  
Principal publication year: 2003  
Reference ID of principal publication: WIJGA2003  
Reference ID of additional publication(s): BRUNEK2002  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : WIJGA  
Phase of IESAST project: Added Nov05

Study design Study type : prospective  
Type of population : random hosp/clinic patients  
Medical exclusions : diet influenced by allergy to cow's milk  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC  
Comments : Mothers included were allergic and non-allergic subgroups

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Parent report (physician diag)  
Timing of lifetime asthma: Lifetime  
Timing of incidence asthma: lifetime (recruit at birth)  
Description of lifetime asthma: asthma  
Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: last n months (12<=n<24)  
Description of current asthma: ever diagnosed asthma and asthma symptoms and/or asthma medication in last 12m  
Number of lifetime asthma cases: 195  
Number of current asthma cases: 145  
Total number of subjects: 2978  
Comments : Number of cases from %

Confounders considered Total number of adjustment factors used: 17  
Adjusted for sex : present  
Adjusted for family (parent/sibl) medical history: 2  
Adjusted for SES (inc parental education): 1  
Adjusted for household composition: 1  
Adjusted for child other medical history/symptoms: 2  
Adjusted for diet/alcohol: 10  
Other confounders considered but rejected: present  
Comments : Region, parental asthma and maternal smoking in pregnancy were assessed as potential confounders but not included in the final model. However it is not stated what criteria were used

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for recent wheeze

Derived 1 - Number of RRs : 2  
RRs available Household exposure RRs: 2

WILLE1 Study description Study title : Willers 1  
 Full study title : Malmo hospital/school CC study 1987-88  
 Study sex : both  
 Lowest age in study : 3  
 Highest age in study (at baseline): 15  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: Malmo  
 Start year of study : 1988  
 End year of study : 1988  
 Principal publication year: 1991  
 Reference ID of principal publication: WILLER1991  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : WILLE1  
 Phase of IESAST project: Original

Study design Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : all in given hosp/clinic(s)  
 Type of population - controls (if diff from cases): all at given school(s)  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Years and ages given refer to cases, controls: 1987, age 7-10

Asthma Current asthma available: present  
 Current asthma is first occurrence: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: asthma based on clinical history (recurrent episode of cough & wheeze) and examination  
 Number of current asthma cases: 49  
 Total number of subjects: 126

Confounders considered Total number of adjustment factors used: 2  
 Adjusted for parental smoking current/since birth: 2

Derived 1 - RRs available Number of RRs : 15  
 Parental exposure RRs: 13  
 Biochemical exposure RRs: 2

WILLE2 Study description Study title : Willers 2  
 Full study title : Malmo population cotinine CC 1993  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 13  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Sweden  
 Location within country: Malmo  
 Start year of study : 1993  
 End year of study : 1993  
 Principal publication year: 2000  
 Reference ID of principal publication: WILLER2000  
 Reference ID of additional publication(s): FORSB31997  
 Overlap: FORSB3/WILLE2  
 Principal/subsidiary study: Subsidiary  
 REF group : FORSB3  
 Phase of IESAST project: Original  
 Comments : Subset of FORSB3 (including all asthmatic children from Malmo as cases, and a small number of symptom-free children as controls)

Study design Study type : case/control  
 Type of controls (for CC studies): healthy  
 Type of population : all children  
 Medical exclusions : acute illness  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : A cross-sectional population study (FORSB3) was used to identify cases, and matched controls were selected from the symptom-free children

WILLE2

(continued)

Asthma Current asthma available: present  
 Source of current asthma diagnosis: Medical records  
 Timing of current asthma: current diagnosis  
 Description of current asthma: initially identified (parent quest) as SOB with wheezing (asthma attacks), dry cough at night without colds, or asthma treatment by physician, in last 12 months; verified by physician examination  
 Number of current asthma cases: 85  
 Total number of subjects: 111

Matching Cases and controls matched on sex: present  
 factors Cases and controls matched on age (CC): present  
 Matched on location (within study area): present

Other results Other exposures available: present Graphs showing case/control status by parental  
 (not current smoking (maternal or household) X cotinine (salivary or urinary) are available but  
 db) are not distinct enough to extract data reliably

Derived 1 - Number of RRs : 2  
 RRs available Household exposure RRs: 2

WITHER Study Study title : Withers  
 description Full study title : Southampton GP birth cohort 78-80 followup CS 1995  
 Study sex : both  
 Lowest age in study : 14  
 Highest age in study (at baseline): 16  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : UK  
 Location within country: Southampton area  
 Start year of study : 1995  
 End year of study : 1995  
 Principal publication year: 1998  
 Reference ID of principal publication: WITHER1998  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : WITHER  
 Phase of IESAST project: Original

Study design Study type : cross-sectional  
 Type of population : all at given primary care(s)  
 Respondent : Parent and child  
 Child smokes : Smkrs inc as not signif univar  
 Standard questionnaire: Non std/NA/NK  
 Comments : Subjects had been registered at 86 GPs at the time of an earlier study (1987), and were traced for this followup. Treated as a cross-sectional study here as analysis relates only to the later questionnaire

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 504  
 Total number of subjects: 2289

Confounders Total number of adjustment factors used: 6  
 considered Adjusted for family (parent/sibl) medical history: 3  
 Adjusted for child other medical history/symptoms: 2  
 Adjusted for parental smoking current/since birth: 1  
 Other confounders considered but rejected: present  
 Comments : Variables considered but not used (as not significant in univariate analyses) were COSEX,COHOCO(2),COSES,COCMED(birth weight),COCOHE,COCHSM,COHSM. Variables initially significant but rejected from final model were FMED(5),COPETS,COPSMC(paternal smoking)

Other results Wheezing/wheezing bronchitis available: present Results available for current wheeze;  
 (not current persistent wheeze; late-onset wheeze  
 db) Other results for child smokers available: present Child (active) smoking is stated to be non-significant

Derived 1 - Number of RRs : 7  
 RRs available Parental exposure RRs: 6  
 Household exposure RRs: 1

WOLF01 Study description Study title : Wolf-Ostermann1  
 Full study title : SW Germany urban/rural phase 1 CS 1977  
 Study sex : both  
 Lowest age in study : 8  
 Highest age in study (at baseline): 8  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Germany  
 Location within country: Mannheim, Freiburg, Breisgau, Hochschwarzwald  
 Start year of study : 1977  
 End year of study : 1977  
 Principal publication year: 1995  
 Reference ID of principal publication: WOLFOS1995  
 Reference ID of additional publication(s): LUTTMA1993  
 Overlap: WOLF01/WOLF02/WOLF03  
 Principal/subsidiary study: Principal  
 REF group : WOLF01  
 Phase of IESAST project: Original  
 Comments : Children from the same cohort were studied in 1977 (WOLF01),  
 1979 (WOLF02) and 1985 (WOLF03), but they have been entered as separate studies  
 because relatively few of the children were included more than once (17% included in  
 all three, and a further 24% included twice)

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : Discussed, but no data avail  
 Standard questionnaire: WHO

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma in last year  
 Number of lifetime asthma cases: 63  
 Number of current asthma cases: 41  
 Total number of subjects: 4052  
 Comments : Number of cases based on %, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 7  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for obesity/BMI: 1

Other results (not current db) Other definitions of asthma available: present Results available for asthma score (sum  
 of SOB with wheeze, phys-diag asthma and asthma in last year)  
 Wheezing/wheezing bronchitis available: present Results available for SOB with wheeze  
 Results by other stratifying factors available: present Results available stratified  
 by region (urban/rural)

Derived 1 - RRs available Number of RRs : 5  
 Household exposure RRs: 5

WOLFO2 Study description Study title : Wolf-Ostermann2  
 Full study title : SW Germany urban/rural phase 2 CS 1979  
 Study sex : both  
 Lowest age in study : 10  
 Highest age in study (at baseline): 10  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Germany  
 Location within country: Mannheim, Freiburg, Breisgau, Hochschwarzwald  
 Start year of study : 1979  
 End year of study : 1979  
 Principal publication year: 1995  
 Reference ID of principal publication: WOLFOS1995  
 Reference ID of additional publication(s): LUTTMA1993  
 Overlap: WOLF01/WOLF02/WOLF03  
 Principal/subsidiary study: Principal  
 REF group : WOLF02  
 Phase of IESAST project: Original  
 Comments : Children from the same cohort were studied in 1977 (WOLF01),  
 1979 (WOLF02) and 1985 (WOLF03), but they have been entered as separate studies  
 because relatively few of the children were included more than once (17% included in  
 all three, and a further 24% included twice)

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : Discussed, but no data avail  
 Standard questionnaire: WHO

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Parent report (other/uns/mix)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma in last year  
 Number of lifetime asthma cases: 66  
 Number of current asthma cases: 35  
 Total number of subjects: 3667  
 Comments : Number of cases based on %, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 7  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 1  
 Adjusted for cooking/heating methods: 1  
 Adjusted for obesity/BMI: 1

Other results (not current db) Other definitions of asthma available: present Results available for asthma score (sum  
 of SOB with wheeze, phys-diag asthma and asthma in last year)  
 Wheezing/wheezing bronchitis available: present Results available for SOB with wheeze  
 Results by other stratifying factors available: present Results available stratified  
 by region (urban/rural)

Derived 1 - RRs available Number of RRs : 8  
 Household exposure RRs: 8

WOLFO3 Study description Study title : Wolf-Ostermann3  
 Full study title : SW Germany urban/rural phase 3 CS 1985  
 Study sex : both  
 Lowest age in study : 16  
 Highest age in study (at baseline): 16  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Germany  
 Location within country: Mannheim, Freiburg, Breisgau, Hochschwarzwald  
 Start year of study : 1985  
 End year of study : 1985  
 Principal publication year: 1995  
 Reference ID of principal publication: WOLFOS1995  
 Reference ID of additional publication(s): LUTTMA1993  
 Overlap: WOLF01/WOLF02/WOLF03  
 Principal/subsidiary study: Principal  
 REF group : WOLF03  
 Phase of IESAST project: Original  
 Comments : Children from the same cohort were studied in 1977 (WOLF01),  
 1979 (WOLF02) and 1985 (WOLF03), but they have been entered as separate studies  
 because relatively few of the children were included more than once (17% included in  
 all three, and a further 24% included twice)

Study design Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent and child  
 Child smokes : Smokers excl questionnaire  
 Standard questionnaire: WHO

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent or child rep (phys dg)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Current asthma available: present  
 Source of current asthma diagnosis: Parent or child rep (oth/unsp)  
 Timing of current asthma: last n months (12<=n<24)  
 Description of current asthma: asthma in last year  
 Number of lifetime asthma cases: 173  
 Number of current asthma cases: 73  
 Total number of subjects: 5833  
 Comments : Number of cases based on %, may be subject to rounding error

Confounders considered Total number of adjustment factors used: 10  
 Adjusted for sex : present  
 Adjusted for age : 1  
 Adjusted for type of respondent: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for SES (inc parental education): 1  
 Adjusted for household composition: 1  
 Adjusted for cooking/heating methods: 2  
 Adjusted for housing quality/age/size: 1  
 Adjusted for obesity/BMI: 1

Other results (not current db) Other definitions of asthma available: present Results available for asthma score (sum  
 of SOB with wheeze, phys-diag asthma and asthma in last year)  
 Wheezing/wheezing bronchitis available: present Results available for SOB with wheeze  
 Results by other stratifying factors available: present Results available stratified  
 by region (urban/rural)

Derived 1 - RRs available Number of RRs : 2  
 Household exposure RRs: 2

XU Study description Study title : Xu  
Full study title : Northern Finland birth cohort 1985-86 PS to 1993  
Study sex : both  
Lowest age in study : 0  
Highest age in study (at baseline): 0  
Highest age in study at final followup: 7  
Study race : all (in country)  
Continent : WEurope/Scandinavia  
Country in W Europe : Finland  
Location within country: northern Finland  
Start year of study : 1985  
End year of study : 1986  
Final follow up year: 1993  
Principal publication year: 1999  
Reference ID of principal publication: XU1999  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : XU  
Phase of IESAST project: Original

Study design Study type : prospective  
Type of population : all children  
Medical exclusions : died before age 7  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
Source of lifetime asthma diagnosis: Med rec or par rep (phys diag)  
Timing of lifetime asthma: NA (incidence only)  
Timing of incidence asthma: lifetime (recruit at birth)  
Description of lifetime asthma: parent report of 'child has long-term illness'  
specifying asthma (probably phys diag), or National Hospital Discharge Record linkage  
indicates ever hospitalized due to asthma  
Number of lifetime asthma cases: 283  
Total number of subjects: 8088

Derived 1 - RRs available Number of RRs : 2  
Parental exposure RRs: 2

YANG Study description Study title : Yang  
Full study title : Rural Kaohsiung schools CS 1994  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 12  
Study race : all (in country)  
Continent : Asia  
Country in Asia : Taiwan  
Location within country: Rural Kaohsiung  
Start year of study : 1994  
End year of study : 1994  
Principal publication year: 1997  
Reference ID of principal publication: YANG1997A  
Reference ID of additional publication(s): YANG1998A  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : YANG  
Phase of IESAST project: Original  
Comments : Only results from YANG1997A have been entered. YANG1998A  
presents results for the same cases, but using a sex & age matched group of controls  
rather than a cross-sectional analysis

Study design Study type : cross-sectional  
Type of population : random schoolchildren  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ATS/NHLI/ESP

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (physician diag)  
Timing of current asthma: current NOS  
Description of current asthma: asthma currently present and confirmed by doctor  
Number of current asthma cases: 165  
Total number of subjects: 4164

## YANG

(continued)

Confounders considered Total number of adjustment factors used: 10  
 Adjusted for air conditioning/humidifier: 3  
 Adjusted for cooking/heating methods: 3  
 Adjusted for damp/mould in home: 1  
 Adjusted for pets in household: 1  
 Adjusted for exposure to food/housedust allergens: 2

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheezing apart from colds or on most days/nights or after exercise

Derived 1 - RRs available Number of RRs : 2  
 Household exposure RRs: 2

## YUAN

Study description Study title : Yuan  
 Full study title : North Jutland whole birth cohort 1996-97 to 1 year  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 1  
 Study race : all (in country)  
 Continent : WEurope/Scandinavia  
 Country in W Europe : Denmark  
 Location within country: North Jutland  
 Start year of study : 1996  
 End year of study : 1997  
 Final follow up year: 1998  
 Principal publication year: 2003  
 Reference ID of principal publication: YUAN2003A  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : YUAN  
 Phase of IESAST project: Added Nov05

Study design Study type : prospective  
 Type of population : all children  
 Other exclusions : multiple births, moved from county in first year  
 Respondent : Medical records  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK

Asthma Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Medical records  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: Prescription for asthma (=both beta-agonist and inhaled glucocorticoid)  
 Number of lifetime asthma cases: 364  
 Total number of subjects: 9705

Confounders considered Total number of adjustment factors used: 5  
 Adjusted for sex : present  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for parent's age: 1  
 Adjusted for household composition: 2  
 Comments : Additional adjustment for 6 fetal growth indicators was stated not to have changed the associations seen

Derived 1 - RRs available Number of RRs : 8  
 Parental exposure RRs: 8

ZEIGER Study description

Study title : Zeiger  
 Full study title : San Diego high risk birth cohort 1981-84 to 1991  
 Study sex : both  
 Lowest age in study : 0  
 Highest age in study (at baseline): 0  
 Highest age in study at final followup: 7  
 Study race : all (in country)  
 Continent : N America  
 Country in N America: USA  
 US state : Cal,Wash,Oreg  
 Location within country: San Diego  
 Start year of study : 1981  
 End year of study : 1984  
 Final follow up year: 1991  
 Principal publication year: 1995  
 Reference ID of principal publication: ZEIGER1995  
 Reference ID of additional publication(s): ZEIGER1989  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : ZEIGER  
 Phase of IESAST project: Original

Study design

Study type : prospective  
 Type of population : all gvn prim cr high algy risk  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: Non std/NA/NK  
 Comments : Subjects were randomized to prophylactic (food allergen avoidance) or control groups, but the groups were combined for the analyses included here

Asthma

Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Medical records  
 Timing of lifetime asthma: NA (incidence only)  
 Timing of incidence asthma: lifetime (recruit at birth)  
 Description of lifetime asthma: asthma (= 2+ episodes lower respiratory disorder with reversible bronchospasm unassociated with other anatomic congenital or immunologic causes)  
 Number of lifetime asthma cases: 50  
 Total number of subjects: 165

Confounders considered

Total number of adjustment factors used: 4  
 Adjusted for sex : present  
 Adjusted for family (parent/sibl) medical history: 1  
 Adjusted for child other medical history/symptoms: 2  
 Other confounders considered but rejected: present  
 Comments : Adjustment factors not included in final model due to lack of significance (p>0.09) were RACE(2), FMED(3), ALGN, CMED(9) and maternal, paternal and household ETS

Derived 1 - RRs available

Number of RRs : 4  
 Parental exposure RRs: 2  
 Household exposure RRs: 2

ZEJDA Study description

Study title : Zejda  
 Full study title : Upper Silesia primary schl air poll CS (ca 1994?)  
 Study sex : both  
 Lowest age in study : 7  
 Highest age in study (at baseline): 9  
 Study race : all (in country)  
 Continent : E Europe/Balkans  
 Country in E Europe/Balkans: Poland  
 Location within country: Chorzow and Mikolow (Upper Silesia)  
 Start year of study : not assessable  
 End year of study : not assessable  
 Principal publication year: 1996  
 Reference ID of principal publication: ZEJDA1996  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group : ZEJDA  
 Phase of IESAST project: Original

Study design

Study type : cross-sectional  
 Type of population : random schoolchildren  
 Respondent : Parent  
 Child smokes : No mention  
 Standard questionnaire: WHO

ZEJDA  
(continued)

Asthma           Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 45  
 Total number of subjects: 1622  
 Comments           : Number of cases based on %, may be subject to rounding error

Confounders considered   Total number of adjustment factors used: 3  
 Adjusted for sex       : present  
 Adjusted for location within study: 1  
 Adjusted for family (parent/sibl) medical history: 1  
 Other confounders considered but rejected: present  
 Comments           : Confounders COHE, HOUS(2) rejected from multiple logistic regression by backwards elimination

Other results (not current db)   Wheezing/wheezing bronchitis available: present Results available for ever had wheezing; for ever had dyspnea with wheezing

Derived 1 - RRs available   Number of RRs           : 1  
 Parental exposure RRs: 1

ZHANG   Study description   Study title           : Zhang  
 Full study title     : Four Chinese Cities Study school/family CS 1993-96  
 Study sex            : both  
 Lowest age in study : 5  
 Highest age in study (at baseline): 16  
 Study race           : all (in country)  
 Continent            : Asia  
 Country in Asia     : China  
 Location within country: Guangzhou, Wuhan, Lanzhou, Chongqing  
 Start year of study : 1993  
 End year of study    : 1996  
 Principal publication year: 2002  
 Reference ID of principal publication: ZHANG2002B  
 Reference ID of additional publication(s): QIAN2004  
 Overlap: none  
 Principal/subsidiary study: Principal  
 REF group            : ZHANG  
 Phase of IESAST project: Added Nov05

Study design       Study type            : cross-sectional  
 Type of population   : all gvn schls + their families  
 Other exclusions     : lived > 2 kms from school, resident <3 yrs, plans to move within 3 yrs  
 Respondent           : Parent  
 Child smokes         : No mention  
 Standard questionnaire: ATS/NHLI/ESP

Asthma           Lifetime/incidence/unspec asthma available: present  
 Source of lifetime asthma diagnosis: Parent report (physician diag)  
 Timing of lifetime asthma: Lifetime  
 Timing of incidence asthma: NA (prevalence analysis only)  
 Description of lifetime asthma: asthma  
 Number of lifetime asthma cases: 173  
 Total number of subjects: 7392  
 Comments           : Number of cases is approximate, based on district-specific prevalence rates adjusted for 19 covariates

ZHANG

(continued)

Confounders considered Total number of adjustment factors used: 29  
Adjusted for sex : present  
Adjusted for age : 1  
Adjusted for location within study: 1  
Adjusted for type of respondent: 1  
Adjusted for interview setting: 2  
Adjusted for family (parent/sibl) medical history: 1  
Adjusted for SES (inc parental education): 4  
Adjusted for air conditioning/humidifier: 1  
Adjusted for cooking/heating methods: 10  
Adjusted for housing quality/age/size: 6  
Adjusted for child other medical history/symptoms: 1  
Other confounders considered but rejected: present  
Comments : Stepwise logistic regression was used to select variables, and interaction terms were omitted because not significant ( $p > 0.15$ ), but no further details given

Other results (not current db) Wheezing/wheezing bronchitis available: present Results available for wheeze with or without cold

Derived 1 - RRs available Number of RRs : 2  
Parental exposure RRs: 1  
Household exposure RRs: 1

ZHENG

Study description Study title : Zheng  
Full study title : Shunyi Beijing schools CC 1999-2001  
Study sex : both  
Lowest age in study : 6  
Highest age in study (at baseline): 10  
Study race : all (in country)  
Continent : Asia  
Country in Asia : China  
Location within country: Shunyi County (Beijing)  
Start year of study : 1999  
End year of study : 2001  
Principal publication year: 2002  
Reference ID of principal publication: ZHENG2002A  
Overlap: none  
Principal/subsidiary study: Principal  
REF group : ZHENG  
Phase of IESAST project: Original

Study design Study type : case/control  
Type of controls (for CC studies): healthy  
Type of population : random schoolchildren  
Type of population - controls (if diff from cases): rndm at gvn schls no resp symp  
Respondent : Parent  
Child smokes : No mention  
Standard questionnaire: ISAAC  
Comments : A cross-sectional survey was conducted to identify cases. All cases were included, and two matched controls (without asthma, wheezing, dry cough or chest tightness) were randomly selected

Asthma Current asthma available: present  
Source of current asthma diagnosis: Parent report (other/uns/mix)  
Timing of current asthma: current NOS  
Description of current asthma: ever phys-diag asthma and parents consider child has asthma  
Number of current asthma cases: 403  
Total number of subjects: 1209

Matching factors Cases and controls matched on sex: present  
Cases and controls matched on age (CC): present

ZHENG  
(continued)

Confounders considered	Total number of adjustment factors used: 6
	Adjusted for sex : present
	Adjusted for age : 1
	Adjusted for race : 1
	Adjusted for family (parent/sibl) medical history: 1
	Adjusted for child other medical history/symptoms: 2
	Other confounders considered but rejected: present
	Comments : Adjustment for other factors was found not to have a material impact on the observed association and not included in the final MLR model: COHE, AIRC, DAMP, PETS, CMED (birth weight)
Derived 1 -	Number of RRs : 26
RRs available	Parental exposure RRs: 2
	Parental passive smoking exposure RRs: 12
	Household exposure RRs: 12

The references corresponding to the reference keys given in above

- ADDOYO2001** Addo-Yobo EOD, Custovic A, Taggart SCO, Craven M, Bonnie B, Woodcock A. Risk factors for asthma in urban Ghana. *J Allergy Clin Immunol* 2001;**108**:363-8.
- AGABIT1999** Agabiti N, Mallone S, Forastiere F, Corbo GM, Ferro S, Renzoni E, *et al.* The impact of parental smoking on asthma and wheezing. *Epidemiology* 1999;**10**:692-8.
- AGUDOT2000** Agudo Trigueros A, Garrich Aumatell T, Heras Fortuny D, Porras Cano D, Sánchez García A. Hábito de fumar, exposición al tabaco y síntomas respiratorios en la población escolar de 14-15 años de Terrassa (Barcelona). (Smoking habits, exposure to environmental tobacco smoke, and respiratory symptoms in schoolchildren aged 14-15 years in Terrassa (Barcelona, Spain)). *Gac Sanit* 2000;**14**:23-30.
- AKCAKA2000** Akçakaya N, Kulak K, Hassanzadeh A, Camcioğlu Y, Çokuş ÖI. Prevalence of bronchial asthma and allergic rhinitis in Istanbul school children. *Eur J Epidemiol* 2000;**16**:693-9.
- ALBA1996** Alba F, Flecha E, Alba J, Hernández R, Busquets E. Características asociadas al asma infantil en pacientes asistidos en atención primaria. (Characteristic features of asthma in children treated in primary care). *Aten Primaria* 1996;**18**:83-6.
- ALDAWO2000** Al-Dawood K. Epidemiology of bronchial asthma among school boys in Al-Khobar City, Saudi Arabia: Cross-sectional study. *Croat Med J* 2000;**41**:437-41.
- ALDAWO2001B** Al-Dawood KM. Epidemiology of bronchial asthma among school boys in Al-Khobar city, Saudi Arabia. *Saudi Med J* 2001;**22**:61-6.
- ALFRAY1989** al Frayh AR, al Nahdi M, Bener AR, Jawadi TQ. Epidemiology of asthma and allergic rhinitis in two coastal regions of Saudi Arabia. *Allerg Immunol* 1989;**21**:389-93.
- ALFRAY1990** al Frayh AR. Asthma patterns in Saudi Arabian children. *J R Soc Health* 1990;**110**:98-100.
- ALFRAY1992** Al-Frayh A, Bener A, Al-Jawadi TQ. Prevalance of asthma among Saudi schoolchildren. *Saudi Med J* 1992;**13**:521-4.
- ANDERS1986** Anderson HR, Bland JM, Peckham C. The natural history of asthma in childhood. *J Epidemiol Community Health* 1986;**40**:121-9.
- ANDERS1987** Anderson HR, Bland JM, Peckham CS. Risk factors for asthma up to 16 years of age: evidence from a national cohort study. *Chest* 1987;**91**(Suppl):127S-30S.
- ANDERS1992B** Anderson HR, Pottier AC, Strachan DP. Asthma from birth to age 23: incidence and relation to prior and concurrent atopic disease. *Thorax* 1992;**47**:537-42.
- ANDRAE1988** Andrae S, Axelson O, Björkstén B, Fredriksson M, Kjellman N-IM. Symptoms of bronchial hyperreactivity and asthma in relation to environmental factors. *Arch Dis Child* 1988;**63**:473-8.
- ANNESI1996** Annesi-maesano I, Sampogna F, Stazi MA, Grandolfo ME. Atopic sensitization and respiratory symptoms in relation to environmental tobacco smoking (ETS) among Italian infants [Abstract]. *Eur Respir J* 1996;**9**(Sup 23):467s.
- ANNESI2001** Annesi-maesano I, Moreau D, Strachan D. *In utero* and perinatal complications preceding asthma. *Allergy* 2001;**56**:491-7.
- ANNESI2004** Annesi-maesano I, Oryszczyn MP, Raheison C, Kopferschmitt C, Pauli G, Taytard A, *et al.* Increased prevalence of asthma and allied diseases among active adolescent tobacco

smokers after controlling for passive smoking exposure. A cause for concern? *Clin Exp Allergy* 2004;**34**:1017-23.

**ARIF2004** Arif AA, Borders TF, Patterson PJ, Rohrer JE, Xu KT. Prevalence and correlates of paediatric asthma and wheezing in a largely rural USA population. *J Paediatr Child Health* 2004;**40**:189-94.

**ARSHAD1992** Arshad SH, Hide DW. Effect of environmental factors on the development of allergic disorders in infancy. *J Allergy Clin Immunol* 1992;**90**:235-41.

**ARSHAD1992A** Arshad SH, Matthews S, Gant C, Hide DW. Effect of allergen avoidance on development of allergic disorders in infancy. *Lancet* 1992;**339**:1493-7.

**ARSHAD1993** Arshad SH, Stevens M, Hide DW. The effect of genetic and environmental factors on the prevalence of allergic disorders at the age of two years. *Clin Exp Allergy* 1993;**23**:504-11.

**AZIZI1995** Azizi BHO, Zulkifli HI, Kasim MS. Indoor air pollution and asthma in hospitalized children in a tropical environment. *J Asthma* 1995;**32**:413-8.

**BALL2000** Ball TM, Holberg CJ, Wright AL. Siblings, day-care attendance, and the risk of asthma and wheezing. The authors reply [Letter]. *N Engl J Med* 2000;**343**:1968.

**BALL2000B** Ball TM, Castro-Rodriguez JA, Griffith KA, Holberg CJ, Martinez FD, Wright AL. Siblings, day-care attendance, and the risk of asthma and wheezing during childhood. *N Engl J Med* 2000;**343**:538-43.

**BARRET2001A** Barreto M, Villa MP, Martella S, Ronchetti F, Darder MT, Falasca C, *et al.* Exhaled nitric oxide in asthmatic and non-asthmatic children: influence of type of allergen sensitization and exposure to tobacco smoke. *Pediatr Allergy Immunol* 2001;**12**:247-56.

**BECKETT1996** Beckett WS, Belanger K, Gent JF, Holford TR, Leaderer BP. Asthma among Puerto Rican Hispanics: a multi-ethnic comparison study of risk factors. *Am J Respir Crit Care Med* 1996;**154**:894-9.

**BENCIV2004** Bencivenga M, Capasso M, Capristo C, Miraglia Del Giudice MJr, Salvestrini S, Capasso S. Contribution of air-proof doors and windows to asthma in Campania Plain (Italy). *Int J Environ Health Res* 2004;**14**:231-5.

**BENER1991** Bener A, Al-Frayh Facharzt AR, Al-Jawadi TQ. Parental smoking and the risk of childhood asthma. *J Asthma* 1991;**28**:281-6.

**BENER1996** Bener A, Abdulrazzaq YM, Al-Mutawwa J, Debuse P. Genetic and environmental factors associated with asthma. *Hum Biol* 1996;**68**:405-14.

**BERGMA2000** Bergmann RL, Edenharter G, Bergmann KE, Lau S, Wahn U. Socioeconomic status is a risk factor for allergy in parents but not in their children. *Clin Exp Allergy* 2000;**30**:1740-5.

**BONCI1993** Bonci E, Antognoni G, Villa MP, Indinnimeo L, Macri F, Signoretti F, *et al.* Hereditary and environmental factors as determinant of asthma: changes over time among children aged 6-13 years [Abstract]. *Eur Respir J* 1993;**6(Sup)**:234S.

**BRABIN1994** Brabin B, Smith M, Milligan P, Benjamin C, Dunne E, Pearson M. Respiratory morbidity in Merseyside schoolchildren exposed to coal dust and air pollution. *Arch Dis Child* 1994;**70**:305-12.

**BRAUNF1997** Braun-Fahrländer C, Vuille JC, Sennhauser FH, Neu U, Künzle T, Grize L, *et al.* Respiratory health and long-term exposure to air pollutants in Swiss schoolchildren. *Am J Respir Crit Care Med* 1997;**155**:1042-9.

- BRUNEK2002** Brunekreef B, Smit J, de Jongste J, Neijens H, Gerritsen J, Postma D, *et al.* The prevention and incidence of asthma and mite allergy (PIAMA) birth cohort study: design and first results. *Pediatr Allergy Immunol* 2002;**13**(Suppl 15):55-60.
- BURCHF1986** Burchfiel CM, Higgins MW, Keller JB, Howatt WF, Butler WJ, Higgins ITT. Passive smoking in childhood. Respiratory conditions and pulmonary function in Tecumseh, Michigan. *Am Rev Respir Dis* 1986;**133**:966-73.
- BURR1993** Burr ML, Limb ES, Maguire MJ, Amarah L, Eldridge BA, Layzell JCM, *et al.* Infant feeding, wheezing, and allergy: a prospective study. *Arch Dis Child* 1993;**68**:724-8.
- BUTZ1992** Butz AM, Rosenstein BJ. Passive smoking among children with chronic respiratory disease. *J Asthma* 1992;**29**:265-72.
- CALL1992** Call RS, Smith TF, Morris E, Chapman MD, Platts-Mills TAE. Risk factors for asthma in inner city children. *J Pediatr* 1992;**121**:862-6.
- CAREY1996** Carey VJ, Weiss ST, Tager IB, Leeder SR, Speizer FE. Airways responsiveness, wheeze onset, and recurrent asthma episodes in young adolescents. *Am J Respir Crit Care Med* 1996;**153**:356-61.
- CELEDO2001** Celedón JC, Soto-Quiros ME, Silverman EK, Hanson LA, Weiss ST. Risk factors for childhood asthma in Costa Rica. *Chest* 2001;**120**:785-90.
- CHEN1988** Chen Y, Li W, Yu S, Qian W. Chang-Ning epidemiological study of children's health: 1: Passive smoking and children's respiratory diseases. *Int J Epidemiol* 1988;**17**:348-55.
- CHEN1996A** Chen Y, Rennie DC, Dosman JA. Influence of environmental tobacco smoke on asthma in nonallergic and allergic children. *Epidemiology* 1996;**7**:536-9.
- CHHABR1998** Chhabra SK, Gupta CK, Chhabra P, Rajpal S. Prevalence of bronchial asthma in schoolchildren in Delhi. *J Asthma* 1998;**35**:291-6.
- CHINN1991** Chinn S, Rona RJ. Quantifying health aspects of passive smoking in British children aged 5-11 years. *J Epidemiol Community Health* 1991;**45**:188-94.
- CHINN2001** Chinn S, Rona RJ. Can the increase in body mass index explain the rising trend in asthma in children? *Thorax* 2001;**56**:845-50.
- CHULAD2003** Chulada PC, Arbes SJ, Dunson D, Zeldin DC. Breast-feeding and the prevalence of asthma and wheeze in children: Analyses from the Third National Health and Nutrition Examination Survey, 1988-1994. *J Allergy Clin Immunol* 2003;**111**:328-36.
- CLARK1994** Clark SJ, Warner JO, Dean TP. Passive smoking amongst asthmatic children. Questionnaire or objective assessment? *Clin Exp Allergy* 1994;**24**:276-80.
- CSONKA2000** Csonka P, Kaila M, Laippala P, Kuusela A-L, Ashorn P. Wheezing in early life and asthma at school age: predictors of symptom persistence. *Pediatr Allergy Immunol* 2000;**11**:225-9.
- CUNNIN1995** Cunningham J, Dockery DW, Gold DR, Speizer FE. Racial differences in the association between maternal smoking during pregnancy and lung function in children. *Am J Respir Crit Care Med* 1995;**152**:565-9.
- CUNNIN1996** Cunningham J, O'Connor GT, Dockery DW, Speizer FE. Environmental tobacco smoke, wheezing, and asthma in children in 24 communities. *Am J Respir Crit Care Med* 1996;**153**:218-24.

- DAIGLE1991** Daigler GE, Markello SJ, Cummings KM. The effect of indoor air pollutants on otitis media and asthma in children. *Laryngoscope* 1991;**101**:293-6.
- DEBENE1994** De Benedetto F, Marinari S, Di Lella M, Panella G, D'Intino D, Corbo G, *et al.* Prenatal, perinatal and environmental risk factors for respiratory diseases in childhood [Abstract]. *Eur Respir J* 1994;**7**(Sp 18):125s.
- DEKKER1991** Dekker C, Dales R, Bartlett S, Brunekreef B, Zwanenburg H. Childhood asthma and the indoor environment. *Chest* 1991;**100**:922-6.
- DEKOK1996** De Kok ME, Mertens PLJM, Cuijpers CEJ, Swaen GMH, Wesseling GJ, Broer J, *et al.* The rate of respiratory symptoms among primary school children in two Dutch regions. *Eur J Pediatr* 1996;**155**:506-11.
- DELL2001** Dell S, To T. Breastfeeding and asthma in young children. Findings from a population-based study. *Arch Pediatr Adolesc Med* 2001;**155**:1261-5.
- DIJKST1988** Dijkstra LJ, Houthuijs D, Akkerman I, Brunekreef B. Health effects of indoor exposure to nitrogen dioxide and tobacco smoke. In: Perry R, Kirk PW, editors. *Indoor and ambient air quality, Indoor and Ambient Air Conference, Imperial College London, 13-15 June, 1988*. London: Selper Ltd, 1988;277-86.
- DIJKST1990** Dijkstra L, Houthuijs D, Brunekreef B, Akkerman I, Boleij JSM. Respiratory health effects of the indoor environment in a population of Dutch children. *Am Rev Respir Dis* 1990;**142**:1172-8.
- DODGE1982** Dodge R. The effects of indoor pollution on Arizona children. *Arch Environ Health* 1982;**37**:151-5.
- DODGE1983** Dodge R. The respiratory health and lung function of Anglo-American children in a smelter town. *Am Rev Respir Dis* 1983;**127**:158-61.
- DOLD1992** Dold S, Reitmeir P, Wjst M, von Mutius E. Auswirkungen des Passivrauchens auf den kindlichen Respirationstrakt. (Respiratory symptoms and lung function in children exposed to passive smoking). *Monatsschr Kinderheilkd* 1992;**140**:763-8.
- DOTTER2001** Dotterud LK, Odland JØ, Falk ES. Atopic diseases among schoolchildren in Nikel, Russia, an Arctic area with heavy air pollution. *Acta Derm Venereol* 2001;**81**:198-201.
- DUHME1998** Duhme H, Weiland SK, Rudolph P, Wienke A, Kramer A, Keil U. Asthma and allergies among children in West and East Germany: a comparison between Münster and Greifswald using the ISAAC phase I protocol. *Eur Respir J* 1998;**11**:840-7.
- ECE2001** Ece A, Ceylan A, Saraçlar Y, Saka G, Gürkan F, Haspolat K. Prevalence of asthma and other allergic disorders among schoolchildren in Diyarbakir, Turkey. *Turk J Pediatr* 2001;**43**:286-92.
- EHRLIC1992** Ehrlich R, Kattan M, Godbold J, Saltzberg DS, Grimm KT, Landrigan PJ, *et al.* Childhood asthma and passive smoking: Urinary cotinine as a biomarker of exposure. *Am Rev Respir Dis* 1992;**145**:594-9.
- EHRLIC1995** Ehrlich R, du Toit D, Jordaan E, Zwarenstein M, Potter P, Volmink J, *et al.* Environmental risk factors for asthma in childhood [Abstract]. *Epidemiology* 1995;**6**:21S.
- EHRLIC1995A** Ehrlich RI, du Toit D, Jordaan E, Volmink JA, Weinberg EG, Zwarenstein M. Prevalence and reliability of asthma symptoms in primary school children in Cape Town. *Int J Epidemiol* 1995;**24**:1138-45.

- EHRLIC1996** Ehrlich RI, du Toit D, Jordaan E, Zwarenstein M, Potter P, Volmink JA, *et al.* Risk factors for childhood asthma and wheezing. Importance of maternal and household smoking. *Am J Respir Crit Care Med* 1996;**154**:681-8.
- FAGBUL1994** Fagbule D, Ekanem EE. Some environmental risk factors for childhood asthma: a case-control study. *Ann Trop Paediatr* 1994;**14**:15-9.
- FARBER1997** Farber HJ, Wattigney W, Berenson G. Trends in asthma prevalence: the Bogalusa heart study. *Ann Allergy Asthma Immunol* 1997;**78**:265-9.
- FAROOQ1998** Farooqi IS, Hopkin JM. Early childhood infection and atopic disorder. *Thorax* 1998;**53**:927-32.
- FERGUS1985** Fergusson DM, Horwood LJ. Parental smoking and respiratory illness during early childhood: a six-year longitudinal study. *Pediatr Pulmonol* 1985;**1**:99-106.
- FERRIS1979** Ferris BG, Jr., Speizer FE, Spengler JD, Dockery D, Bishop YMM, Wolfson M, *et al.* Effects of sulfur oxides and respirable particles on human health: methodology and demography of populations in study. *Am Rev Respir Dis* 1979;**120**:767-79.
- FIELDE1999** Fielder HMP, Lyons RA, Heaven M, Morgan H, Govier P, Hooper M. Effect of environmental tobacco smoke on peak flow variability. *Arch Dis Child* 1999;**80**:253-6.
- FLYNN1994** Flynn MG. Respiratory symptoms of rural Fijian and Indian children in Fiji. *Thorax* 1994;**49**:1201-4.
- FLYNN1994A** Flynn MGL. Respiratory symptoms, bronchial responsiveness, and atopy in Fijian and Indian children. *Am J Respir Crit Care Med* 1994;**150**:415-20.
- FOGELM1980** Fogelman K. Smoking in pregnancy and subsequent development of the child. *Child Care Health Dev* 1980;**6**:233-49.
- FORAST1992** Forastiere F, Corbo GM, Michelozzi P, Pistelli R, Agabiti N, Brancato G, *et al.* Effects of environment and passive smoking on the respiratory health of children. *Int J Epidemiol* 1992;**21**:66-73.
- FORAST1992A** Forastiere F, Corbo GM, Michelozzi P, Pistelli R, Agabiti N, Brancato G, *et al.* Effects of environment and passive smoking on the respiratory health of children [Letter]. *Int J Epidemiol* 1992;1032.
- FORSBE1997** Forsberg B, Pekkanen J, Clench-Aas J, Martensson M-B, St Jernberg N, Bartonova A, *et al.* Childhood asthma in four regions in Scandinavia: Risk factors and avoidance effects. *Int J Epidemiol* 1997;**26**:610-9.
- FREEMA2002** Freeman NC, Schneider D, McGarvey P. School-based screening for asthma in third-grade urban children: the Passaic asthma reduction effort survey. *Am J Public Health* 2002;**92**:45-6.
- FREEMA2003** Freeman NCG, Schneider D, McGarvey P. Household exposure factors, asthma, and school absenteeism in a predominantly Hispanic community. *J Expo Anal Environ Epidemiol* 2003;**13**:169-76.
- FRISCH1992A** Frischer T, Kuehr J, Meinert R, Karmaus W, Barth R, Hermann-Kunz E, *et al.* Maternal smoking in early childhood: a risk factor for bronchial responsiveness to exercise in primary-school children. *J Pediatr* 1992;**121**:17-22.
- FRISCH1993** Frischer T, Kühr J, Meinert R, Karmaus W, Urbanek R. Influence of maternal smoking on variability of peak expiratory flow rate in school children. *Chest* 1993;**104**:1133-7.

- FUJI2002** Fuji Y, Shima M, Ando M, Adachi M, Tsunetoshi Y. Effect of air pollution and environmental tobacco smoke on serum hyaluronate concentrations in school children. *Occup Environ Med* 2002;**59**:124-8.
- GERGEN1998** Gergen PJ, Fowler JA, Maurer KR, Davis WW, Overpeck MD. The burden of environmental tobacco smoke exposure on the respiratory health of children 2 months through 5 years of age in the United States: Third National Health and Nutrition Examination Survey, 1988 to 1994. *Pediatrics* 1998;**101**:6.
- GILLIL2001** Gilliland FD, Li Y-F, Peters JM. Effects of maternal smoking during pregnancy and environmental tobacco smoke on asthma and wheezing in children. *Am J Respir Crit Care Med* 2001;**163**:429-36.
- GILLIL2002** Gilliland FD, Li Y-F, Dubeau L, Berhane K, Avol E, McConnell R, *et al.* Effects of glutathione S-transferase M1, maternal smoking during pregnancy, and environmental tobacco smoke on asthma and wheezing in children. *Am J Respir Crit Care Med* 2002;**166**:457-63.
- GILLIL2003A** Gilliland FD, Berhane K, Islam T, Wenten M, Rappaport E, Avol E, *et al.* Environmental tobacco smoke and absenteeism related to respiratory illness in schoolchildren. *Am J Epidemiol* 2003;**157**:861-9.
- GILLIL2003B** Gilliland FD, Berhane K, Islam T, McConnell R, Gauderman WJ, Gilliland SS, *et al.* Obesity and the risk of newly diagnosed asthma in school-age children. *Am J Epidemiol* 2003;**158**:406-15.
- GOLD1993A** Gold DR, Rotnitzky A, Damokosh AI, Ware JH, Speizer FE, Ferris BG, Jr., *et al.* Race and gender differences in respiratory illness prevalence and their relationship to environmental exposures in children 7 to 14 years of age. *Am Rev Respir Dis* 1993;**148**:10-8.
- GOLD2003** Gold DR, Damokosh AI, Dockery DW, Berkey CS. Body-mass index as a predictor of incident asthma in a prospective cohort of children. *Pediatr Pulmonol* 2003;**36**:514-21.
- GOREN1986** Goren AI, Goldsmith JR. Epidemiology of childhood respiratory disease in Israel. *Eur J Epidemiol* 1986;**2**:139-50.
- GOREN1991** Goren AI, Hellman S. Passive smoking among schoolchildren in Israel. *Environ Health Perspect* 1991;**96**:203-11.
- GOREN1991A** Goren AI, Goldsmith JR, Hellmann S, Brenner S. Follow-up of schoolchildren in the vicinity of a coal-fired power plant in Israel. *Environ Health Perspect* 1991;**94**:101-5.
- GOREN1993** Goren AI, Hellman S, Brenner S. Prevalence of respiratory symptoms and diseases in schoolchildren as related to ETS and other combustion products. In: *Proceedings of Indoor Air '93, Vol 1*. 1993;459-64.
- GOREN1995** Goren AI, Hellmann S. Respiratory conditions among schoolchildren and their relationship to environmental tobacco smoke and other combustion products. *Arch Environ Health* 1995;**50**:112-8.
- GOREN1997** Goren AI, Hellmann S. Changing prevalence of asthma among schoolchildren in Israel. *Eur Respir J* 1997;**10**:2279-84.
- GORTMA1982** Gortmaker SL, Walker DK, Jacobs FH, Ruch-Ross H. Parental smoking and the risk of childhood asthma. *Am J Public Health* 1982;**72**:574-9.
- GUPTA2001** Gupta D, Aggarwal AN, Kumar R, Jindal SK. Prevalence of bronchial asthma and association with environmental tobacco smoke exposure in adolescent school children in Chandigarh, North India. *J Asthma* 2001;**38**:501-7.

- GURKAN2002** Gürkan F, Davutoğlu M, Bilici M, Dağ A, Haspolat K. Asthmatic children and risk factors at a province in the southeast of Turkey. *Allergol Immunopathol* 2002;**30**:25-9.
- HABY2001** Haby MM, Peat JK, Marks GB, Woolcock AJ, Leeder SR. Asthma in preschool children: prevalence and risk factors. *Thorax* 2001;**56**:589-95.
- HAJNAL1999** Hajnal BL, Braun-Fahrlander C, Grize L, Gassner M, Varonier HS, Vuille JC, et al. Effect of environmental tobacco smoke exposure on respiratory symptoms in children. *Schweiz Med Wochenschr* 1999;**129**:723-30.
- HALONE1999** Halonen M, Stern DA, Lohman C, Wright AL, Brown MA, Martinez FD. Two subphenotypes of childhood asthma that differ in maternal and paternal influences on asthma risk. *Am J Respir Crit Care Med* 1999;**160**:564-70.
- HARIKK2004** Harik-Khan RI, Muller DC, Wise RA. Serum vitamin levels and the risk of asthma in children. *Am J Epidemiol* 2004;**159**:351-7.
- HENSCH1997** Henschen M, Frischer T, Pracht T, Spiekerkötter E, Karmaus W, Meinert R, et al. The internal dose of passive smoking at home depends on the size of the dwelling. *Environ Res* 1997;**72**:65-71.
- HIDE1994** Hide DW, Matthews S, Matthews L, Stevens M, Ridout S, Twiselton R, et al. Effect of allergen avoidance in infancy on allergic manifestations at age two years. *J Allergy Clin Immunol* 1994;**93**:842-6.
- HIDE1996** Hide DW, Matthews S, Tariq S, Arshad SH. Allergen avoidance in infancy and allergy at 4 years of age. *Allergy* 1996;**51**:89-93.
- HIGGIN1975** Higgins M, Keller J. Familial occurrence of chronic respiratory disease and familial resemblance in ventilatory capacity. *J Chronic Dis* 1975;**28**:239-51.
- HJERN2001** Hjern A, Hedberg A, Haglund B, Rosén M. Does tobacco smoke prevent atopic disorders? A study of two generations of Swedish residents. *Clin Exp Allergy* 2001;**31**:908-14.
- HORWOO1985** Horwood LJ, Fergusson DM, Shannon FT. Social and familial factors in the development of early childhood asthma. *Pediatrics* 1985;**75**:859-68.
- HOST1993** Høst AH, Duus T, Ibsen TB, Høst A. Hyppighed af astma hos skolebørn. Er sygdommen underdiagnosticeret? (Asthma prevalence in schoolchildren. Is the disease underdiagnosed?). *Ugeskr Laeger* 1993;**155**:3978-81.
- HU1997B** Hu FB, Persky V, Flay BR, Zelli A, Cooksey J, Richardson J. Prevalence of asthma and wheezing in public schoolchildren: association with maternal smoking during pregnancy. *Ann Allergy Asthma Immunol* 1997;**79**:80-4.
- HU1997C** Hu FB, Persky V, Flay BR, Richardson J. An epidemiological study of asthma prevalence and related factors among young adults. *J Asthma* 1997;**34**:67-76.
- HUGHES1995** Hughes CH, Baumer JH. Moving house: a risk factor for the development of childhood asthma? *BMJ* 1995;**311**:1069-70.
- INFANT1993** Infante-Rivard C. Childhood asthma and indoor environmental risk factors. *Am J Epidemiol* 1993;**137**:834-44.
- INFANT1999** Infante-Rivard C, Gautrin D, Malo J-L, Suissa S. Maternal smoking and childhood asthma. *Am J Epidemiol* 1999;**150**:528-31.
- JAAKKO2001A** Jaakkola JJK, Nafstad P, Magnus P. Environmental tobacco smoke, parental atopy, and childhood asthma. *Environ Health Perspect* 2001;**109**:579-82.

- JAAKKO2004** Jaakkola JJK, Gissler M. Maternal smoking in pregnancy, fetal development, and childhood asthma. *Am J Public Health* 2004;**94**:136-40.
- JANG2004** Jang A-S, Choi I-S, Lee S, Nam H-S, Kweon S-S, Son M-H, *et al.* The effect of passive smoking on asthma symptoms, atopy, and airway hyperresponsiveness in schoolchildren. *J Korean Med Sci* 2004;**19**:214-7.
- JENKIN1993** Jenkins MA, Hopper JL, Flander LB, Carlin JB, Giles GG. The associations between childhood asthma and atopy, and parental asthma, hay fever and smoking. *Paediatr Perinat Epidemiol* 1993;**7**:67-76.
- JONES1999B** Jones RCM, Hughes CR, Wright D, Baumer JH. Early house moves, indoor air, heating methods and asthma. *Respir Med* 1999;**93**:919-22.
- KABESC2004** Kabesch M, Hoefler C, Carr D, Leupold W, Weiland SK, von Mutius E. Glutathione S transferase deficiency and passive smoking increase childhood asthma. *Thorax* 2004;**59**:569-73. [with online supplement]
- KALYON1994** Kalyoncu AF, Selçuk ZT, Karakoca Y, Emri AS, Çöplü L, Çihin AA, *et al.* Prevalence of childhood asthma and allergic diseases in Ankara, Turkey. *Allergy* 1994;**49**:485-8.
- KALYON1999** Kalyoncu AF, Selçuk ZT, Entinlü T, Demir AU, Çöplü L, Çihin AA, *et al.* Prevalence of asthma and allergic diseases in primary school children in Ankara, Turkey: two cross-sectional studies, five years apart. *Pediatr Allergy Immunol* 1999;**10**:261-5.
- KAPLAN1985** Kaplan BA, Mascie-Taylor CGN. Biosocial factors in the epidemiology of childhood asthma in a British national sample. *J Epidemiol Community Health* 1985;**39**:152-6.
- KARUNA2001** Karunasekera KAW, Jayasinghe JACT, Alwis LWGR. Risk factors of childhood asthma: a Sri Lankan study. *J Trop Pediatr* 2001;**47**:142-5.
- KASPER2002** Kasperczyk J, Stępielewski Z. Wpływ narażenia na dym tytoniowy na indukcyjność i przebieg kliniczny astmy oskrzelowej u polskich dzieci (The influence of exposure to cigarette smoke on induction and clinical course of bronchial asthma among Silesian children). *Wiad Lek* 2002;**55**(Suppl 1):223-9.
- KAY1995** Kay J, Mortimer MJ, Jaron AG. Do both paternal and maternal smoking influence the prevalence of childhood asthma? A study into the prevalence of asthma in children and the effects of parental smoking. *J Asthma* 1995;**32**:47-55.
- KEARNE1998** Kearney PJ, Kearney PM. The prevalence of asthma in schoolboys of travellers families. *Ir Med J* 1998;**91**:203-6.
- KELLY1995** Kelly YJ, Brabin BJ, Milligan P, Heaf DP, Reid J, Pearson MG. Maternal asthma, premature birth, and the risk of respiratory morbidity in schoolchildren in Merseyside. *Thorax* 1995;**50**:525-30.
- KENDIR1998** Kendirli GS, Altintas DU, Alparslan N, Yurdakul Z, Bolat B. Prevalence of childhood allergic diseases in Adana, Southern Turkey. *Eur J Epidemiol* 1998;**14**:347-50.
- KERSHA1987** Kershaw CR. Passive smoking, potential atopy and asthma in the first five years. *J R Soc Med* 1987;**80**:683-8.
- KIVITY2001** Kivity S, Sade K, Abu-Arisha F, Lerman Y, Kivity S. Epidemiology of bronchial asthma and chronic rhinitis in schoolchildren of different ethnic origins from two neighboring towns in Israel. *Pediatr Pulmonol* 2001;**32**:217-21.

- KNIGHT1998** Knight JM, Eliopoulos C, Klein J, Greenwald M, Koren G. Pharmacokinetic predisposition to nicotine from environmental tobacco smoke: a risk factor for pediatric asthma. *J Asthma* 1998;**35**:113-7.
- KUEHR1992** Kuehr J, Frischer T, Karmaus W, Meinert R, Barth R, Urbanek R. Clinical atopy and associated factors in primary-school pupils. *Allergy* 1992;**47**:650-5.
- KUEHR1992A** Kuehr J, Frischer T, Karmaus W, Meinert R, Barth R, Hermann-Kunz E, *et al.* Early childhood risk factors for sensitization at school age. *J Allergy Clin Immunol* 1992;**90**:358-63.
- KUEHR1998** Kuehr J, Frischer T, Karmaus W, Meinert R, Pracht T, Lehnert W. Cotinine excretion as a predictor of peak flow variability. *Am J Respir Crit Care Med* 1998;**158**:60-4.
- KUHR1991** Kühr J, Hendel-Kramer A, Karmaus W, Moseler M, Weiss K, Stephan V, *et al.* Luftschadstoffbelastung und Asthma bronchiale bei Schulkindern. (Air pollutant burden and bronchial asthma in school children). *Soz Präventivmed* 1991;**36**:67-73.
- KULIG1998** Kulig M, Bergmann R, Tacke U, Wahn U, Guggenmoos-Holzmann I. Long-lasting sensitization to food during the first two years precedes allergic airway disease. *Pediatr Allergy Immunol* 1998;**9**:61-7.
- KURUKU2002** Kurukulaaratchy RJ, Fenn M, Twiselton R, Matthews S, Arshad SH. The prevalence of asthma and wheezing illnesses amongst 10-year-old schoolchildren. *Respir Med* 2002;**96**:163-9.
- KURUKU2004** Kurukulaaratchy RJ, Matthews S, Arshad SH. Does environment mediate earlier onset of the persistent childhood asthma phenotype? *Pediatrics* 2004;**113**:345-50.
- LAM1998** Lam TH, Chung SF, Betson CL, Wong CM, Hedley AJ. Respiratory symptoms due to active and passive smoking in junior secondary school students in Hong Kong. *Int J Epidemiol* 1998;**27**:41-8.
- LAM1999** Lam TH, Hedley AJ, Chung SF, Macfarlane DJ. Passive smoking and respiratory symptoms in primary school children in Hong Kong. *Hum Toxicol* 1999;**18**:218-23.
- LANNER2002** Lannerö E, Kull I, Wickman M, Pershagen G, Nordvall SL. Environmental risk factors for allergy and socioeconomic status in a birth cohort (BAMSE). *Pediatr Allergy Immunol* 2002;**13**:182-7.
- LANPHE2001** Lanphear BP, Aligne A, Auinger P, Weitzman M, Byrd RS. Residential exposures associated with asthma in US children. *Pediatrics* 2001;**107**:505-11.
- LAU1995** Lau YL, Karlberg J, Yeung CY. Prevalence of and factors associated with childhood asthma in Hong Kong. *Acta Paediatr* 1995;**84**:820-2.
- LAU2002** Lau S, Nickel R, Niggemann B, Grüber C, Sommerfeld C, Illi S, *et al.* The development of childhood asthma: lessons from the German Multicentre Allergy Study (MAS). *Paediatr Respir Rev* 2002;**3**:265-72.
- LEBOWI1976** Lebowitz MD, Burrows B. Respiratory symptoms related to smoking habits of family adults. *Chest* 1976;**69**:48-50.
- LEBOWI1992** Lebowitz MD, Sherrill D, Holberg CJ. Effects of passive smoking on lung growth in children. *Pediatr Pulmonol* 1992;**12**:37-42.
- LEE2001A** Lee SI, Shin MH, Lee HB, Lee JS, Son BK, Koh YY, *et al.* Prevalences of symptoms of asthma and other allergic diseases in Korean children: a nationwide questionnaire survey. *J Korean Med Sci* 2001;**16**:155-64.

- LEE2003I** Lee Y-L, Lin Y-C, Hsiue T-R, Hwang B-F, Guo YL. Indoor and outdoor environmental exposures, parental atopy, and physician-diagnosed asthma in Taiwanese schoolchildren. *Pediatrics* 2003;**112**:e389-e395.
- LEEDER1976** Leeder SR, Corkhill RT, Irwig LM, Holland WW, Colley JRT. Influence of family factors on asthma and wheezing during the first five years of life. *Br J Prev Soc Med* 1976;**30**:213-8.
- LEEDER1976A** Leeder SR, Corkhill R, Irwig LM, Holland WW, Colley JRT. Influence of family factors on the incidence of lower respiratory illness during the first year of life. *Br J Prev Soc Med* 1976;**30**:203-12.
- LEEN1994** Leen MG, O'Connor T, Kelleher C, Mitchell EG, Loftus BG. Home environment and childhood asthma. *Ir Med J* 1994;**87**:142-3.
- LEROUX1995** Le Roux P, Bourderont D, Loisel I, Collet A, Boulloche J, Briquet MT, *et al.* Épidémiologie de l'asthme infantile dans la région du Havre. (Epidemiology of infantile asthma in the Le Havre region). *Arch Pediatr* 1995;**2**:643-9.
- LEVESQ2004** Lévesque B, Rhainds M, Ernst P, Grenier A-M, Kosatsky T, Audet N, *et al.* Asthma and allergic rhinitis in Quebec children. *Can Respir J* 2004;**11**:343-8.
- LEWIS1996** Lewis S, Butland B, Strachan D, Bynner J, Richards D, Butler N, *et al.* Study of the aetiology of wheezing illness at age 16 in two national British birth cohorts. *Thorax* 1996;**51**:670-6.
- LI2000** Li Y-F, Gilliland FD, Berhane K, McConnell R, Gauderman WJ, Rappaport EB, *et al.* Effects of *in utero* and environmental tobacco smoke exposure on lung function in boys and girls with and without asthma. *Am J Respir Crit Care Med* 2000;**162**:2097-104.
- LILIEN1990** Lilienfeld DE, Ehrlich RI, Kattan M, Saltzber DS, Grimm KT, Landrigan PJ. Passive smoking and urinary cotinine levels in acute and non-acute asthmatics. In: *Abstracts of International Epidemiological Association Scientific Meeting, Volume 12*. Los Angeles: 1990;78 (abstract number 332). 90024-1772.
- LILLJE1997** Lilljeqvist A-C, Faleide AO, Watten RG. Low birthweight, environmental tobacco smoke, and air pollution: risk factors for childhood asthma? *Pediatr Asthma Allergy Immunol* 1997;**11**:95-102.
- LINDFO1994** Lindfors A, Hedlin G, Rietz H, Nordvall L, Wickman M. Indoor risk factors in young children with asthma [Abstract]. *J Allergy Clin Immunol* 1994;**93**:290.
- LINDFO1995** Lindfors A, Wickman M, Hedlin G, Pershagen G, Rietz H, Nordvall SL. Indoor environmental risk factors in young asthmatics: a case-control study. *Arch Dis Child* 1995;**73**:408-12.
- LIS1997** Lis G, Pietrzyk JJ. Wpływ zanieczyszczenia powietrza na występowanie astmy oskrzelowej u dzieci szkolnych z Krakowa (Association between air pollution and asthma prevalence in schoolchildren from Krakow). *Pneumonol Alergol Pol* 1997;**65**:611-20.
- LISTER1998** Lister SM, Jorm LR. Parental smoking and respiratory illnesses in Australian children aged 0-4 years: ABS 1989-90 National Health Survey results. *Aust N Z J Public Health* 1998;**22**:781-6.
- LONDON2001** London SJ, Gauderman WJ, Avol E, Rappaport EB, Peters JM. Family history and the risk of early-onset persistent, early-onset transient, and late-onset asthma. *Epidemiology* 2001;**12**:577-83.

- LOPEZC2001** López Campos C, Muñoz Hernández MA, López Campos JE, Carrillo Lucero J, Rincón Castañeda CB, Cairo Cueto SM. Factores de riesgo para asma (Asthma risk factors). *Rev Alerg Mex* 2001;**48**:103-6.
- LUTTMA1993** Luttmann H, Gromping U, Kreienbrock L, Treiber-Klotzer C, Wichmann HE. Kohortenstudie zu Atemwegserkrankungen und Lungenfunktion bei Schulkindern in Südwestdeutschland. Teil 1: Studiendesign, Prävalenz und Inzidenz von Atemwegserkrankungen (Cohort study on respiratory diseases and lung function in schoolchildren in southwest Germany. Part 1: Study design, prevalence and incidence of respiratory diseases). *Zentralbl Hyg Umweltmed* 1993;**194**:525-39.
- MAIER1997** Maier WC, Arrighi HM, Morray B, Llewellyn C, Redding GJ. Indoor risk factors for asthma and wheezing among Seattle school children. *Environ Health Perspect* 1997;**105**:208-14.
- MANNIN1998A** Mannino DM. Health effects of environmental tobacco smoke exposure among children in the US: results from NHANES III [Abstract]. *Epidemiology* 1998;**9**:S97.
- MANNIN2001** Mannino DM, Moorman JE, Kingsley B, Rose D, Repace J. Health effects related to environmental tobacco smoke exposure in children in the United States. Data from the Third National Health and Nutrition Examination Survey. *Arch Pediatr Adolesc Med* 2001;**155**:36-41.
- MANNIN2002A** Mannino DM, Homa DM, Redd SC. Involuntary smoking and asthma severity in children: data from the Third National Health and Nutrition Examination Survey. *Chest* 2002;**122**:409-15.
- MARTIN1992** Martinez FD, Cline M, Burrows B. Increased incidence of asthma in children of smoking mothers. *Pediatrics* 1992;**89**:21-6.
- MARTIN1995** Martinez FD, Wright AL, Taussig LM, Holberg CJ, Halonen M, Morgan WJ. Asthma and wheezing in the first six years of life. *N Engl J Med* 1995;**332**:133-8.
- MATTES1999** Mattes J, Karmaus W, van's Gravesande K.S., Moseler M, Forster J, Kuehr J. Pulmonary function in children of school age is related to the number of siblings in their family. *Pediatr Pulmonol* 1999;**28**:414-7.
- MAVALE2004** Mavale-Manuel S, Alexandre F, Duarte N, Albuquerque O, Scheinmann P, Poisson-Salomon AS, *et al.* Risk factors for asthma among children in Maputo (Mozambique). *Allergy* 2004;**59**:388-93.
- MCCONN1986** McConnochie KM, Roghmann KJ. Breast feeding and maternal smoking as predictors of wheezing in children age 6 to 10 years. *Pediatr Pulmonol* 1986;**2**:260-8.
- MCCONN2002** McConnell R, Berhane K, Gilliland F, Islam T, Gauderman WJ, London SJ, *et al.* Indoor risk factors for asthma in a prospective study of adolescents. *Epidemiology* 2002;**13**:288-95.
- MCKEEV2001** McKeever TM, Lewis SA, Smith C, Collins J, Heatlie H, Frischer M, *et al.* Siblings, multiple births, and the incidence of allergic disease: a birth cohort study using the West Midlands general practice research database. *Thorax* 2001;**56**:758-62.
- MEINER1994** Meinert R, Frischer T, Kuehr J. The "healthy passive smoker": relationship between bronchial hyper-reactivity in school children and maternal smoking. *J Epidemiol Community Health* 1994;**48**:325-6.
- MELIA1981** Melia RJW, Florey CdV, Swan AV. Respiratory illness in British schoolchildren and atmospheric smoke and sulphur dioxide 1973-7. I: Cross-sectional findings. *J Epidemiol Community Health* 1981;**35**:161-7.
- MELSOM2001** Melsom T, Brinch L, Hessen J, Schei MA, Kolstrup N, Jacobsen BK, *et al.* Asthma and indoor environment in Nepal. *Thorax* 2001;**56**:477-81.

- MEMON1993** Memon IM, Loftus BG. Spectrum of childhood asthma in Galway. *Ir Med J* 1993;**86**:194-5.
- MILLER2004A** Miller RL, Garfinkel R, Horton M, Camann D, Perera FP, Whyatt RM, *et al.* Polycyclic aromatic hydrocarbons, environmental tobacco smoke, and respiratory symptoms in an inner-city birth cohort. *Chest* 2004;**126**:1071-8.
- MOHAME1995** Mohamed N, Ng'ang'a L, Odhiambo J, Nyamwaya J, Menzies R. Home environment and asthma in Kenyan schoolchildren: a case-control study. *Thorax* 1995;**50**:74-8.
- MONTEF2002** Montefort S, Muscat HA, Caruana S, Lenicker H. Allergic conditions in 5-8-year-old Maltese schoolchildren: prevalence, severity, and associated risk factors (ISAAC). *Pediatr Allergy Immunol* 2002;**13**:98-104.
- MONTEI2004** Monteil MA, Joseph G, Kit CC, Wheeler G, Antoine RM. Smoking at home is strongly associated with symptoms of asthma and rhinitis in children of primary school age in Trinidad and Tobago. *Rev Panam Salud Publica* 2004;**16**:193-8.
- MOUSSA1996** Moussa MAA, Skaik MB, Yaghy OY, Salwanes SB, Bin-Othman SA. Factors associated with asthma in school children. *Eur J Epidemiol* 1996;**12**:583-6.
- MOYER1993** Moyer DB. Environmental tobacco smoke as a risk factor for asthma in inner city children [Letter]. *J Pediatr* 1993;**123**:171.
- MOYES1995** Moyes CD, Waldon J, Ramadas D, Crane J, Pearce N. Respiratory symptoms and environmental factors in schoolchildren in the Bay of Plenty. *N Z Med J* 1995;**108**:358-61.
- MUMCUO1994** Mumcuoglu KY, Abed Y, Armenios B, Shaheen S, Jacobs J, Bar-Sela S, *et al.* Asthma in Gaza refugee camp children and its relationship with house dust mites. *Ann Allergy* 1994;**72**:163-6.
- MURRAY1989** Murray AB, Morrison BJ. Passive smoking by asthmatics: its greater effect on boys than on girls and on older than on younger children. *Pediatrics* 1989;**84**:451-9.
- MURRAY1990A** Murray AB, Morrison BJ. It is children with atopic dermatitis who develop asthma more frequently if the mother smokes. *J Allergy Clin Immunol* 1990;**86**:732-9.
- MURRAY1992** Murray AB, Morrison BJ. Effect of passive smoking on asthmatic children who have and who have not had atopic dermatitis. *Chest* 1992;**101**:16-8.
- MURRAY1993** Murray AB, Morrison BJ. The decrease in severity of asthma in children of parents who smoke since the parents have been exposing them to less cigarette smoke. *J Allergy Clin Immunol* 1993;**91**:102-10.
- NAFSTA1997A** Nafstad P, Kongerud J, Botten G, Hagen JA, Jaakkola JJK. The role of passive smoking in the development of bronchial obstruction during the first 2 years of life. *Epidemiology* 1997;**8**:293-7.
- NEAS1994** Neas LM, Dockery DW, Ware JH, Spengler JD, Ferris BG, Jr., Speizer FE. Concentration of indoor particulate matter as a determinant of respiratory health in children. *Am J Epidemiol* 1994;**139**:1088-99.
- NEUSPI1989** Neuspiel DR, Rush D, Butler NR, Golding J, Bijur PE, Kurzon M. Parental smoking and post-infancy wheezing in children: A prospective cohort study. *Am J Public Health* 1989;**79**:168-71.
- NICOLA1998** Nicolai T, Illi S, von Mutius E. Effect of dampness at home in childhood on bronchial hyperactivity in adolescence. *Thorax* 1998;**53**:1035-40.

- NICOLA2003** Nicolai T, Carr D, Weiland SK, Duhme H, von Ehrenstein O, Wagner C, *et al.* Urban traffic and pollutant exposure related to respiratory outcomes and atopy in a large sample of children. *Eur Respir J* 2003;**21**:956-63.
- NILSSO1999** Nilsson L, Castor O, Löfman O, Magnusson A, Kjellman NI-M. Allergic disease in teenagers in relation to urban or rural residence at various stages of childhood. *Allergy* 1999;**54**:716-21. Erratum appears in *Allergy* 1999;**54**:1223.
- NITTA1996** Nitta H, Nakai S, Kurokawa Y, Honda Y, Ono M, Tanaka T, *et al.* Respiratory symptoms sensitization to aeroallergen and housing characteristics among school children. *Indoor Air* 1996;**1**:197-200.
- NYSTAD1999** Nystad W, Skrondal A, Magnus P. Day care attendance, recurrent respiratory tract infections and asthma. *Int J Epidemiol* 1999;**28**:882-7.
- OCONNE1974** O'Connell EJ, Logan GB. Parental smoking in childhood asthma. *Ann Allergy* 1974;**32**:142-5.
- OCONNO1987** O'Connor GT, Weiss ST, Tager IB, Speizer FE. The effect of passive smoking on pulmonary function and nonspecific bronchial responsiveness in a population-based sample of children and young adults. *Am Rev Respir Dis* 1987;**135**:800-4. Erratum appears in *Am Rev Respir Dis* 1987;**136**:532.
- ODDY1999** Oddy WH, Holt PG, Sly PD, Read AW, Landau LI, Stanley FJ, *et al.* Association between breast feeding and asthma in 6 year old children: findings of a prospective birth cohort study. *BMJ* 1999;**319**:815-9.
- OHARA2002** Ohara Y, Ohrui T, Morikawa T, Sasaki H. Parental attitudes towards passive smoking in Japan [Letter]. *Lancet* 2002;**359**:1159.
- OLIVET1996** Oliveti JF, Kercksmar CM, Redline S. Pre- and perinatal risk factors for asthma in inner city African-American children. *Am J Epidemiol* 1996;**143**:570-7.
- PALMIE1990** Palmieri M, Longobardi G, Napolitano G, Simonetti DML. Parental smoking and asthma in childhood. *Eur J Pediatr* 1990;**149**:738-40.
- PERERA2002A** Perera FP, Illman SM, Kinney PL, Whyatt RM, Kelvin EA, Shepard P, *et al.* The challenge of preventing environmentally related disease in young children: community-based research in New York City. *Environ Health Perspect* 2002;**110**:197-204.
- PERZAN2002** Perzanowski MS, Rönmark E, Platts-Mills TAE, Lundbäck B. Effect of cat and dog ownership on sensitization and development of asthma among preteenage children. *Am J Respir Crit Care Med* 2002;**166**:696-702.
- PETERS1996** Peters J, Hedley AJ, Wong CM, Lam TH, Ong SG, Liu J, *et al.* Effects of an ambient air pollution intervention and environmental tobacco smoke on children's respiratory health in Hong Kong. *Int J Epidemiol* 1996;**25**:821-8.
- PETERS1999** Peters JM, Avol E, Navidi W, London SJ, Gauderman WJ, Lurmann F, *et al.* A study of twelve southern California communities with differing levels and types of air pollution. I. Prevalence of respiratory morbidity. *Am J Respir Crit Care Med* 1999;**159**:760-7.
- PIC2002** Pic D, Aublet-Cuvelier B, Laquet A, Glanddier P, Labbé A. Prévalence de l'asthme chez l'enfant en Auvergne: une région préservée? (Prevalence of asthma in children in Auvergne: a safe region?). *Arch Pediatr* 2002;**9**:26-31.
- PIROGO2004A** Pirogowicz I, Bujnowska-Fedak M, Piorek M, Steciwko A. Wpływ biernego palenia papierosów na czynniki infekcji dróg oddechowych, alergii i astmy oskrzelowej u dzieci (Effect

of passive cigarette smoking on the frequency of respiratory tract infections, allergy and bronchial asthma in children). *Przegl Lek* 2004;**61**:1061-4.

- PLATTS1993** Platts-Mills TAE, Call RS. Environmental tobacco smoke as a risk factor for asthma in inner city children [Letter]. *J Pediatr* 1993;**123**:171.
- POKHAR2001** Pokharel PK, Kabra SK, Kapoor SK, Pandey RM. Risk factors associated with bronchial asthma in school going children of rural Haryana. *Indian J Pediatr* 2001;**68**:103-6.
- PONSON2000** Ponsonby A-L, Couper D, Dwyer T, Carmichael A, Kemp A, Cochrane J. The relation between infant indoor environment and subsequent asthma. *Epidemiology* 2000;**11**:128-35.
- QIAN2000** Qian Z, Chapman RS, Tian Q, Chen Y, Liou PJ, Zhang J. Effects of air pollution on children's respiratory health in three Chinese cities. *Arch Environ Health* 2000;**55**:126-33.
- QIAN2004** Qian Z, Zhang J, Korn LR, Wei F, Chapman RS. Factor analysis of household factors: are they associated with respiratory conditions in Chinese children? *Int J Epidemiol* 2004;**33**:582-8.
- RASANE2000** Räsänen M, Kaprio J, Laitinen T, Winter T, Koskenvuo M, Laitinen LA. Perinatal risk factors for asthma in Finnish adolescent twins. *Thorax* 2000;**55**:25-31.
- RATAGE2000** Ratageri VH, Kabra SK, Dwivedi SN, Seth V. Factors associated with severe asthma. *Indian Pediatr* 2000;**37**:1072-82.
- RENNIE2002** Rennie DC, Dosman J, Senthilselvan A. Respiratory symptoms and asthma in two farming populations: a comparison of Hutterite and non-Hutterite children. *Can Respir J* 2002;**9**:313-8.
- RIBEIR2002** Ribeiro SA, Furuyama T, Schenkman S, de Brito Jardim JR. Atopy, passive smoking, respiratory infections and asthma among children from kindergarten and elementary school. *Sao Paulo Med J* 2002;**120**:109-12.
- RODRIG2002** Rodriguez MA, Winkleby MA, Ahn D, Sundquist J, Kraemer HC. Identification of population subgroups of children and adolescents with high asthma prevalence. *Arch Pediatr Adolesc Med* 2002;**156**:269-75.
- RONCHE1982** Ronchetti R, Martinez F, Criscione S, Macri F, Tramutoli GM, Antognoni G, *et al.* Influenza di fattori familiari e ambientali sulla prevalenza della sindrome asmatica e della sindrome bronchitica del bambino. (Studio epidemiologico su 2500 scolari romani) Influence of familial and environmental factors on the prevalence of asthmatic and bronchitic syndromes of children. (Epidemiological survey on 2500 roman pupils). *Riv Ital Pediatr* 1982;**8**:755-65.
- RONCHE2001** Ronchetti R, Villa MP, Barreto M, Rota R, Pagani J, Mortella S, *et al.* Is the increase in childhood asthma coming to an end? Findings from three surveys of schoolchildren in Rome, Italy. *Eur Respir J* 2001;**17**:881-6.
- RONCHE2002** Ronchetti R, Villa MP, Matricardi PM, La Grutta S, Barreto M, Pagani J, *et al.* Association of asthma with extra-respiratory symptoms in schoolchildren: two cross-sectional studies 6 years apart. *Pediatr Allergy Immunol* 2002;**13**:113-8.
- RONMAR1998** Rönmark E, Lundbäck B, Jönsson E, Platts-Mills T. Asthma, type-1 allergy and related conditions in 7- and 8-year-old children in Northern Sweden: prevalence rates and risk factor pattern. *Respir Med* 1998;**92**:316-24.
- RONMAR1999** Rönmark E, Jönsson E, Platts-Mills T, Lundbäck B. Different pattern of risk factors for atopic and nonatopic asthma among children - report from the Obstructive Lung Disease in Northern Sweden Study. *Allergy* 1999;**54**:926-35.

- RONMAR2001** Rönmark E, Jönsson E, Platts-Mills T, Lundbäck B. Incidence and remission of asthma in schoolchildren: report from the Obstructive Lung Disease in Northern Sweden studies. *Pediatrics* 2001;**107**:e37.
- RONMAR2002** Rönmark E, Perzanowski M, Platts-Mills T, Lundbäck B. Incidence rates and risk factors for asthma among school children: a 2-year follow-up report from the Obstructive Lung Disease in Northern Sweden (OLIN) studies. *Respir Med* 2002;**96**:1006-13.
- ROSASV2002** Rosas Vargas MA, González Reyes M, del Rio Navarro BE, Avila Castañón L, Velázquez Armenta Y, Sienna Monge JJ. Sensibilización con alérgenos y asma en niños de uno a tres años de edad. (Allergen sensitization and asthma in children from 1 to 3 years of age). *Rev Alerg Mex* 2002;**49**:171-5.
- RUDNIK1985** Rudnik J, Herman SM, Pisiewicz K. Respiratory symptoms in a long-term epidemiological study on asthma in children. In: Rudnik J, Kurzawa R, editors. *Paediatric respiratory diseases*. Rabka: NRIMCh, 1985;31-41.
- RUSCON1999** Rusconi F, Galassi C, Corbo GM, Forastiere F, Biggeri A, Ciccone G, *et al.* Risk factors for early, persistent, and late-onset wheezing in young children. *Am J Respir Crit Care Med* 1999;**160**(5 Pt 1):1617-922.
- SANZOR1990** Sanz Ortega J, Martorell Aragones A, Alvarez Angel V, Bermudez Edo JD, Saiz Rodriguez R, Fuertes Fortea A, *et al.* Estudio epidemiológico de los factores de riesgo asociados con el desarrollo de patología respiratoria en la población infantil (Epidemiologic of risk factors associated with the development of respiratory pathology in children). *An Esp Pediatr* 1990;**32**:389-98.
- SARRAZ1997** Sarrazola Sanjuan DM, Salas Ramírez M, Segura Méndez NH, Medrano S, Cairo Cueto SM. Exposición a contaminantes y alérgenos en el niño asmático en comparación con el niño sano. (Exposure to pollutants and allergens in the asthmatic child compared with the healthy child). *Rev Alerg Mex* 1997;**44**:13-6.
- SCHENK1983** Schenker MB, Samet JM, Speizer FE. Risk factors for childhood respiratory disease: the effect of host factors and home environmental exposures. *Am Rev Respir Dis* 1983;**128**:1038-43.
- SCHMIT1993** Schmitzberger R, Rhomberg K, Büchele H, Puchegger R, Smitzberger-Natzmer D, Kemmler G, *et al.* Effects of air pollution on the respiratory tract of children. *Pediatr Pulmonol* 1993;**15**:68-74.
- SELCUK1997** Selçuk ZT, Çağlar T, Enünlü T, Topal T. The prevalence of allergic diseases in primary school children in Edirne, Turkey. *Clin Exp Allergy* 1997;**27**:262-9.
- SENNHA1992** Sennhauser FH, Güntert BJ. Prävalenz des Asthma bronchiale im Kindesalter in der Schweiz: die Bedeutung von Symptomatik und Diagnose. (Prevalence of bronchial asthma in childhood in Switzerland: significance of symptoms and diagnosis). *Schweiz Med Wochenschr* 1992;**122**:189-93.
- SHAMSS1999** Shamsain MH, Shamsian N. Prevalence and severity of asthma, rhinitis, and atopic eczema: the north east study. *Arch Dis Child* 1999;**81**:313-7.
- SHAMSS2001** Shamsain MH, Shamsian N. Prevalence and severity of asthma, rhinitis, and atopic eczema in 13- to 14-year-old schoolchildren from the northeast of England. *Ann Allergy Asthma Immunol* 2001;**86**:428-32.
- SHERMA1990** Sherman CB, Tosteson TD, Tager IB, Speizer FE, Weiss ST. Early childhood predictors of asthma. *Am J Epidemiol* 1990;**132**:83-95.
- SHIVA2003** Shiva F, Nasiri M, Sadeghi B, Padyab M. Effects of passive smoking on common respiratory symptoms in young children. *Acta Paediatr* 2003;**92**:1394-7.

- SHOHAT2002** Shohat T, Green MS, Davidson Y, Livine I, Tamir R, Garty B-Z. Differences in the prevalence of asthma and current wheeze between Jews and Arabs: results from a national survey of schoolchildren in Israel. *Ann Allergy Asthma Immunol* 2002;**89**:386-92.
- SIDRIA1997** SIDRIA (Italian Studies on Respiratory Disorders in Childhood and the Environment). Asthma and respiratory symptoms in 6-7 yr old Italian children: gender, latitude, urbanization and socioeconomic factors. *Eur Respir J* 1997;**10**:1780-6.
- SIDRIA1998** SIDRIA (Italian Studies on Respiratory Disorders in Childhood and the Environment). Fumo dei genitori, asma e sibili respiratori in bambini ed adolescenti. I risultati di SIDRIA. (Parental smoking, asthma and wheeze among children and adolescents. Results from SIDRIA). *Epidemiol Prev* 1998;**22**:146-54.
- SIGURS1995** Sigurs N, Bjarnason R, Sigurbergsson F, Kjellman B, Björkstén B. Asthma and immunoglobulin E antibodies after respiratory syncytial virus bronchiolitis: a prospective cohort study with matched controls. *Pediatrics* 1995;**95**:500-5.
- SOMERV1988** Somerville SM, Rona RJ, Chinn S. Passive smoking and respiratory conditions in primary school children. *J Epidemiol Community Health* 1988;**42**:105-10.
- SOTOQU1994** Soto-Quiros M, Bustamante M, Gutierrez I, Hanson LÅ, Strannegård I-L, Karlberg J. The prevalence of childhood asthma in Costa Rica. *Clin Exp Allergy* 1994;**24**:1130-6.
- SOYSET1995** Søyseth V, Kongerud J, Boe J. Postnatal maternal smoking increases the prevalence of asthma but not of bronchial hyperresponsiveness or atopy in their children. *Chest* 1995;**107**:389-94.
- SPEIZE1989** Speizer FE. Studies of acid aerosols in six cities and in a new multi-city investigation: design issues. *Environ Health Perspect* 1989;**79**:61-7.
- SPENGL2004** Spengler JD, Jaakkola JJK, Parise H, Katsnelson BA, Privalova LI, Kosheleva AA. Housing characteristics and children's respiratory health in the Russian Federation. *Am J Public Health* 2004;**94**:657-62.
- SPIEKE1994** Spiekerkötter EF, Henschen M, Pracht T, Forster J, Frischer T, Kuehr J. Relationship between urinary cotinine, passive smoke exposure and respiratory health in children [Abstract]. *Pediatr Res* 1994;**36**:216.
- SQUILL1997** Squillace SP, Sporik RB, Rakes G, Couture N, Lawrence A, Merriam S, *et al.* Sensitization to dust mites as a dominant risk factor for asthma among adolescents living in Central Virginia. Multiple regression analysis of a population based study. *Am J Respir Crit Care Med* 1997;**156**:1760-4.
- STANHO1979** Stanhope JM, Rees RO, Mangan AJ. Asthma and wheeze in New Zealand adolescents. *N Z Med J* 1979;**90**:279-82.
- STAZI2002** Stazi M-A, Sampogna F, Montagano G, Grandolfo ME, Couilliot M-F, Annesi-maesano I. Early life factors related to clinical manifestations of atopic disease but not to skin-prick test positivity in young children. *Pediatr Allergy Immunol* 2002;**13**:105-12.
- STERN1987** Stern B, Raizenne M, Burnett R, Kearney J. Respiratory effects of early childhood exposure to passive smoke. In: *Proceedings of the 4th International Conference on Indoor Air Quality and Climate*. Berlin: Institute for Water, Soil and Air Hygiene, 1987;22-8.
- STERN1989** Stern B, Raizenne M, Burnett R. Respiratory effects of early childhood exposure to passive smoke. *Environ Int* 1989;**15**:29-34.
- STERN1989A** Stern B, Jones L, Raizenne M, Burnett R, Meranger JC, Franklin CA. Respiratory health effects associated with ambient sulfates and ozone in two rural Canadian communities. *Environ Res* 1989;**49**:20-39.

- STODDA1995** Stoddard JJ, Miller T. Impact of parental smoking on the prevalence of wheezing respiratory illness in children. *Am J Epidemiol* 1995;**141**:96-102.
- STRACH1988** Strachan DP, Anderson HR, Bland JM, Peckham C. Asthma as a link between chest illness in childhood and chronic cough and phlegm in young adults. *BMJ* 1988;**296**:890-3.
- STRACH1995A** Strachan DP, Carey IM. Home environment and severe asthma in adolescence: a population based case-control study. *BMJ* 1995;**311**:1053-6.
- STRACH1995B** Strachan DP. Epidemiology. In: Silverman M, editor. *Childhood asthma and other wheezing disorders*. London: Chapman & Hall, 1995;7-31.
- STRACH1996** Strachan DP, Butland BK, Anderson HR. Incidence and prognosis of asthma and wheezing illness from early childhood to age 33 in a national British cohort. *BMJ* 1996;**312**:1195-9.
- STURM2004** Sturm JJ, Yeatts K, Loomis D. Effects of tobacco smoke exposure on asthma prevalence and medical care use in North Carolina middle school children. *Am J Public Health* 2004;**94**:308-13.
- TAGER1979** Tager IB, Weiss ST, Rosner B, Speizer FE. Effect of parental cigarette smoking on the pulmonary function of children. *Am J Epidemiol* 1979;**110**:15-26.
- TARIQ1995** Tariq SM, Matthews S, Stevens M, Hakim EA, Hide DW. Asthma, atopy and passive smoking in a cohort of children aged four years [Abstract]. *Eur Respir J* 1995;**8**(Suppl 19):217s.
- TARIQ1998** Tariq SM, Matthews SM, Hakim EA, Stevens M, Arshad SH, Hide DW. The prevalence of and risk factors for atopy in early childhood: a whole population birth cohort study. *J Allergy Clin Immunol* 1998;**105**:587-93.
- TARIQ2000** Tariq SM, Hakim EA, Matthews SM, Arshad SH. Influence of smoking on asthmatic symptoms and allergen sensitisation in early childhood. *Postgrad Med J* 2000;**76**:694-9.
- TAUSSI1989** Taussig LM, Wright AL, Morgan WJ, Harrison HR, Ray CG. The Tucson children's respiratory study I. design and implementation. *Am J Epidemiol* 1989;**129**:1219-31.
- TAYLOR1983** Taylor B, Wadsworth J, Golding J, Butler N. Breast feeding, eczema, and hayfever. *J Epidemiol Community Health* 1983;**37**:95-9.
- TIMONE1995** Timonen KL, Pekkanen J, Korppi M, Vahteristo M, Salonen RO. Prevalence and characteristics of children with chronic respiratory symptoms in eastern Finland. *Eur Respir J* 1995;**8**:1155-60.
- TOMINA1985** Tominaga S, Itoh K. Relationship between parental smoking and respiratory diseases of three year old children. *Tokai J Exp Clin Med* 1985;**10**:395-9.
- TSIMOY1987** Tsimoyianis GV, Jacobson MS, Feldman JG, Antonio-Santiago MT, Clutario BC, Nussbaum M, *et al.* Reduction in pulmonary function and increased frequency of cough associated with passive smoking in teenage athletes. *Pediatrics* 1987;**80**:32-6.
- ULRIK1996** Ulrik CS, Backer V, Hesse B, Dirksen A. Risk factors for development of asthma in children and adolescents: findings from a longitudinal population study. *Respir Med* 1996;**90**:623-30.
- ULRIK1998** Ulrik CS, Backer V, Hesse B, Dirksen A. Risikofaktorer for udvikling af astma hos børn og unge. Resultater fra en longitudinel populationsundersøgelse. (Risk factors for the development of asthma in children and adolescents. Results of a longitudinal study). *Ugeskr Laeger* 1998;**160**:2243-8.

- VARELA2001** Varela Delgado AL, Segura Méndez NH, Salas Ramírez M., Espínola Reyna G, Torres Salazar AB. Correlación clínica y espirométrica con alérgenos intradomiciliarios y con contaminantes. (Clinical and spirometric correlation with home allergens and with pollutants). *Rev Alerg Mex* 2001;**48**:107-9.
- VAVILI2000** Vavilin VA, Chasovnikova OB, Lyakhovich VV, Gavalov SM, Ryabova OA. Genetic polymorphisms of glutathione S-transferase M1 and T1 in asthmatic children. *Vopr Med Khim* 2000;**46**:388-97.
- VAVILI2002** Vavilin VA, Makarova SI, Liakhovich VV, Gavalov SM. Assotsiatsiia polimorfnykh genov fermentov biotransformatsii ksenobiotikov s predraspolozhennost'iu k bronkhial'noi astme u detei s nasledstvennoi otiagoshchennost'iu i bez takovoi. (Polymorphic genes of xenobiotic-metabolizing enzymes associated with predisposition to bronchial asthma in hereditarily burdened and nonburdened children). *Genetika* 2002;**38**:539-45.
- VENNER2001** Venners SA, Wang X, Chen C, Wang B, Ni J, Jin Y, *et al.* Exposure-response relationship between paternal smoking and children's pulmonary function. *Am J Respir Crit Care Med* 2001;**164**:973-6.
- VERHOE1992** Verhoeff AP, van Strien R, Brunekreef B, van Wijnen JH. Reported frequency of allergen avoidance measures in the homes of children with chronic respiratory symptoms and asthma [Abstract]. *Am Rev Respir Dis* 1992;**145**(4 pt 2):533A.
- VOLKME1995** Volkmer RE, Ruffin RE, Wigg NR, Davies N. The prevalence of respiratory symptoms in South Australian pre-school children. II. Factors associated with indoor air quality. *J Paediatr Child Health* 1995;**31**:116-20.
- VOLKME1995A** Volkmer RE, Ruffin RE, Wigg NR, Davies N. The prevalence of respiratory symptoms in South Australian preschool children. I. Geographic location. *J Paediatr Child Health* 1995;**31**:112-5.
- VONMAF2001** Von Maffei J, Beckett WS, Belanger K, Triche E, Zhang HP, Machung JF, *et al.* Risk factors for asthma prevalence among urban and nonurban African American children. *J Asthma* 2001;**38**:555-64.
- WANG1994A** Wang X, Wypij D, Gold DR, Speizer FE, Ware JH, Ferris BG, Jr., *et al.* A longitudinal study of the effects of parental smoking on pulmonary function in children 6-18 years. *Am J Respir Crit Care Med* 1994;**149**:1420-5.
- WANG1999B** Wang T-N, Ko Y-C, Chao Y-Y, Huang C-C, Lin R-S. Association between indoor and outdoor air pollution and adolescent asthma from 1995 to 1996 in Taiwan. *Environ Res* 1999;**81**:239-47.
- WARE1984** Ware JH, Dockery DW, Spiro A, III, Speizer FE, Ferris BG, Jr. Passive smoking, gas cooking and respiratory health of children living in six cities. *Am Rev Respir Dis* 1984;**129**:366-74.
- WARKE2003** Warke TJ, Mairs V, Fitch PS, Ennis M, Shields MD. Possible association between passive smoking and lower exhaled nitric oxide in asthmatic children. *Arch Environ Health* 2003;**58**:613-6.
- WARTEN1994** Wartenberg D, Ehrlich R, Lilienfeld D. Environmental tobacco smoke and childhood asthma: comparing exposure metrics using probability plots. *Environ Res* 1994;**64**:122-35.
- WEILAN1999** Weiland SK, von Mutius E, Hirsch T, Duhme H, Fritzsche C, Werner B, *et al.* Prevalence of respiratory and atopic disorders among children in the East and West of Germany five years after unification. *Eur Respir J* 1999;**14**:862-70.

- WEISS1980** Weiss ST, Tager IB, Speizer FE, Rosner B. Persistent wheeze: Its relation to respiratory illness, cigarette smoking, and level of pulmonary function in a population sample of children. *Am Rev Respir Dis* 1980;**122**:697-707.
- WEITZM1990** Weitzman M, Gortmaker S, Walker DK, Sobol A. Maternal smoking and childhood asthma. *Pediatrics* 1990;**85**:505-11.
- WEITZM1990A** Weitzman M, Gortmaker S, Sobol A. Racial, social, and environmental risks for childhood asthma. *Am J Dis Child* 1990;**144**:1189-94.
- WICKMA2003** Wickman M, Melén E, Berglind N, Nordvall SL, Almqvist C, Ull I, *et al.* Strategies for preventing wheezing and asthma in small children. *Allergy* 2003;**58**:742-7.
- WIJGA2003** Wijga AH, Smit HA, Kerkhof M, de Jongste JC, Gerritsen J, Neijens HJ, *et al.* Association of consumption of products containing milk fat with reduced asthma risk in pre-school children: the PIAMA birth cohort study. *Thorax* 2003;**58**:567-72.
- WILLER1991** Willers S, Svenonius E, Skarping G. Passive smoking and childhood asthma. Urinary cotinine levels in children with asthma and in referents. *Allergy* 1991;**46**:330-4.
- WILLER2000** Willers S, Axmon A, Feyerabend C, Nielsen J, Skarping G, Skerfving S. Assessment of environmental tobacco smoke exposure in children with asthmatic symptoms by questionnaire and cotinine concentrations in plasma, saliva, and urine. *J Clin Epidemiol* 2000;**53**:715-21.
- WITHER1998** Withers NJ, Low L, Holgate ST, Clough JB. The natural history of respiratory symptoms in a cohort of adolescents. *Am J Respir Crit Care Med* 1998;**158**:352-7.
- WOLFOS1995** Wolf-Ostermann K, Luttmann H, Treiber-Klötzer C, Kreienbrock L, Wichmann HE. Kohortenstudie zu Atemwegserkrankungen und Lungenfunktion bei Schulkindern in Südwestdeutschland. Teil 3: Einfluss von Rauchen und Passivrauchen. (Cohort study on respiratory diseases and lung function in schoolchildren in Southwest Germany. Part 3: Influence of smoking and passive smoking). *Zentralbl Hyg* 1995;**197**:459-88.
- WONG1992** Wong CM, Spiegelhalter DJ. Effects of environment and passive smoking on the respiratory health of children [Letter]. *Int J Epidemiol* 1992;1031.
- WRIGHT1989A** Wright AL, Taussig LM, Ray CG, Harrison HR, Holberg CJ. The Tucson children's respiratory study II. Lower respiratory tract illness in the first year of life. *Am J Epidemiol* 1989;**129**:1232-46.
- WRIGHT1996** Wright AL, Holberg CJ, Morgan WJ, Taussig LM, Halonen M, Martinez FD. Recurrent cough in childhood and its relation to asthma. *Am J Respir Crit Care Med* 1996;**153**:1259-65.
- XU1999** Xu B, Pekkanen J, Järvelin M-R, Olsen P, Hartikainen A-L. Maternal infections in pregnancy and the development of asthma among offspring. *Int J Epidemiol* 1999;**28**:723-7.
- XU1999A** Xu X, Yang J, Chen C, Wang B, Jin Y, Fang Z, *et al.* Familial aggregation of pulmonary function in a rural Chinese community. *Am J Respir Crit Care Med* 1999;**160**:1928-33.
- YANG1997A** Yang C-Y, Chiu J-F, Cheng M-F, Lin M-C. Effects of indoor environmental factors on respiratory health of children in a subtropical climate. *Environ Res* 1997;**75**:49-55.
- YANG1998A** Yang C-Y, Lin M-C, Hwang K-C. Childhood asthma and the indoor environment in a subtropical area. *Chest* 1998;**114**:393-7.

**YUAN2003A** Yuan W, Fonager K, Olsen J, Sørensen HT. Prenatal factors and use of anti-asthma medications in early childhood: a population-based Danish birth cohort study. *Eur J Epidemiol* 2003;**18**:763-8.

**ZEIGER1989** Zeiger RS, Heller S, Mellon MH, Forsythe AB, O'Connor RD, Hamburger RN, *et al.* Effect of combined maternal and infant food-allergen avoidance on development of atopy in early infancy: a randomized study. *J Allergy Clin Immunol* 1989;**84**:72-9.

**ZEIGER1995** Zeiger RS, Heller S. The development and prediction of atopy in high-risk children: follow-up at age seven years in a prospective randomized study of combined maternal and infant food allergen avoidance. *J Allergy Clin Immunol* 1995;**95**:1179-90.

**ZEJDA1996** Zejda JE, Skiba M, Orawiec A, Dybowska T, Cimander B. Respiratory symptoms in children of Upper Silesia, Poland: cross-sectional study in two towns of different air pollution levels. *Eur J Epidemiol* 1996;**12**:115-20.

**ZHANG2002B** Zhang J, Hu W, Wei F, Wu G, Korn LR, Chapman RS. Children's respiratory morbidity prevalence in relation to air pollution in four Chinese cities. *Environ Health Perspect* 2002;**110**:961-7.

**ZHENG2002A** Zheng T, Niu S, Lu B, Fan X, Sun F, Wang J, *et al.* Childhood asthma in Beijing, China: a population-based case-control study. *Am J Epidemiol* 2002;**156**:977-83.