

**APPENDIX 1**

Induction of asthma – non-smoking adults.

Detailed data entry instructions

(Project IASTAD)

## App1-2

IASTAD - STUDY DATABASE					
REF					Usually first 6 letters of first author's name (unless study has other well known title). Block caps
Sex, Group					Enter "-", 1
Study description	DESCR	1			
Study title	TITLE	8	Character	( 15 )	Usually first author's name, unless study has other well known title. Initial capital only
Full study title	FTITLE	9	Character	( 50 )	Summarize date/location/nature of population/studytype. Include other specific focus (eg air pollution). If data unknown use 'date submitted-1' as approx. e.g. Bristol schools CS 1996-98 Southern Norway allergy hospital CC (ca 1995?)
Study sex	sSEX	10	Graded	( system 34 )	
	1 (b) both				
	2 (m) male				
	3 (f) female				
Lowest age in study	sAGELO	11	Measured	(0-99 )	Refers to study as designed (i.e. if unrestricted do not enter age actually found). Use 99 for no upper limit. Use 15 for adult NOS and enter comment. Lower limit of interest is 18, but study can be allowed if overlaps this slightly
Highest age in study (at baseline)	sAGEHI	12	Measured	(0-99 )	
Highest age in study at final followup	sAGEHF	13	Measured	( 0-99 )	Enter "-" for CC or CS. Refers to study as designed
Study race	sRACE	14	Graded	( system 16 )	Refers to study as designed.
	1 (a) all (in study area)				
	2 (w) whites (inc hispanics)				
	3 (b) blacks				
	4 (4) whites and blacks				
5 (5) whites (excluding Hispanics)					
Continent	CONT	15	Graded	( system 17 )	This GS should be sufficient, but may need to review for multicountry studies
	1 (1) NAmerica				
	2 (2)Europe				
	3 (3)Asia				include Middle East
	4 (4)Australia				
5 (5) multi					
US state	USSTAT	16	Graded	( system 36 )	Enter "-" if CONT not 1
	1 (n) all (nationwide)				
	2 (m) multi (not all)				
	3 (c) California				
4 (d) Delaware					

## App1-3

Country in Europe	EUR	17	Graded	( system 19 )	This GS should be sufficient. Enter "-" if CONT not 2
	1 (1) Estonia				
	2 (2) Finland				
	3 (3) France				
	4 (4) Germany				
	5 (5) Poland				
	6 (6) Sweden				
	7 (7) Switzerland				
Country in Asia	ASIA	18	Graded	( system 37 )	Extend GS as necessary. Enter "-" if CONT not 3
	1 (i) India				
	2 (s) Singapore				
Location within country	LOCAT	19	Character	50	
Start year of study	BEGYR	20	Measured	( 1900 to 2004 )	
End year of study	ENDYR	21	Measured	( 1900 to 2004 )	End of baseline (i.e. recruitment) if Prosp (includes Longitudinal)
Final follow up year	FINFYR	22	Measured	( 1900 to 2004 )	Enter "-" for CC or CS
Principal publication year	PUBYR	23	Measured	( 1900 to 2004 )	
Reference ID of principal publication	REFID	24	Character	( 12 )	Block caps
Reference ID of additional publication(s)	ADDREF	25	Character	( 50 )	Block caps, comma and space separator. If not enough room, continue with thrown comment. Enter "-" if none.
Overlap	OVERL	26	Graded>0	( system 21 )	Extend grading system as necessary (i.e. add a level for each set of overlapping studies)
	1 (1) none				
Principal/subsidiary	PRINC	27	Graded>0	system 22	
	1 (p) principal				use this level for non-overlapping studies
	2 (s) subsidiary				
REF group	REFGP	28	Character	6	Ref of principal study in overlap group (same as REF except for subsidiary studies)
Comment		29			Notes on alternatives/duplicates at study level, and why this one chosen. Also notes on overlap

## App1-4

Study design	DESIGN	2			
Study type	STYPE	33	Graded	( system 38 )	
	1 (c) case/control				Includes if cases identified by an initial cross-sectional study
	2 (p) prospective				Includes longitudinal/repeat interviews (of same subjects)
	3 (x) cross sectional				Includes if only one wave of longitudinal, or only baseline of prospective is actually used. Includes repeated cross-sectional studies at school where same pupils not re-included
Type of controls (for CC studies)	CONTRL	34	Graded	( system 39 )	Enter "-" for P, CS. See IESAST/validation if extending this list
	1 (h) healthy				
	2 (d) diseased/hospital				
	3 (b) both				
Control diseases	CONDIS	35	Character	( 50 )	Enter "-" unless CONTRL is 2
Type of population	POPUL	36	Graded	( system 25 )	Use this to describe eligibility to join study, for CC studies describe <b>cases only</b> .
	1 (1) all				Refers to subjects within defined study area/age group etc
	2 (2) randomly selected				Extend GS as necessary to describe major study <b>inclusion</b> criteria (e.g. high allergy risk, athletes) but not for minor exclusion categories (use MEDEXC and OTHExc to describe them)
	3 (3) farmers				
	4 (4) random households				
	5 (5) unstated				
Medical exclusions	MEDEXC	37	Character	50	Include both subject's and family medical history. Enter 0 if no exclusions. Describe <b>exclusions</b> ; if a major inclusion criteria has already been mentioned in POPUL, repeat this preceded by "restricted to..." Mention exclusion of baseline asthma from "onset" analyses
Other exclusions	OTHEXC	38	Character	50	Enter 0 if no exclusions. Describe <b>exclusions</b> - if a major inclusion criteria has already been mentioned in POPUL, repeat this preceded by "restricted to..." No need to mention exclusion due to missing data, failure to trace etc. Do not mention exclusion of active smokers (use NEVSMO for that)
Type of population - controls (if different from cases)	POPCON	39	Graded	system 26	Enter "-" if prosp or CS. Enter 0 for CC if controls are same as cases apart from as already defined (e.g. healthy controls). No need to mention if cases are 'all' but controls are randomly selected.
	1 without chest/resp symptoms				
	2 without history of asthma				
	3 without history of atopy				

## App1-5

Respondent	RESPON	40	Graded	( system 27 )	Refers to provider of information on smoking information/ETS exposure. Extend GS as necessary.
	1 (s) Subject				
	2 (p) Proxy				give more details in comment
	3 (3) Subject or proxy				give more details in comment (inc % proxies if poss)
	4 (m) Medical records				
	5 (u) Unspecified				includes questionnaire but not stated who completed it
Definition of never/non smoking	NEVSMO	41	Graded	( system 28 )	Extend GS as necessary
	1 Never smoked NOS				Refers to criteria that only studies of never smokers (or near equivalent) are included
	2 <del>Never smoked, specifically defined as not even 1 cigarette</del>				
	3 Smoked <1 cig/day for 1 year				
	4 Never smoked not even few per week				
	5 Never smoked regularly/daily				
	6 Smoked <20 pks cigs or 360g tobacco in lifetime				
	7 Smoked <1 cigarette /day or 1 cigar/week for a year; or 360g tobacco total in lifetime				
	8 Smoked for < 1 year				
	9 Not current smoker				
	10(a) Not active smoker				
	11(b) Not current smoker and serum cotinine <14 ng/ml				
12(c) Serum cotinine <14ng/ml					
Standard questionnaire used	QUEST	42	Graded	system 29	Refers to questionnaire for respiratory symptoms
	1 Non std/NA/NK				Use this when not one of the standard published questionnaires. Includes if questionnaire used was taken from another study. Includes when based on medical records/diagnosis.
	2 ISAAC				Include if questionnaire was 'based on' or 'modified version of'
	3 ATS/NHLI/ESP		(Ferris)		
	4 MRC				
	5 ECRHS				
6 MRC,ATS,ECRHS					
Comment		43			Other important design features or comments on data entered in DESCR or DESIGN. No need to particularly mention study weaknesses

## App1-6

Asthma	ASTHMA	3			
Lifetime asthma available	LIFAST	47	presence		Include if near-equivalent available, or if timing is unspecified. Include incident asthma from prospective studies. If different results available for more than one source, or more than one timing, or more than one disease definition, choose one only, and record availability of other in OTHRES/OTHAST. As new definitions found, extend 'rules' below.
Source of lifetime asthma diagnosis	DIAGLS	48	Graded	( system 30 )	see note on LIFAST. Enter "-" if LIFAST 0.
	1 (m) Medical records				"medical records" includes diagnosis for current admission/visit in hospital/GP study, or current test (e.g. FEV or exercise challenge).
	2 (s) Self report (doctor diag)				"mixed" includes if physician ever diagnosed but symptoms are self report.
	3 (3) Self report (other/unspec/mixed)				"proxy report" includes if some self report/some proxy report
	4 (4) Proxy report (doctor diag)				
	5 (5) Proxy report (other/unspec/mixed)				
	6 (6) Medical records or self/proxy report (doctor diag)				
	7 (7) Medical records or self/proxy report (other/unspec/mixed)				
	8 (u) Unspecified				
Timing of lifetime asthma	TIMLAS	49	graded>0	system 35	see note on LIFAST. Enter "-" if LIFAST 0. Extend GS as necessary
	1 Lifetime				
	2 NA (incidence only)				Use this for prospective study which has only onset RRs in RRDB
	3 from age 1 / 2				
	4 from age 16				
	5 up to baseline				
	6 unspecified				
Timing of incident asthma (onset analyses from prospective studies)	INCAST	50	graded>0	system 32	Enter "-" if LIFAST 0.
	1 since baseline (earlier excl)				enrolment is at age >0 and pre-existing cases excluded
	2 lifetime (recruit at birth)				
	3 lifetime (retrospective)				enrolment is at age >0 and pre-existing cases included using age at onset
	4 NA (only prevalence analysis)				use this for any study which does not have any onset RRs in RRDB
Description of lifetime asthma	DESLAS	51	Character	( 50 )	usually no need to mention timing or source. Enter "-" if LIFAST 0.
Current asthma available	CURAST	52	Presence		Same notes as LIFAST (except use LIFAST if timing unspecified)
Current asthma is first occurrence	FIRAST	53	Presence		Enter "-" if CURAST 0.
Repeat measures for current asthma	REPCAS	54	Presence		Enter "-" if CURAST 0.

## App1-7

Source of current asthma diagnosis	DIAGCS	55	Graded	( system 30 )	see note on LIFAST. Enter "-" if CURAST 0.
	levels same as for DIAGLS				see notes on DIAGLS
Timing of current asthma	TIMCAS	56	graded>0	system 33	see note on LIFAST. Enter "-" if CURAST 0. Extend GS as necessary
	1 Current diagnosis				
	<del>2 in last n months (n&lt;6)</del>				
	<del>3 in last n months (6&lt;=n&lt;12)</del>				
	4 in last n months (12<=n<24)				
	<del>5 in last n years (2&lt;=n&lt;5)</del>				
	6 current NOS				
Description of current asthma	DESCAS	57	Character	( 50 )	usually no need to mention timing or source. Enter "-" if CURAST 0.
Number of lifetime asthma cases	NLAST	58	Measured	( 1 to 32765 )	If possible, number actually in analysis
Number of current asthma cases	NCAST	59	Measured	( 1 to 32765 )	Enter "-" if type not available
Total number of subjects	NTOT	60	Measured	( 1 to 32765 )	If possible, number actually in analysis
Comment		61			Other important features of definition of asthma or of numbers 12=number of cases based on %
Matching factors	MATCH	4			
Cases and controls matched on sex	MATSEX	65	Presence	( system 6 )	Enter "-" for CS and prosp  Add extra fields as necessary for other matching factors, and back fill. (No need to change validation cmd files)
Cases and controls matched on age	MATAGE	66	Presence	( system 6 )	
Cases and controls matched on race	MATRAC	67	Presence	( system 6 )	
matched on location	MATLOC	68	Presence	( system 6 )	
matched on SES	MATSES	69	Presence	( system 6 )	
matched on hospital (ward/date of admission)	MATHOS	70	Presence	( system 6 )	
Comment		71			
Confounders considered	CONFND	5			Refers to variables used in adjustment, and to matching factors if used in matched analysis ("conditional logistic regression" means it is matched)
Total number of adjustment factors used	TOTCO	75	Measured	( 0 to 99 )	
Results presented adjusted for sex	COSEX	76	Presence	( system 6 )	Enter 0 for single sex study, and for both sex study if only single sex results
age	COAGE	77	Measured	( 0 to 10 )	
race	CORACE	78	Measured	( 0 to 10 )	does not include nationality
location	COLOC	79	Measured	(( 0 to 10 )	to include urban/rural, and districts chosen on basis of air pollution, dust etc
type of respondent	CORESP	80	Measured	(( 0 to 10 )	

## App1-8

interview setting	COIVST	81	Measured	(( 0 to 10 )	
religion	CORELI	82	Measured	(( 0 to 10 )	
family medical history	COFMED	83	Measured	(( 0 to 10 )	to include parents and siblings
SES	COSES	84	Measured	( 0 to 10 )	
Household composition	COHOCO	85	Measured		to include number of children, household size, single parent, position in sibship
Air conditioning	COAIRC	86	Measured		to include dehumidifier, air cleaner
Cooking/heating	COCOHE	87	Measured		to include burning of incense or mosquito coils
damp/mould	CODAMP	88	Measured		
Housing quality	COHOUS	89	Measured		to include housing quality, age, size, crowding, own/shared bedroom, own/rent
Pets	COPETS	90	Measured		to include close contact with animals (incl farm animals)
Exposure to food/housedust allergens	COALGN	91	Measured		to include presence of carpets, type of bedding, washing of bedding, houseplants
Occupation	COOCC	92	Measured		to include working status, occupational exposures (apart from ETS)
Education	COEDUC	93	Measured		
Mobility	COMOB	94	Measured		to include born in different town/country from currently(parent or child), moved house, nationality, time of residence at current address, language spoken at home
Subject's medical history/symptoms	COSMED	95	Measured		to include SPT results, but not nutrition/diet
obesity/BMI	COOBES	96	Measured		
exercise	COEXER	97	Measured		
diet/alcohol	CODIET	98	Measured		
subject's active smoking (ex/never)	COACSM	99	Measured		enter 0 usually. Only relevant if study is of non-smokers
maternal smoking in pregnancy	COMSMP	100	Measured		
childhood ETS	COCETS	101	Measured		to include parental smoking
total ETS (as an adult)	COTETS	117			
household ETS (as an adult)	COHETS	102	Measured		
workplace ETS	COWETS	103	Measured		
Other confounder(s) considered but rejected	COREJE	104	Presence		i.e. found to be non-significant in stepwise MLR or similar and therefore not actually used in any final model; or <u>formally</u> tested (e.g. univariate) and therefore not entered into MLR. Use comment to list the rejected fields
Comment		105			Include rejected fields



## App1-9

Other results (not current db)	OTHRES	6			Other information in the paper but not currently being entered
Other definitions of asthma available	OTHAST	109	Presence	( system 6 )	i.e. other definition which would qualify for the study (i.e. asthma qualifies, but we have chosen another qualifying definition, or this one does not qualify because it is past asthma, exacerbation or other reason)
Results for wheezing or wheezy bronchitis also available	WHEEZE	110	Presence	( system 6 )	includes "asthma or wheezy bronchitis", "asthmatic bronchitis"
Other exposures available	OTHEXP	111	Presence	( system 6 )	Refers only to smoking exposures (e.g. during travel)
Other definitions of never or non smokers available	OTHNSM	112	Presence	( system 6 )	i.e. results also available for another never-smoking subset, or for non-smokers or ex-smokers as well as never smoker
Results stratified by other factors, or for particular subset also available	OTHSTR	113	Presence		
Comment		114			More details of what is available, using thrown comment to relevant field

IESAST Experiment :	RRDB				
REF, SEX, GROUP - as in studydb					
ADTOT (STI variable)			No need to enter, is calculated by RRVALID		
RR Description	RRDEF	1	NB - do not enter * (missing) for any field in this card		
Number of RR within study	NRR	8	Measured+v	( 1 to 440 )	must be unique, must have a number 1
Sex	RSEX	9	Graded>0	( system 16 )	
	1 (b) both				
	2 (m) male				
	3 (f) female				
Lowest age in RR	<del>r</del> AGELO	10	Measured	( 0 to 99 )	enter 0 if whole study
Highest age in RR	<del>r</del> AGEHI	11	Measured	( 0 to 99 )	
Race	<del>r</del> RACE	12	Graded	( system 27 )	enter 0 if whole study. Extend GS as necessary
	<del>1 (1) NOT USED</del>				
	<del>2 (w) white</del>				
	<del>3 (b) black</del>				
	<del>4 (4) white ex hispanic</del>				
	<del>5 (5) hispanic white</del>				
Asthma time	rASTIM	13	graded >0	system 17	
	1 (l) lifetime			Do not extend - refers to the two possible definitions in STUDYDB/ASTHMA card	
	2 (c) current				
Onset - analysis type	ONSET	14	presence	<p>This variable is used in %RR and in set META2 to determine correct calculation of variance, enter 0 for</p> <ul style="list-style-type: none"> <li>any analysis of CC study,</li> <li>prevalence analysis of a CS (O.R.),</li> <li>repeat measure of prevalence in a prospective,</li> </ul> <p>or enter 1 for onset in a prospective study. Onset implies "at risk" refers to baseline numbers, Relative Risk rather than Odds Ratio.</p>	
Odds Ratio used for Onset	ODDSON	15	presence	<p>Enter '-' if ONSET=0.  Enter 0 if result is a relative risk (including if calculated from baseline numbers at risk).  Enter 1 if relative risk not available so Odds Ratio entered instead (usually from Multiple Logistic Regression)</p>	

## App1-11

Exposure type	EXPOS	16	Graded>0	( system 18 )	If any others found (e.g. Not home) do not enter them, but record their existence in STUDYDB-OTHRES.
	1 (h) Household			Refers to active smoking by household members or to general ETS exposure (to subject) at home. Include parental smoking as a child (but not maternal smoking during pregnancy) No need to mention if smoking by household members is limited to in house/in presence of subject. Give details in WHOHOU and WHESMO	
	2 (w) Work			<del>Restriction to working subjects?</del>	
	3 (t) Total			Refers to questionnaire-based or other 'total' involving exposure outside the home, and also to biochemically measured. Also to "passive smoking" if there is no other description. Also to "home and/or work" Give details in WHOTOT and WHESMO If various locations available, choose only the most combined, others to be noted in OTHRES.	
Household - who smoked	WHOHOU	17	Graded>0	( system 19 )	Enter "-" if expos not household. Extend GS as necessary to allow for whatever persons/combinations are found. Construct 'all' if possible, and construct 'parents' if possible, but do not construct any other combinations - will decide at the end which ones should be done.
	1 (a) all			no need to mention whether visitors included or only residents	
	2 (m) mother				
	3 (f) father				
	4 (p) parents (mother +/- father)				
	5 (s) spouse			<del>Restriction to married subjects?</del> Includes cohabiting	
Total - who smoked	WHOTOT	18	Graded>0	( system 20 )	Enter "-" if expos not total. Extend GS as necessary
	1 (1) total (unspecified)				
	2 (2) serum cotinine			Add extra levels if other biochem marker, will also need to amend validation	
	3 (3) home and/or work				
Exposure - when smoked	WHESMO	19	Graded	( system 21 )	Extend GS as necessary
	1 (L) lifetime				
	2 (n) current (now)			includes "in last year"	
	3 (y) childhood/youth			irrespective of adulthood	
	4 (e) ever			refers to smoker (e.g. spouse or parent) is ever smoker, not necessarily while living with (in lifetime of) the subject	
	5 (m) during marriage			includes when living together	
	6 (u) unspecified				
	7 (r) recent years				
	8 (8) child but not adult				
	9(9) adult but not child				
	10(a) adult			irrespective of childhood	
	11(b) both adult and child				

## App1-12

Dose response	DOSER	20	Graded >0	(System 22)	For dose-response categories, number sequentially starting from 2.
	1 (1) all			i.e. it is <u>not</u> part of a dose-response	
	2 (2) level 1 ... 10 (a) level 9			For dose-response categories, number sequentially starting from 2.	
	11 (b) per unit dose regression				
	12 (c) dose response other				
Measure of exposure	MEASEX	21	Graded>0	( system 23 )	Must enter a value if it has a "low" unexposed, or is part of a dose-response sequence or model, otherwise enter 1 Extend GS as necessary
	1 (1) yes/no			includes smoker/nonsmoker	
	2 (n) cigarettes/day				
	3 (y) years				
	4 (k) pack-years				
	5 (h) hours/day				
	6 (b) ng/ml				
	7 (7) persons				
Exposed - low value	EXPLO	22	Real	( 0.00 to 999.00 )	Enter "-" if DOSER is 1 or b or c Within the dose-response sequence, enter RRs in ascending order. Enter each level vs lowest level. See also rules below about combining. Use units as described in MEASEX Within each set, levels must be non-overlapping (i.e. must have $LO_{i+1} > HI_i$ ) but can have $HI_i = LO_i$ , Enter LO=1, HI = 999 for open-ended. Enter both as successive integers if MEASEX is 6 and put details in comment
Exposed - high value	EXPHI	23	Real	( 0.00 to 999.00 )	
Unexposed - time	UNEXTI	24	Graded	( system 24 )	
	1 (1) non			i.e. not at the time defined by WHESMO, but do not use with 'ever'	
	2 (2) never			i.e. in the conventional sense from current/ex/never smokers. Refers to the smoker's lifetime, unrelated to the time living with subject/subject's lifetime	
	3 (3) non+other			i.e. not at the time defined by WHESMO, and other times are also excluded (but not so much excluded as to qualify as never). Requires explanation in comment.	
Unexposed - source	UNEXSO	25	Graded	( system 25 )	Use the lowest relevant level (e.g. if WHOHOU=both parents, then use 3 not 4 because they mean the same)
	1 (1) none (or low)			use this level if expos=total; do not use it for parent/household exposure unless exposure outside the home has also been excluded	
	2 (2) none of type (as defined by EXPOS)			e.g. no household member smokes (if EXPOS is household)	
	3 (3) neither parent			i.e. no parent smokes	
	4 (4) not specified household member			i.e. person(s) specified in WHOHOU do not smoke (but use 2 instead if WHOHOU=all)	
Unexposed - high value	UNEXHI	26	Real	( 0.00 to 999.00 )	Enter "-" if MEASEX =1 or if DOSER =b or c
Source	SOURCE	27	character	50	Table number, page number, REFID. For an adjusted RR, no need to give source of numbers of cases if these have already been used in an unadjusted
Comment		28			Any further information refining RR definition. Include if there is an upper limit on a biochemical exposure.

## App1-13

RR Adjustment	RRADJ	2	NB - do not enter * (missing) for any field in this card		
Adjusted for sex	ADSEX	32	Presence	( system 6 )	Enter 0 if single sex study or single sex RR
Adjusted for Age	ADAGE	33	Presence	( system 6 )	
Adjusted for Race	ADRACE	34	Presence	( system 6 )	
Adjusted for active smoking (ex/never)	ADACSM	53	Presence	( system 6 )	Enter 0 if study of never smokers. Only relevant to studies of non smokers
Adjusted for other sources of ETS	ADOETS	54	Graded	(system 26)	Includes maternal smoking in pregnancy Same levels as ADOTHR
Adjusted for other confounders	ADOTHR	35	Graded	( system 26 )	
	1 (1) 1				
	2 (2) 2		etc .....		
	19 (j) 19+				
		20 (k) +ive but unknown			
Comment		36			What the 'other ETS' or 'other' confounders are, but only if different from full set(s).
RR data	RRDATA	3			
Cases exposed	CA1	42	Measured	( 0 to 99999 )	Enter * if unknown NB Enter numbers of cases whether unadjusted or adjusted.
Cases, unexposed	CA0	43	Measured	( 0 to 99999 )	
Controls, exposed	CO1	44	Measured	( 0 to 99999 )	Controls for CC study, otherwise at risk for onset analysis, disease-free for prevalence analysis. Enter "-" if adjusted, * if unknown.
Controls, unexposed	CO0	45	Measured	( 0 to 99999 )	
Relative risk	RR	46	Real	( 0.00 to 999.00 )	For unadjusted, if both numbers and RR/CI given in paper, enter RR/CI (rounding to two decimal places if more given) with DERIVE code 1, then use META (in Analysis) to check; if different, then change RR/CI to values as calculated and change DERIVE code to 3 (except if RR/CI was originally given to <2 decimal places and it is correct so far as given, use code 2). If RR/CI not given but numbers available, use CALC with %RR and "onset". For onset analysis (adjusted or if numbers not available), prefer RR but accept OR/MLR if RR not available (see ODDSON in card RRDEF)
RR lower 95% CL	RRL	47	Real	( 0.00 to 999.00 )	
RR upper 95% CL	RRU	48	Real	( 0.00 to 999.00 )	
Derived RR	DERIVE	49	Graded	( system 28 )	The order represents roughly the order of preference in which they should be used. For an adjusted RR, no need to give derivation of numbers of cases if already used in corresponding unadjusted
	1 (1) original				
	2 (2) RR/CI from numbers				Includes if numbers from % distribution (mention in comments -13) Includes if exposed and total given, unexposed by simple subtraction. Includes if adjustment for numbers (mention in comment - 13; % 14) Includes if RR but no CI originally. Includes if <2 dec pl given originally (and agrees so far as given)
	3 (3) RR/CI recalc from numbers				i.e. discrepancy from RR/CI as given originally. Only use this if numbers and RR/CI are from same paper and definitely on same basis. Otherwise choose one here and mention other in DISCREP
	4 (4) combined ETS levels/sum				
	<del>5 (5) combined disease levels/sum</del>				

App1-14

	6 (6) other combined/sum			
	7 (7) RR/CI calc using 0.5 for 0			Use this when there is <u>one</u> zero cell; do not calculate (and probably do not even enter) if two zero cells.
	8 (8) CI converted to 95%			
	9 (9) inverted from diff denom			
	10 (a) non-significant			Use these only if CI missing (and cannot be estimated as under code 20) or if RR&CI are missing. Base on P<0.05 if possible (otherwise give P in comment). Comm 45=not in MLR due to lack of significance
	11 (b) significant			
	12 (c) read from graph/chart			i.e. measured from graph
	13 (d) RR original, CI from P value			see template_ClfromRR&P.xls
	14 (e) combined ETS levels/F&L			F&L =Fry&Lee, this is what used to be called RLCI and done in QP. Now done in Excel. Template is T:\jan\RREst\rrest7.xls
	15 (f) combined disease levels/F&L			
	16 (g) other combined/F&L			
	17 (h) adj from orig RRs/mini meta			
	18 (i) combined F&L then adj minimeta			
	19 (j) other			other method, or combination of methods, but not involving adjusted CI from crude numbers, and not involving 0.5 for zero cell.
	20 (k) RR orig CI est from numbers			These are only relevant to using crude numbers with adjusteds
	21 (l) other (CIestnums)			
Comment		50		Further description of derivation method Must be entered for DERIVE = 19, 21 For 6, 16 say what is being combined For 10, 11 give significance level if other than P<0.05 For DOSER=b, use comment 126 for regression coeff and SE Otherwise only if some unusual feature.
DISCR Discrepancy (Extra card added just to record any discrepancy information) 4				
Comment		52		Description of any alternative discrepant results. (Do not enter anything if it is just inadequate decimal places or if recalculation from numbers has already been described in RRDATA) Also mention if alternative adjustment available (but by same number of adjusters). Also if alternative form of dose-response (e.g. per unit dose as well as categorical)

**Other rules**

Only one lifetime and/or one current definition of asthma per study. Choose near-equivalent(s) to "current" and "lifetime". Keep record in field OTHAST if others available, mention but do not enter exacerbation of asthma. If the paper calls it asthma, then it qualifies! Prefer (1) medical records (2) report of physician diagnosis (3) self report. For current asthma, prefer (1) diagnosis (2) symptoms (3) taking medication (4) visit to emergency room.

Only one definition of "never/non smoker" per study. Keep record in field OTHNSM if others available.

Prospective studies - usually enter only final follow-ups (but may need to enter interims if age is important, or if different exposures)

A study in STUDYDB may have no RRs in RRDB, but this is unlikely (e.g. stratified results which cannot be combined), would probably have at least something with a DERIVE code 10 or 11 .

Within a study, each RR must have a unique combination of values for fields in cards RRDEF (excl nrr, source) and RRADJ. These cards should not have any missing (\*) data.

Within each dose-response set of RRs, only the fields DOSER, EXPLO and EXPHI should differ.

Adjustment: For CC and CS enter "least adjusted" and "most adjusted" only (except do both with and without adjustment for other ETS).

For Prospective, enter "age-adjusted" and "most adjusted"; enter unadjusted only if age-adjusted not available.

Mention alternative "equal to most" .

Timing: Do as much combining as possible (e.g. if parent's or spouse's smoking status is given as current, ex, never, then construct current vs never, current vs non, ex vs never and ever vs never; and if it is e.g. in childhood and as an adult, construct child vs not-child, adult vs not-adult, child vs none, adult vs none, any vs none.

Dose-response data (including biochem, and total if given as semi-quantitative): If given 3 or more levels, enter as a dose-response sequence (i.e. 2 vs 1, 3 vs 1, 4 vs 1 etc), and also construct "all others" vs "lowest" (which will have DOSER = 1, and "B" in EXPLO/EXPHI)

Enter both as categories (DOSER=2...) and as regression model (DOSER=b) if available in both forms.

If dose response is within ETS-exposed (e.g. high categories vs low omitting non) use separate level of MEASEX (not very satisfactory - any better ideas?)

If only highest dose vs none/lowest (i.e. no data for middle category), enter as DOSER = 2 (not very satisfactory - any better ideas?)

Stratified data: If results available by sex, enter sex-separate data only; enter sexes-combined only if sexes-separately not available. If age-specific, race-specific or age- and race-specific results available, enter all of these, and also construct and enter overall data. Use to construct age- and race- adjusted results if appropriate. Record other stratifying fields in OTHRES/OTHSTR, and use to construct overall/adjusted results if appropriate.

Parents: construct combinations (eg mother vs not mother, mother vs none etc) but do not do "both parents" vs "one or none parents" unless this is all that is available. Also do mother adjusted for father, and vice versa. TEMPLATE-PARENTS.xls (which was originally for IESAST) may be useful

Household: Enter RRs for any individual persons/combinations as given, as non-dose-response. Also construct "all persons" if possible, but do not construct any other combinations. In addition, numbers of persons should be treated as a dose-response variable if possible. (I do not think this should involve any duplication of data entry, but it doesn't matter if it does). Other combinations may be identified later. Prefer (1) household members smoke in home; (2) household members smoke (anywhere); (3) household members smoke in same room as subject.

### **Abbreviations**

These can be used in text fields or comments without explanation:

- phys diag = physician diagnosed
- MLR = multiple logistic regression
- SPT = skin prick test
- SOB = shortness of breath
- URTI = upper respiratory tract infection