
International Smoking Statistics

Web Edition

A collection of worldwide historical data

Italy

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¹ See footnotes to Tables

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¹ See footnotes to Figures

Preface

International Smoking Statistics is a collection of smoking data covering most of Europe and various other economically developed countries. The second edition (published by Wolfson Institute of Preventive Medicine and OUP, 2002, www.oup.co.uk/isbn/0-19-850856-5) included data for 30 countries up to 1995. Since 2006, work has been ongoing to make individual country updates available online. Please register at www.pnlee.co.uk if you wish to be informed when updates are posted.

The methods used in the web edition are essentially unchanged from those of the second edition, although some minor changes are included in the online Methods chapter. Readers are strongly recommended to consult the Methods chapter.

The two main types of data presented are sales data and survey data. We give the results of the original authors as closely as possible, whilst presenting them in a uniform format.

Sales data give the total national consumption of tobacco. Data on sales of cigarettes and of all tobacco products are presented, usually from about 1920. Estimates of the consumption of hand-rolled cigarettes are included where possible, as are data on the types of manufactured cigarettes sold. The Tobacco Research Council provided most of the sales data until 1973, while later sales data were obtained from government and industry sources.

Survey data provide information on the prevalence and amount of smoking according to age and sex. These were obtained from a wide variety of surveys. Some survey data are available for the early part of the 20th century, but for most countries they are available only from the 1950s or 1960s onwards.

In additional tables we calculate further statistics by combining sales and survey data using certain standardized assumptions. The figures are intended to provide an easily interpretable summary of the data presented in the tables, and the commentary has deliberately been kept to a minimum.

Downloads

Updates currently available to download from www.pnlee.co.uk/iss.htm include:

Methods, including

Appendix I: *Estimated size of adult population;*

Appendix II: *Comparisons of manufactured and hand-rolled cigarettes and differences in the way they are smoked;*

Appendix III: *Consumption category estimation;*

Comparisons between countries;

Updated country chapters (see *Methods* for current list);

Tables from each updated chapter, in Excel format, including extended versions of Tables 4 and 6 and Figure 3 for chapters issued since January 2011;

Supplement 1: *Estimation of sex-specific smoking statistics by standardized age groups and time periods.* [The web edition comprises a brief Update

Note, together with tables (in Excel format only) for the countries with a chapter in the web edition. The original Supplement 1 to the second edition (an extended version of Appendix IV to the second edition) is also available and gives a full description and tables for the other countries].

Also available from the same source are:

Supplement 2 to the second edition: *Estimating past smoking habits by an indirect method. An investigation into a method based on recall, with application to Great Britain.* [This supplement is an extended version of Appendix V to the second edition];

IMASS, a comprehensive Excel database system, based on WHO mortality data and smoking statistics from Supplement 1. The IMASS system includes powerful routines for creating graphs and tables.

Acknowledgements

We would like to acknowledge the tobacco industry for their financial support and for providing some of the sales data in International Smoking Statistics.

We would also like to thank the many government and research organizations and individuals who supplied much of the information included.

We thank Yvonne Cooper, Pauline Wassell and Diana Morris for maintenance of our references database.

We are indebted to G. F. Todd, past director of the Tobacco Research Council, who, shortly before he died in 1988, had prepared a draft report from which the first edition of International Smoking Statistics developed.

Professor Nicholas Wald was an editor of earlier editions, and we thank him for his support and encouragement.

We alone bear the responsibility for the analysis and interpretation of the data presented.

Introduction

Sales data

See Tables 1-3 and *Notes on sources of sales data*.

Until 1955 sales data were available only for 5-year periods. They show no evidence of war-time shortages, but rather show a depression in sales lasting from the 1930s through to the early 1950s.

The data presented are of tobacco sold legally. The extent of smuggling is difficult to estimate but various sources suggest that it amounted to an extra 10-30% of the legal tobacco market up to the 1980s, but then reduced, with recent estimates below 3%. The greatest part of this reduction in smuggled volume seems to have taken place during the 2000s.

From 1881 until 1950 sales of manufactured cigarettes per adult increased slowly from virtually zero to 2 per day. Sales continued to rise until the mid-1980s, when they reached 6 cigarettes per day, then decreased to 5 per day through the 1990s. A sharp increase back to nearly 6 cigarettes per day during the early 2000s may reflect the reduction in smuggled volume. Sales then reduced again to 5 cigarettes per day by 2005. Hand-rolled cigarette consumption is estimated to have declined to negligible levels by the mid-1960s but started to increase again in the mid 1990s. However, hand rolling tobacco makes a minimal contribution to overall sales.

Sales of all tobacco products per adult varied between 2 and 3 g per day from 1881 to 1955. After this it started to rise, reaching 6 g by the mid 1970s and remaining in the range 5-6 g thereafter.

Before 1905 virtually all tobacco was consumed in forms other than cigarettes. By 1925, 40% of all tobacco was consumed as manufactured cigarettes. This proportion increased to 97% by 1975 and has been over 98% since 1983. The proportion of manufactured cigarettes that were filtered was already nearly 30% in 1961, and continued to increase, reaching 90% about 1980. Sales of cigars and cigarillos decreased from about 25% of all tobacco in 1925 to less than 1% in the 1980s. A very similar pattern was seen for sales of pipe and hand-rolling tobacco. The consumption of smokeless tobacco has been very low since the 1940s.

Survey data

See Tables 4-8 and *Notes on sources of survey data*.

In 1949 the prevalence of cigarette smoking among those aged 15 years and over was 70% in men and 10% in women. The difference between the percentages of men and women who smoke has decreased since then. The prevalence among men decreased to around 30% by 2005. Estimates of the prevalence among women vary considerably, with some estimates as high as 30% in the 1970s and 1980s, but most are between 15% and 25% throughout the 1990s and 2000s. Estimates higher than these were generally results from Eurobarometer surveys (survey sources 41 and 42) which have been criticised for having small sample sizes and for generating “estimates that are in some cases widely discrepant from more substantive national sources” (Bogdanovica *et al* (2011)).

Nationally based data on adult smoking by age have been available from 1965. At all ages, the prevalence of smoking has decreased since then among men, but among women prevalence rose considerably in all age groups between 1965 and 1980. The prevalence among women has remained fairly stable in each age group throughout the 1990s and 2000s, with no trends evident. The tendency for older age groups to have a lower percentage of smokers is more marked in women than in men. Around 1% of men smoked other products but not cigarettes, with the prevalence somewhat higher for older men. Only very few women smoke products other than cigarettes.

Most surveys of smoking among teenagers were locally based, making comparisons over time difficult. When first surveyed in 1962, the prevalence of smoking among teenage boys was very high. The prevalence among girls was much lower, although when occasional smokers were included, the difference between the sexes was not great at age 18 years and over. From the late 1970s some surveys show similar prevalence in boys and girls. Two international survey series provide teenager smoking prevalence information for 1995 onwards. The ESPAD series (survey source 36) shows teenage prevalence values much higher than those given for similar age groups in surveys of the general population: for ages 15-16, prevalence of daily smoking was around 23% in both boys and girls. The rates of smoking including occasional smoking are somewhat higher in girls than in boys: around 35% in boys and 40% in girls. No major change in prevalence is evident during 1995-2007. Italy participated in the HBSC series in 2002 and 2006 (survey source 37). At age 15 prevalence was similar in girls and boys (daily smoking around 15%, at least weekly smoking 20-25%), and was slightly lower for both sexes in 2006 than in 2002.

Apart from surveys where the original authors made adjustments to include clandestine sales, comparison of survey and sales data suggests that the degree of under-statement increased from 5% in the 1960s to 30-40% in the 2000s. However, as the extent of the clandestine market is unknown (but was probably substantial for some years) these estimates should be regarded with caution: they exclude clandestine sales and so under-estimate the true extent of the under-statement implied by the surveys.

In the period 1949-2010, the estimated number of cigarettes smoked per person per day (sales-adjusted) decreased for men from 8-10 (up to the mid 1980s) to 6-8 thereafter. For women, although estimates varied considerably, it increased from less than 1 to around 3-5 during that period.

Table 1.1 Total annual sales of tobacco products, 1880-1973

Year	Manufactured cigarettes		Cigars		Cigarillos		Smoking tobacco tonnes	Snuff tonnes	All tobacco products tonnes
	tonnes	millions	tonnes	millions	tonnes	millions			
1880-83	9	9	6 215	1 243	0	0	6 615	3 473	16 334
1904-05	1 344	1 344	7 093	1 419	0	0	5 943	2 268	16 648
1909-10	2 646	2 646	9 104	1 821	0	0	5 477	2 134	19 336
1914-15	4 219	4 219	7 744	1 549	0	0	6 023	1 803	19 788
1919-20	6 466	6 466	7 873	1 575	0	0	7 979	2 184	24 502
1921-25	11 150	11 148	6 640	1 328	0	0	7 760	2 090	27 630
1926-30	13 900	13 900	5 940	1 188	70	29	7 760	1 720	29 400
1931-35	12 910	12 911	2 990	597	920	366	6 260	1 320	24 390
1936-40	17 340	17 342	2 260	451	1 720	689	5 440	1 090	27 850
1941-45	20 750	20 748	2 340	468	1 320	527	5 620	730	30 760
1946-50	22 350	22 347	1 960	391	700	278	5 220	540	30 760
1951-55	33 980	33 978	2 100	420	190	75	5 130	540	41 940
1956	40 400	40 398	1 700	340	160	62	5 260	500	48 020
1957	42 670	42 658	1 630	326	140	55	5 080	500	50 010
1958	44 910	44 906	1 550	309	130	52	5 220	500	52 300
1959	46 590	46 584	1 490	297	130	51	5 260	500	53 970
1960	48 320	48 313	1 450	289	130	52	5 130	450	55 480
1961	51 870	51 864	1 420	284	130	52	4 850	450	58 730
1962	55 840	55 826	1 390	277	180	71	4 540	410	62 340
1963	57 160	57 154	1 350	269	160	65	4 260	410	63 340
1964	58 610	58 599	1 320	263	180	72	4 130	360	64 590
1965	60 630	60 621	1 140	227	180	72	3 810	320	66 070
1966	64 660	64 645	1 160	232	180	73	3 540	270	69 810
1967	66 670	66 657	1 080	216	140	54	3 580	270	71 740
1968	68 470	68 454	1 100	220	140	56	3 400	270	73 380
1969	68 540	68 526	1 080	215	120	49	3 220	230	73 180
1970	69 550	69 534	940	188	120	46	2 900	180	73 690
1971	70 840	70 830	920	183	150	60	2 720	180	74 810
1972	74 180	74 165	860	172	130	53	2 450	180	77 800
1973	80 140	80 131	790	158	130	50	2 310	140	83 510

Source: see *Notes on sources of sales data: Sales data before 1974*, p. 42

Table 1.2 Total annual sales of tobacco products, 1974-2010

Year	Manufactured cigarettes		Cigars ¹		Cigarillos		Snuff tonnes	Pipe and hand-rolling tobacco tonnes	All tobacco other than cigarettes ² tonnes	All tobacco products ³ tonnes
	tonnes	millions	tonnes	millions	tonnes	millions				
1974	87 500	87 500	945	210			140	2 000	3 085	90 585
1975	88 800	88 800	900	200			130	1 800	2 830	91 630
1976	89 700	89 700	855	190			120	1 700	2 675	92 375
1977	90 300	90 300	855	190			110	1 500	2 465	92 765
1978	88 800	88 800	720	160			100	1 400	2 220	91 020
1979	96 800	96 800	765	170			100	1 300	2 165	98 965
1980	98 700	98 700	810	180			90	1 200	2 100	100 800
1981	100 900	100 900	855	190			80	1 200	2 135	103 035
1982	101 600	101 600	855	190			80	1 000	1 935	103 535
1983	102 300	102 300	855	190			70	900	1 825	104 125
1984	104 283	104 283							1 682	105 965
1985	105 315	105 315							1 581	106 895
1986	104 711	104 711							1 492	106 203
1987	102 181	102 181							1 637	103 818
1988	97 576	97 576							1 551	99 127
1989	97 455	97 455							1 466	98 921
1990	90 904	90 904							1 434	92 338
1991	89 108	89 108							1 416	90 524
1992	88 194	88 194							1 208	89 402
1993	88 618	88 618	652	130	227	151	36	626	1 541	90 158
1994	89 460	89 460							1 229	90 689
1995	89 838	89 838							1 296	91 133
1996	89 361	89 361							1 253	90 614
1997	89 230	89 230	545	109	185	123	27	518	1 274	90 504
1998	89 903	89 903	548	110	205	136	25	534	1 311	91 214
1999	95 886	95 886							1 400	97 300
2000	100 354	100 354							1 400	101 800
2001	101 595	101 595							1 400	103 000
2002	102 932	102 932							1 400	104 300
2003	101 582	101 582	629	126	402	268	13	528	1 572	103 154
2004	98 846	98 846	668	134	424	283	12	659	1 763	100 609
2005	92 822	92 822	645	129	430	287	11	777	1 863	94 685
2006	93 807	93 807	694	139	479	319	12	856	2 041	95 848
2007	92 821	92 821	743	149	513	342	12	1 014	2 282	95 103
2008	92 000	92 000	768	154	543	362		1 298	2 608	94 608
2009	89 100	89 100								
2010	87 000	87 000								

¹ Cigars and Cigarillos combined for 1974-1983.

² The values for 1999-2002 are estimated – see *Notes on sources of sales data*, p.42.

³ The values for 1999-2002 are rounded to the nearest 100.

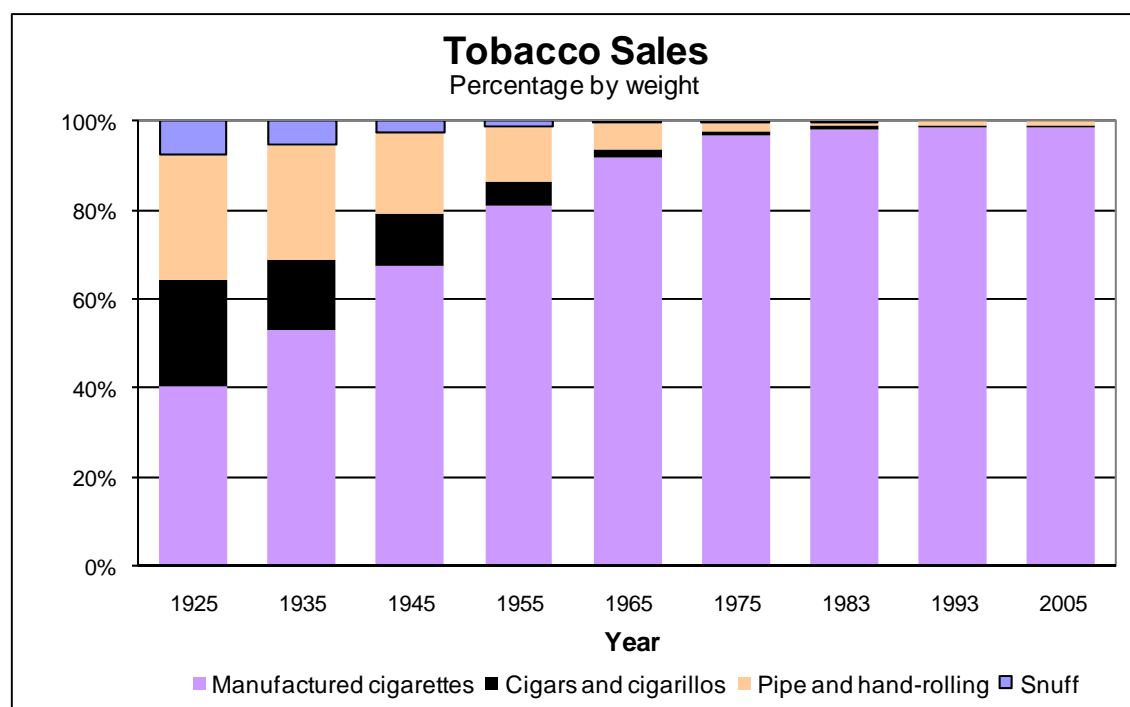
Source: see *Notes on sources of sales data: Sales data for 1974 onwards*, p. 42

Table 1.3 Percentage of sales of tobacco in different forms (by weight), selected years

Year	Manufactured cigarettes %	Cigars and cigarillos %	Pipe and hand-rolling %	Snuff %
1925	40.3	24.0	28.1	7.6
1935	52.9	16.0	25.7	5.4
1945	67.5	11.9	18.3	2.4
1955	81.0	5.5	12.2	1.3
1965	91.8	2.0	5.8	0.5
1975	96.9	1.0	2.0	0.1
1983	98.2	0.8	0.9	0.1
1993	98.5	0.7	0.7	0.0
2005	98.5	0.7	0.8	0.0

Source: calculated from Tables 1.1 & 1.2

Figure 1 Percentage of sales of tobacco in different forms (by weight), selected years



Source: Table 1.3

Table 2 Sales of cigarettes (including estimated number of hand-rolled cigarettes) and of all tobacco products.
Annual total and average per adult (age 15 years and over) per day

Year	Manufactured cigarettes		Hand-rolled cigarettes		Total cigarettes		All tobacco products ¹	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day
1881-83	9	0.0					16 334	2.4
1904-05	1 344	0.2					16 648	2.1
1909-10	2 646	0.3					19 336	2.3
1914-15	4 219	0.5					19 788	2.3
1919-20	6 466	0.7					24 502	2.7
1921-25	11 148	1.1					27 630	2.8
1926-30	13 900	1.4					29 400	2.9
1931-35	12 911	1.2					24 390	2.3
1936-40	17 342	1.5					27 850	2.5
1941-45	20 748	1.8					30 760	2.6
1946-50	22 347	1.8					30 760	2.5
1951-55	33 978	2.6	2 565	0.2	36 543	2.8	41 940	3.2
1956	40 398	3.0	2 367	0.2	42 765	3.2	48 020	3.6
1957	42 658	3.2	2 032	0.2	44 690	3.3	50 010	3.7
1958	44 906	3.3	1 827	0.1	46 733	3.4	52 300	3.8
1959	46 584	3.4	1 578	0.1	48 162	3.5	53 970	3.9
1960	48 313	3.5	1 283	0.1	49 596	3.6	55 480	4.0
1961	51 864	3.7	970	0.1	52 834	3.8	58 730	4.2
1962	55 826	4.0	681	0.0	56 507	4.0	62 340	4.4
1963	57 154	4.0	426	0.0	57 580	4.1	63 340	4.5
1964	58 599	4.1	207	0.0	58 806	4.1	64 590	4.5
1965	60 621	4.2	191	0.0	60 812	4.2	66 070	4.6
1966	64 645	4.5	0	0.0	64 645	4.5	69 810	4.8
1967	66 657	4.6	0	0.0	66 657	4.6	71 740	4.9
1968	68 454	4.7	0	0.0	68 454	4.7	73 380	5.0
1969	68 526	4.7	0	0.0	68 526	4.7	73 180	5.0
1970	69 534	4.7	0	0.0	69 534	4.7	73 690	5.0
1971	70 830	4.7	0	0.0	70 830	4.7	74 810	5.0
1972	74 165	4.9	0	0.0	74 165	4.9	77 800	5.2
1973	80 131	5.3	0	0.0	80 131	5.3	83 510	5.5
1974	87 500	5.7	0	0.0	87 500	5.7	90 585	5.9
1975	88 800	5.7	0	0.0	88 800	5.7	91 630	5.9
1976	89 700	5.7	0	0.0	89 700	5.7	92 375	5.9
1977	90 300	5.7	0	0.0	90 300	5.7	92 765	5.9
1978	88 800	5.6	0	0.0	88 800	5.6	91 020	5.7
1979	96 800	6.0	0	0.0	96 800	6.0	98 965	6.2

Table 2 (continued)

Year	Manufactured cigarettes		Hand-rolled cigarettes		Total cigarettes		All tobacco products ¹	
	Total annual millions	Number/adult/day	Total annual millions	Number/adult/day	Total annual millions	Number/adult/day	Total annual tonnes	Grams/adult/day
1980	98 700	6.1	0	0.0	98 700	6.1	100 800	6.2
1981	100 900	6.1	0	0.0	100 900	6.1	103 035	6.3
1982	101 600	6.2	0	0.0	101 600	6.2	103 535	6.3
1983	102 300	6.2	0	0.0	102 300	6.2	104 125	6.3
1984	104 283	6.3	0	0.0	104 283	6.3	105 965	6.4
1985	105 315	6.3	0	0.0	105 315	6.3	106 895	6.4
1986	104 711	6.2	0	0.0	104 711	6.2	106 203	6.3
1987	102 181	6.0	0	0.0	102 181	6.0	103 818	6.1
1988	97 576	5.6	0	0.0	97 576	5.6	99 127	5.7
1989	97 455	5.6	0	0.0	97 455	5.6	98 921	5.7
1990	90 904	5.2	0	0.0	90 904	5.2	92 338	5.3
1991	89 108	5.1	0	0.0	89 108	5.1	90 524	5.2
1992	88 194	5.0	0	0.0	88 194	5.0	89 402	5.1
1993	88 618	5.0	200	0.0	88 818	5.0	90 158	5.1
1994	89 460	5.1	200	0.0	89 660	5.1	90 689	5.1
1995	89 838	5.1	200	0.0	90 038	5.1	91 133	5.2
1996	89 361	5.0	200	0.0	89 561	5.1	90 614	5.1
1997	89 230	5.0	200	0.0	89 430	5.0	90 504	5.1
1998	89 903	5.1	200	0.0	90 103	5.1	91 214	5.1
1999	95 886	5.4	200	0.0	96 086	5.4	97 300	5.5
2000	100 354	5.6	200	0.0	100 554	5.6	101 800	5.7
2001	101 595	5.7	200	0.0	101 795	5.7	103 000	5.8
2002	102 932	5.8	285	0.0	103 217	5.8	104 300	5.8
2003	101 582	5.6	325	0.0	101 907	5.6	103 154	5.7
2004	98 846	5.4	463	0.0	99 309	5.4	100 609	5.5
2005 ²	92 822	5.0	593	0.0	93 415	5.1	94 685	5.1
2006	93 807	5.1	686	0.0	94 493	5.1	95 848	5.2
2007	92 821	5.0	844	0.0	93 665	5.0	95 103	5.1
2008 ³	92 000	4.9	1 128	0.1	93 128	5.0	94 608	5.1
2009 ³	89 100	4.8						
2010 ³	87 000	4.7						

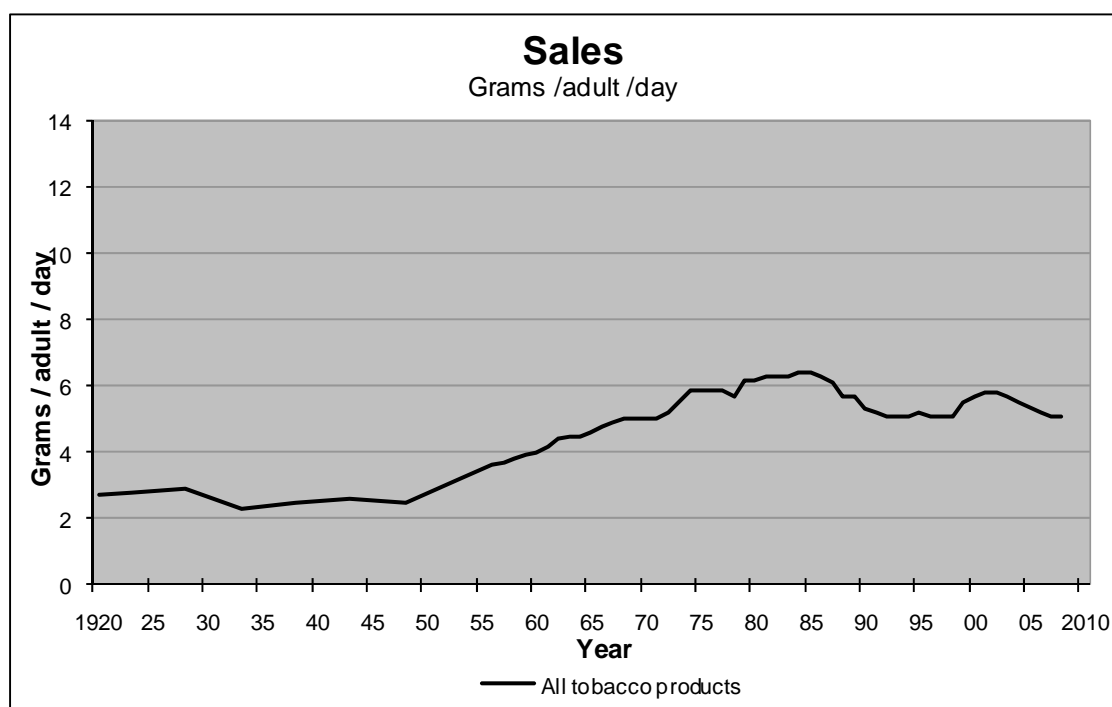
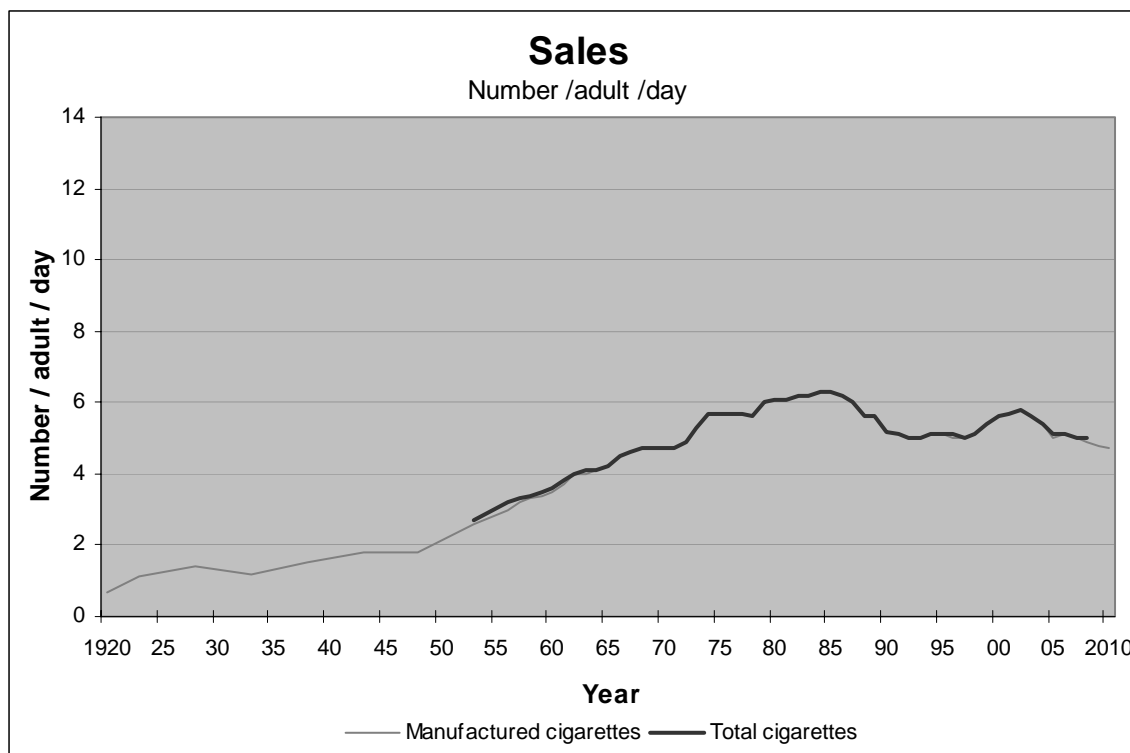
¹ The values for 1999-2002 are estimated – see *Notes on sources of sales data*.

² Uses population data for 2006.

³ Uses population data for 2007.

Source: Manufactured cigarettes and all tobacco products, Tables 1.1 and 1.2. Hand-rolled cigarettes, see *Notes on sources of sales data: Estimates of numbers of hand-rolled cigarette*, p. 44. Population, see *Population, Methods* p. 14.

Figure 2 Sales of (i) manufactured and total¹ cigarettes and (ii) all tobacco products. Average per adult (aged 15 years and over) per day



1 Includes estimated hand-rolled cigarette consumption
 Source: Table 2
 Table 2 includes data for earlier years (not shown in this figure).

Table 3 Manufactured cigarettes: percentage of total sales as filter cigarettes; sales-weighted average machine yields per cigarette of tar (SWAT)

Year	Filter %	SWAT mg/cig
1961	29.2	
1962	33.6	
1963	38.4	
1964	39.0	
1965	39.6	
1966	43.0	
1967	44.0	
1969	55.7	
1970	60.0	
1971	66.8	
1972	71.8	
1973	77.0	
1974	80.5	
1975	84.3	
1976	85.0	
1977	86.8	
1978	86.7	
1979	84.8	
1980	88.6	
1981	89.3	
1983	93.0	
1984		17.3
1992		10.3
1993		10.3
1995		9.8
1996		9.6
1997	95.4	9.2
1998	95.5	9.1
1999	95.6	8.6
2000		8.6
2001		8.5
2002		8.4
2003		6.9

Source: see *Notes on sources of sales data: Plain/Filter cigarette sales*, p. 44 and *Tar and nicotine machine yields of cigarettes*, p. 44

Table 4M Prevalence of smoking, males: selected surveys by age
(continues on p.18)

Year	Source	Product	Frequency	Age Groups																	All ages
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	
49	14	UC	U	71																	
57	14	UC	U	65																	
57	21	UC	R	72 66 62																	68
60	22	UC	R	57 67 63 60																	63
60	23	UC	R	63 57 61 55																	59
62	6	U	*	33 43 45 59 73 67																	
62	6	U	A	52 63 61 67 79 75																	
63	7	UC	U	46																	
63	7	A	U	50																	
65	14	UC	U	55 61 68 66 53																	60
72	6	U	*	46 59 69 73 79 82																	
72	6	U	A	64 75 78 85 86 90																	
73	12	U	U	34																	
73	13	U	U	39																	
75	14	UC	U	53																	
76	2	U	U	56 57 54 51																	55
77	8	UC	R	29																	
77	8	UC	A	38																	
77	20	U	U	62																	
79	9	UC	A	67																	
79	9	A	A	68																	
79	24	U	*	8 25																	
80	1	UC	U	44 64 61 61 48 31																	53
80	1	A	U	23 61 65 62 62 52 39																	54
80	1	U	U	2 6 16 31 43 42																	
80	5	U	U	1 4 13 19 27 42 48 39																	
81	3	U	*	13 31																	
81	3	U	A	24 42																	
81	11	MC	U																		
82	10	U	U	54																	
82	25	UC	R	53 55 52 50 49 47 47 45 39 33																	47
83	1	U	U	33 56 53 52 46 35 25																	46
83	18	UC	R	60 50 50 47																	49
83	18	UC	A	61 52 53 47																	51
83	18	A	A	61 53 53 47																	51
86	16	UC	R	50 49 42 38																	44
86	16	UC	A	55 53 47 40																	47
86	16	A	A	55 53 47 41																	48
86	17	UC	R	45 38 34 30																	35
86	17	UC	A	49 41 37 32																	37
86	17	A	A	50 41 37 33																	38
87	1	UC	U	30 49 49 44 41 30 19																	41
87	1	A	U	31 50 50 44 41 31 21																	
87	15*	UC	R	33 47 38 26																	38
87	15*	A	R	40																	
87	41	UC	U	33 48 40 31																	38
87	41	A	U	33 51 42 32																	40

Table 4F Prevalence of smoking, females: selected surveys by age
(continues on p.19)

Year	Source	Product	Frequency	Age Groups																	All ages											
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+							
49	14	UC	U	10																												
57	14	UC	U	6																												
57	21	UC	R																													
60	22	UC	R																													
60	23	UC	R																													
62	6	U	*		6	12	8	23	25	27																						
62	6	U	A		16	29	30	47	60	69																						
63	7	UC	U	27																												
63	7	A	U	27																												
65	14	UC	U	9				9			11		8			4				8												
72	6	U	*		38	53	53	51	57	61																						
72	6	U	A		63	78	78	81	83	81																						
73	12	U	U		24																											
73	13	U	U		29																											
75	14	UC	U	16																												
76	2	U	U					42			29		16		14						26											
77	8	UC	R					25																								
77	8	UC	A					39																								
77	20	U	U	32																												
79	9	UC	A	18																												
79	9	A	A	18																												
79	24	U	*	2		24																										
80	1	UC	U					23			26		18		13		7		3			17										
80	1	A	U					10			32		26		18		13		7		3			17								
80	1	U	U		0	2	8	11	16	23																						
80	5	U	U	0	5	9	23	26	37	39	47																					
81	3	U	*					12			32																					
81	3	U	A					25			47																					
81	11	MC	U					44			49		38		26		20						37									
82	10	U	U	37																												
82	25	UC	R					43			41		33		28		23		18		16		13		11		8					22
83	1	U	U					20			27		24		16		12		6		4						18					
83	18	UC	R								35		24		12		8									15						
83	18	UC	A								41		29		12		8									17						
83	18	A	A								41		29		12		8									17						
86	16	UC	R								31		24		20		12									20						
86	16	UC	A								35		27		23		13									22						
86	16	A	A								35		27		23		13									22						
86	17	UC	R								29		31		22		21									25						
86	17	UC	A								32		34		25		23									28						
86	17	A	A								32		34		25		22									28						
87	1	UC	U					16			30		25		16		10		7		2						17					
87	1	A	U					16			30		25		16		10		7		3											
87	15*	UC	R					31			35				22				10							27						
87	15*	A	R	27																												
87	41	UC	U					32			41		20		16									28								
87	41	A	U					32			41		20		16									28								

Table 4M (continued from p.16, continues on p.20)
Prevalence of smoking, males

Year	Source	Product	Frequency	Age Groups																	All ages					
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+	
88	3	U	*			10			28																	
88	3	U	A			16			37																	
88	26	UC	*			7			24																	
88	26	UC	A			14			33																	
88	41	TC	U					27			47			52						34					40	
88	41	A	U					30			47			53						35						41
88	41	TC	U					31			41			41						34						37
88	41	A	U					31			42			43						35						38
89	16	UC	R								37		43		37				32							38
89	16	UC	A								41		49		38				36							42
89	16	A	A								41		49		38				36							42
89	17	UC	R								44		32		31				33							32
89	17	UC	A								45		32		32				33							32
89	17	A	A								45		34		33				34							34
89	27	U	U				10																			
89	28	U	*			9			20																	
89	28	U	R			20			31																	
89	41	TC	U					31			39			30						38						35
89	41	A	U					31			41			31						39						36
89	41	TC	U					27			45			40						32						36
89	41	A	U					27			47			42						32						37
90	15	UC	R											38												
90	27	U	U					13																		
90	29	U	*			2	6																			
90	29	U	R	0		6																				
90	30	UC	*			8			25																	
90	30	UC	R			16			34																	
90	41	MC	U					34			40			45						26						36
90	41	TC	U					34			40			45						27						36
90	41	A	U					34			44			47						27						38
91	1	UC	U					29			42		45		42			34		28		17				37
91	1	A	U					29			43		46		43			35		29		19				37
91	27	U	U					16																		
91	40	U	U											38												
91	41	MC	U					33			40			43						29						36
91	41	TC	U					33			42			43						29						37
91	41	A	U					33			42			44						31						38
92	19	A	U																28	21	18	14				22
92	27	U	U					24																		
92	31	UC	R						53																	
92	41	MC	U					35			41			46						38						40
92	41	TC	U					36			41			48						38						41
92	41	A	U					37			44			52						39						43
93	32	A	U											38												
93	33	U	U			8																				
93	34	U	*			4	10	18	36																	
93	34	U	A			9	21	28	47																	
93	38	U	U					27			42		43		42			35			23					36

Table 4F (continued from p.17, continues on p.21)
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																	All ages					
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+	
88	3	U	*			7			21																	
88	3	U	A			12			29																	
88	26	UC	*			5			20																	
88	26	UC	A			9			27																	
88	41	TC	U					15			44		28			15									26	
88	41	A	U					15			44		28			15										26
88	41	TC	U					29			34		26			20										27
88	41	A	U					29			34		26			20										27
89	16	UC	R							29		25		18		11										19
89	16	UC	A								33		31		19		12									22
89	16	A	A								32		31		19		12									22
89	17	UC	R								22		27		24		18									24
89	17	UC	A								23		28		25		19									25
89	17	A	A								23		28		25		19									24
89	27	U	U				9																			
89	28	U	*			4			9																	
89	28	U	R			9			17																	
89	41	TC	U					18			39		24			14										24
89	41	A	U					18			39		24			14										24
89	41	TC	U					20			33		39			21										28
89	41	A	U					20			35		40			21										28
90	15	UC	R																							
90	27	U	U					10																		
90	29	U	*			1	1																			
90	29	U	R	2		2																				
90	30	UC	*			4			20																	
90	30	UC	R			8			29																	
90	41	MC	U					26			44		25			11										25
90	41	TC	U					27			44		25			11										25
90	41	A	U					27			44		25			11										25
91	1	UC	U					17			26		26		18		12		7		2					17
91	1	A	U					17			26		26		18		11		7		2					17
91	27	U	U					13																		
91	40	U	U																							
91	41	MC	U					21			37		32			14										25
91	41	TC	U					21			37		32			14										25
91	41	A	U					21			37		32			14										25
92	19	A	U													12		7		7		4				8
92	27	U	U					12																		
92	31	UC	R																							
92	41	MC	U					25			27		33			14										24
92	41	TC	U					25			27		34			14										24
92	41	A	U					25			27		34			14										24
93	32	A	U																							
93	33	U	U			3																				
93	34	U	*			2	8	9	30																	
93	34	U	A			8	20	17	32																	
93	38	U	U					13			25		26		21		12				5					17

Table 4M (continued from p.18, continues on p.22)
Prevalence of smoking, males

Year	Source	Product	Frequency	Age Groups																	All ages																											
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79	80+																							
94	1	UC	U	20				42				42				39				31				22				16				32																
94	1	A	U	20				42				42				40				31				22				17				33																
94	16	UC	R					44				35				35				32								34																				
94	16	UC	A					44				35				35				33								34																				
94	16	A	A					44				35				36				33								35																				
94	17	UC	R					32				34				29				21								29																				
94	17	UC	A					37				36				30				23								30																				
94	17	A	A					37				36				32				25								32																				
94	35	UC	*	4																																												
94	35	UC	R	6																																												
94	35	UC	A	4	7	25	34																		11																							
94	38	U	U					26				41				44				41				32				21				34																
94	41	MC	U					33				43				43								25				36																				
94	41	TC	U					33				44				43								25				36																				
94	41	A	U					33				45				47								26				38																				
94	42	MC	U					33				44				43								25				36																				
94	42	TC	U					33				44				43								25				36																				
94	42	A	U					33				45				47								26				38																				
95	32	A	U	35																																												
95	36	UC	*					22																																								
95	36	UC	A					36																																								
95	38	U	U					28				40				44				39				31				24				14				34												
95	39	U	U	32																																												
95	42	MC	U					34				40				41								29				36																				
95	42	TC	U					35				40				41								29				36																				
95	42	A	U					36				42				43								30				38																				
96	38	U	U					30				42				43				42				34				20				35																
97	38	U	U					29				41				41				38				32				19				34																
97	39	U	U	34																																												
97	44	UC	R	5	13	29	32	35	36																		22																					
97	45	UC	R	8	23	28	39	57	50																		30																					
98	38	UC	U	1	12			29	38	38	39	37	32	27	21	11			31																													
98	38	U	U	1	12			29	38	39	41	38	33	28	22	12			32																													
99	36	UC	*					19																																								
99	36	UC	A					37																																								
99	38	UC	U	3	13			30	37	39	38	38	32	27	20	11			32																													
99	38	U	U	3	13			30	37	40	39	39	33	28	20	12			32																													
99	42	U	U					34				35				42				29				35																								
00	38	UC	U					9				26				36				39				36				37				31				26				21				10				30
00	38	U	U					9				26				37				39				37				38				33				28				22				11				32
00	39	U	U	33																																												
01	15	UC	U					38				42				34				18				35																								
01	38	UC	U					9				24				36				38				37				36				31				24				19				12				30
01	38	U	U	2	12			24	36	39	38	37	32	26	20	12			31																													

Table 4F (continued from p.19, continues on p.23)
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																	All ages					
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79	80+	
94	1	UC	U								10			23		29		20		13		7		2	16	
94	1	A	U								10			23		29		20		13		7		3	16	
94	16	UC	R											30		34		20		10					23	
94	16	UC	A											31		34		20		11					23	
94	16	A	A											31		34		20		11					23	
94	17	UC	R											28		29		19		17					22	
94	17	UC	A											33		32		20		19					24	
94	17	A	A											33		32		20		19					24	
94	35	UC	*		2																					
94	35	UC	R		4																					
94	35	UC	A		2	5	17	16																	6	
94	38	U	U								13			25		27		21		13			6		17	
94	41	MC	U								20			38				26				17			25	
94	41	TC	U								20			40				26				17			25	
94	41	A	U								20			40				26				17			25	
94	42	MC	U								21			39				26				17			25	
94	42	TC	U								21			40				26				17			25	
94	42	A	U								21			40				26				17			25	
95	32	A	U															23								
95	36	UC	*																							
95	36	UC	A																							
95	38	U	U								13			24		27		21		13		7		3	17	
95	39	U	U																							
95	42	MC	U																			13			26	
95	42	TC	U																			13			26	
95	42	A	U																			13			26	
96	38	U	U								15			24		30		24		13			6		18	
97	38	U	U								15			23		28		22		14			6		17	
97	39	U	U																							
97	44	UC	R		16	29	29	39	30	40															28	
97	45	UC	R		7	9	20	28	27	29															19	
98	38	UC	U		2		8		17	21			23		28		22		14	12		7		2	17	
98	38	U	U		2		8		18	21			23		28		22		14	12		7		2	17	
99	36	UC	*																							
99	36	UC	A																							
99	38	UC	U		3		8		17	21			21		28		21		17	12		7		4	17	
99	38	U	U		3		8		17	21			21		28		21		18	13		8		4	17	
99	42	U	U								23			27		23						11			20	
00	38	UC	U				6		15	21			21		28		24		16	11		7		3	17	
00	38	U	U				6		15	22			21		28		24		16	12		7		3	17	
00	39	U	U																							
01	15	UC	U								30			34				22				8			24	
01	38	UC	U								5		17	20		21		26		22	19	13		7	3	17
01	38	U	U		1				7	17	21		21		26		22		19	13		7		3	17	

Table 4F (continued from p.21, continues on p.25)
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																	All ages					
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+	
02	15	UC	U	27				30				21				11					22					
02	37	A	*		3	16																				
02	37	A	R		7	25																				
02	38	UC	U	5			20	20	21	24	24	15	11	9	3							17				
02	38	U	U	1	7		20	21	22	25	24	16	12	9	3							17				
02	42	MCR		35				36			31			19					29							
02	42	TC	R	35				36			31			19					29							
02	42	A	R	35				36			31			19					29							
02	42	MC	U	40				40			36			21					32							
02	42	TC	U	40				40			36			21					32							
02	42	A	U	40				40			36			21					32							
03	15	UC	U	21				34				22				9					23					
03	36	UC	*	22		33																				
03	36	UC	A	40		46																				
03	38	UC	U	7			19	21	22	25	24	18	14	6	2							17				
03	38	U	U	1	10		20	21	22	25	24	19	15	7	3							17				
03	39	U	U	18																						
04	15	UC	U	27				31				23				8					23					
04	39	U	U	18																						
05	15	UC	U	21				31				25				8					22					
05	38	UC	U	5			17	21	21	22	22	16	13	8	4							16				
05	38	U	U	2	7		17	22	21	22	23	16	14	8	4							16				
05	39	UC	R	9				22	22	20	21	24	26	22	18	14	6					17				
05	42	MCR		26				25			21			11					19							
05	42	TC	R	28				26			21			11					19							
05	42	A	R	28				26			21			11					19							
05	42	MC	U	30				31			25			14					23							
05	42	TC	U	32				33			26			14					24							
05	42	A	U	32				34			26			14					25							
06	15	UC	U	26				27				19				9					20					
06	37	A	*		2	14																				
06	37	A	R		5	20																				
06	38	UC	U	6			14	23	22	22	24	21	15	8	3							17				
06	38	U	U	1	8		14	24	22	23	24	21	15	8	3							17				
06	42	MCR		19				21			19			12					17							
06	42	TC	R	22				22			19			12					18							
06	42	A	R	24				22			19			12					18							
06	42	MC	U	28				25			25			14					21							
06	42	TC	U	34				27			26			15					23							
06	42	A	U	40				27			26			15					24							
07	15	UC	U	16				29				19				7					19					
07	36	UC	*	25																						
07	36	UC	A	39																						
07	38	UC	U	6			17	20	22	21	23	20	14	8	4							16				
07	38	U	U	2	7		17	21	22	21	23	20	15	9	4							17				
07	43	UC	A	26																						

Table 4M (continued from p. 22)
Prevalence of smoking, males

Year	Source	Product	Frequency	Age Groups																	All ages			
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79
08	15	UC	U					30				30				29				11				26
08	38	UC	U			10		31	35	37		35		32		29	26	15		9		28		
08	38	U	U	2		12		31	35	37		35		33		31	28	17		9		29		
08	43	UC	A	35																				
09	15	UC	U					34				36				31				19				29
09	38	U	U	2		17		27	32	40		35		34		32	28	20		9		30		
09	43	UC	A	33																				
10	15	UC	U					25				29				26				11				24

Source: see *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products

Frequency: A = all smokers (including occasional)
 R = regular or daily smokers
 = unspecified
 * = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source

Table 4F (continued from p.23)
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																	All ages				
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+
08	15	UC	U						18															18	
08	38	UC	U			5			19	20				21		20			24	18	17		9	3	16
08	38	U	U		3		6		19	20				21		20			24	18	17		9	3	16
08	43	UC	A																						
09	15	UC	U						24					28					28				9		22
09	38	U	U		3		9		17	22				22		21			25	19	17		10	3	17
09	43	UC	A																						
10	15	UC	U						18					24					26				7		20

Source: see *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products

Frequency: A = all smokers (including occasional)
 R = regular or daily smokers
 U = unspecified
 * = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source

Table 5M Number of cigarettes smoked per smoker per day, males:
selected surveys by age
(continues on p.28)

Year	Source	Product	Estimated	Age Groups																	All ages		
				12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64		65-69	70-74
49	14	UC		14																			
57	14	UC		13																			
57	21	UC E												10	9.8	9.9							10
60	22	UC E											17	14	13	13							14
60	23	UC E											12	11	11	10							11
65	14	UC		13																			
73	12	UC E		1.3																			
76	2	UC							18		18		19		19								19
77	8	UC				6.5																	
79	24	UC E				8.2																	
80	1	UC				11			16		18		19		18		16					14	17
81	3	UC E			7.5			11															
81	11	MCE																					
82	25	UC E							16	18	19	19	19	19	19	17	16	15					18
83	1	UC E							19				19				15				18		
83	18	UC							19		19		19		16								18
86	16	UC							18		21		17		16								18
86	17	UC							16		17		17		14								16
87	1	UC E					14		18		19		19		17		15					12	16
87	15	UC							15														
87	41	UC E					13		15		18				14								15
88	3	UC E*			9.2			12															
88	26	UC E			5.2			8.0															
88	41	TC E					12		16		17				14								15
89	16	UC							15		19		19		17								18
89	17	UC							17		19		18		14								17
89	28	UC E			6.6			8.9															
89	41	TC E					11		18		19				15								16
90	15	UC							19														
90	30	UC E			10			9.7															
90	41	TC E					12		16		16				14								15
91	1	UC E					17		18		19		20		18		16					13	18
91	41	TC E					12		17		18				16								16
92	19	A															18	19	15	16			18
92	41	TC E					11		16		17				16								15
93	34	UC E					9.8																
93	38	UC					13		16		18		19		17						14		17
94	1	UC E					13		17		19		20		17		16				15		18
94	16	UC							15		20		18		17								18
94	17	UC							15		17		20		15								18
94	38	UC							13		16		18		20		18				14		17
94	41	TC E						9.4		12		17				17							15
94	42	TC E						9.4		15		17				17							15
95	36	UC E				9.0																	
95	38	UC						12		16		18		19		17					14		17
95	42	TC E						10		13		16									14		14
96	38	UC						12		16		18		19		17					13		16

Table 5F Number of cigarettes smoked per smoker per day, females:
selected surveys by age
(continues on p.29)

Year	Source	Product	Estimated	Age Groups																	All ages					
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+	
49	14	UC		7.9																						
57	14	UC		7.0																						
57	21	UC E																								
60	22	UC E																								
60	23	UC E																								
65	14	UC		5.8																						
73	12	UC E	0.9																							
76	2	UC								11		11		11		10							11			
77	8	UC		3.5																						
79	24	UC E		6.7																						
80	1	UC		8.9																	11					
81	3	UC E		6.6																						
81	11	MCE		10																	11					
82	25	UC E								9.4	11	12	12	12	11	11	11	11					8.9			
83	1	UC E		12																	12					
83	18	UC									11		11		9.8		10						10			
86	16	UC									12		13		11		12						12			
86	17	UC									9.9		10		11		9.8						10			
87	1	UC E		10																	11					
87	15	UC		10																						
87	41	UC E		8.0																	9.7					
88	3	UC E		7.4						8.0																
88	26	UC E		5.6						5.7																
88	41	TC E		11																	11					
89	16	UC									10		13		12		9.6						12			
89	17	UC									11		11		11		10						11			
89	28	UC E		8.2						6.1																
89	41	TC E		7.2																	10					
90	15	UC		12																						
90	30	UC E		8.8						8.4																
90	41	TC E		6.6																	11					
91	1	UC E		16																	14					
91	41	TC E		9.8																	11					
92	19	A																12	12	8.3	8.1		11			
92	41	TC E		7.2																	11					
93	34	UC E		7.3																						
93	38	UC		10																	12					
94	1	UC E		11																	13					
94	16	UC									12		14		14		14						14			
94	17	UC									10		12		13		10						12			
94	38	UC		9.9																	12					
94	41	TC E		7.8																	11					
94	42	TC E		7.8																	11					
95	36	UC E		8.0																						
95	38	UC		9.0																	12					
95	42	TC E		6.9																	11					
96	38	UC		9.6																	12					

Table 5M (continued from p.26)
Number of cigarettes smoked per smoker per day, males

Year	Source	Product	Estimated	Age Groups																	All ages
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	
97	38	UC		12				15			17		18		17		14				16
97	44	UC E*		11																	
97	45	UC E*		13																	
98	38	UC		12				16		18		19		17		14				16	
99	36	UC E		8.5																	
99	38	UC		4.6	9.3		11	13	16	18	19	17	16	15	11					16	
00	38	UC		9.0				12	14	15	18	19	19	16	15	12					16
01	15	UC		19																	
01	38	UC		10		11	13	15	17	20	18	17	15	12					17		
02	15	UC		19																	
02	38	UC		7.7		11	12	15	17	18	18	17	15	12					16		
02	42	TC E		12				17			17		16				16				
03	15	UC		19																	
03	36	UC E		11	11																
03	38	UC		8.4		9.9	12	14	17	18	18	17	14	11					15		
04	15	UC		17																	
05	15	UC		16																	
05	38	UC		7.9		8.7	11	14	16	17	17	16	14	12					15		
05	39	UC		14				17				15				16					
05	42	MC E		13				14		16		14				14					
05	42	TC E		12				14		16		14				14					
06	15	UC		15																	
06	38	UC		8.0		10	12	14	16	17	17	16	14	11					15		
06	42	MC E		9.4				13		16		14				14					
06	42	TC E		9.0				13		15		14				13					
07	15	UC		15																	
07	36	UC E		11																	
07	38	UC		7.3		9.3	12	14	16	17	17	16	15	12					15		
08	15	UC		15																	
08	38	UC		11		9.5	12	14	15	17	16	17	15	12					15		
09	15	UC		16																	
10	15	UC		15																	

Source: see *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products
 U = unspecified

Estimated: E = mean estimated from percentage distribution
 (see also *Consumption category estimation*, Methods p. 11, and Appendix III)
 * = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source

Table 5F (continued from p.27)
Number of cigarettes smoked per smoker per day, females

Year	Source	Product	Estimated	Age Groups																	All ages
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	
97	38	UC		9.2					12	12	13	12	11					12			
97	44	UC E*		6.9																	
97	45	UC E*		5.8																	
98	38	UC		9.0					12	12	13	13	11					12			
99	36	UC E		9.0																	
99	38	UC		6.1	8.0	9.5	11	12	13	14	13	12	12	8.4	12						
00	38	UC		6.9			8.9	10	11	13	13	12	13	12	9.4	12					
01	15	UC		12																	
01	38	UC		7.6			8.3	9.5	11	13	14	13	13	11	10	12					
02	15	UC		13																	
02	38	UC		7.8			8.4	10	11	13	13	14	12	12	9.0	12					
02	42	TC E		9.4					12	13	12					12					
03	15	UC		12																	
03	36	UC E		8.2	8.4																
03	38	UC		8.1			6.9	9.7	11	12	13	13	13	11	9.3	12					
04	15	UC		14																	
05	15	UC		12																	
05	38	UC		6.9			6.4	8.9	10	11	12	13	12	12	9.2	11					
05	39	UC		11					13					12					12		
05	42	MC E		11					10	12			10					11			
05	42	TC E		11					10	12			10					11			
06	15	UC		12																	
06	38	UC		8.8			9.2	9.0	9.9	12	13	12	13	11	8.7	11					
06	42	MC E		8.8					11	11			6.8					9.5			
06	42	TC E		8.9					10	11			6.6					9.3			
07	15	UC		13																	
07	36	UC E		10																	
07	38	UC		6.1			8.4	8.7	10	12	12	12	13	11	8.5	11					
08	15	UC		13																	
08	38	UC		6.7			8.0	9.1	10	11	12	13	13	11	9.0	11					
09	15	UC		12																	
10	15	UC		12																	

Source: see *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products
 U = unspecified

Estimated: E = mean estimated from percentage distribution
 (see also *Consumption category estimation*, Methods p. 11, and Appendix III)
 * = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source

Table 6M Number of cigarettes smoked per person per day, males:
selected surveys by age; with percentage total sales
(continues on p.32)

Year	Source	Product	Age Groups																	All ages	% Total sales
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		
49	14	UC*	9.6																		--*
57	14	UC	8.6																		--*
57	21	UC	7.3 6.5 6.1																	6.8	**
60	22	UC	9.6 9.5 8.5 7.8																	8.9	**
60	23	UC	7.4 6.3 6.9 5.7																	6.6	**
65	14	UC	8.0																		96%T
73	12	UC	0.4																		**
76	2	UC	9.8 10 10 9.7																	10	**
77	8	UC*	2.5																		**
79	24	UC	2.0																		**
80	1	UC	6.5 12 12 11 7.9 4.3																	9.0	88%T
80	4	MC	10																		--
81	3	UC	1.0	3.3																	**
81	11	MC																			**
82	25	UC	8 10 10 9 10 9 9 7 6 5																	8.0	80%T
83	1	UC	8.0																		79%T
83	18	UC	11 9.6 9.6 7.5																	9.1	**
86	16	UC	8.9 11 7.3 5.9																	8.2	**
86	17	UC	7.0 6.4 5.6 4.1																	5.5	**
87	1	UC	4.1 8.7 9.5 8.3 7.0 4.5 2.4																	6.7	73%T
87	15	UC	5.8																		71%T
87	41	UC*	4.2 7.2 7.1 4.3																	5.8	69%T
88	3	UC*	0.9	3.3																	**
88	26	UC	0.4	1.9																	**
88	41	TC*	3.3 7.6 8.7 4.7																	6.1	76%T
89	16	UC	5.5 8.4 6.8 5.4																	7.1	**
89	17	UC	7.5 6.1 5.7 4.7																	5.6	**
89	28	UC	0.6	1.8																	**
89	41	TC*	3.5 7.0 5.9 5.5																	5.5	70%T
90	15	UC	7.1																		98%T
90	30	UC	0.9	2.4																	**
90	41	TC*	4.2 6.2 7.4 3.7																	5.4	77%T
91	1	UC	4.9 7.5 8.6 8.2 6.2 4.5 2.2																	6.6	85%T
91	41	TC*	4.0 7.1 7.7 4.7																	5.9	85%T
92	19	TC	4.9 4.1 2.6 2.3																	3.9	**
92	41	TC*	4.0 6.5 8.4 6.0																	6.2	87%T
93	38	UC	3.5 6.9 8.0 7.9 6.0 3.2																	5.9	76%T
94	1	UC	2.6 7.3 8.0 8.0 5.3 3.5 2.3																	5.9	74%T
94	16	UC	6.7 6.9 6.2 5.4																	6.3	**
94	17	UC	4.9 5.9 5.7 3.2																	5.2	**
94	38	UC	3.4 6.7 8.0 8.0 5.7 3.1																	5.8	75%T
94	41	TC*	3.1 5.0 7.5 4.3																	5.4	85%T
94	42	TC*	3.1 6.5 7.5 4.3																	5.4	80%T
95	36	UC	2.0																		**
95	38	UC	3.3 6.5 8.2 7.9 5.3 2.9																	5.7	74%T
95	42	TC*	3.5 5.0 6.7 4.1																	4.9	76%T
96	38	UC	3.8 6.5 7.8 7.8 6.0 2.6																	5.7	76%T

Table 6F Number of cigarettes smoked per person per day, females:
selected surveys by age; with percentage total sales
(continues on p.33)

Year	Source	Product	Age Groups																	All ages	% Total sales	
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60			65
49	14	UC*	0.8																		--*	
57	14	UC	0.4																		--*	
57	21	UC																			**	
60	22	UC																			**	
60	23	UC																			**	
65	14	UC	0.4																		96%T	
73	12	UC	0.2																		**	
76	2	UC					4.5			4.3		1.8		1.4						2.8	**	
77	8	UC*	1.4																		**	
79	24	UC	1.6																		**	
80	1	UC	2.3				2.9			1.9		1.5		0.8		0.2		1.8	88%T			
80	4	MC	2.1																		--	
81	3	UC	0.8	2.3																		**
81	11	MC	4.4				6.5			3.7		2.9		2.0						4.0	**	
82	25	UC					4	4	4	3	3	2	2	1	1	1					2.0	80%T
83	1	UC	2.1																		79%T	
83	18	UC					3.8			2.6		1.1		0.8						1.6	**	
86	16	UC					3.8			3.1		2.2		1.4						2.3	**	
86	17	UC					2.8			3.2		2.4		2.1						2.6	**	
87	1	UC	1.7				3.7			3.2		2.1		1.3		0.7		0.3		1.9	73%T	
87	15	UC	2.9																		71%T	
87	41	UC*	2.6				4.2			2.3		1.6						2.7	69%T			
88	3	UC*	0.5	1.7																		**
88	26	UC	0.3	1.2																		**
88	41	TC*	1.7				4.4			3.5		1.2						2.7	76%T			
89	16	UC					3.0			3.3		2.1		1.0						2.3	**	
89	17	UC					2.4			2.9		2.6		1.9						2.5	**	
89	28	UC	0.3	0.5																		**
89	41	TC*	1.3				3.8			3.4		1.3						2.5	70%T			
90	15	UC	3.1																		98%T	
90	30	UC	0.3	1.7																		**
90	41	TC*	1.8				4.8			3.2		1.3						2.7	77%T			
91	1	UC	2.7				3.2			3.6		2.3		1.5		0.8		0.3		2.4	85%T	
91	41	TC*	2.1				4.6			3.6		1.4						2.8	85%T			
92	19	TC	1.5 0.9 0.5 0.3																	0.9	**	
92	41	TC*	1.8				3.6			3.7		1.4						2.6	87%T			
93	38	UC	1.4				2.8			3.3		2.7		1.6		0.5				2.0	76%T	
94	1	UC	1.1				2.6			3.9		2.6		1.5		0.8		0.3		2.2	74%T	
94	16	UC					3.8			4.8		2.7		1.4						3.2	**	
94	17	UC					2.8			3.4		2.5		1.8						2.6	**	
94	38	UC	1.3				2.9			3.3		2.8		1.5		0.6				2.0	75%T	
94	41	TC*	1.6				7.9			3.4		1.8						2.7	85%T			
94	42	TC*	1.6				4.3			3.5		1.8						2.8	80%T			
95	36	UC	1.8																			**
95	38	UC	1.2				2.8			3.5		2.9		1.6		0.6				2.0	74%T	
95	42	TC*	1.9				4.9			3.9		1.5						3.0	76%T			
96	38	UC	1.4				2.7			3.8		3.0		1.6		0.7				2.1	76%T	

Table 6M (continued from p.30)
Number of cigarettes smoked per person per day, males

Year	Source	Product	Age Groups																	All ages	% Total sales						
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60			65	70	75	80+		
97	38	UC							3.5			6.2		7.1		7.0		5.5			2.8		5.4	72%T			
97	44	UC							2.4															**			
97	45	UC							3.9															**			
98	38	UC							3.6			6.0		7.2		7.0		5.2			2.5		5.3	71%T			
99	36	UC																						**			
99	38	UC			0.1		1.2		3.2		4.9		6.2		6.8		7.0		5.6		4.2		2.9	1.3	5.2	66%T	
00	38	UC							0.8		3.1		5.0		5.9		6.4		6.8		5.9		4.1	3.0	1.1	5.0	61%T
01	15	UC																							81%T		
01	38	UC							0.9		2.7		4.9		5.7		6.4		7.0		5.6		4.0	2.9	1.4	5.0	60%T
02	15	UC																							76%T		
02	38	UC							0.6		2.7		4.4		5.5		6.2		6.1		5.3		4.1	2.8	1.2	4.6	57%T
02	42	TC																							5.9	83%T	
03	15	UC																							78%T		
03	36	UC							2.5		3.5														**		
03	38	UC							0.7		2.6		4.3		5.5		6.0		6.3		5.3		4.4	2.7	1.4	4.6	58%T
04	15	UC																							74%T		
05	15	UC																							71%T		
05	38	UC							0.7		2.4		4.1		4.8		5.3		5.4		4.6		3.8	2.4	0.9	4.0	57%T
05	42	MC																							4.0	59%M	
05	42	TC																							4.1	60%T	
06	15	UC																							65%T		
06	38	UC							0.7		2.6		4.0		5.0		5.6		5.5		5.0		4.0	2.4	1.0	4.1	59%T
06	42	MC																							4.0	54%M	
06	42	TC																							4.1	55%T	
07	15	UC																							66%T		
07	36	UC																							**		
07	38	UC							0.6		2.5		3.9		5.2		5.4		5.5		4.3		3.6	2.6	1.1	4.1	58%T
08	15	UC																							63%T		
08	38	UC							1.1		3.0		4.0		5.2		5.3		5.4		4.7		4.3	2.3	1.0	4.1	59%T
09	15	UC																							74%T		
10	15	UC																							64%T		

Source: *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products
 U = unspecified

* = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source
 % Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined
 ** = cannot be calculated
 -- = adjusted by original author

Table 6F (continued from p.31)
Number of cigarettes smoked per person per day, females

Year	Source	Product	Age Groups																	All ages	% Total sales													
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60			65	70	75	80+									
97	38	UC	1.4			2.7			3.5			2.8			1.7			0.7			2.1	72%T												
97	44	UC	1.9																					**										
97	45	UC	1.1																					**										
98	38	UC	1.5			2.7			3.4			2.9			1.7			0.6			2.1	71%T												
99	36	UC																			**													
99	38	UC	0.2	0.6	1.6	2.2	2.4	3.6	2.9	2.2	1.5	0.9	0.3									2.1	66%T											
00	38	UC	0.4			1.3			2.1			2.3			3.5			3.1			2.0			1.4			0.8			0.3			2.0	61%T
01	15	UC	2.9																		81%T													
01	38	UC	0.4			1.4			1.9			2.2			3.2			3.0			2.4			1.6			0.8			0.4			2.0	60%T
02	15	UC	2.9																		76%T													
02	38	UC	0.4			1.6			2.1			2.4			3.1			3.1			2.2			1.3			1.1			0.3			2.0	57%T
02	42	TC	3.7			4.7			4.5			2.5																				3.7	83%T	
03	15	UC	2.7																		78%T													
03	36	UC	1.8	2.8																			**											
03	38	UC	0.5			1.3			2.0			2.3			3.0			3.1			2.4			1.8			0.7			0.2			2.0	58%T
04	15	UC	3.1																		74%T													
05	15	UC	2.6																		71%T													
05	38	UC	0.4			1.1			1.9			2.1			2.5			2.7			2.0			1.6			1.0			0.3			1.8	57%T
05	42	MC	2.8			2.6			2.6			1.1																				2.0	59%M	
05	42	TC	3.1			2.6			2.6			1.1																				2.1	60%T	
06	15	UC	2.4																		65%T													
06	38	UC	0.5			1.3			2.1			2.2			2.6			3.0			2.5			2.0			0.9			0.3			1.9	59%T
06	42	MC	1.7			2.2			2.1			0.8																				1.6	54%M	
06	42	TC	1.9			2.3			2.1			0.8																				1.6	55%T	
07	15	UC	2.5																		66%T													
07	36	UC																			**													
07	38	UC	0.3			1.4			1.8			2.2			2.4			2.9			2.4			1.9			0.9			0.3			1.8	58%T
08	15	UC	2.3																		63%T													
08	38	UC	0.3			1.6			1.8			2.1			2.3			2.9			2.4			2.2			1.0			0.3			1.8	59%T
09	15	UC	2.6																		74%T													
10	15	UC	2.5																		64%T													

Source: *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products
 U = unspecified

* = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source
 % Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined,
 ** = cannot be calculated
 -- = adjusted by original author

Table 7M Number of cigarettes smoked per person per day, sales-adjusted, males: selected surveys¹ by age; with percentage total sales

Year	Source	Product	Age Groups																	All ages	% Total sales													
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60			65	70	75	80+									
49	14	UC*	9.6																		--*													
57	14	UC	8.6																		--*													
65	14	UC	8.3																		96%T													
80	1	UC	7.4			13			13			13			9.0			4.9			10	88%T												
80	4	MC	10																		--													
82	25	UC				10			13			13			11			13			11			9			8			6			10	80%T
83	1	UC	10																		79%T													
87	1	UC	5.7			12			13			11			9.6			6.1			3.3			9.2	73%T									
87	15	UC	8.1																		71%T													
87	41	UC*	6.0			11			10			6.3									8.4	69%T												
88	41	TC*	4.3			10			11			6.1									8.1	76%T												
89	41	TC*	4.9			9.9			8.4			7.9									7.8	70%T												
90	15	UC	7.3																		98%T													
90	41	TC*	5.4			8.1			9.6			4.8									7.0	77%T												
91	1	UC	5.8			8.9			10			9.7			7.3			5.3			2.6			7.8	85%T									
91	41	TC*	4.7			8.4			9.0			5.5									7.0	85%T												
92	41	TC*	4.6			7.5			9.7			6.9									7.2	87%T												
93	38	UC	4.6			9.1			10			10			7.8			4.2			7.8	76%T												
94	1	UC	3.5			9.9			11			11			7.2			4.7			3.1			8.0	74%T									
94	38	UC	4.5			9.0			11			11			7.6			4.1			7.7	75%T												
94	41	TC*	3.7			5.9			8.7			5.0									6.3	85%T												
94	42	TC*	3.9			8.2			9.4			5.3									6.8	80%T												
95	38	UC	4.5			8.8			11			11			7.1			3.9			7.7	74%T												
95	42	TC*	4.6			6.6			8.8			5.4									6.4	76%T												
96	38	UC	4.9			8.5			10			10			7.9			3.5			7.5	76%T												
97	38	UC	4.8			8.7			9.8			9.7			7.6			3.9			7.5	72%T												
98	38	UC	5.1			8.5			10			9.9			7.4			3.5			7.5	71%T												
99	38	UC	0.2	1.8	4.9	7.4	9.4	10	11	8.5	6.3	4.5	1.9	7.8	66%T																			
00	38	UC	1.3		5.0		8.2		9.6		11		11		9.6		6.7		5.0		1.9		8.1	61%T										
01	15	UC	8.1																		81%T													
01	38	UC	1.5		4.5		8.1		9.6		11		12		9.4		6.7		4.9		2.4		8.3	60%T										
02	15	UC	7.9																		76%T													
02	38	UC	1.1		4.7		7.8		9.8		11		11		9.3		7.2		5.0		2.1		8.1	57%T										
02	42	TC	6.6			9.6			7.8			4.8									7.2	83%T												
03	15	UC	7.9																		78%T													
03	38	UC	1.2		4.5		7.5		9.5		10		11		9.2		7.6		4.6		2.4		8.0	58%T										
04	15	UC	6.8																		74%T													
05	15	UC	6.5																		71%T													
05	38	UC	1.2	4.2	7.3	8.5	9.3	9.5	8.1	6.7	4.2	1.5	7.1	57%T																				
05	42	MC	6.8			6.3			8.5			5.8									6.7	59%M												
05	42	TC	7.4			6.5			8.4			5.8									6.9	60%T												
06	15	UC	6.6																		65%T													
06	38	UC	1.2		4.4		6.8		8.4		9.4		9.4		8.4		6.8		4.0		1.6		7.0	59%T										
06	42	MC	3.3			11			9.4			4.9									7.4	54%M												
06	42	TC	3.6			10			9.5			5.1									7.5	55%T												
07	15	UC	6.3																		66%T													
07	38	UC	1.0		4.4		6.8		8.9		9.2		9.4		7.4		6.2		4.4		1.8		7.0	58%T										
08	15	UC	6.4																		63%T													
08	38	UC	1.8		5.0		6.7		8.8		9.0		9.2		8.0		7.2		3.8		1.8		7.0	59%T										
09	15	UC	6.3																		74%T													
10	15	UC	5.9																		64%T													

1 Based on those surveys in Table 6 with data for both sexes and age range at least 21-64 (see *Cigarette consumption per person*, Methods p. 11)

Source: *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products
 U = unspecified

* = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source
 % Total sales: Adjustment factor used, estimated % of total sales
 of M = manufactured or T = total cigarette consumption
 implied by survey, sexes combined
 -- = adjusted by original author

Table 7F Number of cigarettes smoked per person per day, sales-adjusted, females: selected surveys¹ by age; with percentage total sales

Year	Source	Product	Age Groups																	All ages	% Total sales													
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60			65	70	75	80+									
49	14	UC*	0.8																		--*													
57	14	UC	0.4																		--*													
65	14	UC	0.5																		96%T													
80	1	UC	2.6			3.4			2.2			1.7			0.9			0.3			2.1	88%T												
80	4	MC	2.1																		--													
82	25	UC	5			5			5			4			4			3			3			1			1			1			2.5	80%T
83	1	UC	2.7																		79%T													
87	1	UC	2.3			5.0			4.4			2.9			1.8			1.0			0.4			2.7	73%T									
87	15	UC	4.0																		71%T													
87	41	UC*	3.8			6.0			3.3			2.4												3.9	69%T									
88	41	TC*	2.2			5.8			4.6			1.6												3.5	76%T									
89	41	TC*	1.8			5.5			4.9			1.8												3.5	70%T									
90	15	UC	3.2																		98%T													
90	41	TC*	2.3			6.3			4.1			1.7												3.5	77%T									
91	1	UC	3.2			3.8			4.2			2.7			1.8			0.9			0.4			2.8	85%T									
91	41	TC*	2.4			5.4			4.2			1.7												3.3	85%T									
92	41	TC*	2.1			4.1			4.3			1.7												3.0	87%T									
93	38	UC	1.8			3.7			4.4			3.5			2.0			0.6						2.6	76%T									
94	1	UC	1.5			3.5			5.3			3.5			2.0			1.1			0.4			3.0	74%T									
94	38	UC	1.7			3.8			4.5			3.7			2.0			0.8						2.7	75%T									
94	41	TC*	1.8			9.2			4.0			2.1												3.2	85%T									
94	42	TC*	2.0			5.3			4.3			2.3												3.4	80%T									
95	38	UC	1.6			3.8			4.7			3.9			2.1			0.8						2.7	74%T									
95	42	TC*	2.4			6.4			5.1			2.0												3.9	76%T									
96	38	UC	1.9			3.5			5.0			4.0			2.1			0.9						2.8	76%T									
97	38	UC	1.9			3.7			4.9			3.9			2.4			0.9						2.9	72%T									
98	38	UC	2.1			3.8			4.8			4.1			2.4			0.8						2.9	71%T									
99	38	UC	0.2	0.9	2.5	3.4	3.6	5.4	4.4	3.4	2.2	1.3	0.5	3.1	66%T																			
00	38	UC	0.7		2.2		3.5		3.8		5.7		5.1		3.2		2.4		1.3		0.5		3.3	61%T										
01	15	UC	3.5																		81%T													
01	38	UC	0.7		2.4		3.2		3.7		5.4		5.0		4.0		2.7		1.4		0.6		3.3	60%T										
02	15	UC	3.8																		76%T													
02	38	UC	0.7		2.9		3.6		4.2		5.4		5.5		3.9		2.3		1.9		0.5		3.5	57%T										
02	42	TC	4.5			5.7			5.5			3.1												4.5	83%T									
03	15	UC	3.5																		78%T													
03	38	UC	0.9		2.3		3.5		4.0		5.1		5.4		4.1		3.2		1.2		0.4		3.4	58%T										
04	15	UC	4.2																		74%T													
05	15	UC	3.7																		71%T													
05	38	UC	0.7		1.9		3.4		3.7		4.4		4.8		3.6		2.9		1.7		0.6		3.1	57%T										
05	42	MC	4.8			4.3			4.4			1.8												3.5	59%M									
05	42	TC	5.2			4.3			4.3			1.8												3.4	60%T									
06	15	UC	3.8																		65%T													
06	38	UC	0.8		2.1		3.6		3.7		4.4		5.2		4.3		3.4		1.5		0.5		3.2	59%T										
06	42	MC	3.1			4.2			3.8			1.5												3.0	54%M									
06	42	TC	3.5			4.3			3.7			1.5												3.0	55%T									
07	15	UC	3.8																		66%T													
07	38	UC	0.6		2.4		3.1		3.8		4.2		4.9		4.2		3.2		1.5		0.5		3.1	58%T										
08	15	UC	3.7																		63%T													
08	38	UC	0.6		2.6		3.1		3.5		3.9		4.9		4.0		3.7		1.6		0.5		3.1	59%T										
09	15	UC	3.5																		74%T													
10	15	UC	3.8																		64%T													

1 Based on those surveys in Table 6 with data for both sexes and age range at least 21-64 (see *Cigarette consumption per person*, Methods p. 11)

Source: See *Notes on sources of survey data*, p. 45
 Product: MC = manufactured cigarettes
 TC = total cigarettes (including hand-rolled)
 UC = cigarettes (type unspecified)
 A = all products
 U = unspecified

* = refer to *Notes on sources of survey data*, p. 45
 All ages: relates to ages reported; as given in original source
 % Total sales: Adjustment factor used, estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined
 -- = adjusted by original author

Table 8 Estimated¹ prevalence of smoking and estimated¹ number of cigarettes per person per day (unadjusted and sales-adjusted): summary of Tables 4, 6 and 7. Males and females aged 15 years and over

Year	Source ²	Product ³	Prevalence ⁴				Number of cigarettes								
			Manufactured cigarettes		Total cigarettes ⁵		All products ⁶		Unadjusted ⁷			Sales-adjusted ⁸			
			M	F	M	F	M	F	Number/ person/day	Total sales %	Manufactured cigarettes number/ person/day	Total cigarettes ⁹ number/ person/day			
						M	F		M	F	M	F			
1949	14	UC			70	10			9.3	0.8	/10			9.3	0.8
1957	14	UC			64	6			8.6	0.4	/10			8.6	0.4
1963	7	UC+A			46	27	50	27						(5.6	2.6)
1965	14	UC			59	8			8.0	0.4	96			8.3	0.5
1975	14	UC			53	16								(9.4	2.3)
1977	20	U					62	32							
1979	9	UC+A			67	18	68	18						(10.2	2.2)
1980	1 4	UC+A MC			52	17	54	17	9.1	1.8	88			10.4	2.1
1981	11	MC	30						10.1	2.1	--	10.1	2.1		
1982	10 25	U UC					52	31							
1982					44	23			7.9	2.3	80			9.9	2.9
1983	1	UC+U					45	17	8.0	2.1	79			10.1	2.7
1987	1 15 41	UC+A UC+A UC+A			40	17	41	17	6.8	2.0	73			9.4	2.8
					38	26	40	27	5.8	2.9	71			8.1	4.0
					38	27	40	27	5.7	2.6	69			8.3	3.8
1988	41 41	TC+A TC+A			40	25	41	25	6.1	2.6	76			8.0	3.4
					37	26	38	26							
1989	41 41	TC+A TC+A			35	23	36	23	5.6	2.4	70			8.0	3.4
					36	28	38	28							
1990	15 41	UC MC+TC+A	36	25	38	26			7.1	3.1	98			7.3	3.2
					36	26	38	26	5.4	2.7	77			7.0	3.5
1991	1 40 41	UC+A U MC+TC+A			36	17	37	17	6.5	2.3	85			7.7	2.7
							38	18							
			36	25	37	25	38	25	5.9	2.8	85			7.0	3.3
1992	41	MC+TC+A	40	24	41	24	43	24	6.3	2.5	87			7.3	2.9
1993	32 38	A UC+U					38	20							
							35	17	5.9	2.0	76			7.7	2.6

Table 8 (continued)

Year	Source ²	Product ³	Prevalence ⁴						Number of cigarettes							
			Manufactured cigarettes		Total cigarettes ⁵		All products ⁶		Unadjusted ⁷			Sales-adjusted ⁸				
			M	F	M	F	M	F	Number/ person/day	Total sales %	Manufactured cigarettes number/ person/day	Total cigarettes ⁹ number/ person/day	M	F	M	F
1994	1	UC+A			32	16	33	16	5.7	2.0	74				7.7	2.7
	38	UC+U					34	17	5.8	2.0	75				7.7	2.6
	41	MC+TC+A	36	25	36	25	38	25	5.0	3.7	85				5.9	4.3
	42	MC+TC+A	36	25	36	26	38	26	5.5	2.8	80				6.8	3.5
1995	32	A					35	23								
	38	UC+U					34	17	5.7	2.0	74				7.7	2.7
	39	U					32	17								
	42	MC+TC+A	36	26	36	26	37	26	4.9	3.0	76				6.4	3.9
1996	38	UC+U					35	18	5.7	2.1	76				7.5	2.8
1997	38	UC+U					34	17	5.4	2.0	72				7.4	2.8
	39	U					34	17								
1998	38	UC+U			32	17	33	17	5.3	2.1	71				7.4	2.9
1999	38	UC+U			32	17	33	17	5.2	2.1	66				7.9	3.1
	42	U					35	20								
2000	38	UC+U			30	17	31	17	5.0	2.0	61				8.2	3.3
	39	U					33	18								
2001	15	UC			35	24			6.5	2.9	81				8.1	3.5
	38	UC+U			30	17	31	17	5.0	2.0	60				8.3	3.3
2002	15	UC			31	22			6.0	2.9	76				7.9	3.8
	38	UC+U			29	16	31	17	4.7	2.0	57				8.2	3.5
	42	MC+TC+A	33	28	33	28	33	28	5.9	3.7	83				7.2	4.5
	42	MC+TC+A	36	32	36	32	37	32								
2003	15	UC			33	22			6.2	2.7	78				7.9	3.5
	38	UC+U			30	17	31	17	4.7	2.0	58				8.1	3.4
	39	U					32	18								
2004	15	UC			30	22			5.0	3.1	74				6.8	4.2
	39	U					28	18								
2005/11	15	UC			29	22			4.6	2.6	71				6.5	3.7
	38	UC+U			27	16	29	16	4.1	1.8	57				7.2	3.1
	39	UC			28	16										
	42	MC+TC+A	28	18	29	19	31	19	4.0	2.0	59	6.8	3.4			
	42	MC+TC+A	31	23	33	24	36	24	4.1	2.0	60				6.8	3.4

Table 8 (continued)

Year	Source ²	Product ³	Prevalence ⁴				Number of cigarettes								
			Manufactured cigarettes		Total cigarettes ⁵		All products ⁶		Unadjusted ⁷			Sales-adjusted ⁸			
			M	F	M	F	M	F	Number/ person/day	Total sales %	Manufactured cigarettes number/ person/day	Total cigarettes ⁹ number/ person/day			
						M	F		M	F	M	F			
2006	15	<i>UC</i>			28	20			4.2	2.4	65			6.6	3.8
	38	<i>UC+U</i>			28	17	29	17	4.2	1.9	59			7.1	3.2
	42	MC+TC+A	29	17	31	17	33	18	4.0	1.6	54	7.4	2.9		
	42	<i>MC+TC+A</i>	32	21	35	23	39	23	4.1	1.6	55			7.5	2.9
2007	15	<i>UC</i>			28	19			4.2	2.5	66			6.3	3.8
	38	<i>UC+U</i>			28	16	29	17	4.1	1.8	58			7.1	3.1
	43	UC			31	21									
2008/12	15	<i>UC</i>			26	18			4.0	2.3	63			6.4	3.7
	38	<i>UC+U</i>			28	16	29	16	4.2	1.8	59			7.1	3.1
	43	UC			30	21									
2009/13	15	<i>UC</i>			31	22			4.6	2.6	74			6.3	3.5
	38	<i>U</i>					30	17							
	43	UC			29	20									
2010/14	15	<i>UC</i>			24	20			3.8	2.5	64			5.9	3.8

1 Surveys covering an age range of at least 21-64 are included. Any gaps in the data for ages 15-20 and 65 years and over are filled in by assumed extensions to the age distribution, given in *Notes on sources of survey data*, p. 45. Method: see *Summary of adult smoking*, Methods p. 13.

2 See *Notes on sources of survey data*, p. 45.

3 Product: MC = manufactured cigarettes, TC = total cigarettes (including hand-rolled), UC = cigarettes (type unspecified), A = all products, U = unspecified. Frequency of smoking is indicated by: regular or daily smokers in normal type, **all smokers (including occasional) in bold**, *unspecified in italics*.

4 From Table 4.

5 This column includes prevalence of smoking classified as UC = cigarettes (type unspecified).

6 This column includes prevalence of smoking classified as U = unspecified product.

7 From Table 6.

8 From Table 7, except data in parentheses, which are derived from the prevalence of smoking from Table 4 as described in *Summary of adult smoking*, Methods p. 13.

9 Number of cigarettes classified as UC = cigarettes (type unspecified) has been adjusted to total cigarette sales and included in this column.

10 Assumed to have been estimated to include clandestine sales, so not sales-adjusted.

11 Calculations based on 2006 population.

12 Calculations based on 2007 population.

13 Calculations based on 2007 population and 2008 estimate of hand-rolled cigarettes.

14 Calculations based on 2007 population, 2008 estimate for hand-rolled cigarettes and 2009 estimate for manufactured cigarettes.

Figure 3 Estimated prevalence of smoking of (i) manufactured cigarettes, (ii) total cigarettes and (iii) all tobacco products; by year of survey. Males and females aged 15 years and over

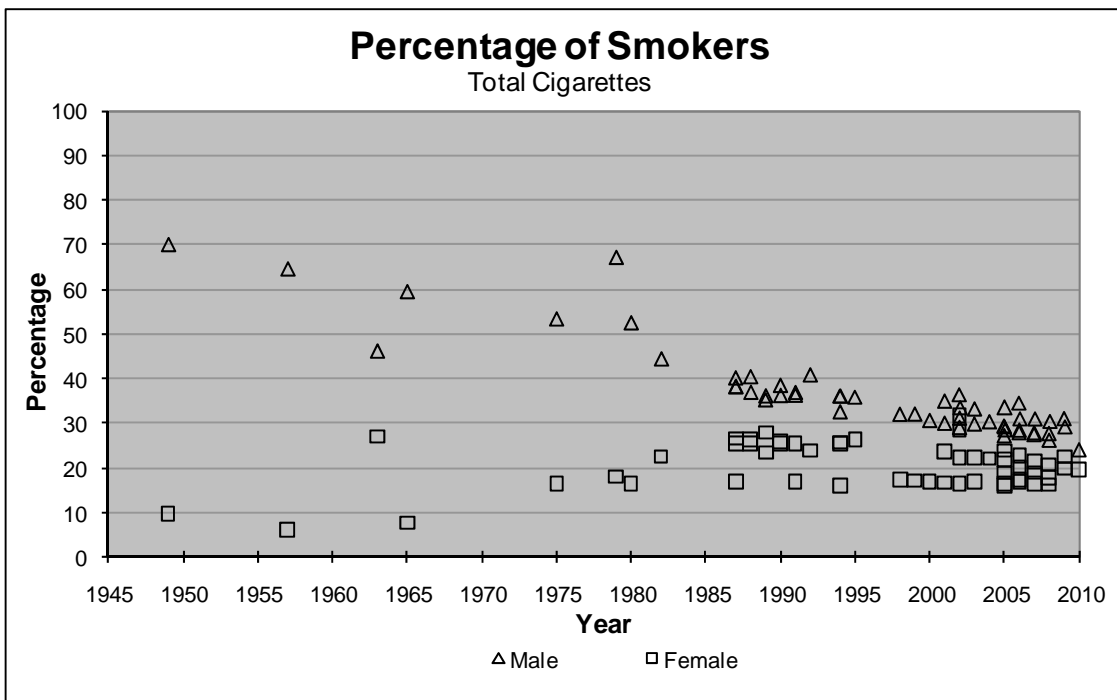
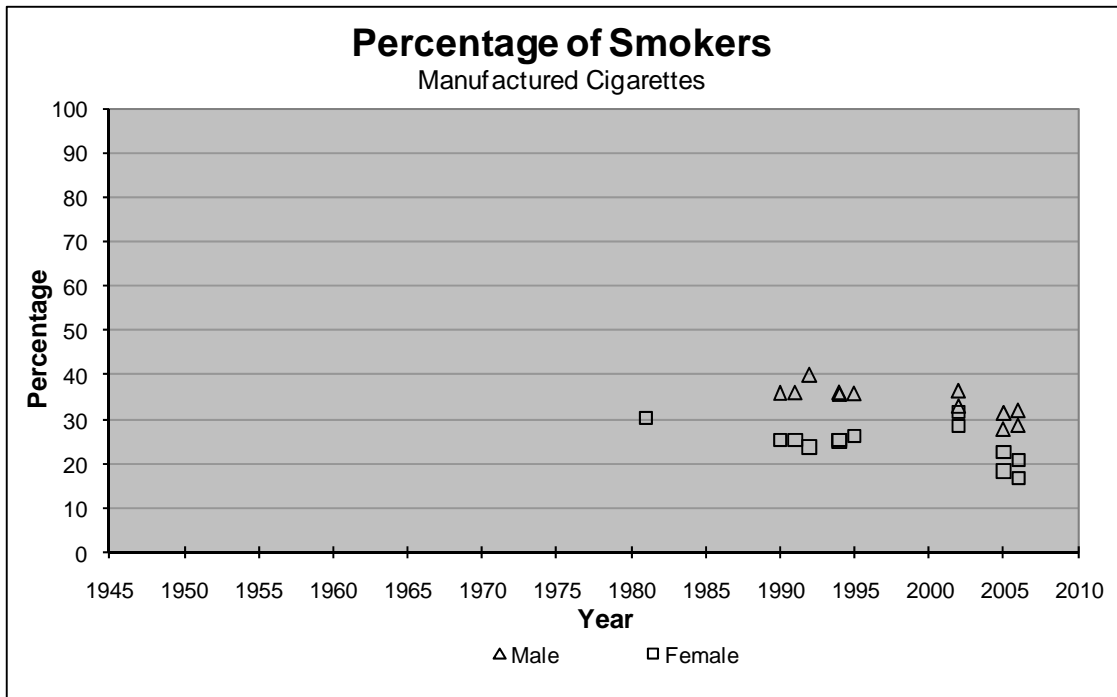
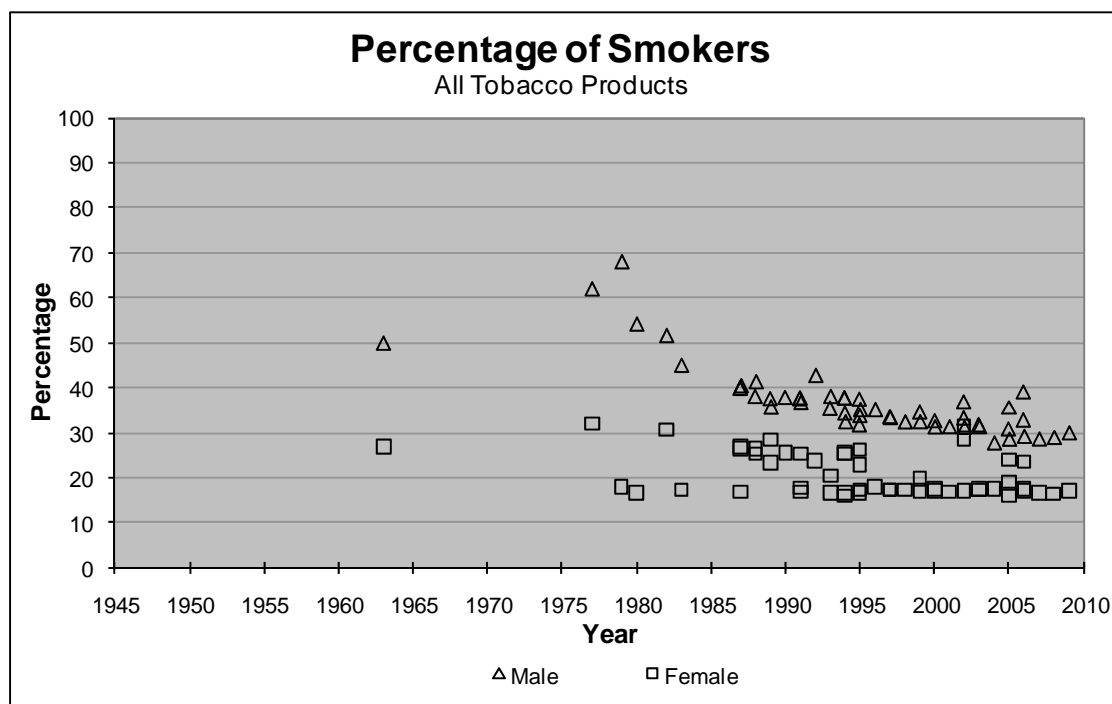
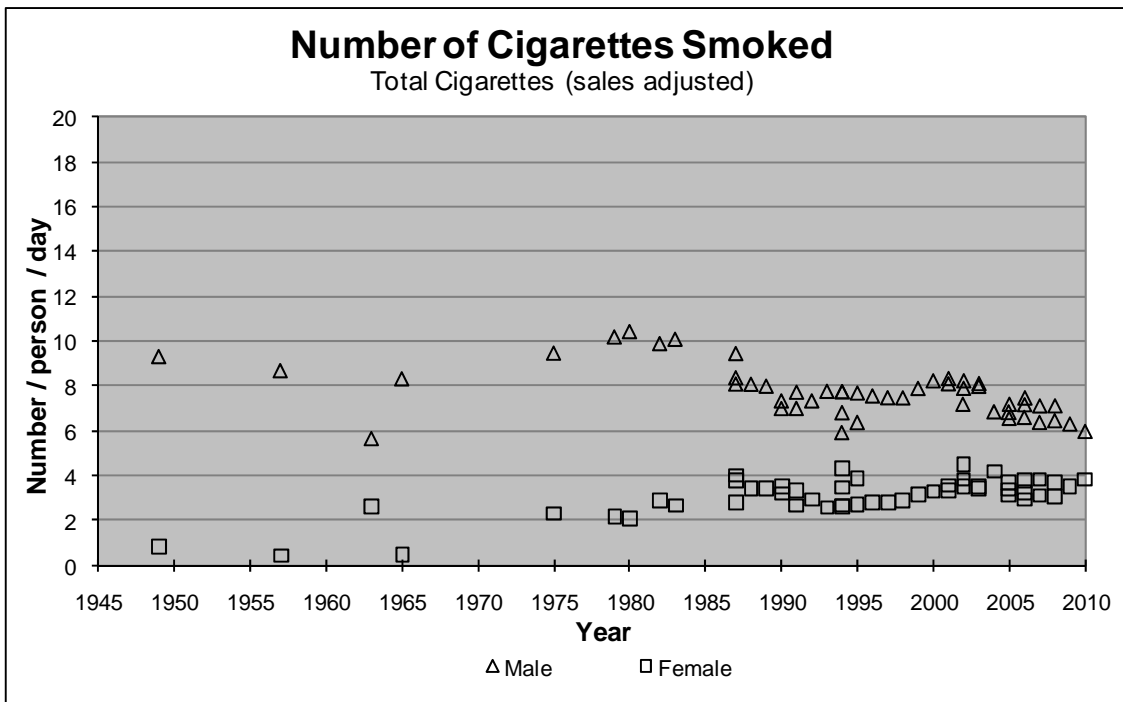
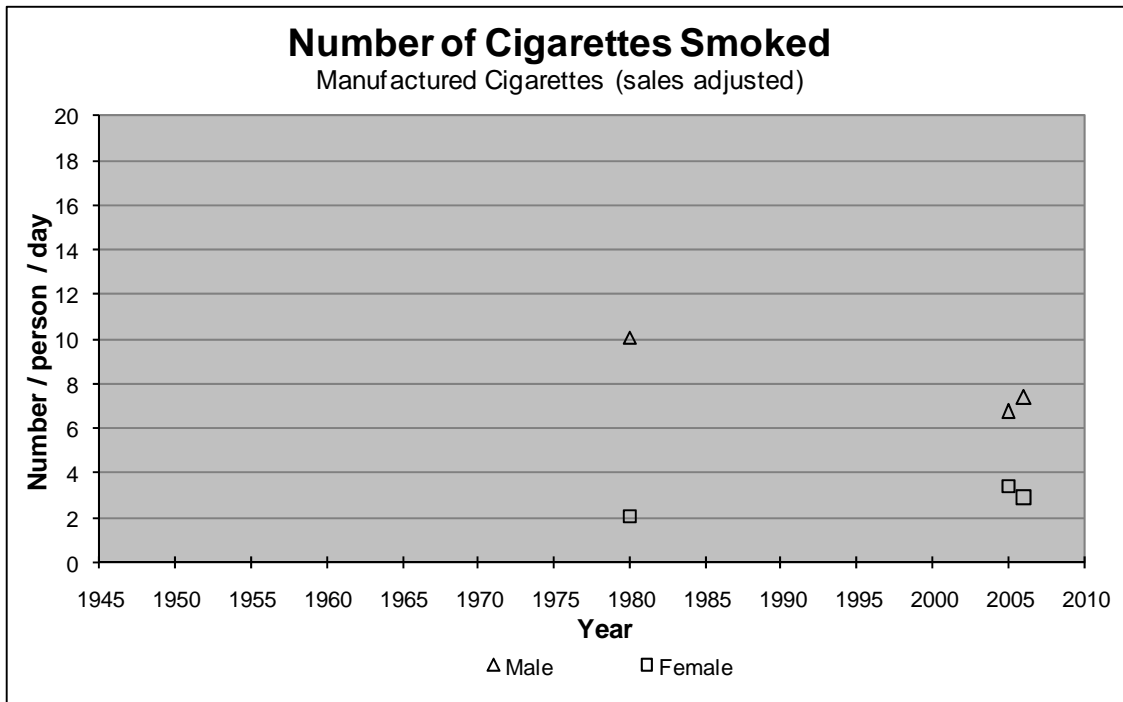


Figure 3 (continued)



Source: Table 8
See also customisable version of Figure 3 in the Excel workbook

Figure 4 Estimated number of (i) manufactured cigarettes and (ii) total cigarettes smoked per person per day, sales-adjusted; by year of survey. Males and females aged 15 years and over



Source: Table 8

Notes

Notes on sources of sales data

The data presented in the tables and figures were obtained from several sources, details of which are given below, together with estimations and related assumptions. Full citations of the sources are given on p. 54 under *References*.

Sales data before 1974

1880-1920: Diana (2000)

Data were given in tonnes and have been converted to numbers assuming an average of 1g per cigarette and 5g per cigar (based on average values in Lee (1975)).

1921-1973: RP6 (Lee (1975))

Data by weight, originally given to nearest 100 000 pounds, have been converted to tonnes and given to the nearest 10 tonnes (100 000 lbs = 45.359 tonnes). Where weight conversion factors have been quoted in RP6, the weights have been recalculated without rounding and then converted to tonnes.

Notes as given in RP6:

a) Details of the weight of tobacco consumed by types of product were provided by the Amministrazione dei Monopoli di Stato, Rome. The figures for the years up to 1960 were published in the *Industrial Balance of the Administration*.

(b) The numbers of cigarettes consumed have been estimates from the cigarette consumption in pounds weight by using a conversion factor of 2.205 lbs per 1 000. The conversion factors used for cigars and cigarillos were 11.025 lbs per 1 000 and 5.513 lbs per 1 000 respectively.

(c) Details of the amount of tobacco consumed in individual years before 1956 were not provided. The figures for the years 1921 to 1955 are five-year averages.

(d) A change in the accounting period took place during 1964 when the financial year was converted from a year ended 30th June to a calendar year basis.

Sales data for 1974 onwards

1974-1983: AMS (Amministrazione dei Monopoli di Stato, Roma). Responsabile per la Direzione Centralerelazioni con la Stampa

Data were given in numbers and have been converted to weight assuming an average of 1 g per cigarette and 4.5 g per cigar or cigarillo (based on a weighted average of the values in Lee (1975)).

1984-1996: Federazione Italiana Tabaccai (1999)

1993: Joossens *et al* (1994)

1997-1998: Anonymous (1999)

1999-2007: Pacifici (2008)

2008: Zuccaro and Pacifici (2009)

2009-2010: Pacifici (2010, 2011)

Data were given in tonnes. For conversion to numbers, we assumed average weights of 1 g per cigarette, 5 g per cigar and 1.5 g per cigarillo.

These sources do not give values for sales of cigars, cigarillos, snuff, pipe and hand-rolling tobacco or total tobacco for the years 1999-2002. We have estimated total tobacco sales for those years by using estimates for the annual sales of products other than cigarettes: 590 tonnes of cigars, 300 tonnes of cigarillos, 530 tonnes of pipe or hand-rolling tobacco and 20 tonnes of snuff per year. These estimates were based on values for the years before and after 1999-2002. The resulting estimates for total tobacco sales have been given to the nearest 100 tonnes.

The value for all tobacco products 2008 excludes sales of snuff (for which we have no estimate) but which was probably negligible.

Estimates of smuggling

The table below summarises estimates for the market share (%) of non-legal sales. The sources of the estimates are described below the table.

Source:	Cigarettes						All tobacco				
	1	2	3	4	5	6	7	8	9	10	11
Decades before 1980s								More than in 1981-82			
1978							20%				
1981-82	18%							10-30%			
1983		1.4%									
1985					1.4%						
Early 1990s			11.5%								
1990									2.0%		
1991									2.8%		
1992		12%			8.7%				1.8%		
1993									2.9%		
1994									2.9%		
1995									2.9%		
1996									6.1%		
1997									6.5%		
1998					15.9%				2.9%	10%	
1999									3.6%		
2000				10-20%					2.4%		
2001									4.6%		
2002									1.9%		
2003									0.5%		
2006					1-2%						
2005-08						0.7%					
2009											2.8%

Sources:

1: Merzdorf *et al* (1982)

2: Joossens *et al* (1994)

3: Joossens and Raw (1998)

4: Colombo *et al* (2002)

5: Joossens and Raw (2008)

This source also stated that sales of smuggled cigarettes peaked in 1998.

6: Gallus *et al* (2009)

See survey source **15** note d below. The authors note that the validity of self-reports remains open to discussion and that this figure is probably an underestimate.

7: Tonelli *et al* (1980)

8: La Vecchia (1986)

This author quoted confidential information from the Department of Finance that, during 1981-1982, confiscated tobacco represented about 3% of the amount sold legally by the State Monopoly. The author estimates that, during 1981-1982, it is unlikely that the market share covered by smuggling was less than 10%, and may have been as high as 20-30%.

The author suggested that, in earlier decades, smuggling quotas were probably even larger, and that this might, at least in part, explain the large survey overstatement in 1949 – see survey source **14** below, where consumption implied by the survey is nearly 2.5 times the volume of legal sales.

9: Berardi *et al* (2004) quoting the Guardia di Finanza.

10: Zuccaro *et al* (2001) quoting the Guardia di Finanza.

11: British American Tobacco Italia (2010)

Results from a market investigation commissioned by BAT Italia in the first half of 2009.

Note: For *source 4* the market share of non-legal sales was estimated by us using values given in the *source*. For *sources 2, 5 and 9* the market share was estimated by us based on the amount smuggled (as estimated in the *source*) plus the quantity of legal sales as shown in Table 2.

Estimates of numbers of hand-rolled cigarettes

We have estimated the weight of tobacco sold for hand-rolled cigarettes using the assumptions shown in the table below, and the number of hand-rolled cigarettes consumed by assuming 1 g per cigarette.

	Assumption used
1951-1955	50% of pipe and hand-rolling tobacco sales.
1956-1965	Consumption decreasing by 5% per year.
1966-1992	Zero, as suggested by La Vecchia (1986, 1990) (see paragraph below for details).
1993-2001	200 tonnes (similar to the 1965 and 2002 values).
2002-2005	Values as given in Berardi (2006) (see paragraph below for details) for tonnes of tobacco used for hand-rolling and, for 2003, for the rate of increase from 2002 (14%).
2006-2008	Pipe tobacco assumed to stay at a constant 170 tonnes, the rest of loose tobacco being used for hand-rolled cigarettes.

These estimates are based on the following limited information:

Mastrandrea *et al* (1984) stated that ‘although reliable data are lacking, it seems that hand-rolling of cigarettes was a well-established habit in Italy, as in other countries, especially up to about 1950.’

Merzdorf *et al* (1982) based estimates on the assumption that all pipe and hand-rolling tobacco was used in hand-rolled cigarettes.

La Vecchia (1986) stated that, in 1949, over 5% of smokers used hand-rolled cigarettes only, and over 25% used both manufactured and hand-rolled cigarettes. However, “this habit has gradually decreased over the last three decades, and, nowadays, is of minor importance.” This author confirmed that view, (La Vecchia (1990), personal communication) stating that “hand-rolled cigarettes practically disappeared in Italy between the mid-1950s and the mid-1960s, and almost the totality of pipe and hand-rolling tobacco has been used in pipes over the last two or three decades.”

Berardi (2006) stated that looking within the data for all 'Other tobacco' products, reveals that the increasing sales trend during 2002 to 2005 was really just in the single category of Roll Your Own tobacco. This source gave values for sales of hand-rolling tobacco for the years 2002-2005. These imply the following estimates for consumption (tonnes), with the values for pipe tobacco calculated from the values in the other columns:

	Hand-rolling tobacco	Pipe tobacco	Total
2002	285		
2003	325	203	528
2004	463	196	659
2005	593	184	777

Plain/Filter cigarette sales

1961-1981: Maxwell, Jr. (Successive years)
 1983: Todd (1986)
 1997-1999: US Department of Agriculture (1999)

Tar and nicotine machine yields of cigarettes

1984: La Vecchia (1985)
 1992-1993: Joossens *et al* (1994)
 1995-2003: Rossi *et al* (2005)

The value shown for 1984 is derived from tar yields of 18 brands of cigarettes bought in 1983 and 1984 combined using market share information for the years 1977-1979. The values shown for 1992 onwards are derived from tables of tar/cigarette ranges and associated market shares.

Legal limits:

The tar yield per cigarette was limited by EC directive 90/239/EEC to 15 mg by the end of 1992 and to 12 mg by the end of 1997. EU directive 2001/37/EC limited tar yield to 10 mg/cigarette, nicotine yield to 1 mg/cigarette and carbon monoxide yield to 10 mg/cigarette by the end of 2003 (ASPECT (Analysis of the Science and Policy for European Control of Tobacco) Consortium (2004)).

Notes on sources of survey data

Each source of survey data—either an individual survey or a series of surveys repeated over a number of years—is cited by a source number. This number is shown in the tables and corresponds to the source numbers given below, where details of the source publication and of the survey methodology are given. Full citations of the sources are given on p. 54 under *References*.

Source number

1 Istituto Centrale de Statistica (1982), Bolzan *et al* (1982), La Vecchia (1986), La Vecchia *et al* (1988, 1990, 1994), Negri *et al* (1989), Ferraroni *et al* (1989), Pagano *et al* (1996)

- a. National Health Surveys conducted by the ISTAT. Representative of civilian non-institutionalized population. Interviews at home, with all household members, but proxy interviews permitted for members not present.

Year	Dates	Sample size				Participation rate (%)	Proxies (%)
		Households	Individuals	Adults (15+)			
				Males	Females		
1980	Nov 1980	25 018	75 397			94	6
1983	Nov-Dec 1983	30 025	89 765	34 787	37 497	94	8
1987	Nov 1986-Apr 1987	25 427	77 151	30 096	32 176	> 90	
1991	Dec 1990-May 1991	25 878	67 400	27 135	28 854	89	8
1994	Jan-Mar 1994	5 700	15 513	6 307	6 741	> 90	28

- b. Cigarette smokers: smokers who smoked mainly cigarettes.
 c. Approximately 1% of subjects aged 10-14 described themselves as smokers in both 1986-1987 and 1990-1991.
 d. Consumption category estimation (except *All ages* data) based on (1980) 1-5, 6-10, 11-20, 21-30, and 31+ cigarettes/smoker/day, (1983, separate age groups) <15, 15+ cigarettes/smoker/day, (1983, all ages) <15, 15-24, 25+ cigarettes/smoker/day, (1987-1994) <15, 15-24, 25+ cigarettes/smoker/day, (1995) <15 cigarettes or pipes/cigars and 15+ cigarettes/smoker/day. 1993 and 1995 estimates should be regarded with caution. Comparison was possible for *All ages* data between category estimates (not shown) and direct means (as shown in Table 5) for 1991 when results were very similar, and for 1994 when category estimates were lower by about 0.8 cigarettes for both males and females.
 e. Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

2 The Research Group ATS-RF2 of the Italian National Research Council (1981)

- a. Subjects were invited for medical examination as part of a project screening for atherosclerosis risk factors. Pooled results from nine population samples in eight regions throughout Italy (Veneto, Pavia, Bologna, Siena, Rome, Naples, Cagliari, Palermo). Sample size (males) 3 189, (females) 3 510. Participation rate 62%. Survey year 1976.

3 Monarca *et al* (1987), Donato *et al* (1994)

- a. Study of high school pupils in 10 towns (North: Pavia, Genova. Central: Perugia, Urbino, Latina, S Benedetto del Tronto. South and Islands: Brindisi, Cagliari, Sassari). Questionnaires were completed anonymously in class with teachers present. Approximate ages corresponding to first and final grades in senior high school (grades 9 and 13) – see note on School types and grades in *Additional information (not presented in tables)* below.

Year	Sample size			
	Males		Females	
	9 th	13 th	9 th	13 th
1981	2 051	2 168	1 983	2 074
1988	2 596	1 937	2 625	2 217

- b. Smokers marked as frequency *: smoked at least one cigarette every day. All smokers: smoked at least one cigarette a month.
 c. Consumption category estimation based on (1981) 1-4, 5-9, 10-19, >20 (assume 20+) cigarettes/smoker/day; (1988) two categories 1-9 and 10+ cigarettes/smoker/day and the resulting figures for 1988 should be regarded with caution.

- 4 Todd (1986)**
a. Cigarettes/person/day (cigarettes sold legally) estimated for 1980 by Todd.
- 5 Pastega (1982)**
a. Survey of 4 junior and 5 senior high schools in Venice. Questionnaires completed anonymously in class with teachers absent. Year unknown (1980 assumed). Sample size 2 196.
- 6 Modolo (1977)**
a. Surveys of senior high school students in Perugia (central Italy). Upper age limit not stated. Sample size in 1962 (boys) 1 250, (girls) 609; and in 1972 (boys) 1 915, (girls) 1 655.
b. Smokers marked as frequency *: smoked 1 or more cigarettes per day.
c. Last age group assumed to be age 20 years only.
- 7 Readers Digest (1963)**
a. Series of surveys conducted in European countries using identical questionnaires. Italian survey conducted in 1963 by Misura S.p.A. Random sample of about 2 000 people.
b. Merzdorf *et al* (1982) commented that ‘... the strikingly high proportion of female smokers ... is all the more surprising in view of the fact that in other countries the proportion of women who smoke was consistently underestimated in this study’.
c. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.
- 8 Bartolini *et al* (1977)**
a. Interview study in 1977 of young people in Perugia, considered representative of those not attending high school. Sample size 931.
b. Regular smokers: frequency not defined.
c. Calculation of consumption per person assumed that consumption per smoker related to ‘all’ smokers.
- 9 Merzdorf *et al* (1982), quoting industrial research**
a. Study in 1979 by Oi.
- 10 Analisi e Strategie de Mercato (ASM) (personal communication)**
a. Representative sample. Sample size (males) 547, (females) 576. Survey year 1982.
b. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.
- 11 Analisi e Strategie di Mercato (1981)**
a. Quota sample, representative of the Italian adult female population. Sample size 1 096. Survey year 1981.
b. Consumption category estimation based on packs per week <2, 2-4, 5-6, 7, 8-10, 11-13, 14, and 15+ cigarettes/smoker (equivalents assumed 1-5, 6-14, 15-19, 20, 21-29, 30-39, 40, and 41+ cigarettes/smoker/day).
c. Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.
- 12 Tonelli *et al* (1980)**
a. Survey in 1973-1974 of 3rd year pupils (age around 14) in junior high schools throughout Bologna) – see note on School types and grades in *Additional information (not presented in tables)* below. Sample size (males) 907, (females) 1 017.
b. Consumption category estimation based on weekly consumption of <6, 6-10, and 11+ cigarettes/smoker .
- 13 Modolo *et al* (1980)**
a. Survey in 1973 of schoolchildren in Rome.
- 14 La Vecchia (1986), quoting Doxa (1950, 1958, 1966, 1978)**
a. Surveys by DOXA Marketing Research Institute on behalf of Italian State Monopoly (and in 1957 of the U.S. Department of Agriculture). Sample size 4 000-6 000. Survey years 1949, 1957, 1965 and 1975. The 1949 survey used non-random sampling.
b. Figures for consumption in 1949 and 1957 represent 245% and 133% respectively of the cigarettes sold legally (calculation for 1949 based on the 1946-1950 sales data and the 1950 population). We have not carried out sales adjustment because the sales data exclude the quantity of smuggled tobacco consumed in these years, which was probably a considerable amount.
c. Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

15 La Vecchia and Scarpino (1993), Colombo *et al* (2002), Gallus *et al* (2002, 2004, 2006, 2007), Doxa (2006, 2007, 2008, 2009, 2010), Zuccaro and Pacifici (2009), Pacifici (2005, 2008, 2010)

- a. Surveys by DOXA (the Italian branch of the Gallup International Association) on behalf of the European Economic Community (in 1987 and 1990) and on behalf of the Istituto Superiore di Sanità (Institute of Health) in later years. Representative samples of the adult Italian population. Face-to-face interviews using CAPI (computer assisted personal interviewing).

- b. Survey details:

	Survey period	Sample size
1987		1 054
1990		1 033
2001	Feb-Mar 2001	3 296
2002	Mar-Apr 2002	3 238
2003	Feb-Apr 2003	3 535
2004	Mar-Apr 2004	3 050
2005	Mar-Apr 2005	3 114
2006	Mar-Apr 2006	3 039
2007	Mar-Apr 2007	3 057
2008	Mar-Apr 2008	3 035
2009	Mar-Apr 2009	3 213
2010	Mar-May 2010	3 020

- c. Age-specific cigarette smoking prevalence and all product prevalence shown in Table 4 as 1987 are based on combined results for 1987 and 1990.
- d. For the surveys of 2005-2008 subjects who were current smokers were asked about the source of the cigarettes they had bought in the 30 days before interview. For those years combined, 97.8% of the cigarettes smoked were stated to have been bought from legal shops or vending machines; 0.7% were stated to have been bought "from smugglers". The values relating to illicit trade are "probably underestimates" (Gallus *et al* (2009)).
- e. Age groups are 15-24, 25-44, 45-64 and 65+ years.

16-18 Tolonen *et al* (2000), Kuulasmaa *et al* (1998), Wolf *et al* (1998), Molarius *et al* (1999)

- a. Surveys using self-administered questionnaires in three regions carried out in three phases, forming part of the WHO MONICA Project:

	Region	Phase	Participation rate (%)		Sample used*		Date
			Males	Females	Males	Females	
16	Brianza	1	70	72	808	826	Apr 1986-Mar 1987
17	Friuli	1	85	83	935	931	Jan 1986-Sep 1986
18	Area Latina	1	76	76	891	891	May 1982-Mar 1985
16	Brianza	2	71	70	782	771	May 1989-Jul 1990
17	Friuli	2	84	80	907	904	Mar 1989-Dec 1989
16	Brianza	3	73	73	801	858	Sep 1993-Nov 1994
17	Friuli	3	80	79	883	888	Mar 1994-Oct 1994

* 'Sample used' includes age 25-34, all other figures are for age 35-64 only

- b. *All ages* column relates only to age 35-64 and is standardized to world population.
- c. Regular cigarette smokers: smoked cigarettes daily. All smokers: smoked cigarettes daily or occasionally, or smoked 1 g pipe tobacco or 1 cigar per week.
- d. For phase 1, there are minor discrepancies between the data shown in Table 4 and equivalent data taken from World Health Organization (1989) used in earlier editions of this report.

19 Farchi *et al* (2004)

- a. Italian Longitudinal Study on Aging (ILSA) in 1992. People aged 65-84 in eight centres in north, central and southern regions of Italy. 4 521 subjects. Response rate 80%. Baseline values reported.
- b. Age groups are 65-69, 70-74, 75-79 and 80-84 years. The *All ages* values are standardised to the Italian population distribution of 1999.
- c. Cigarettes per smoker relate to all smokers, including occasional smokers. Cigarettes per person based on prevalence of smoking (any product) so may overestimate.

20 Modolo *et al* (1980)

- a. Overall results from a 1977 survey covering north, central, and southern regions. Age group unknown (adults).

21-23 Keys *et al* (1966)

- a. Baseline of Seven Countries Study on cardiovascular disease, in three rural villages. Interview including smoking questions before medical examinations.

	Year	Location	Sample size	Response rate (%)
21	1957	Nicotera, far south	607	97
22	1960	Crevalcore, Po valley	994	99
23	1960	Montegiorgio, Province of Marche (east coast)	719	99

- b. Results for additional occupational groups (railwaymen in Rome) are not presented here.
c. Consumption category estimation based on 1-9, 10-19, 20+ cigarettes/smoker/day.

24 Casson *et al* (1982)

- a. Survey of school pupils in Chioggia in 1979. Approximate ages corresponding to junior and senior high schools) – see note on School types and grades in *Additional information (not presented in tables)* below. Sample size 2 616, response rate 56%.
b. Smokers marked as frequency *: smoked daily.
c. Lower age group 11-14.
d. Consumption category estimation (upper school) based on 1-5, 6-10, 11-15, 16-20, >20 cigarettes/smoker/day, taken from chart. Approximately 90% of lower school smokers smoked <5 cigarettes per day.

25 Menotti *et al* (1995)

- a. The RIFLE (Risk Factors and Life Expectancy) pooling project. Pooled data from nine studies that used a standardised methodology, conducted between 1978 and 1987. Not a representative sample of the population but it includes samples from 13 regions, the authors claiming the data to be “the largest and most representative set of data” available for that time. Sample size (men) 36 337, (women) 33 632.
b. The data are presented against 1982, the middle of the range of years in which the studies were conducted.
c. Consumption category estimation based on 1-9, 10-19 and 20+ cigarettes/smoker/day.
d. Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

26 Casadidio *et al* (1993)

- a. Anonymous survey of high school pupils in two Local Health Units of Marche region (central Italy). Questionnaires completed in class without intervention from teachers present. Approximate ages corresponding to 9th and 13th grades) – see note on School types and grades in *Additional information (not presented in tables)* below. Sample size (males) 368, (females) 559. Survey year 1988.
b. Smokers marked as frequency *: smoked daily. All smokers: smoked daily or occasionally.
c. Consumption category estimation based on 1-4, 5-9, 10-19, 20+ cigarettes/smoker/day.

27 Arciti *et al* (1995)

- a. Follow-up study in Liguria of 1 894 pupils who had not participated in any smoking control programme. Pupils were enrolled in their first year of senior high, vocational or teacher training school and followed up through their years in that school) – see note on School types and grades in *Additional information (not presented in tables)* below. Surveys carried out in the academic years 1989/90 – 1992/93.

28 Donato *et al* (1991)

- a. Survey of high school pupils in Brescia (northern Italy), using same methodology as source 3. Participation rate 90%.

Year	Sample size			
	Males		Females	
	9 th	13 th	9 th	13 th
1989	287	318	366	393

- b. Smokers marked as frequency *: smoked at least one cigarette every day. Regular smokers: smoked at least one cigarette a week.
c. Consumption category estimation based on 1-4, 5-9, 10-19, 20+ cigarettes/smoker/day.

- 29 van Reek *et al* (1992), van Reek and Adriaanse (1995)**
- A series of surveys of Young Europeans. About 800 children aged 11-15 years interviewed in each EC country except Luxembourg (where only 250 interviewed). Lowest age group 11-12. Interviews conducted at home, with parents absent. Survey year 1990.
 - Smokers marked as frequency *: smoked daily. Regular smokers: smoked at least once a week.
 - Lower age group 11-12.
- 30 Pasquale *et al* (1992)**
- Survey of high school pupils in Valle Camonica, a mountain community in Brescia (northern Italy). Questionnaires completed anonymously in class. Approximate ages corresponding to 9th and 13th grades) – see note on School types and grades in *Additional information (not presented in tables)* below. Sample size 1 391, participation rate 78%. Survey year 1990.
 - Smokers marked as frequency *: smoked at least one cigarette every day. Regular smokers: smoked at least one cigarette a week.
 - Consumption category estimation based on 1-4, 5-9, 10-19, 20+ cigarettes/smoker/day.
- 31 Ferrante *et al* (1993)**
- Survey of young men from all Italian regions, at a military training centre. Age 20. Year not stated (1992 assumed). Sample size 1 153.
- 32 Centro di Documentazione e Informazione sul Tabacco (1996)**
- Surveys conducted by Abacus (1993) and ISPO (1995). Age not stated.
- 33 Maglione *et al* (1994)**
- Survey of 8th grade pupils at 13 high schools in Benevento (Campania Region)) – see note on School types and grades in *Additional information (not presented in tables)* below. Year not stated (1993 assumed).
- 34 Marin *et al* (1999)**
- Anonymous questionnaire survey of pupils in years I, III and V of senior high school (9th, 11th and 13th grades) at 14 high schools in Belluno and Bassano del Grappa) – see note on School types and grades in *Additional information (not presented in tables)* below. Conducted in 1993-1994. Upper age limit not stated. Sample size (males) 1 756, (females) 2 329.
 - Smokers marked as frequency *: smoked every day. All smokers: smoked every day or occasionally.
 - Last age group assumed to be age 20 years only.
 - Consumption category estimation based on <6, 6-10, 11-15, 16-20 and >20 cigarettes/smoker/day.
- 35 Gruppo Collaborativo SIDRIA (1998)**
- S.I.D.R.I.A.(Studi Italiani sui Disturbi Respiratori nell’Infanzia e l’Ambiente, Italian Studies on Respiratory Disorders in Childhood and the Environment). A collaborative study of 3rd year junior high school pupils (8th grade) and their families in 10 regions of northern and central Italy) – see note on School types and grades in *Additional information (not presented in tables)* below. Survey carried out during Oct 1994-Mar 1995. Sample size (males) 11 360, (females) 10 486. Participation rate 96%.
 - Smokers marked as frequency *: smoked daily. Regular smokers: smoked at least 1 cigarette per week. All smokers: smoked regularly (excludes those who only tried a few cigarettes).
- 36 Hibell *et al* (1997, 2000, 2009), Andersson *et al* (2007)**
- Nationally representative survey forming part of ESPAD (European School Survey Project on Alcohol and Other Drugs). Surveys of pupils in senior high school, selecting those aged 15-16 at the time of the survey. Anonymous questionnaire completed and sealed in an envelope by the pupil, in class. Teachers present, but discouraged from walking round the classroom.

	Date	Sample size		Participation rate (%)		Target year of birth	Average age
		Males	Females	Schools	Pupils		
1995	Apr-Jun 1995	943	582	99	95	1979	–
1999	Apr-May 1999	1 681	2 425	100	91	1983	15.3
2003	Mar-Apr 2003	2 300	2 571	96	98	1987	15.8
2007	Mar-Apr 2007	5 335	4 646	99	88	1991	15.8

- b. In 2003 some countries including Italy conducted a survey using identical methodology targeting students born in 1985 (thus age 17-18). 74% of this age group were still in school. Sample size (boys) 2 313, (girls) 2 817. Participation rate (schools) 96%, (pupils) 94%. Average age 17.7. (Andersson *et al* (2007))
- c. Representativeness of the surveys:

	Proportion of 15-16 year olds still in school (%)	Proportion represented of all students in Italy (%)
1995	60	75
1999	72	94
2003	93	100
2007	88	99

Results for 1995 should therefore be treated with caution.

- d. Smokers marked as frequency *: smoked one or more cigarettes per day in the last 30 days. All smokers: smoked in the last 30 days.
- e. Consumption category estimation based on 1-5, 6-10, 11-20, 21+ cigarettes/smoker/day.

37 Currie *et al* (2004, 2008)

- a. Part of the HBSC (Health Behaviour in School-Aged Children) Study, a collaborative cross-national research study sponsored by the WHO. School classes or schools were randomly selected, targeting age groups 11 (not presented here), 13 and 15. The target sample size in each age group was 1 500.

Year	Sample size		Mean age	
	Target age 13	Target age 15	Target Age 13	Target age 15
2002	1 633	1 229	13.8	15.9
2006	1 343	1 335	13.8	15.8

- b. Smokers marked as frequency *: smoked daily. Regular smokers: smoke once a week or more.

38 Pagano *et al* (1998), Benedetti and Cozzi (2003), Barbieri (2002, 2003, 2004, 2005, 2006), Roncati (2002), Roncati and Tononi (2005, 2007), Camporese (1999), Orsini (2000, 2001, 2002, 2004, 2005, 2007a, 2007b, 2008, 2009), Orasi (2007, 2008), Cacioli (2009), Anonymous (2010a)

- a. Indagine multiscopo sulle famiglie "Aspetti della vita quotidiana" (multipurpose household survey "Aspects of daily life") for ISTAT (Istituto Nazionale di Statistica: National Institute of Statistics). Annual surveys from 1993. Face to face interviews with some self-completion. Some proxy responses.
- b. Survey details:

	Survey period	Sample size	
		Families	Individuals
1993	Dec 1993	-	-
1994	Nov 1994	-	-
1995	Nov 1995	21 629	60 933
1996	Nov 1996	-	-
1997	Nov 1997	-	-
1998	Nov 1998	28 782	77 443
1999	Nov 1999	20 197	55 581
2000	Nov 2000	21 718	58 653
2001	Dec 2001 – Mar 2002	19 920	53 113
2002	Nov 2002	20 927	55 294
2003	Oct 2003	20 574	53 708
2005	Mar 2005	≈20 000	≈50 000
2006	Feb 2006	19 303	48 834
2007	Feb 2007	19 170	48 253
2008	Feb 2008	19 573	48 861

- c. Cigarette smokers: smokers who smoked mainly cigarettes. Cigarettes per smoker values probably include occasional smokers.
- d. Lowest age group 11-14 for 2001 onwards, product unspecified.
- e. Additional values not shown in the tables: Orsini (2002, 2004, 2005, 2007a, 2007b, 2008, 2009) give the prevalence of smoking any product for age range 14-17; and Anonymous (2010a) gives the number of cigarettes per smoker and per person for ages 15-24 and 65+:

	Prevalence (%), ages 14-17		Cigarettes per smoker, ages 15-24		Cigarettes per person, ages 15-24		Cigarettes per smoker, ages 65+		Cigarettes per person, ages 65+	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
1999			12.3	10.2	3.6	1.7	14.1	10.7	2.4	0.6
2000			12.9	9.4	3.5	1.5	14.0	11.1	2.5	0.6
2001	9.5	5.3	12.5	9.1	3.4	1.4	14.4	11.1	2.5	0.6
2002	8.1	5.4	11.5	9.6	3.1	1.6	14.4	11.2	2.3	0.7
2003	8.6	7.4	11.2	9.0	3.0	1.6	13.1	10.6	2.3	0.5
2005	8.4	5.4	10.5	8.2	2.8	1.3	13.3	11.3	1.9	0.7
2006	9.1	5.9	11.1	9.0	2.8	1.5	13.4	10.8	1.9	0.6
2007	7.8	5.5	10.7	8.3	2.7	1.3	14.0	10.0	2.0	0.6
2008	9.9	5.0	11.1	8.6	3.0	1.3	14.0	10.5	1.9	0.6

f. For the years 1993-1998, calculation of cigarettes per person was based on prevalence of smoking (product unspecified) and number of cigarettes per cigarette smoker, so may overestimate.

39 Gargiulo *et al* (2006), Istituto Nazionale di Statistica (2006)

- Indagine multiscopo sulle famiglie "Condizioni di salute e ricorso ai servizi sanitari" (multipurpose household survey "health conditions and use of health services"). 5-yearly thematic surveys. Forms part of the European Health Interview Survey.
- The 1999-2000 survey involved approximately 24 000 families. The 2005 survey was conducted during December 2004 – March 2005 and included approximately 60 000 families.

40 Roncati and Tononi (2007), Statistika Centralbyrån (1995)

- Survey entitled "Indagine multiscopo sulle famiglie" (multipurpose household survey) and comparable with the "Aspetti della vita quotidiana" series (source 38) but carried out in 1991, before that series began.

41, 42 Rabier *et al* (1989), Reif and Melich (1990, 1991a, 1991b, 1992, 1995, 1998a, 1998b, 2000), Reif and Marlier (1998), Melich (2006), Christensen (2004), Papacostas (2008), (2009)

- Eurobarometer Surveys commissioned by the European Commission to monitor public opinion in the European Union. Some Eurobarometer surveys include questions on smoking habits. Sample size around 1 000. These surveys have been criticised for having small sample sizes and for generating "estimates that are in some cases widely discrepant from more substantive national sources" (Bogdanovica *et al* (2011)).
- For surveys before 1994 the sample consisted of people aged 15 and over who were resident in the country and had the country's nationality (source 41). For surveys after 1994 the sample consisted of people aged 15 and over who were resident in the country and had the nationality of any of the member states (source 42). For 1994 itself (Eurobarometer survey 41.0) results were available according to both sample definitions and both are presented.
- Two waves of the survey were carried out in each of 1988 and 1989. Prevalence data from both waves are presented in Table 4 but data on cigarettes per smoker and per person are available only from the first.
- Frequency U represents positive answers to questions such as "Do you smoke cigarettes?" or "You smoke packeted cigarettes". From 2002 an additional question made it possible to identify regular smokers also.
- Consumption category estimation based on (1987 only) <5, 5-9, 10-14, 15-19, 20-24, 25-30, 31-34, 35-40 and 41+ cigarettes/smoker/day and (all other years) <5, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39 and 40+ cigarettes/smoker/day.
- Before 2002 the calculation of cigarettes per person was based on prevalence of smoking (daily and non-daily) and number of cigarettes per daily smoker, so may overestimate.

43 Anonymous (2008, 2009, 2010b)

- Surveillance system PASSI (Progressi delle Aziende Sanitarie per la Salute in Italia). Telephone surveys of people aged 18-69 years who were on the registers of the 149 local health agencies participating in PASSI. Uses the questionnaire developed in the US for the Behavioral Risk Factor Surveillance System.

Year	Regions included	Number of subjects	Response rate (%)
2007	All except Lombardy and Calabria	21 498	85
2008	All except Calabria	37 522	87
2009	All regions	39 212	-

- b. Smokers: had smoked more than 100 cigarettes in lifetime and currently smoked every day or occasionally or had quit less than six months before interview.
- c. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

44, 45 Gaeta *et al* (1998)

- a. Study of adolescents in senior high schools in two towns: a large city (Naples, 978 subjects, source 4) and a small town (Capua, 40 kilometres from Naples, 467 subjects, source 5). Age range 14-19 years considered. Response rate 85% in Naples, 82% in Capua. Survey year not stated; assumed to be 1997.
- b. Regular smokers: smoked one or more cigarettes in the previous week.
- c. Consumption category estimation based on 8-21, 22-41 and 42+ cigarettes/smoker/week. Results should be regarded with caution.

*Additional information (not presented in tables)***School types and grades**

The notes on surveys refer to various types of school, the year groups within these schools and grade numbers that represent the level of study.

A school we refer to as a junior high school is a “Scuola secondaria di primo grado” and provides three year groups.

A school we refer to as a senior high school is a “Scuola secondaria di secondo grado” or “Istituto secondario superiore” and provides up to five year groups. This type of school will fall into one of several categories: “Liceo”, “Istituto tecnico”, “Istituto professionale”, “Istituto d’arte.”

The table below summarises the schooling system for ages 11+. Note that the age ranges are approximate: students at a particular grade level may be older or younger than the age range stated.

School type	Year within school type	Grade	Age range (approximate)
Junior high school	1	VI	11-12
	2	VII	12-13
	3	VIII	13-14
Senior high school	1	IX	14-15
	2	X	15-16
	3	XI	16-17
	4	XII	17-18
	5	XIII	18-19

Mix of tobacco products smoked

La Vecchia (1986) (survey source 14) states that in 1949 over 5% of smokers used hand-rolled cigarettes only and over 25% used both manufactured and hand-rolled cigarettes.

Keys *et al* (1966) (survey sources 21-23) states that pipe and cigar consumption was negligible in Italy, especially in rural areas (in 1957-60).

Readers Digest (1963) (survey source 7) reported that 4% of men (5% age <40 and 5% age 40+ (*sic*)) smoked a pipe, and that 4% of men (3% age <40 and 7% age 40+) smoked cigars (in 1963).

Istituto Centrale de Statistica (1982) (survey source 1) gives the distribution of products smoked (%) in 1980 as:

Age	Males			Females		
	Cigarettes	Cigars	Pipe	Cigarettes	Cigars	Pipe
14-29	99.2	0.2	0.6	100.0	-	-
30-59	98.3	0.8	0.9	99.7	0.3	-
60+	88.6	7.1	4.3	98.3	0.7	1.1
All ages	96.9	1.7	1.4	99.7	0.2	0.1

Survey source **38** (various reports) gives the percentages of all smokers who smoke predominantly cigarettes as:

	Males	Females
1998	97.6	99.5
1999	97.6	99.4
2000	96.7	98.9
2001	96.8	99.5
2002	94.4	97.2
2003	96.4	98.3
2005	96.6	98.9
2006	97.1	99.1
2007	97.5	99.6
2008	97.0	99.9

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