
International Smoking Statistics

Web Edition

A collection of worldwide historical data

Denmark

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Correction to product codes for survey source 23, 1985, 1988, 1991, 1994, 1998, 2002, Table 4. Correction to frequency codes for survey source 24, 1995, 1999, 2003, Table 4.

Tables 4Ext and 6Ext and Figure 3Ext added to Excel workbook. Minor text changes.

(Note that calculations of '% total sales' (Tables 6-8) and of 'adult (15+) estimates' (Tables 4Ext, 6Ext and 8, Figures 3-4) have not been updated with the revised population data; there may be discrepancies for 2002-2007, but these will be very minor.)

Revised 22-Nov-2011 – Table 2 Manufactured Cigarettes (Number/Adult/Day) 2000-2010 corrected, now uses taxed sales plus cross-border trade rather than just taxed sales.

Updated Figure 2 to reflect changes in Table 2

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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 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*.

From 1920 until 1945 the consumption of manufactured cigarettes per adult remained around 1 to 1.5 cigarettes per day. After the Second World War consumption rose, rapidly at first to 3 cigarettes per day around 1950, then gradually to about 5 cigarettes per day in the early 1970s. It remained at about this level until the mid 1980s, then dipped to about 4 cigarettes per day in 1995 and then rose again to about 5 cigarettes per day by 2005. This apparent dip may have been due to cross border sales (see *Notes on sources of sales data*, p. 46) which are not taken into account in the data before 2000.

Although there is conflicting information on hand-rolled cigarette consumption, our estimates suggest that consumption per adult decreased from nearly 2 hand-rolled cigarettes per day about 1950 to 1 per day about 1980, then increased to 1.5 by 1995 and declined again to about 0.5 by 2010. Thus total cigarette consumption per adult has generally remained between 5 and 6 cigarettes per day since 1950.

There is some uncertainty in our estimates of the total weight of tobacco consumed, due to conflicting information on the average weight of cigarettes. The consumption of tobacco products per adult was about 8 g per day from 1920 until the beginning of the Second World War. After a decline during the war, consumption rose rapidly to about 10 g per day in 1950 and varied between 9 g and 10 g per day until the mid 1970s, then decreased to around 7 g in the late 1980s. A dip in taxed sales to 6 g during the 1990s may have been due to increased cross-border trade. Estimates from 2000 onwards take this into account, and show a decline from 7 g to 5.6 g per adult per day by 2010.

From 1925 to 1945, the tobacco consumed was divided fairly equally between manufactured cigarettes, cigars and cigarillos, pipe and hand-rolling tobacco, and chewing tobacco and snuff. After the war, the percentage of tobacco consumed as manufactured cigarettes rose steadily to about 65% by the mid 1980s and to about 85% by the mid 2000s; chewing tobacco and snuff declined rapidly to very low levels, cigars and cigarillos declining more slowly to 6% in 1995 and to very low levels by 2005. Pipe and hand-rolling tobacco reversed their decline in the 1990s but slipped back to about 15% by 2005. The percentage of manufactured cigarettes sold as filtered increased slowly from 30% in 1960 to 90% in the mid 2000s. Sales-weighted average tar yields fell from 27 mg per cigarette in 1964 to 19 mg in 1990.

Survey data

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

From the late 1950s, two sources provided survey data almost annually: source 1, OBSERVA and source 2, Gallup (which, with a slightly modified methodology, continues as source 26). For 2002 onwards source 30, Eurobarometer, is the main source of results by age group.

In 1953, the prevalence of tobacco smoking (all products) among those aged 15 years and over was 78% in men and 40% in women. Over the next 30 years it fell

to about 50% in men but changed little in women. Subsequently the prevalence fell in both sexes to about 30% in men and 25% in women.

In 1953-1954 one national source (source 6) reported that the prevalence of cigarette smoking was higher among women (32%) than among men (24%). Over the next 40 years, however, the prevalence was higher in men than in women and was typically about 40% in men and 35% in women. Between 1995 and 2007 rates fell by about 10% in each sex. Denmark was unique among the countries in the International Smoking Statistics series in that, until the start of the 2000s, a substantial proportion of women smoked products other than manufactured cigarettes.

Data available on adult smoking by age from 1953 until 1970 show a decrease in the prevalence of tobacco smoking in all age groups among men but little change among women. However, from 1970 to the mid 1990s the prevalence of cigarette smoking for both men and women fell among younger age groups, whilst rising among older age groups. From the mid 1990s to the mid 2000s the prevalence of cigarette smoking has declined in all age groups. The proportion of smokers who exclusively smoked products other than cigarettes has always been higher in the old than in the young. In 1953, for example, this proportion was about 90% in men aged over 50 and about 50% in men aged under 30. For women, about half of the older smokers exclusively smoked other products, but very few did in the younger group. By 2000, hardly any young smokers of either sex exclusively smoked other products, though 10% of male smokers aged over 50 did so.

In 1959, the prevalence of smoking among teenage girls was lower than among teenage boys. In the 1980s and 1990s most surveys reported higher prevalence of smoking among girls than boys. During the 2000s smoking prevalence was similar in boys and girls.

Comparison of survey and sales data suggests that the regular surveys (sources 2 and 26) under-reported consumption by 20-30% in the early 1970s, but this gradually reduced and from about 1985 to the end of the 1990s under-reporting was less than 10%. Since then under-reporting has been increasing, to around 30% in 2006. Other sources are more variable, with data from source 6 suggesting under-reporting by 50% in the 1950s, contrasting with data from source 7 suggesting over-reporting by 20%. This variability may to some extent be attributable to low estimates of sales in some years and the uncertainty of estimates of hand-rolled cigarette consumption, as mentioned above.

Between 1953 and 2007, the estimated number of cigarettes smoked per person per day (sales-adjusted) for men generally remained between 6 and 7, while for women it increased from about 4 to nearly 6 in the early 1980s, then decreased to about 5.

Table 1.1 Total annual sales of tobacco products, 1920-1973

Year	Manufactured cigarettes		Cigars		Cigarillos		Smoking tobacco tonnes	Chewing tobacco tonnes	Snuff tonnes	All tobacco products tonnes
	tonnes	millions	tonnes	millions	tonnes	millions				
1920	1 090	860	1 590	321	230	86	2 490	1 410	180	6 990
1921	1 090	868	1 410	284	180	72	2 360	1 130	230	6 400
1922	1 180	943	1 410	284	230	90	2 310	910	180	6 210
1923	1 410	1 109	1 450	292	320	126	2 310	1 180	270	6 940
1924	1 450	1 159	1 410	285	320	125	2 180	1 130	270	6 760
1925	1 540	1 219	1 270	258	360	139	2 130	1 130	270	6 710
1926	1 680	1 325	1 270	251	410	155	2 310	1 090	320	7 080
1927	1 720	1 373	1 180	233	410	167	2 220	1 040	320	6 890
1928	1 950	1 544	1 090	222	500	196	2 270	1 000	320	7 120
1929	1 270	1 017	1 410	278	500	195	2 270	950	360	6 760
1930	1 630	1 319	1 450	289	590	213	2 310	950	360	7 300
1931	1 630	1 332	1 410	284	640	262	2 270	910	410	7 260
1932	1 450	1 170	1 360	268	730	293	2 540	820	410	7 300
1933	1 450	1 142	1 590	314	820	333	2 450	770	410	7 480
1934	1 540	1 214	1 810	366	910	360	2 450	730	410	7 850
1935	1 630	1 307	2 040	406	950	379	2 400	730	450	8 210
1936	1 770	1 404	2 180	437	1 000	393	2 540	680	450	8 620
1937	1 910	1 507	2 310	459	1 000	402	2 400	680	450	8 750
1938	2 000	1 605	2 360	469	1 000	407	2 450	640	450	8 890
1939	2 180	1 748	2 450	487	1 040	425	2 540	590	450	9 250
1940	2 090	1 662	2 040	409	820	333	2 590	590	500	8 620
1941	2 000	1 577	1 130	227	680	269	2 000	640	540	6 990
1942	2 220	1 779	730	145	770	317	2 590	640	500	7 440
1943	1 360	1 094	590	116	730	284	1 720	410	450	5 260
1944	1 630	1 318	590	117	770	305	1 860	410	540	5 810
1945	1 450	1 163	680	137	820	335	1 410	360	540	5 260
1946	2 680	2 150	1 540	308	1 180	474	2 630	540	640	9 210
1947	2 990	2 380	1 720	347	1 090	441	2 720	500	540	9 570
1948	3 310	2 663	1 910	383	1 180	479	3 080	450	540	10 480
1949	4 350	3 489	1 910	383	1 000	402	2 540	450	500	10 750
1950	5 030	4 008	1 910	383	1 000	400	2 490	410	500	11 340
1951	4 350	3 483	1 410	282	1 040	423	2 400	410	500	10 120
1952	4 850	3 881	1 090	214	1 360	542	2 590	360	500	10 750
1953	4 900	3 931	1 040	208	1 500	597	2 590	360	500	10 890
1954	4 810	3 834	1 040	208	1 540	621	2 680	360	500	10 930
1955	4 760	3 787	1 090	216	1 540	612	2 630	320	450	10 800
1956	4 850	3 882	1 130	225	1 540	615	2 590	320	450	10 890
1957	5 030	4 010	1 130	229	1 540	621	2 540	270	450	10 980
1958	5 400	4 349	1 180	239	1 630	657	2 590	270	450	11 520
1959	5 900	4 706	1 320	262	1 720	683	2 450	270	450	12 110
1960	6 170	4 990	1 360	275	1 720	699	2 450	270	450	12 430
1961	6 350	5 097	1 450	286	1 770	705	2 270	230	410	12 470
1962	6 760	5 257	1 450	286	1 810	722	2 270	230	410	12 930
1963	6 800	5 600	1 360	271	1 810	720	2 180	230	410	12 790
1964	6 530	5 277	1 450	293	2 130	854	2 450	230	410	13 200
1965	6 890	5 414	1 500	300	2 040	851	2 450	180	360	13 430
1966	7 080	5 566	1 450	288	2 000	808	2 310	180	360	13 380
1967	7 120	5 614	1 450	290	2 000	809	2 360	180	320	13 430
1968	7 350	5 799	1 360	270	1 910	784	2 310	140	320	13 380
1969	7 940	6 274	1 360	274	1 910	782	2 180	140	270	13 790
1970	8 070	6 357	1 320	267	1 810	762	2 130	140	270	13 740
1971	8 210	6 481	1 220	250	1 720	718	2 090	140	270	13 650
1972	8 800	6 940	1 180	240	1 680	702	1 950	90	270	13 970
1973	9 160	7 202	1 130	234	1 590	670	1 910	90	230	14 110

Source: see *Notes on sources of sales data: Sales data before 1974*, p. 46

Table 1.2 Total annual sales of tobacco products, 1974-1997

Year	Manufactured cigarettes		Cigars and cigarillos		Pipe & HR ¹ tobacco tonnes	Chewing tobacco tonnes	Snuff tonnes	All tobacco products tonnes
	tonnes	millions	tonnes	millions				
1974	6 909	6 909	2 775	881	2 551	99	227	12 561
1975	7 295	7 295	2 756	875	2 023	93	223	12 390
1976	7 690	7 690	2 674	849	1 792	82	207	12 445
1977	7 610	7 610	2 655	843	1 889	76	198	12 428
1978	7 435	7 435	2 460	781	1 780	47	185	11 907
1979	7 431	7 431	2 331	740	1 821	65	170	11 818
1980	7 151	7 151	2 192	696	2 128	61	159	11 691
1981	7 299	7 299	1 991	632	2 315	58	149	11 812
1982	7 989	7 989	1 792	569	2 474	52	142	12 449
1983	7 411	7 411	1 673	531	2 202	49	131	11 466
1984	7 720	7 720	1 566	497	2 223	44	117	11 670
1985	7 787	7 787	1 487	472	2 314	43	107	11 738
1986	7 502	7 502	1 452	461	2 419	39	98	11 510
1987	7 183	7 183	1 367	434	2 547	37	84	11 218
1988	6 939	6 939	1 232	391	2 662	32	76	10 941
1989	6 776	6 776	1 153	366	2 760	29	75	10 793
1990	6 584	6 584	1 033	328	2 953	26	70	10 666
1991	6 517	6 517	964	306	2 931	25	62	10 499
1992	6 745	6 745	891	283	2 776	22	52	10 486
1993	6 382	6 382	784	249	2 899	19	48	10 132
1994	6 440	6 440	709	225	2 771	16	40	9 976
1995	6 429	6 429	636	202	2 718	14	37	9 834
1996	6 587	6 587	599	190	2 357	13	36	9 592
1997	6 675	6 675	573	182	2 294	10	35	9 587

¹ Tobacco for hand-rolled cigarettes

Source: see *Notes on sources of sales data: Sales data for 1974 onwards*, p. 46

Table 1.3 Total annual sales of tobacco products, 1998-2006, and estimated consumption, 2000-2010

Year	Taxed sales			Net cross-border trade		Consumption ¹		Estimated ² cigarette consumption millions	All tobacco products ² tonnes
	Manufactured cigarettes millions	Cigars & cigarillos millions	Smoking tobacco tonnes	Cigarettes, cigars & cigarillos millions	Smoking tobacco tonnes	Cigarettes, cigars & cigarillos millions	Smoking tobacco tonnes		
1998	6 873	180	2 218						9 451
1999	7 108	167	2 149						9 591
2000	7 054	156	2 231	850	450	8 060	2 681	7 886	11 116
2001	7 200	140	1 690	850	475	8 190	2 165	8 034	10 691
2002	7 157	130	1 732	850	475	8 137	2 207	7 992	10 656
2003	7 873	119	1 608	740	475	8 732	2 083	8 602	11 095
2004	8 178	114	1 325	550	450	8 842	1 775	8 720	10 878
2005	7 966	103	1 122	400	375	8 469	1 497	8 361	10 198
2006	8 241	94	1 032	300	300	8 635	1 332	8 538	10 176
2007	7 938	88	908	200	300	8 226	1 208	8 136	9 628
2008	7 903	82	849	175	250	8 160	1 099	8 076	9 439
2009	7 868	71	779	150	250	8 089	1 029	8 017	9 274
2010	7 702	67	715	150	250	7 918	965	7 850	9 030

¹ Taxed sales plus net cross-border trade

² See *Notes for method of calculation*

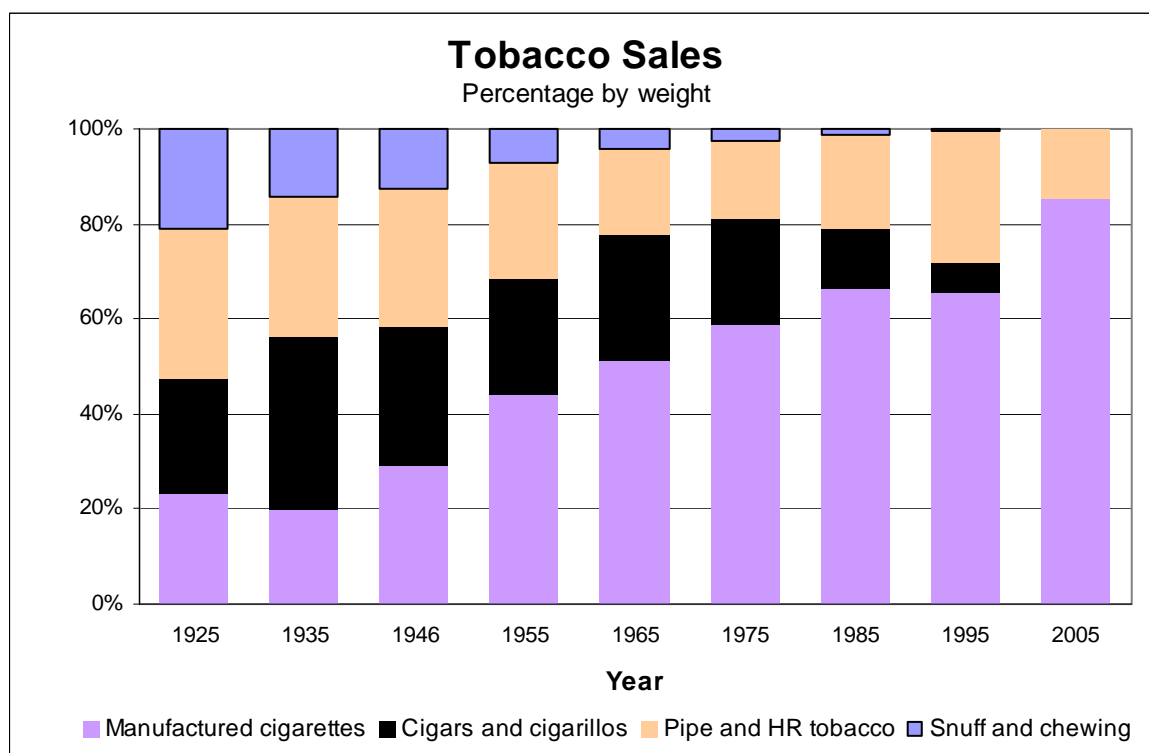
Source: see *Notes on sources of sales data: Sales data for 1974 onwards*, p. 46

Table 1.4 Percentage of sales of tobacco in different forms (by weight), selected years

Year	Manufactured cigarettes %	Cigars and cigarillos %	Pipe and HR tobacco %	Snuff and chewing %
1925	23.0	24.3	31.8	20.9
1935	19.9	36.5	29.3	14.4
1946	29.1	29.5	28.6	12.8
1955	44.1	24.4	24.4	7.1
1965	51.3	26.4	18.3	4.0
1975	58.9	22.2	16.3	2.6
1985	66.3	12.7	19.7	1.3
1995	65.4	6.5	27.6	0.5
2005	85.3 (With Cigarettes)		14.7	0.0

Source: calculated from Tables 1.1, 1.2 & 1.3

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



Source: Table 1.4

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	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day
1920	860	1.1					6 990	8.6
1921	868	1.0					6 400	7.6
1922	943	1.1					6 210	7.4
1923	1 109	1.3					6 940	8.0
1924	1 159	1.3					6 760	7.8
1925	1 219	1.4					6 710	7.8
1926	1 325	1.5					7 080	8.0
1927	1 373	1.5					6 890	7.7
1928	1 544	1.7					7 120	7.8
1929	1 017	1.1					6 760	7.4
1930	1 319	1.4					7 300	8.0
1931	1 332	1.4					7 260	7.5
1932	1 170	1.2					7 300	7.5
1933	1 142	1.2					7 480	7.7
1934	1 214	1.2					7 850	7.9
1935	1 307	1.3					8 210	8.3
1936	1 404	1.4					8 620	8.5
1937	1 507	1.5					8 750	8.6
1938	1 605	1.5					8 890	8.5
1939	1 748	1.7					9 250	8.8
1940	1 662	1.6					8 620	8.2
1941	1 577	1.5					6 990	6.5
1942	1 779	1.7					7 440	6.9
1943	1 094	1.0					5 260	4.9
1944	1 318	1.2					5 810	5.3
1945	1 163	1.1					5 260	4.8
1946	2 150	1.9					9 210	8.3
1947	2 380	2.1					9 570	8.6
1948	2 663	2.3					10 480	9.2
1949	3 489	3.1					10 750	9.5
1950	4 008	3.5	1 992	1.7	6 000	5.2	11 340	9.9
1951	3 483	3.0	1 920	1.7	5 403	4.7	10 120	8.8
1952	3 881	3.3	2 072	1.8	5 953	5.1	10 750	9.2
1953	3 931	3.4	2 072	1.8	6 003	5.1	10 890	9.3
1954	3 834	3.2	2 144	1.8	5 978	5.1	10 930	9.3
1955	3 787	3.2	2 104	1.8	5 891	5.0	10 800	9.1
1956	3 882	3.2	2 072	1.7	5 954	5.0	10 890	9.1
1957	4 010	3.3	2 032	1.7	6 042	5.0	10 980	9.1
1958	4 349	3.6	2 072	1.7	6 421	5.3	11 520	9.5
1959	4 706	3.8	1 960	1.6	6 666	5.4	12 110	9.8
1960	4 990	4.0	1 960	1.6	6 950	5.6	12 430	9.9
1961	5 097	4.0	1 816	1.4	6 913	5.4	12 470	9.8
1962	5 257	4.1	1 816	1.4	7 073	5.5	12 930	10.1
1963	5 600	4.3	1 744	1.3	7 344	5.7	12 790	9.8
1964	5 277	4.0	1 960	1.5	7 237	5.5	13 200	10.1
1965	5 414	4.1	1 960	1.5	7 374	5.6	13 430	10.1
1966	5 566	4.2	1 848	1.4	7 414	5.6	13 380	10.0
1967	5 614	4.2	1 888	1.4	7 502	5.6	13 430	10.0
1968	5 799	4.3	1 848	1.4	7 647	5.6	13 380	9.9
1969	6 274	4.6	1 744	1.3	8 018	5.9	13 790	10.1

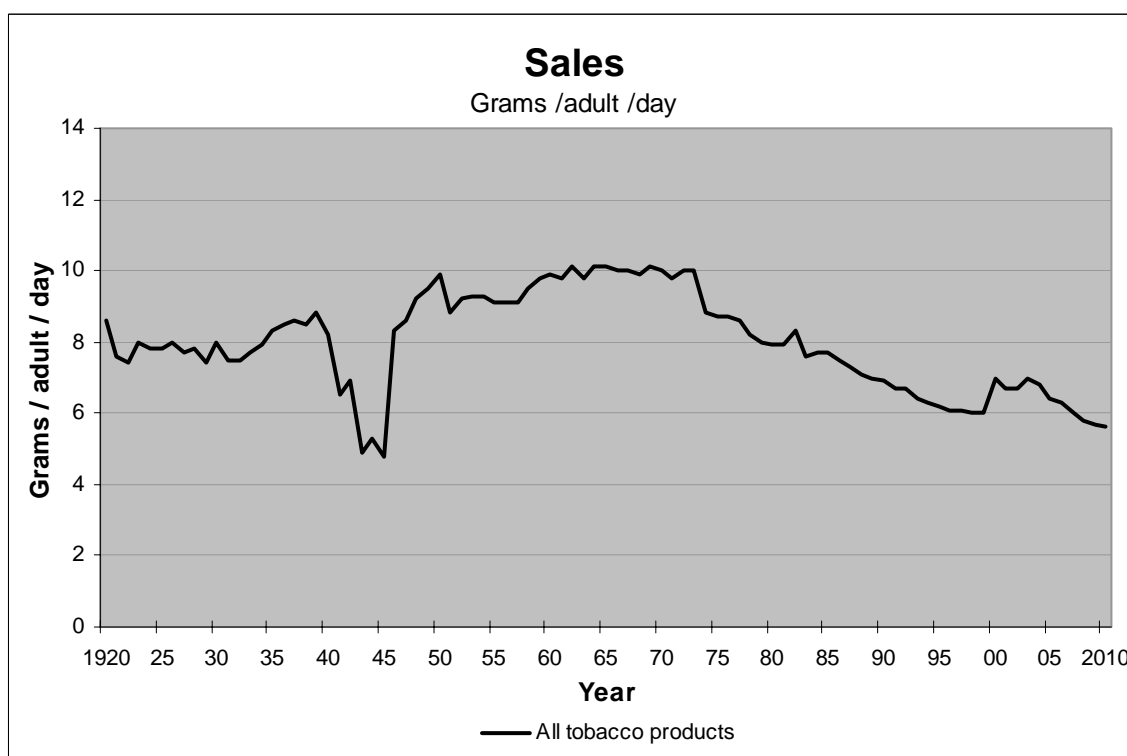
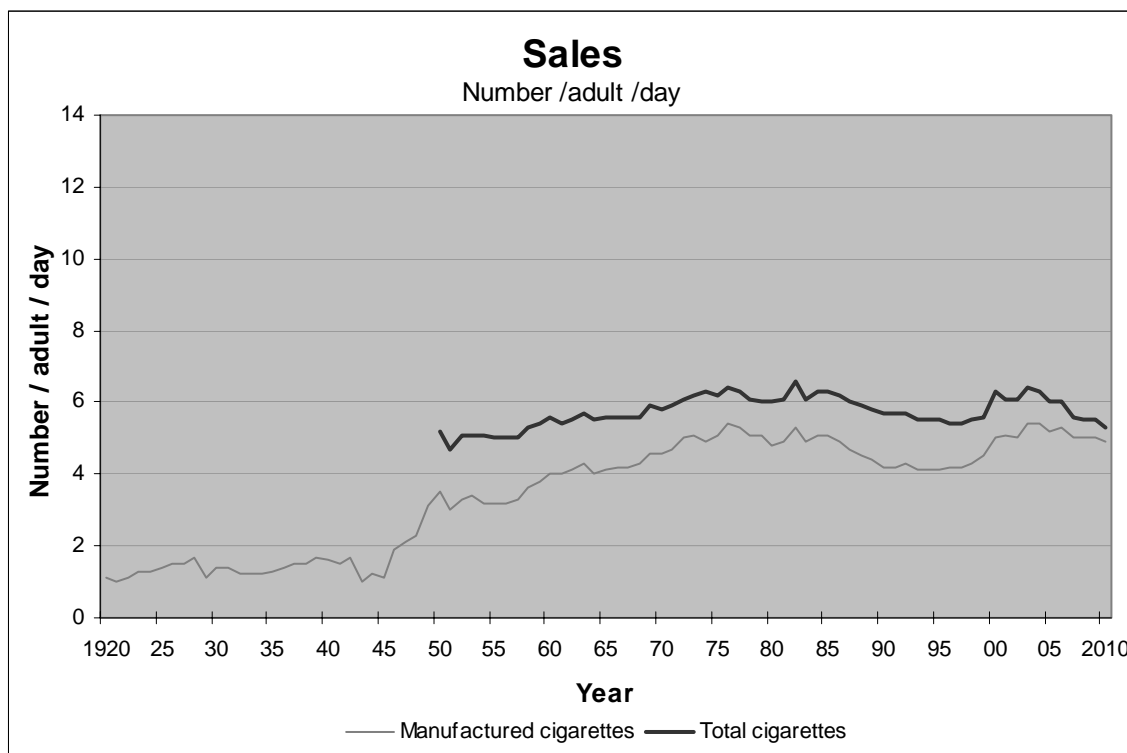
Table 2 (continued)

Year	Manufactured Cigarettes		Hand-rolled cigarettes		Total cigarettes		All tobacco products	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day
1970	6 357	4.6	1 704	1.2	8 061	5.8	13 740	10.0
1971	6 481	4.7	1 672	1.2	8 153	5.9	13 650	9.8
1972	6 940	5.0	1 560	1.1	8 500	6.1	13 970	10.0
1973	7 202	5.1	1 528	1.1	8 730	6.2	14 110	10.0
1974	6 909	4.9	2 041	1.4	8 950	6.3	12 561	8.8
1975	7 295	5.1	1 618	1.1	8 913	6.2	12 390	8.7
1976	7 690	5.4	1 434	1.0	9 124	6.4	12 445	8.7
1977	7 610	5.3	1 511	1.0	9 121	6.3	12 428	8.6
1978	7 435	5.1	1 424	1.0	8 859	6.1	11 907	8.2
1979	7 431	5.1	1 457	1.0	8 888	6.0	11 818	8.0
1980	7 151	4.8	1 702	1.2	8 853	6.0	11 691	7.9
1981	7 299	4.9	1 852	1.2	9 151	6.1	11 812	7.9
1982	7 989	5.3	1 979	1.3	9 968	6.6	12 449	8.3
1983	7 411	4.9	1 762	1.2	9 173	6.1	11 466	7.6
1984	7 720	5.1	1 778	1.2	9 498	6.3	11 670	7.7
1985	7 787	5.1	1 851	1.2	9 638	6.3	11 738	7.7
1986	7 502	4.9	1 935	1.3	9 437	6.2	11 510	7.5
1987	7 183	4.7	2 038	1.3	9 221	6.0	11 218	7.3
1988	6 939	4.5	2 130	1.4	9 069	5.9	10 941	7.1
1989	6 776	4.4	2 208	1.4	8 984	5.8	10 793	7.0
1990	6 584	4.2	2 362	1.5	8 946	5.7	10 666	6.9
1991	6 517	4.2	2 345	1.5	8 862	5.7	10 499	6.7
1992	6 745	4.3	2 221	1.4	8 966	5.7	10 486	6.7
1993	6 382	4.1	2 319	1.5	8 701	5.5	10 132	6.4
1994	6 440	4.1	2 217	1.4	8 657	5.5	9 976	6.3
1995	6 429	4.1	2 174	1.4	8 603	5.5	9 834	6.2
1996	6 587	4.2	1 886	1.2	8 473	5.4	9 592	6.1
1997	6 675	4.2	1 835	1.2	8 510	5.4	9 587	6.1
1998	6 873	4.3	1 774	1.1	8 647	5.5	9 451	6.0
1999	7 108	4.5	1 719	1.1	8 827	5.6	9 591	6.0
2000	7 886	5.0	2 145	1.4	10 030	6.3	11 116	7.0
2001	8 034	5.1	1 732	1.1	9 766	6.1	10 691	6.7
2002	7 992	5.0	1 766	1.1	9 757	6.1	10 656	6.7
2003	8 602	5.4	1 666	1.0	10 268	6.4	11 095	7.0
2004	8 720	5.4	1 420	0.9	10 140	6.3	10 878	6.8
2005	8 361	5.2	1 198	0.7	9 558	6.0	10 198	6.4
2006	8 538	5.3	1 066	0.7	9 603	6.0	10 176	6.3
2007 ¹	8 136	5.0	966	0.6	9 102	5.6	9 628	6.0
2008 ¹	8 076	5.0	879	0.5	8 955	5.5	9 439	5.8
2009 ¹	8 017	5.0	823	0.5	8 840	5.5	9 274	5.7
2010 ¹	7 850	4.9	772	0.5	8 622	5.3	9 030	5.6

1 Uses population data for 2006

Source: Manufactured cigarettes and all tobacco products, Tables 1.1, 1.2 and 1.3 (using estimated consumption 2000-2010). Hand-rolled cigarettes, see *Notes on sources of sales data: Estimates of numbers of hand-rolled cigarette for 1920-2010*, p. 46. 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 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
1960	29.0	
1961	30.0	
1962	30.5	
1963	35.3	
1964	37.5	27.0
1965	39.1	27.0
1966	41.8	27.0
1967	44.5	28.0
1968	48.1	29.0
1969	49.4	29.0
1970	47.8	30.0
1971	48.3	30.0
1972	49.5	30.0
1973	51.9	30.0
1974	52.6	29.0
1975	53.5	29.0
1976	56.6	28.0
1977	59.7	27.0
1978	60.6	27.0
1979	61.9	26.0
1980	62.1	25.0
1981	63.2	25.0
1982	66.0	24.0
1983	67.0	24.0
1984	68.0	23.0
1985	65.0	23.0
1986	80.0	21.8
1987	76.0	21.0
1988	78.0	20.3
1989	79.3	18.9
1990	84.0	18.6
1991	89.9	
1992	90.9	
1993	90.9	
1994	85.0	
1995	86.0	
1996	88.0	
1997	89.0	
1998	90.0	
1999	90.6	
2000	90.6	
2001	91.4	
2002	91.6	
2003		
2004	90.6	

Source: see *Notes on sources of sales data: Plain/Filter cigarette sales*, p. 47 and *Tar machine yields of cigarettes*, p. 47

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+
74	1	A	U	64																					
74	2	TC	R	35				58	52	48	54	41				19				42					
74	2	A	R	40				65	64	66	72	68				60				64					
74	8	TC	U	35																					
74	8	A	U	68																					
74	12	A	U	40				63			65			70			69			61					
75	2	TC	R	37				53	52	48	51	38				16				40					
75	2	A	R	41				57	63	62	69	65				53				60					
75	11	UC	U	38				57	54	48	50	38				15				41					
75	11	A	U	41				62	62	64	70	66				52				61					
76	1	MC	U	37																					
76	1	A	A	51				67				63				55				62					
76	2	TC	R	30				55	53	46	49	42				23				41					
76	2	A	R	32				61	62	60	68	66				57				61					
76	8	A	U	61																					
76	12	A	U	35				63			62	69	67				59								
77	1	MC	U	36																					
77	1	A	A	53				65				58				52				59					
77	2	TC	R	28				52	53	47	50	43				31				40					
77	2	A	R	30				58	61	60	67	66				60				59					
77	8	A	U	54																					
77	16	A	U	58				62	63	68	76	77	75	72	70	64	57	53	63						
78	1	MC	U	40																					
78	1	A	A	51				62				60				52				57					
78	2	TC	R	31				47	50	46	47	42				21				41					
78	2	A	R	32				53	58	58	66	66				53				57					
79	1	TC	U	38																					
79	2	TC	R	30				49	53	48	47	42				21				41					
79	2	A	R	31				53	60	59	62	65				52				57					
79	7	UC	R	44																					
79	7	A	R	39				62				60				56				59					
80	1	MC	U	40																					
80	1	A	A	46				59				54				39				53					
80	2	TC	R	33				46	54	48	46	45				23				42					
80	2	A	R	33				51	61	61	62	64				53				57					
80	13	A	R	28																					
80	13	A	A	12	19	26	36	52																	
81	1	A	A	41				59				60				40				53					
81	2	TC	R	25				43	53	45	45	48				23				40					
81	2	A	R	27				46	55	56	61	66				52				54					
82	1	A	A	43				57				60				40				53					
82	2	TC	R	29				38	50	47	47	45				24				40					
82	2	A	R	30				40	55	57	60	61				50				53					
83	1	A	A	42				53				55				32				48					
83	2	TC	R	25				45	47	47	42	43				21				39					
83	2	A	R	28				50	54	59	57	64				49				54					
83	4	UC	R	55				44				50				39				45					
83	4	UC	A	57				46				51				40				46					
83	4	A	A	63				59				65				59				61					
83	5	UC	U																						
84	1	A	A	39				53				54				36				48					
84	2	TC	R	22				45	47	49	42	42				26				40					
84	2	A	R	22				46	50	58	55	58				49				51					

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	25	30	35	40	45	50	55	60	
85	2	TC	R							30	42	45	47	43	42					26	40
85	2	A	R							30	43	50	55	57	59					49	51
85	13	UC	A	4	12	20	32	32													
85	23	U	*		3		15														
85	23	U	R		6		19														
85	23	U	A		8		23														
86	2	TC	R						23	38	53	51	40	43					26	40	
86	2	A	R						28	39	55	60	58	63					49	53	
86	4	UC	R								51	43	41	35						40	
86	4	A	A								53	51	52	51						51	
87	2	TC	R						21	42	50	48	45	39					26	39	
87	2	A	R						22	43	53	54	58	55					48	50	
87	17	A	R						23	44	44	49	50	57	53			39	36		
87	17	UC	A						24	44	45	41	44	35				19		38	
87	17	A	A						24	48	45	53	53	59	55			42	42	49	
87	29	UC	U						42	44	44	34	26							37	
87	29	A	U						43	49	50	50	47							48	
88	2	TC	R						18	37	44	47	42	43					28	38	
88	2	A	R						19	37	46	54	52	56					47	47	
88	23	U	*		3		14														
88	23	U	R		6		11														
88	23	U	A		9		25														
88	29	TC	U						27	47	42	25								36	
88	29	TC	U						24	41	40	26								33	
88	29	A	U						29	55	51	43								45	
88	29	A	U						24	48	55	45								44	
89	2	TC	R						24	43	44	46	41	42					25	38	
89	2	A	R						25	44	46	51	49	56					44	47	
89	18	U	*	1			12														
89	18	U	R	4			17														
89	18	U	A	8			24														
89	19	A	R						30	43	48	43								43	
89	19	A	A						35	43	49	52	52	*						47	
89	25	UC	R		6		17														
89	25	UC	A		15		40														
89	29	TC	U						34	40	36	30								35	
89	29	TC	U						44	47	38	32								40	
89	29	A	U						37	46	45	55								47	
89	29	A	U						46	50	52	44								48	
90	2	TC	R						26	41	47	47	38	39					28	38	
90	2	A	R						27	41	49	52	47	54					49	47	
90	21	U	R			8	9														
90	21	U	A	1		8															
90	22	U	R				8														
90	22	A	A						15	48	53	56	49								
90	29	MC	U						31	32	33	18								28	
90	29	TC	U						36	39	41	29								36	
90	29	A	U						38	43	51	51								46	

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	25	30	35	40	45	50	55	60		65	70	75	80+			
85	2	TC	R							28					44	49		48			38			19		37		
85	2	A	R							28					44	50		50			48			45		30	42	
85	13	UC	A	5	11	30	41	45																				
85	23	U	*		11																							
85	23	U	R		13																							
85	23	U	A		17																							
86	2	TC	R							26					36	52		52			43			46		24	40	
86	2	A	R							27					37	53		55			46			52		36	45	
86	4	UC	R															50			37			46		39	40	
86	4	A	A															50			38			47		46	43	
87	2	TC	R							24					42	49		48			40			42		22	38	
87	2	A	R							25					43	49		49			44			47		32	42	
87	17	A	R							33					46	46		47			46			48	42	26	17	
87	17	UC	A							35					50			49			46			45	36	16	39	
87	17	A	A							35					51	49		50			48			49	43	31	19	40
87	29	UC	U							41								50			45			27			40	
87	29	A	U							42								52			47			33			43	
88	2	TC	R							25					44	46		50			43			45		21	39	
88	2	A	R							25					44	47		51			45			49		28	42	
88	23	U	*		1					16																		
88	23	U	R		6					17																		
88	23	U	A		7					33																		
88	29	TC	U							43								41			48			34			40	
88	29	TC	U							49								47			44			37			44	
88	29	A	U							44								41			49			39			42	
88	29	A	U							49								49			45			43			46	
89	2	TC	R							27					41	53		45			40			44		24	38	
89	2	A	R							27					41	53		46			42			47		31	41	
89	18	U	*	1						30																		
89	18	U	R	6						39																		
89	18	U	A	8						50																		
89	19	A	R												31			39					31				35	
89	19	A	A												38	46		41			33		36	*			39	
89	25	UC	R		6					23																		
89	25	UC	A		16					30																		
89	29	TC	U							40								52			44			41			46	
89	29	TC	U							51								54			44			34			45	
89	29	A	U							40								52			45			46			47	
89	29	A	U							52								55			47			38			47	
90	2	TC	R							22					44	45		47			44			42		23	38	
90	2	A	R							22					44	46		47			45			46		30	40	
90	21	U	R							5					17													
90	21	U	A	2						10																		
90	22	U	R												12													
90	22	A	A												23			49			46		48		39			
90	29	MC	U							32								41			39			22			32	
90	29	TC	U							36								54			50			30			42	
90	29	A	U							36								54			52			36			44	

Table 4M (continued from p. 20, continues on p. 24)
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+									
91	2	TC	R							22		41	46		47		46		39			26		39										
91	2	A	R							22		42	48		51		55		53			44		47										
91	4	UC	R												43		45		47		37			44										
91	4	UC	A												47		48		49		38			46										
91	4	A	A												49		51		59		51			53										
91	17	UC	A							24		39		48		45		37		33		28		39										
91	17	A	A							24		41		55		58		44		46		44		47										
91	20	U	R								16																							
91	20	U	A									31																						
91	23	U	*									4										16												
91	23	U	A									17										26												
91	29	MC	U												36		35		35			26		33										
91	29	TC	U												42		45		40			32		40										
91	29	A	U												44		48		49			43		46										
92	2	TC	R									20		41	46		46		45		39		27	39										
92	2	A	R									20		41	47		50		55		49		43	46										
92	29	MC	U												23		33		31			16		26										
92	29	TC	U												26		47		38			24		34										
92	29	A	U												27		49		44			40		41										
93	2	TC	R												20				*					37										
93	2	A	R												20		41	47	46		50		53	41	45									
94	17	A	R														30		41		50		38	41										
94	17	UC	A														33		39		40		26	36										
94	17	A	A														33		44		52		40	44										
94	23	U	*																			4		11										
94	23	U	R																			5		14										
94	23	U	A																			11		25										
94	26	U	R																			*	19	35	48	54	46	45	34	38				
94	26	U	A																					41										
94	29	MC	U																					28	28	33	24	28						
94	29	TC	U																					41	39	42	27	37						
94	29	A	U																					41	40	50	44	43						
94	30	MC	U																					28	28	32	23	27						
94	30	TC	U																					41	38	42	27	36						
94	30	A	U																					41	39	49	44	43						
95	24	UC	*																					16										
95	24	UC	A																					24										
95	26	U	R																					*	20	33	40	45	33	47	39	38		
95	26	U	A																						42									
95	30	MC	U																						33	44	33	21	33					
95	30	TC	U																						38	46	43	33	40					
95	30	A	U																						39	48	51	44	46					
96	26	U	R																						*	14	37	41	40	32	43	23	36	
96	26	U	A																							40								
96	31	U	R																							17	22	26	30	24				
96	31	U	A																							36								
97	26	U	R																						*	20	32	30	42	40	39	37	34	
97	26	U	A																							37								
98	17	UC	R																							23	36	34	40	27	24	18	14	31
98	17	A	R																							23	37	36	47	38	34	27	19	36
98	17	A	A																							27	42	40	51	41	36	31	21	40
98	23	A	*																							3		15						
98	23	A	R																							6		20						
98	26	U	R																							*	18	31	29	42	38	34	30	32
98	26	U	A																								36							

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+
91	2	TC	R							20		44	45		50		42		41		27		39		
91	2	A	R							20		44	46		51		43		44		32		41		
91	4	UC	R											45		44		43		49				45	
91	4	UC	A											51		46		46		50				47	
91	4	A	A											51		46		47		52				48	
91	17	UC	A							30		44		46		44		46		32		24		39	
91	17	A	A							30		44		46		44		49		35		27		41	
91	20	U	R									21													
91	20	U	A									41													
91	23	U	*									3		20											
91	23	U	A									16		32											
91	29	MC	U							30				34		40				19				29	
91	29	TC	U							35				50		50				22				38	
91	29	A	U							35				50		54				30				41	
92	2	TC	R							26		43	43	49		43		41		23				38	
92	2	A	R							26		43	43	49		44		44		28				40	
92	29	MC	U							46				36		40				30				37	
92	29	TC	U							52				50		50				44				48	
92	29	A	U							52				50		54				49				51	
93	2	TC	R							21								*						37	
93	2	A	R							21		42	44	46		43		45		29				39	
94	17	A	R							29				43		40				27				37	
94	17	UC	A							32				46		37				22				37	
94	17	A	A							32				46		41				29				39	
94	23	U	*							3		17													
94	23	U	R							8		24													
94	23	U	A							16		33													
94	26	U	R							*		26		39		37		42		49		42		35	
94	26	U	A													37									
94	29	MC	U							34				47		37				28				36	
94	29	TC	U							41				53		53				40				46	
94	29	A	U							41				53		55				41				47	
94	30	MC	U							34				47		37				29				36	
94	30	TC	U							41				53		53				40				46	
94	30	A	U							41				53		55				42				48	
95	24	UC	*							18															
95	24	UC	A							32															
95	26	U	R							*		20		35		49		42		31		33		32	
95	26	U	A													37									
95	30	MC	U							34				34		33				18				28	
95	30	TC	U							42				44		47				23				37	
95	30	A	U							42				45		49				26				39	
96	26	U	R							*		10		35		39		44		26		37		32	
96	26	U	A													35									
96	31	U	R									21	20	28	32									25	
96	31	U	A											39											
97	26	U	R							*		24		27		37		38		36		30		30	
97	26	U	A													33									
98	17	UC	R									28		33		40		32		34		25	18	4	31
98	17	A	R									28		33		40		34		36		29	21	6	32
98	17	A	A									33		40		44		37		39		30	22	14	36
98	23	A	*									4		21											
98	23	A	R									8		28											
98	26	U	R							*		16		34		29		39		35		32		19	30
98	26	U	A													33									

Table 4F (continued from p. 23, continues on p. 27)
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
99	17	UC	R							23		35		33		36		29		29		19	3	30
99	17	A	R							23		35		34		37		31		33		22	5	31
99	17	A	A							29		39		39		39		34		35		22	5	35
99	24	UC	*							26														
99	24	UC	A							42														
99	26	U	R		*					24		28		27		37		27		31		16		27
99	26	U	A																					
99	28	U	*			3	11	14																
99	28	U	A			10	14	32	36															
99	30	U	U							49		41		51						37				44
00	17	UC	R							25		32		37		36		27		30		15	5	30
00	17	A	R							25		32		37		37		30		33		18	8	31
00	17	A	A							29		34		38		39		31		34		22	12	33
00	26	U	R		*					24		29		28		34		35		29		22		29
00	26	U	A																					
00	27	U	*							15	18	22	26	25										21
00	27	U	R							19	25	27	30	28										26
00	27	U	A							27	33	37	38	34										34
00	28	U	*			4	11	18																
00	28	U	A			5	17	34	41															
01	17	UC	R							24		25		37		36		29		28		16	4	28
01	17	A	R							25		25		37		36		32		31		20	9	30
01	17	A	A							28		29		39		38		33		33		21	9	32
01	26	U	R		*					15		28		25		32		34		24		18		26
01	26	U	A																					
01	27	U	*							15	19	25	27	30										24
01	27	U	R							29														
01	27	U	A							28	32	38	41	42										37
01	28	U	*			2	9	16																
01	28	U	A			5	12	26	38															
02	23	A	*			3		16																
02	23	A	R			5		21																
02	26	U	R		*					18		28		30		27		32		27		21		26
02	26	U	A																					
02	27	U	*							13	20	20	20	26										20
02	27	U	A							19	35	28	32	37										31
02	28	U	*			4	12	11																
02	28	U	A			6	12	30	29															
02	30	M	C	R						21		29		25		23								25
02	30	T	C	R						26		35		33		27								31
02	30	A	R							26		35		33		27								31
02	30	M	C	U						27		34		29		26								29
02	30	T	C	U						32		40		36		30								34
02	30	A	U							32		40		37		31								35
03	24	UC	*							20														
03	24	UC	A							32														
03	26	U	R		*					7		19		25		30		29		29		24		24
03	26	U	A																					
03	27	U	*							18	14	21	19	24										19
03	27	U	R							22	16	25	23	28										23
03	27	U	A							26	24	29	26	36										28
03	28	U	*			2	5	12																
03	28	U	A			2	11	16	32															

Table 4M (continued from p. 24)
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
04	26	U	R	28																				
04	26	U	A	29																				
04	27	U	*					13	14	22	15	22											17	
04	27	U	R					14	16	26	22	26											21	
04	27	U	A					17	25	31	29	31											26	
04	28	U	*																					
04	28	U	A	3	13	18	27																	
05	26	A	R	28																				
05	26	UC	A	27																				
05	26	A	A	31																				
05	28	U	*		2	7	9																	
05	28	U	A	4	8	16	23															12		
05	30	MC	R					28				35				22				19				26
05	30	TC	R					30				39				27				24				30
05	30	A	R					30				39				29				34				33
05	30	MC	A					34				36				28				20				28
05	30	TC	A					35				40				33				25				33
05	30	A	A					37				41				39				37				38
06	26	A	R	26																				
06	26	UC	A	26																				
06	26	A	A	30																				
06	27	U	*					11	16	16	25	22											18	
06	27	U	R					14	18	20	29	25											21	
06	27	U	A					20	26	26	31	33											27	
06	28	U	*		1	6	9																	
06	28	U	A	2	6	17	22															12		
07	26	UC	R	28																				
07	26	A	R	28																				
07	26	UC	A	28																				
07	26	A	A	32																				

Source: see *Notes on sources of survey data*, p. 48
 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. 48
 All ages: relates to ages reported; as given in original source

Table 4F (continued from 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
04	26	U	R	23																			
04	26	U	A	24																			
04	27	U	*					16	15	15	25	28											20
04	27	U	R					18	18	21	33	34											25
04	27	U	A					22	25	31	41	39											31
04	28	U	*		2	7	9																
04	28	U	A	2	7	19	25																
05	26	A	R	24																			
05	26	UC	A	25																			
05	26	A	A	25																			
05	28	U	*		1	8	10																
05	28	U	A	3	8	17	28																13
05	30	MC	R					31			28			23			19				24		
05	30	TC	R					31			29			26			24				27		
05	30	A	R					31			29			26			24				27		
05	30	MC	A					38			33			27			22				28		
05	30	TC	A					39			34			29			27				31		
05	30	A	A					39			34			29			27				31		
06	26	A	R	23																			
06	26	UC	A	25																			
06	26	A	A	26																			
06	27	U	*					12	16	19	14	17											16
06	27	U	R					18	20	21	18	19											19
06	27	U	A					25	24	31	27	24											26
06	28	U	*		1	5	8																
06	28	U	A	1	8	13	26																11
07	26	UC	R	23																			
07	26	A	R	21																			
07	26	UC	A	23																			
07	26	A	A	24																			

Source: see *Notes on sources of survey data*, p. 48
 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. 48
 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. 30)

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
53	6	UC	E				9.0				13			15		14		14		11		6.2	13	
54	6	UC	E													13								
64	8	A	E															18 [!]						
64	14	TC	E													11								
67	8	UC	*																			14 [!]		
67	8	A																				17 [!]		
69	2	TC	E*													12								
70	2	TC	E*				9.3		12	13	13	13	13		12						11			12
71	2	TC	E*				8.9		11	13	12	13	13		13						11			12
72	2	TC	E*				9.3		12	14	14	13	13		13						11			13
73	2	TC	E*				9.9		11	12	12	12	12		12						11			12
74	2	TC	E*				9.7		12	14	14	14	14		13						10			13
74	8	UC	E*																		17 [!]			
74	8	A	E																		17 [!]			
75	2	TC	E*				9.8		14	15	15	15	15		13						11			14
75	11	UC	E													11								
76	2	TC	E*				10		14	14	15	15	15		14						12			14
77	2	TC	E*				12		14	15	15	15	15		14						11			14
77	16	A	E						14	17	18	20	19	20	19	18	18	16	15	14	12			
78	2	TC	E*				11		14	15	16	16	16		14						12			14
79	2	TC	E*				12		15	15	16	15	15		14						12			15
79	7	UC	E*													16								
80	2	TC	E*				12		14	14	16	16	16		14						13			15
81	2	TC	E*				12		13	15	16	16	16		15						12			15
82	2	TC	E*				12		15	15	16	16	16		15						13			15
83	2	TC	E*				11		15	17	17	16	16		16						13			16
83	4	UC									17 [!]	17 [!]	16 [!]	15 [!]										16
83	5	UC	E*																					
84	2	TC	E*				12		16	17	17	17	17		16						13			16
85	2	TC	E*				13		16	17	17	17	17		16						14			16
86	2	TC	E*				14		14	18	17	17	17		15						13			16
86	4	UC									18 [!]	19 [!]	19 [!]	14 [!]										18
87	2	TC	E*				13		17	17	18	17	17		18						14			17
87	17	UC	E*				15		17	17	18	19	17	17	16	12								17
87	29	UC	E				13		13	13	16	16	16		11									13
88	2	TC	E*				13		16	17	16	17	17		16						12			16
88	29	TC	E				12		12	12	13	17	17		10									13
89	2	TC	E*				12		16	17	18	17	17		16						14			16
89	19	A	E*						17	17	16	13	13	12										
89	29	TC	E				12		12	12	14	17	17		12									14
90	2	TC	E*				12		15	18	17	18	18		17						13			16
90	22	A	E*						15 [!]	15 [!]	15 [!]	19 [!]	19 [!]	18 [!]	16 [!]									
90	29	TC	E				13		13	13	16	16	16		14									15
91	2	TC	E*				12		16	18	18	18	18		18						14			17
91	4	UC									16 [!]	19 [!]	19 [!]	16 [!]										18
91	17	UC	E*				10		16	18	20	20	20		14						16			17
91	29	TC	E				13		13	13	15	21	21		9.7									15

Table 5M (continued from p. 28)
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		65	70	75
92	2	TC	E*							13		17	18	18	18		17			14				17
92	29	TC	E							12			17		18					15				16
93	2	TC	E*												17									
94	2	TC	E*												21									
94	17	UC	E							16			20			19				14				18
94	26	UC	E*												17									
94	29	TC	E							13			15		17					13				15
94	30	TC	E							13			15		17					13				15
95	2	TC	E*												19									
95	24	UC	E							11														
95	26	UC	E*												17									
95	30	TC	E							14			19		16					16				17
96	2	TC	E*												20									
96	26	UC	E*												17									
97	26	UC	E*												17									
98	17	UC	E*							15		18	19	19	20	20	18	11	12					18
98	23	UC			1.1		4.3																	
98	26	UC	E*												17									
99	17	UC	E*							15		19	19	20	19	17	11	10						19
99	24	UC	E							13														
99	26	UC	E*												17									
00	17	UC	E*							17		20	19	20	20	17	11	10						19
00	26	UC	E*												16									
00	27	UC	E*							13	11	14	17	14										14
01	17	UC	E*							15		21	19	18	21	18	12	11						19
01	26	UC	E*												17									
01	27	UC	E*							15														
02	26	UC	E*												17									
02	27	UC	E*							11	14	14	13	15										14
02	30	TC	E							17		19	22		15									19
03	24	UC	E							12														
03	27	UC	E*							12	12	14	14	15										14
04	27	UC	E*							11	16	14	16	14										14
05	26	UC	E												18									
05	30	MC	E							13		16	20		18									17
05	30	TC	E							13		17	19		19									18
06	26	UC	E												18									
06	27	UC	E							15	13	14	12	12										13
07	26	UC	E												18									

Source: see *Notes on sources of survey data*, p. 48
 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. 48
 All ages: relates to ages reported; as given in original source

Table 5F (continued from p. 29)
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		65	70	75
92	2	TC	E*				11		13	14	14		15		14			12					14	
92	29	TC	E				12				13		13					13					13	
93	2	TC	E*										14											
94	2	TC	E*										14											
94	17	UC	E				13				15			16			10							15
94	26	UC	E*										14											
94	29	TC	E				11				13		13				13							13
94	30	TC	E				11				13		13				13							13
95	2	TC	E*										15											
95	24	UC	E				9.7																	
95	26	UC	E*										15											
95	30	TC	E				11				13		13				11							12
96	2	TC	E*										14											
96	26	UC	E*										14											
97	26	UC	E*										14											
98	17	UC	E*				12			14		16	14	16		13	9.7	9.7						14
98	23	UC			0.7	4.0																		
98	26	UC	E*										14											
99	17	UC	E*				13			13		16	15	15		13	10	24						14
99	24	UC	E				9.8																	
99	26	UC	E*										14											
00	17	UC	E*				12			14		15	15	16		13	13	9.7						14
00	26	UC	E*										14											
00	27	UC	E*				10	11	10	11	11													11
01	17	UC	E*				14			15		16	14	15		13	12	9.7						15
01	26	UC	E*										14											
01	27	UC	E*				12																	
02	26	UC	E*										14											
02	27	UC	E*				8.9	10	12	12	13													11
02	30	TC	E				12			13		14				12								13
03	24	UC	E				10																	
03	27	UC	E*				11	11	9.6	12	12													11
04	27	UC	E*				11	12	14	13	13													12
05	26	UC	E										13											
05	30	MC	E				13			13		15				13								14
05	30	TC	E				13			13		15				13								14
06	26	UC	E										14											
06	27	UC	E				11	9.1	11	10	13													11
07	26	UC	E										14											

Source: see *Notes on sources of survey data*, p. 48
 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. 48
 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. 34)

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		
53	6	UC	2.6				4.5		4.7		3.7		2.2		0.6		0.1		3.1	52%T
54	6	UC	2.9																	51%T
64	8	A*																	14	**
64	14	TC																	4.7	72%T
67	8	A*																	13	**
69	2	TC*																	4.9	71%T
70	2	TC*	3.9		6.4	7.2	6.8		6.5		4.5		1.9				5.1	78%T		
71	2	TC*	3.8		6.1	7.1	6.4		6.2		4.6		1.9				5.0	76%T		
72	2	TC*	3.6		6.7	7.0	6.5		6.2		4.8		1.9				5.0	76%T		
73	2	TC*	4.0		7.0	6.3	5.9		6.2		4.5		2.0				4.8	72%T		
74	2	TC*	3.4		7.0	7.2	6.7		7.4		5.3		2.0				5.4	77%T		
74	8	A*																	12	**
75	2	TC*	3.6		7.2	7.5	7.0		7.4		4.9		1.7				5.4	78%T		
75	10	MC																	5.7	--
75	11	UC																	4.5	66%T
76	2	TC*	3.0		7.5	7.6	6.9		7.3		5.7		2.8				5.7	80%T		
77	2	TC*	3.4		7.4	8.0	7.1		7.7		6.0		3.4				5.7	87%T		
77	16	A			7.7	10	11	14	15	15	14	13	12	10	8.8	7.3	7.8	105%A		
78	2	TC*	3.4		6.4	7.5	7.2		7.3		6.0		2.6				5.9	85%T		
79	2	TC*	3.5		7.3	8.1	7.5		7.2		5.9		2.6				6.0	86%T		
79	7	UC*																	9.2	122%T
80	2	TC*	4.0		6.7	7.8	7.6		7.4		6.2		3.0				6.1	89%T		
81	2	TC*	3.2		5.7	7.9	7.2		6.9		7.0		2.8				5.9	86%T		
82	2	TC*	3.4		5.6	7.4	7.3		7.5		6.8		3.1				6.1	81%T		
83	2	TC*	2.9		6.8	7.8	8.0		6.8		6.7		2.8				6.1	90%T		
83	4	UC					9.2		7.5		7.9		5.7						7.2	**
83	5	UC*																		**
84	2	TC*	2.5		7.3	7.8	8.3		7.2		6.6		3.4				6.3	91%T		
85	2	TC*	3.9		6.6	7.9	8.0		7.3		6.8		3.5				6.4	89%T		
86	2	TC*	3.3		5.4	9.7	8.4		6.7		6.6		3.3				6.3	92%T		
86	4	UC					9.4		8.0		8.0		5.0						7.2	**
87	2	TC*	2.8		7.2	8.2	8.7		7.7		6.9		3.6				6.6	97%T		
87	17	UC*	3.5		7.4		8.0		7.8		7.6		5.6		2.3		6.6	100%T		
87	29	UC*	5.3				6.0				5.5				2.8				4.9	80%T
88	2	TC*	2.3		5.8	7.5	7.7		6.9		6.6		3.4				5.9	94%T		
88	29	TC*	3.1				5.9				7.0				2.5				4.7	81%T
89	2	TC*	2.8		6.9	7.3	8.1		7.0		6.8		3.5				6.2	97%T		
89	19	A*																	5.9	**
89	29	TC*	4.2				5.6				6.0				3.5				4.9	89%T
90	2	TC*	3.2		6.0	8.3	8.1		6.8		6.5		3.7				6.2	98%T		
90	22	A*					7.9				10				7.7				**	
90	29	TC*	5.6				7.4				6.6				4.4				6.1	92%T
91	2	TC*	2.7		6.7	8.0	8.4		8.1		6.9		3.7				6.6	104%T		
91	4	UC					7.3		8.7		9.1		5.9						8.1	**
91	17	UC*	2.4		6.4		8.5		8.9		7.3		4.8		4.5		6.7	102%T		
91	29	TC*	5.3				6.8				8.4				3.1				5.8	95%T

Table 6F Number of cigarettes smoked per person per day, females:
selected surveys by age; with percentage total sales
(continues on p. 35)

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
53	6	UC				2.4				4.3		3.6		2.1		1.0		0.3		0.1		2.4	52%T
54	6	UC														2.4							51%T
64	8	A*														7.0							**
64	14	TC														3.3							72%T
67	8	A*																			2.8		**
69	2	TC*														3.5							71%T
70	2	TC*				3.4		5.6	5.5	5.5	5.5	4.9		3.2					0.9			3.8	78%T
71	2	TC*				3.0		5.1	5.5	5.3	5.1		3.3					1.0				3.7	76%T
72	2	TC*				3.8		5.7	5.5	5.4	5.2		3.6					1.0				4.0	76%T
73	2	TC*				3.4		5.3	5.4	5.5	4.7		3.6					1.2				3.8	72%T
74	2	TC*				3.6		6.3	4.9	5.6	5.7		3.7					1.2				4.2	77%T
74	8	A*																5.8					**
75	2	TC*				3.7		6.4	6.0	5.4	5.6		3.5					1.2				4.3	78%T
75	10	MC														4.7							--
75	11	UC														3.7							66%T
76	2	TC*				3.7		6.6	5.7	5.3	6.1		4.1					1.3				4.4	80%T
77	2	TC*				3.8		7.6	6.5	5.9	6.5		4.3					2.1				4.6	87%T
77	16	A						8.0	7.8	9.6	8.7	9.5	9.7	8.9	7.8	6.9	5.5	4.9	4.3	2.5			105%A
78	2	TC*				3.2		6.2	7.0	5.9	6.4		4.2					1.2				4.6	85%T
79	2	TC*				3.4		6.5	6.5	5.4	6.2		4.5					1.3				4.6	86%T
79	7	UC*														5.9							122%T
80	2	TC*				3.2		6.1	6.4	5.9	5.5		4.7					1.7				4.6	89%T
81	2	TC*				3.2		5.9	6.9	5.9	6.2		4.8					1.8				4.7	86%T
82	2	TC*				3.1		6.1	7.2	6.7	5.7		5.0					1.7				4.8	81%T
83	2	TC*				2.4		6.6	7.0	6.9	5.9		5.1					1.8				4.9	90%T
83	4	UC								8.1		6.8		6.8		4.1						6.1	**
83	5	UC*				5		8	9	10	9	7											**
84	2	TC*				2.7		6.1	7.0	7.1	6.4		5.3					2.4				5.2	91%T
85	2	TC*				3.0		5.6	6.5	7.3	6.2		4.8					2.0				4.9	89%T
86	2	TC*				2.5		4.7	7.4	7.1	6.0		5.5					2.5				5.1	92%T
86	4	UC								7.3		5.8		6.9		5.0						6.0	**
87	2	TC*				2.7		5.3	6.4	6.9	5.6		5.6					2.6				5.0	97%T
87	17	UC*				4.3		6.7	7.1	7.0	6.3		4.3				1.5					5.5	100%T
87	29	UC*				4.3			6.5		6.4						2.6					4.8	80%T
88	2	TC*				2.6		5.2	6.3	7.0	6.5		5.9					2.2				5.1	94%T
88	29	TC*				4.5			4.6		7.1						3.4					4.7	81%T
89	2	TC*				2.6		5.4	7.3	6.3	5.7		5.8					2.5				5.0	97%T
89	19	A*						5.0	5.9	6.0	4.1		3.8										**
89	29	TC*				4.8			6.7		5.8							4.7				5.7	89%T
90	2	TC*				2.2		5.6	6.1	6.8	6.2		5.9					2.6				5.1	98%T
90	22	A*						6.3					7.2		6.2		4.3						**
90	29	TC*				3.7			5.7		6.2							2.8				4.5	92%T
91	2	TC*				2.5		5.6	6.1	7.4	6.1		5.6					3.1				5.3	104%T
91	4	UC							6.9		7.4		6.8		6.5							7.0	**
91	17	UC*				2.9		5.6		6.5	6.6		6.3		3.2		2.2					5.0	102%T
91	29	TC*				3.6			6.9		7.7							2.0				4.8	95%T

Table 6M (continued from p. 32)
 Number of cigarettes smoked per person per day, males:
 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
92	2	TC*					2.6			6.8	8.4	8.3	8.3		6.6			3.8				6.6	103%T
92	29	TC*					3.1				8.0		6.7			3.5						5.5	103%T
93	2	TC*											6.4										103%T
94	2	TC*											6.0										93%T
94	17	UC					5.4				7.6			7.5			3.5					6.6	107%T
94	26	UC*											6.4										104%T
94	29	TC*					5.5				5.9		7.1			3.5						5.4	104%T
94	30	TC*					5.5				5.7		7.1			3.5						5.4	103%T
95	2	TC*											5.9										96%T
95	24	UC				1.7																	**
95	26	UC*											6.6										106%T
95	30	TC*					5.2				9.0		7.0			5.3						6.7	104%T
96	2	TC*											5.5										91%T
96	26	UC*											6.0										99%T
97	26	UC*											5.8										94%T
98	17	UC*					3.6				6.5		6.6	7.5		5.3	4.2	1.9	1.7		5.7	91%T	
98	23	UC	0.1		0.9																		**
98	26	UC*											5.5										91%T
99	17	UC*					3.6				7.4		6.2	7.0		5.3	3.8	2.2	1.1		5.7	87%T	
99	24	UC				3.1																	**
99	26	UC*											5.8										88%T
00	17	UC*					3.7				7.2		5.9	6.7		4.6	4.2	1.7	0.4		5.4	82%T	
00	26	UC*											5.2										80%T
00	27	UC*				3.2	3.5	4.0	5.4	4.5											4.1	**	
01	17	UC*					3.5				8.4		6.2	6.2		4.6	4.4	1.2	1.0		5.5	85%T	
01	26	UC*											5.6										85%T
01	27	UC*					3.5																**
02	26	UC*											5.3										81%T
02	27	UC*				1.6	2.6	2.2	3.6	4.1											2.8	**	
02	30	TC					4.5				8.8		8.1			4.5						6.7	94%T
03	24	UC				2.1																	**
03	27	UC*				1.5	2.5	4.2	3.8	3.4											3.1	**	
04	27	UC*				1.4	2.3	3.0	2.4	3.0											2.4	**	
05	26	UC											5.0										72%T
05	30	MC					3.8				5.7		4.4			3.5						4.4	76%M
05	30	TC					4.0				6.5		5.2			4.6						5.2	77%T
06	26	UC											4.6										68%T
06	27	UC*				1.6	2.0	2.1	3.0	2.5											2.2	**	
07	26	UC											5.0										71%T

Source: *Notes on sources of survey data*, p. 48
 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. 48
 All ages: relates to ages reported; as given in original source
 % Total sales: estimated % of total sales of A = all products,
 M = manufactured or T = total cigarette consumption
 implied by survey, sexes combined
 ** = cannot be calculated
 -- = adjusted by original author

Table 6F (continued from p. 33)
 Number of cigarettes smoked per person per day, females:
 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+
92	2	TC*							2.9	5.5	6.3	6.8	6.4	5.7	2.7								5.2	103%T	
92	29	TC*							5.9		6.3	6.5	5.9										6.1	103%T	
93	2	TC*										5.1												103%T	
94	2	TC*										4.3												93%T	
94	17	UC							4.2		6.7	6.0	2.3										5.4	107%T	
94	26	UC*									4.8													104%T	
94	29	TC*							4.7		6.8	7.0	5.1										5.9	104%T	
94	30	TC*							4.7		6.7	7.0	5.0										5.9	103%T	
95	2	TC*										4.6												96%T	
95	24	UC			1.8																			**	
95	26	UC*									4.7													106%T	
95	30	TC*							4.7		5.6	6.3	2.4										4.5	104%T	
96	2	TC*										4.4												91%T	
96	26	UC*									4.4													99%T	
97	26	UC*									4.1													94%T	
98	17	UC*							3.4		4.8	6.4	4.6	5.4	3.2	1.7	0.3						4.4	91%T	
98	23	UC		0.1		1.1																		**	
98	26	UC*										4.3												91%T	
99	17	UC*							3.0		4.6	5.2	5.3	4.4	3.6	1.9	0.6						4.2	87%T	
99	24	UC				2.5																		**	
99	26	UC*									3.8													88%T	
00	17	UC*							3.0		4.6	5.7	5.3	4.3	3.9	1.9	0.5						4.3	82%T	
00	26	UC*									3.9													80%T	
00	27	UC*				2.7	3.7	3.8	4.3	3.8														3.6	**
01	17	UC*							3.3		3.7	5.7	5.1	4.3	3.6	1.9	0.4						4.1	85%T	
01	26	UC*									3.6													85%T	
01	27	UC*							2.8															**	
02	26	UC*									3.5													81%T	
02	27	UC*				1.2	2.0	2.3	2.3	3.3														2.3	**
02	30	TC							3.2		4.7	4.6	3.2										3.9	94%T	
03	24	UC				2.1																		**	
03	27	UC*				1.9	1.5	2.0	2.3	2.9														2.1	**
04	27	UC*				1.7	1.8	2.0	3.2	3.6														2.4	**
05	26	UC									3.1													72%T	
05	30	MC							4.0		3.7	3.5	2.5										3.3	76%M	
05	30	TC							4.0		3.8	3.9	3.2										3.6	77%T	
06	26	UC									3.1													68%T	
06	27	UC*				1.2	1.5	2.0	1.4	2.2														1.7	**
07	26	UC									3.4													71%T	

Source: *Notes on sources of survey data*, p. 48
 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. 48
 All ages: relates to ages reported; as given in original source
 % Total sales: estimated % of total sales of A = all products,
 M = manufactured or T = total cigarette consumption
 implied by survey, sexes combined
 ** = cannot be calculated
 -- = 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 (continues on p. 39)

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
53	6	UC				4.6			8.2		6.9		4.0		1.9		0.6		0.2			4.6	52%T
54	6	UC											4.6										51%T
64	14	TC																					72%T
69	2	TC*																					71%T
70	2	TC*				4.4		7.2	7.1		7.1		6.3		4.1				1.2			4.9	78%T
71	2	TC*				3.9		6.7	7.2		7.0		6.7		4.3				1.3			4.9	76%T
72	2	TC*				5.0		7.5	7.2		7.1		6.9		4.7				1.3			5.3	76%T
73	2	TC*				4.7		7.3	7.5		7.6		6.5		5.0				1.7			5.3	72%T
74	2	TC*				4.7		8.2	6.4		7.3		7.4		4.8				1.6			5.4	77%T
75	2	TC*				4.8		8.2	7.7		6.9		7.2		4.5				1.5			5.5	78%T
75	10	MC																					--
75	11	UC																					66%T
76	2	TC*				4.6		8.2	7.1		6.6		7.6		5.1				1.6			5.5	80%T
77	2	TC*				4.4		8.7	7.4		6.8		7.4		4.9				2.4			5.3	87%T
77	16	A						7.6	7.4	9.2	8.3	9.1	9.3	8.5	7.4	6.6	5.3	4.6	4.1	2.4			105%A
78	2	TC*				3.8		7.3	8.2		6.9		7.5		4.9				1.4			5.4	85%T
79	2	TC*				3.9		7.5	7.5		6.2		7.2		5.2				1.5			5.3	86%T
79	7	UC*																					122%T
80	2	TC*				3.6		6.9	7.2		6.6		6.2		5.3				1.9			5.2	89%T
81	2	TC*				3.7		6.8	8.0		6.8		7.2		5.6				2.1			5.4	86%T
82	2	TC*				3.8		7.5	8.8		8.2		7.0		6.1				2.1			5.9	81%T
83	2	TC*				2.7		7.3	7.8		7.7		6.6		5.7				2.0			5.4	90%T
84	2	TC*				3.0		6.7	7.7		7.8		7.0		5.8				2.6			5.7	91%T
85	2	TC*				3.4		6.3	7.3		8.2		7.0		5.4				2.2			5.5	89%T
86	2	TC*				2.7		5.1	8.1		7.7		6.5		6.0				2.7			5.6	92%T
87	2	TC*				2.8		5.5	6.6		7.1		5.8		5.8				2.7			5.2	97%T
87	17	UC*				4.3		6.7	7.1		7.0		6.3		4.3				1.5			5.5	100%T
87	29	UC*				5.4			8.1		8.0				3.3							6.1	80%T
88	2	TC*				2.8		5.5	6.7		7.4		6.9		6.3				2.3			5.4	94%T
88	29	TC*				5.6			5.7		8.8				4.2							5.8	81%T
89	2	TC*				2.7		5.6	7.6		6.5		5.9		6.0				2.6			5.2	97%T
89	29	TC*				5.4			7.5		6.5				5.3							6.4	89%T
90	2	TC*				2.2		5.7	6.2		6.9		6.3		6.0				2.6			5.2	98%T
90	29	TC*				4.0			6.2		6.8				3.1							4.9	92%T
91	2	TC*				2.4		5.4	5.9		7.1		5.9		5.4				3.0			5.1	104%T
91	17	UC*				2.8		5.5	6.4		6.5		6.2		3.1				2.2			4.9	102%T
91	29	TC*				3.8			7.2		8.1				2.1							5.1	95%T
92	2	TC*				2.8		5.3	6.1		6.6		6.2		5.5				2.6			5.0	103%T
92	29	TC*				5.8			6.1		6.4				5.7							6.0	103%T
93	2	TC*													4.9								103%T
94	2	TC*													4.6								93%T
94	17	UC				4.0			6.3		5.6				2.1							5.1	107%T
94	26	UC*													4.6								104%T
94	29	TC*				4.5			6.5		6.7				4.9							5.7	104%T
94	30	TC*				4.5			6.5		6.8				4.9							5.7	103%T

Table 7M (continued from p. 36)
 Number of cigarettes smoked per person per day, sales-adjusted, males:
 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+																			
95	2	TC*	6.1																96%T																									
95	26	UC*	6.2																106%T																									
95	30	TC*	5.0					8.6					6.7					5.1					6.5	104%T																				
96	2	TC*	6.0																91%T																									
96	26	UC*	6.1																99%T																									
97	26	UC*	6.2																94%T																									
98	17	UC*	4.0					7.2					7.2					8.3					5.8					4.6					2.1					1.8					6.3	91%T
98	26	UC*	6.0																91%T																									
99	17	UC*	4.1					8.5					7.2					8.1					6.1					4.4					2.5					1.3					6.5	87%T
99	26	UC*	6.6																88%T																									
00	17	UC*	4.5					8.8					7.2					8.1					5.6					5.1					2.0					0.5					6.6	82%T
00	26	UC*	6.4																80%T																									
01	17	UC*	4.2					10					7.3					7.3					5.4					5.2					1.5					1.2					6.5	85%T
01	26	UC*	6.7																85%T																									
02	26	UC*	6.5																81%T																									
02	30	TC	4.8					9.4					8.6					4.8										7.1	94%T															
05	26	UC	6.9																72%T																									
05	30	MC	4.9					7.5					5.7					4.5										5.7	76%M															
05	30	TC	5.2					8.5					6.7					6.0										6.8	77%T															
06	26	UC	6.8																68%T																									
07	26	UC	7.0																71%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. 48
 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. 48
 All ages: relates to ages reported; as given in original source
 % Total sales: Adjustment factor used, estimated % of total sales of A = all products, M = manufactured or T = total cigarette consumption implied by survey, sexes combined
 -- = adjusted by original author

Table 7F (continued from p. 37)
 Number of cigarettes smoked per person per day, sales-adjusted, females:
 with percentage total sales

Year	Source	Product	Age Groups														All ages	% Total sales												
			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+					
95	2	TC*	4.8															96%T												
95	26	UC*	4.4															106%T												
95	30	TC*	4.5				5.4				6.1				2.3				4.4	104%T										
96	2	TC*	4.8															91%T												
96	26	UC*	4.4															99%T												
97	26	UC*	4.3															94%T												
98	17	UC*	3.8				5.2				7.1				5.1				6.0				3.5		1.9		0.4		4.9	91%T
98	26	UC*	4.7															91%T												
99	17	UC*	3.5				5.3				6.0				6.1				5.1				4.2		2.2		0.7		4.9	87%T
99	26	UC*	4.3															88%T												
00	17	UC*	3.6				5.6				6.9				6.5				5.2				4.7		2.4		0.6		5.2	82%T
00	26	UC*	4.9															80%T												
01	17	UC*	4.0				4.3				6.8				6.0				5.1				4.3		2.2		0.5		4.9	85%T
01	26	UC*	4.3															85%T												
02	26	UC*	4.4															81%T												
02	30	TC	3.4				5.0				4.9				3.4								4.2	94%T						
05	26	UC	4.2															72%T												
05	30	MC	5.2				4.8				4.6				3.3								4.3	76%M						
05	30	TC	5.2				4.9				5.0				4.2								4.7	77%T						
06	26	UC	4.6															68%T												
07	26	UC	4.7															71%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. 48
 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. 48
 All ages: relates to ages reported; as given in original source
 % Total sales: Adjustment factor used, estimated % of total sales of A = all products, 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	M	F	Total sales %	Manufactured cigarettes number/person/day		Total cigarettes ⁹ number/person/day		
									M	F	M	F	M	F		
1953	6	UC+A			24	32	77	39	3.1	2.3	52			5.9	4.3	
1954	6	UC+A			22	32	78	39	2.9	2.4	51			5.6	4.6	
1958	2	TC			46	38							(6.4	4.2)		
1959	2	TC			43	36							(6.5	4.4)		
1960	1	A					68	38					(6.9	4.3)		
	2	TC			44	34										
1961	1	A					62	38					(6.6	4.3)		
	2	TC			43	35										
1962	2	TC			41	34							(6.6	4.4)		
1963	2	TC+A			39	32	71	41					(6.8	4.5)		
1964	2	TC			38	32							(6.6	4.5)		
	14	TC+A			44	40	76	49	4.7	3.3	72		6.5	4.5		
1965	1	TC			41	34							(6.7	4.5)		
	2	TC			38	32							(6.7	4.5)		
1966	1	TC			40	35							(6.5	4.6)		
	2	TC			38	33							(6.6	4.6)		
1967	1	TC			38	34							(6.6	4.6)		
	2	TC			39	37							(6.4	4.8)		
1968	1	A					69	44					(6.7	4.6)		
	2	TC			40	34										
1969	1	TC+A			44	39	69	48					(6.9	4.9)		
	2	TC+A			41	35	68	44	4.9	3.5	71		6.9	4.9		
1970	1	A					66	45								
	2	TC+A			43	38	68	47	5.2	3.9	78		6.7	5.0		
1971	1	TC+A			44	37	66	46					(7.0	4.8)		
	2	TC+A			42	37	66	46	5.1	3.8	76		6.7	5.1		
1972	1	TC+A			45	39	65	47					(7.2	5.0)		
	2	TC+A			41	38	64	46	5.2	4.1	76		6.8	5.3		
1973	1	TC+A			44	40	63	48					(7.2	5.2)		
	2	TC+A			43	38	62	46	5.0	3.9	72		7.0	5.5		
	3	UC			43	39							(7.2	5.2)		
1974	1	A					62	46								
	2	TC+A			43	38	63	46	5.6	4.2	77		7.2	5.4		
	12	A					62	45								

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	M	F	Total sales %	Manufactured cigarettes number/person/day	Total cigarettes ⁹ number/person/day		
1975	2	TC+A			41	38	60	45	5.5	4.2	78			7.1	5.4
	10	MC							5.7	4.7	--	5.7	4.7		
	11	UC+A			42	37	61	45	4.5	3.7	66	(6.0	4.2)	6.9	5.6
1976	1	MC+A	36	35			58	46				(6.0	4.7)		
	2	TC+A			42	39	60	46	5.8	4.4	80			7.3	5.5
	12	A					61	48							
1977	1	MC+A	35	29			57	41				(6.3	4.2)		
	2	TC+A			43	42	59	49	6.1	4.9	87			7.0	5.6
	16	A					63	53	10.8	7.3	105			10.3	6.9 /11
1978	1	MC+A	39	32			56	42				(6.2	4.1)		
	2	TC+A			40	38	57	45	5.8	4.5	85			6.8	5.3
1979	1	TC			37	33								(7.1	5.1)
	2	TC+A			41	38	56	44	6.0	4.5	86			6.9	5.2
	7	UC+A			44	37	58	45	9.0	5.8	122			7.4	4.8
1980	1	MC+A		30			50	41							
	2	TC+A			42	38	57	44	6.1	4.5	89			6.9	5.1
1981	1	A					51	43							
	2	TC+A			41	38	54	43	5.9	4.7	86			6.9	5.4
1982	1	A					50	44							
	2	TC+A			40	38	53	43	6.0	4.8	81			7.4	5.9
1983	1	A					47	44							
	2	TC+A			39	38	53	43	6.1	4.9	90			6.8	5.4
1984	1	A					46	43							
	2	TC+A			40	39	51	43	6.3	5.2	91			6.9	5.7
1985	2	TC+A			40	37	51	42	6.4	4.9	89			7.2	5.5
1986	2	TC+A			40	40	53	45	6.3	5.0	92			6.9	5.5
	2	TC+A			39	38	50	41	6.6	5.0	97			6.9	5.2
	17	UC+A					46	41	6.5	5.5	100			6.5	5.5
	17	UC+A			38	40	49	44							
1987	29	UC+A			36	39	48	43	4.8	4.8	80			6.0	6.0
	2	TC+A			38	38	47	41	6.0	5.1	94			6.3	5.4
	29	TC+A			36	41	45	43	4.7	4.8	81			5.8	5.9
1988	29	TC+A			33	43	44	46							

Table 8 (continued/2)

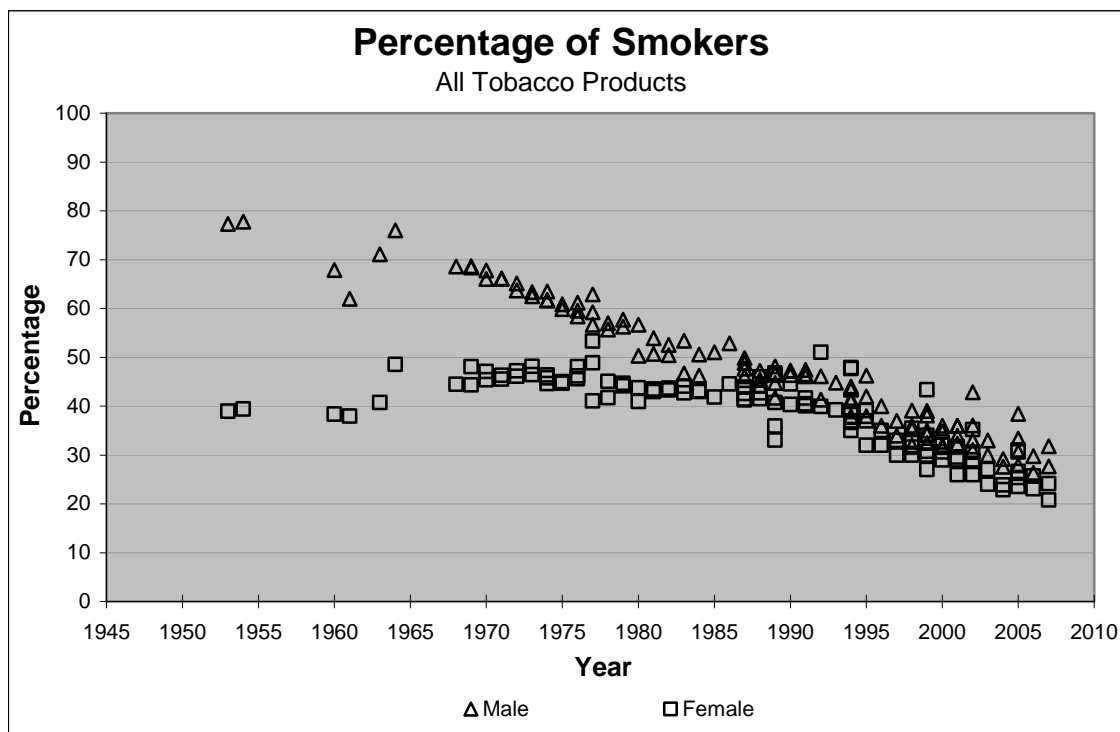
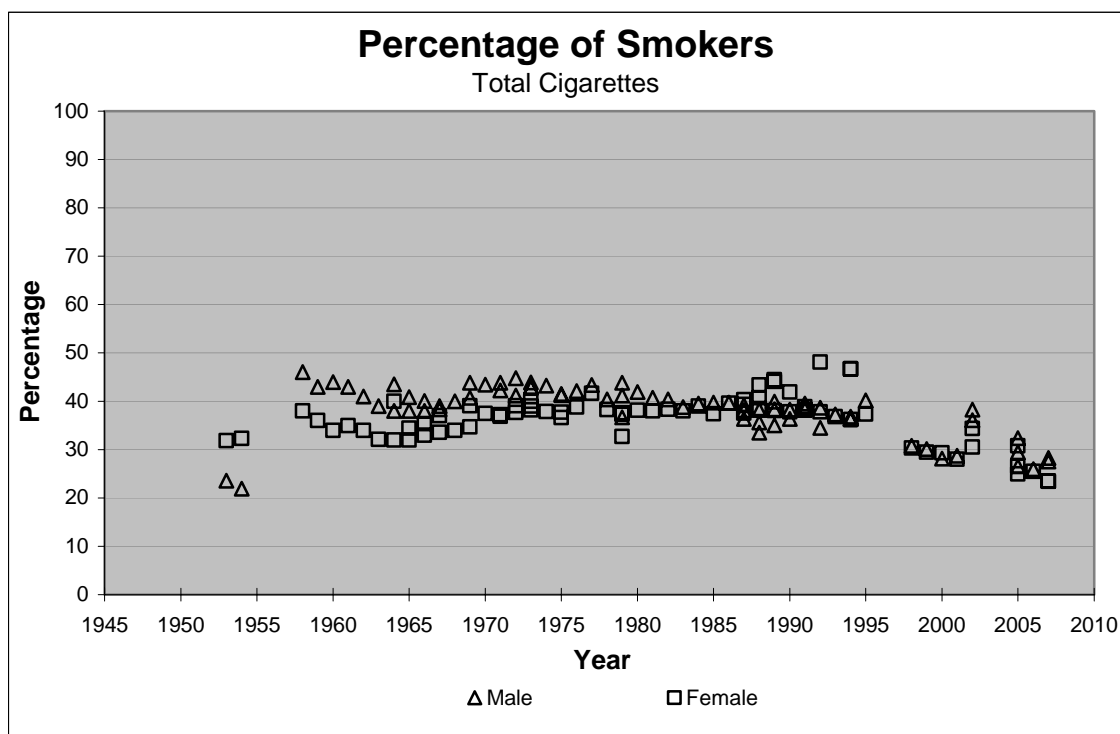
Year	Source ²	Product ³	Prevalence ⁴				Number of cigarettes								
			Manufactured cigarettes		Total cigarettes ⁵		All products ⁶		Unadjusted ⁷			Sales-adjusted ⁸			
			M	F	M	F	M	F	Number/ person/day	Total sales %	Manufactured cigarettes number/ person/day	Total cigarettes ⁹ number/ person/day			
						M	F		M	F	M	F			
1989	2	TC+A			38	38	47	41	6.2	5.0	97			6.5	5.2
	19	A					42	33							
	19	A					45	36							
	29	TC+A			35	44	47	46	4.8	5.5	89			5.4	6.2
	29	TC+A			40	44	48	47							
1990	2	TC+A			38	38	47	40	6.2	5.1	98			6.4	5.2
	29	MC+TC+A	28	32	36	42	46	45	6.0	4.5	92			6.6	4.9
1991	2	TC+A			39	38	47	40	6.6	5.2	104			6.3	5.0
	17	UC+A			38	39	47	40	6.6	5.0	102			6.5	4.9
	29	MC+TC+A	33	29	40	38	46	42	5.9	4.9	95			6.2	5.2
1992	2	TC+A			39	38	46	40	6.7	5.2	103			6.5	5.0
	29	MC+TC+A	26	37	34	48	41	51	5.6	6.2	103			5.4	6.0
1993	2	TC+A			37	37	45	39	6.4	5.1	103			6.2	4.9
1994	2	TC							6.0	4.3	93			6.4	4.6
	17	UC+A					41	37	6.6	5.2	107			6.2	4.9
	17	UC+A			36	36	44	39							
	26	UC+U					38	35	6.5	4.9	104			6.3	4.7
	26	U					41	37							
	29	MC+TC+A	28	36	37	47	44	48	5.5	5.9	104			5.3	5.7
1995	30	MC+TC+A	28	36	37	47	43	48	5.4	5.9	103			5.3	5.7
	2	TC							5.9	4.6	96			6.1	4.8
	26	UC+U					38	32	6.8	4.8	106			6.4	4.5
	26	U					42	37							
	30	MC+TC+A	33	28	40	37	46	39	6.8	4.6	104			6.5	4.4
1996	2	TC							5.5	4.4	91			6.0	4.8
	26	UC+U					36	32	6.2	4.5	99			6.2	4.5
	26	U					40	35							
1997	26	UC+U					34	30	5.9	4.2	94			6.3	4.4
	26	U					37	33							
1998	17	UC+A			31	30	35	32	5.6	4.4	91			6.1	4.8
	17	A					39	35							
	26	UC+U					32	30	5.6	4.4	91			6.2	4.8
	26	U					36	33							
1999	17	UC+A			30	30	34	31	5.6	4.1	87			6.4	4.8
	17	A					38	34							
	26	UC+U					35	27	6.0	3.9	88			6.8	4.4
	26	U					39	30							
	30	U					32	43							

Table 8 (continued/3)

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 number/ person/day	Total cigarettes ⁹ number/ person/day	M	F	M
2000	17	UC+A			28	29	32	31	5.3	4.2	82			6.5	5.1
	17	A					35	33							
	26	UC+U					32	29	5.3	4.0	80			6.6	5.0
	26	U					36	32							
2001	17	UC+A			29	28	32	30	5.5	4.1	85			6.5	4.8
	17	A					36	32							
	26	UC+U					34	26	5.8	3.7	85			6.9	4.4
	26	U					36	29							
2002	26	UC+U					31	26	5.5	3.6	81			6.7	4.5
	26	U					33	29							
	30	MC+TC+A	28	25	36	31	36	31	6.7	3.9	94			7.1	4.2
	30	MC+TC+A	30	29	38	34	43	35							
2003	26	U					30	24							
	26	U					33	27							
2004	26	U					28	23							
	26	U					29	24							
2005	26	UC+A					28	24	5.1	3.2	72			7.1	4.4
	26	UC+A			27	25	31	25							
	30	MC	25	24					4.3	3.3	76	5.7	4.3		
	30	TC+A			29	27	33	27	5.2	3.6	77			6.7	4.7
	30	MC+TC+A	28	28	32	31	38	31							
2006/10	26	UC+A			26	25	26	23	4.7	3.2	68			7.0	4.7
	26	A					30	26							
2007/10	26	UC+A			28	23	28	21	5.0	3.4	71			7.0	4.7
	26	UC+A			28	23	32	24							

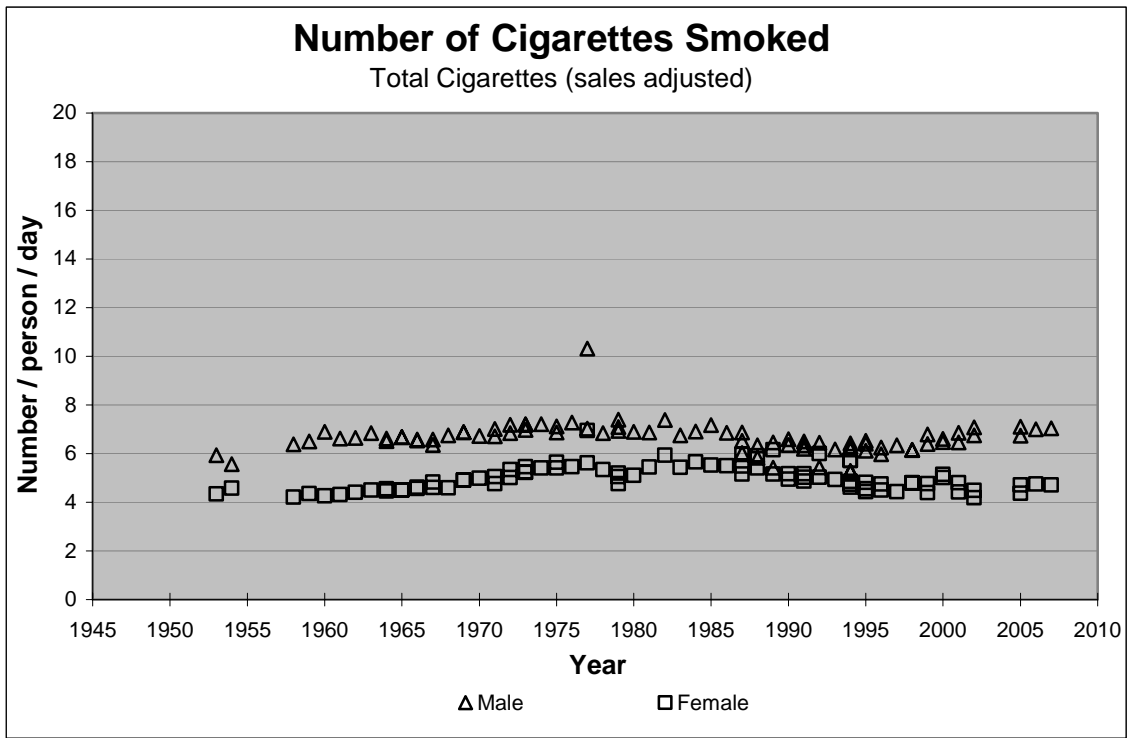
- 1 Surveys covering an age range of at least 21-64 are included. Any gaps in the data for ages 15-20 and 65 years and over are filled in by assumed extensions to the age distribution, given in *Notes on sources of survey data*, p. 48. Method: see *Summary of adult smoking*, Methods p. 13. Exceptionally, calculation is based on the *All ages* value from Table 4 in those surveys for which some age-specific data are not available (age groups marked as * in Table 4).
- 2 See *Notes on sources of survey data*, p. 48
- 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 Calculations based on 2005 population
- 11 All tobacco products, g/person/day

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



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

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



Note: data for 1977 include the values from source 16: All products, g/person/day
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. 55 under *References*.

Sales data before 1974

RP6

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).

Notes as given in RP6:

(a) Details of the number of cigarettes, cigars, and cigarillos, and of the weight of pipe, chewing tobacco and snuff consumed were supplied by Tobaksindustrien, Copenhagen.

(b) Factors for conversion from number to weight for cigarettes, cigars and cigarillos were obtained from trade sources.

According to Hutson (1937) consumption of tobacco products in 1913 (together with our conversion to tonnes using the rate shown above) was:

Product	Consumption	
	1,000 lb	tonnes
Cigars and cigarillos	3 287	1 491
Cigarettes	866	393
Smoking mixtures	4 392	1 992
Chewing tobacco	2 820	1 279
Snuff	295	134
Total	11 660	5 289

Sales data for 1974 onwards

1974-1997 Wicklin (1998)

Data were given in numbers and we have converted them to weight assuming an average of 1 g per cigarette and 3.15 g per cigar or cigarillo (based on values used in Sundhedsministeriet (1998)).

This assumption is supported by Mørck *et al* (1982) who used 1 g per cigarette for the period 1970-80. However it conflicts with Wicklin (1998) who used 0.65 g per cigarette and 2 g per cigar for all Scandinavian countries, and these values have subsequently been used by the OECD (Organisation for Economic Co-operation and Development (2005)). Our conversion to weight may therefore over-estimate. RP6 used 1.2-1.3 g per cigarette before 1974.

The data report taxed sales and exclude cross-border sales. According to Egsmose and Egsmose (1988), a further 10-20% of tobacco is purchased by Danes in tax-free areas.

1998-2010 Danmarks Statistik (2007, 2011)

Data were given in numbers and we have converted them to weight using the same assumed average weights as for 1974-1997 (above). For 2000 onwards data are available for cross-border sales and for consumption (taxed sales plus net cross-border sales) but are given only for cigarettes and cigars/cigarillos combined. Data for consumption have been converted to weight by assuming that the proportion of cigarettes in net cross-border sales (of cigarettes, cigars and cigarillos combined) is the same as in taxed sales. This assumption has also been used to estimate the total number of manufactured cigarettes consumed.

Data for sales of cigarettes, of cigars and cigarillos and of smoking tobacco are available from this source back to 1955. Generally the values differ from those given in Wicklin (1998) by less than 5%.

Merzdorf *et al* (1982), United States Department of Agriculture Economic Research Service (USDA) (1996) and US Department of Agriculture (2006) provide manufactured cigarette sales data based on production plus imports minus exports. These differ from taxed sales data as follows (selected years):

Year	Taxed sales	Production + imports – exports	Difference (% of taxed sales)
1966	5 566	6 710	20
1970	6 357	7 520	18
1975	7 295	8 640	18
1980	7 151	7 983	12
1985	7 787	8 781	13
1990	6 584	8 049	22
1995	6 429	8 360	30
2000	7 054	8 700	23
2004	8 178	8 700	6

According to Giovino *et al* (2004), the leading brand of menthol cigarette accounts for 5% of the total cigarette market.

Estimates of numbers of hand-rolled cigarette for 1920-2010

Following Merzdorf *et al* (1982) we estimated hand-rolled cigarette consumption on the basis of 80% of loose smoking tobacco sales. We assume an average of 1 g per hand-rolled cigarette. This is supported by Coresta task force on roll-your-own (fine cut) tobacco (1999) which reports a study in Denmark that found an average weight of 929 mg tobacco per cigarette when a pre-made filter tube was used, and also reports that 92% of non-manufactured cigarettes in Denmark were made using a tube, the rest being made by hand without use of a rolling machine.

This gives hand-rolled cigarettes as a proportion of all cigarettes falling from about 30% in 1960 to 16% in 1978 and then increasing again to 26% by 1990. This assumption is supported by United States Department of Agriculture Economic Research Service (USDA) (1996) which gives separate pipe tobacco and rolling tobacco production figures for 1993-1995, and by World Health Organization (1997) which estimated that roll-your-own cigarettes accounted for 20-25% of total cigarette consumption during the early 1990s. However it conflicts with Mørck *et al* (1982): ‘Owing to the tax position, the part played by hand-rolled cigarettes is very small (4-5%). During the last few years, however, this has tended to increase’. It is not clear whether this means that 4-5% of tobacco is used for hand-rolled cigarettes, or that 4-5% of cigarettes are hand-rolled.

Plain/Filter cigarette sales

1960-1981 Maxwell, Jr. (Successive years)

1982-1984 Prener and Jensen (1985)

1985-2004 US Department of Agriculture (2006)

For 1960-1984 the percentages are described as “market share” with no further detail. For 1985-2004 the values shown are percentages of cigarette production. The result for 2003 is omitted because the value given for filter production is anomalous for that year.

Tar machine yields of cigarettes

1964-1984 Prener and Jensen (1985). Data taken from a graph.

1985-1990 Industry sources

The tar yield per cigarette was limited by EC directive (Directive 90/239/EEC) to 15 mg by the end of 1992, and to 12 mg by the end of 1997 (Harkin *et al* (1997)). From the start of 2004 cigarette yields were further limited by EU directive (Directive 2001/37/EC) to 10 mg tar, 1 mg nicotine and 10 mg carbon monoxide (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. 55 under *References*.

Source number

- 1 OBSERVA Association and Merzdorf *et al* (1982), quoting OBSERVA**
 - a. Sample size (1976) 1 314, (1980) 1 319, and (1984) 1 252; unknown for other years.
 - b. It is unclear whether data relate to age 18+ or age 20+. Figure given in the *All ages* column in Table 4 for 1960 is for age 20+.
 - c. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.
- 2 Nielsen *et al* (1978, 1988), Osler (1992a), Nielsen and Sørensen (1995), Joossens *et al* (1994), Wicklin (1998), Statistika Centralbyrå (1995)**
 - a. Annual consumer survey by Gallup Markedsanalyse. Sample size 15 000–20 000 people aged 15 and older. Telephone interviews.
 - b. See Source 26 for a continuation of this source, with some differences in methodology.
 - c. Smokers: smoked ‘yesterday’. Daily and occasional smokers cannot be differentiated.
 - d. Some percentages of cigarette smokers taken from charts.
 - e. The *All ages* values refer to ages 15+; age-specific data are not available for the age groups marked *.
 - f. Consumption category estimation based on two categories, 1-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution. There is a discrepancy in the data for 1973, data from Osler (1992a) (used here) give higher estimates than data from Nielsen *et al* (1978) (all ages only).
- 3 Le Meitour-Kaplan (1977), quoting Nordic Research Association (1973)**
 - a. Survey conducted November-December 1973 in four Nordic countries. Total sample size 6 000. Age group not stated. (See also Norway source 3, Sweden source 4, and Finland source 8).
 - b. Smokers: smoked ‘yesterday’.
- 4 Tolonen *et al* (2000), Kuulasmaa *et al* (1998), Wolf *et al* (1998), Molarius *et al* (1999)**
 - a. Surveys using self-administered questionnaires in one region carried out in three phases, forming part of WHO MONICA Project:

Region	Phase	Participation rate (%)		Sample used		Date
		Males	Females	Males	Females	
Glostrup	1	83	77	1 456	1 361	Nov 1982-Jan 1984
	2	88	86	574	572	Aug 1986-Apr 1987
	3	74	75	607	611	Feb 1991-Mar 1992
 - b. The surveys included subjects aged 30, 40, 50 and 60 years only. The *All ages* column relates only to the ages surveyed 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.
- 5 Lidegaard (1984)**
 - a. Representative sample of 788 women aged 15-45. The questions were included in the regular Gallup Omnibus surveys conducted during April and May 1983.
 - b. Data taken from diagram.
 - c. Consumption category estimation based on two categories, 1-10 and 11+ cigarettes/smoker/day, and resulting figures should be regarded with caution.

6 Hamtoft and Lindhardt (1955), Osler (1992b)

- a. The Danish National Morbidity Survey of 1950, smoking sections conducted August 1952-April 1953 and January-April 1954. Participation rate 83%.

	Sample size	
	Males	Females
1952-1953	11 492	11 800
1954	5 453	5 273

- b. Consumption category estimation based on <5 (assume 1-5), 6-15, 16-25, and 26+ cigarettes/smoker/day. Comparable results given directly for the two periods combined were lower (males 11.7, females 5.6)

7 Roed-Petersen (1984)

- a. Representative sample in eastern Denmark (Seeland, Lolland-Falster and Bornholm) in October 1979. Sample size 1 651 (out of intended sample of 2 308, 72%).
- b. Smokers: smoked daily during the past 3 months.
- c. Consumption category estimation based on two categories, 1-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution.
- 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.

8 Agner and Mørck (Date unknown), Hagerup and Larsen (1971), Hagerup *et al* (1981), Schroll (1980)

- a. Population studies in Glostrup, studying persons born in specific single years.

Year of examination	Type of examination	Birth year	Age	Number examined	Response rate (%)
1964	Cross-sectional	1914	50	802	82
1967	Cross-sectional	1897	70	440	69
1974	Follow-up	1914	60	666	75
1976	Cross-sectional	1936	40	1 052	88
1977	Follow-up	1897	80	246	68

- b. Consumption in grams of tobacco (estimated by 1 cigarette = 1 g, 1 cheroot = 3 g, and 1 cigar = 5 g). First results presented in Table 5 for 1967 and 1974 are consumption of tobacco per cigarette smoker (including mixed smokers), second results (and results for 1964) are consumption of tobacco per smoker (any product). Only results based on all smokers are included in Table 6.
- c. For 1964 and 1974, consumption category estimation based on 1-14, 15-24, 25+ g/smoker per day.

9 Ibsen (1982), Osler (1992a) quoting Lambert *et al* (1961)

- a. Nationwide interview survey of 11-14-year-olds. Sample size 3 109.
- b. Some data taken from graph.

10 Todd (1986)

- a. Estimated by Todd.

11 Nielsen and Krarup (1976)

- a. Sample size (males) 5 550, (females) 5 666.
- b. Consumption category estimation based on 1-7, 8-14, 15-19, and 20+ cigarettes/smoker/day.

12 Merzdorf *et al* (1982), quoting tobacco industry

- a. Presumably in same series as source 1.

13 Ibsen (1982, 1986), Holstein *et al* (1990) quoting Ibsen (1981)

- a. In 1980, a stratified sample of 39 schools, representative of all schools in Denmark. Age 9-16. Self-completion questionnaire in class. Sample size 9 158.
- b. In 1985, the same schools were contacted again. 36 of them took part in a follow-up survey. Response rate 71%. Sample size 4 500.
- c. In 1980, some data taken from a graph.
- d. In 1980 60% of smokers (sexes combined) smoked every day, 95% smoked cigarettes, and 6% smoked more than 10 cigarettes per day.
- e. In 1985 34% of smokers (sexes combined) smoked every day.

14 Bonnevie (1964)

- a. National survey carried out by Elmark & Lorenz Christensen Marketing A/S for *Politiken*. Sample size 1 500.
- b. Consumption category estimation based on 1-3, 4-8, 9-14, 15-20, 21+ cigarettes/smoker/day.

- 15 Holstein *et al* (1990), Osler (1992a) quoting Vilstrup (1973)**
 a. Nationwide interview survey of 9-15-year-olds. Sample size 495.
- 16 Appleyard (1987)**
 a. Baseline of Copenhagen City Heart Study, March 1976-March 1978. Representative sample drawn from 10 administrative wards in Copenhagen. Subjects were invited to health screening and completed a self-administered questionnaire before physical examination. Sample size 14 223, response rate 74%.
 b. Consumption in grams of tobacco (estimated by 1 cigarette = 1 g, 1 cheroot = 3 g, and 1 cigar = 5 g).
 c. Consumption category estimation based on 1-4, 5-9 10-19 20-29, 30+ grams/smoker/day.
 d. Assumed extensions to age distribution for percentage smokers and for grams/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

17 Osler (1992a) quoting Rasmussen *et al* (1988), Osler (1992b), Kjølner *et al* (1995), Statens Institut for Folkesundhed (National Institute of Public Health) (2000), Eurostat (accessed August 2007)

- a. Sundhed og sygelighed i Danmark (Danish Health and Morbidity Survey). Also called the Danish Health Interview Survey. Representative nationwide surveys conducted by the Danish Institute for Clinical Epidemiology. Personal interviews at home. Called Sundheds- og sygelighedsundersøgelsen (SUSY) (Health and Morbidity Survey) in 2000

	Date	Sample size		Participation rate (%)
		Males	Females	
1987	Sep 1986-Jun 1987	2 320	2 433	80
1991	Sep 1990-May 1991	1 545	1 659	81
1994	—	2 237	2 431	—
2000	Feb 2000-Sep 2000	8 190	8 500	74

Survey details for other years (1994, 1998, 1999 and 2001) are unavailable.

- b. Highest age group (1998 onwards) 85+.
 c. Consumption category estimation for 1987 and 1991 based on two categories, 1-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution. For 1994, based on three categories, 1-4, 5-14 and 15+ cigarettes/smoker/day. Consumption category estimation for 1998, 1999, 2000 and 2001 based on two categories, 1-19 and 20+ cigarettes/smoker/day, and resulting figures should be regarded with caution.
 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.

18 Hansen and Osler (1990)

- a. Survey at 9 elementary schools in the Municipality of Frederiksberg. Approximate ages corresponding to 6th and 8th grades. Sample size (boys grade 6) 162, (boys grade 8) 177, (girls grade 6) 149, (girls grade 8) 186.
 b. Smokers marked as frequency *: smoked daily. Regular smokers: smoked daily or occasionally. All smokers: smoked daily, occasionally or rarely.

19 Osler *et al* (1992, 1992a)

- a. Questionnaire survey in County Vejle about knowledge and behaviour in relation to cardiovascular risk factors. Sample size (males) 1 330, (females) 1 561.
 b. The *All ages* values refer to ages 20-64; age-specific data are not available for the age group marked *.
 c. There is some discrepancy in the age groups shown by the two sources.
 d. Consumption category estimation based on two categories, 1-14 and 15+ grams/smoker/day, and resulting figures should be regarded with caution.
 e. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

20 Due and Holstein (1997) quoting Schmidt (1992), and Osler (1992a) quoting Schmidt

- a. No details available.

21 van Reek *et al* (1992), van Reek and Adriaanse (1995)

- a. 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.
 b. Regular smokers: smoked daily. All smokers: smoked at least once a week.

22 Osler (1992a) quoting Due and Holstein (1991)

- a. Danish Longitudinal Health Behaviour Study. Sample size 2 858 at ages 15, 25, 50, 60, 70.
- b. Regular smokers: smoked daily. All smokers: smoked daily or occasionally.
- c. Consumption category estimation based on two categories, 1-14 and 15+ grams/smoker/day, and resulting figures should be regarded with caution.

23 Ito *et al* (1987), Holstein *et al* (1990), King *et al* (1996), Due and Holstein (1997), Currie *et al* (2000), Currie *et al* (2004)

- 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.

Year	Target age 13			Target age 15		
	Sample size		Mean age	Sample size		Mean age
	Boys	Girls		Boys	Girls	
1985 *	131	114	—	96	99	—
1988	286	288	—	266	301	—
1991	333	310	—	296	333	—
1994	697	717	13.6	696	662	15.6
1998	1 807		13.8	1 536		15.8
2002	1 582		13.8	1 380		15.8

* Survey conducted from December 1984 to February 1985.

- b. Smokers marked as frequency *: smoked daily. Regular smokers: smoked once a week or more.
- c. Calculation of cigarettes per smoker based on median cigarettes smoked per week and includes non-daily smokers.

24 Hibell *et al* (1997, 2000, 2004)

- a. Nationally representative survey forming part of ESPAD (European School Survey Project on Alcohol and Other Drugs). Survey of pupils in school grade 9, selecting those born within a target year, thus age 15-16 at the time of the survey. 95% or more of 15-16 year-olds were still in school in each survey year. 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	Mar 1995-Apr 1995	1 189	1 250	68	90	1979	—
1999	Mar 1999-Apr 1999	875	915	53	92	1983	15.3
2003	Mar 2003-May 2003	1 504	1 474	62	90	1987	15.8

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

25 Nygaard *et al* (1990)

- a. Anonymous questionnaire survey carried out in 1988-1989 in County Roskilde. Approximate ages corresponding to school grades 7 and 9. Sample size 4 044.
- b. Data taken from diagram.
- c. Regular smokers: smoked daily. All smokers: smoked daily or only at parties.

26 Falk (2003), Sundhedsstyrelsen (2004, 2005b, 2005a, 2007a, 2008a)

- a. Monitorering af danskernes rygevaner (Monitoring smoking habits in the Danish population). Nationally representative surveys by Gallup (1994-1996), PLS Rambøll Management (1997-2006) and TNS Gallup (2007 onwards) for Tobaksskaderådet (until 2000), Sundhedsstyrelsen (from 2001), Kræftens Bekæmpelse, Danmarks Lungeforening (1998 onwards) and Hjerteforeningen (1997 onwards).
- b. Continuation of source 2, with some differences in methodology: people aged 13 and over (1994-2006) or 15 and over (2007); and the range of possible answers to the question "Do you smoke?" allows daily and occasional smokers to be differentiated. Telephone interviews. Sample size 2 000-3 000 in 1994-2002.

	Date	Sample size		Participation rate (%)	
		Males	Females		
	2003	1 526	1 601		
	2004	2 243	2 334		
	2005	Nov – Dec	2 265	2 355	67
	2006	Weeks 48-50	2 221	2 296	
	2007	Weeks 47-50	1 230	1 275	

- c. For 1994-2003, the *All ages* values refer to ages 13+; age-specific data are not available for the age groups marked *.
- d. Consumption category estimation (1994-2002) based on two categories, 1-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution. Consumption category estimation (2005-2007) based on 1-4, 5-9, 10-14, 15-19, 20-24, 25-29 and 30+ cigarettes/smoker/day.

27 Nielsen et al (2002), Groth et al (2003), Nissen and Nielsen (2004), Ringgaard and Nielsen (2005), Ringgaard et al (2005), Nielsen et al (2006), Rheinländer and Nielsen (2007)

- a. Survey series MULD: Monitorering af Unges Livsstil og Dagligdag (Monitoring Young People's Lifestyle and Daily Life). Nationally representative surveys of 16-20 year olds.

	Date	Sample size		Participation rate (%)	
		Males	Females		
	2000	Nov 2000–Jan 2001	921	1 125	69
	2001	—	942	1 145	70
	2002	Nov 2002–Jan 2003	913	1 128	68
	2003	Nov 2003–Feb 2004	756	1 012	60
	2004	Nov 2004–Mar 2005	661	1 111	58
	2006	Oct 2006–Jan 2007	853	1 120	68

- b. Data also given on the prevalence of using a hookah/waterpipe:

Prevalence of use of hookah/waterpipe (weekly or more often)

	Males						Females					
	16	17	18	19	20	16-20	16	17	18	19	20	16-20
2004	2.9	2.3	0.7	3.3	1.7	2.1	0.0	0.5	0.5	0.5	0.0	0.3
2006	1.2	2.6	3.4	2.0	1.8	2.2	0.9	0.9	0.5	0.5	0.0	0.5

Snuff (snus) and chewing tobacco were not used regularly by this age group in 2004/2006.

- b. Smokers marked as frequency *: smoked daily. Regular smokers: smoked at least weekly.
- c. Highest age group is age 20.
- d. Consumption category estimation before 2006 based on two categories, 0-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution. Calculation of cigarettes per person based on percentage smokers (product unspecified) and number of cigarettes per cigarette smoker, so may overestimate. In 2000, calculation of cigarettes per person was based on all smokers rather than daily smokers. Consumption category estimation in 2006 based on 1-4, 5-9, 10-14, 15-19, 20-24, 25-29 and 30+ cigarettes/smoker/day.

28 Sundhedsstyrelsen (2007b, 2008b)

- a. Undersøgelse af 11-15 åriges livsstil og sundhedsvaner (Survey of 11-15 year olds' lifestyle and health habits). Surveys conducted yearly during November-December, among a representative sample of pupils in grades 5-10. The survey does not include private or continuation schools.

	Sample size	Participation rate (%)	
		Classes	Pupils
	1999	2 448	
	2000	2 330	
	2001	2 471	
	2002	1 386	
	2003	2 574	
	2004	3 330	
	2005	2 681	95
	2006	2 794	95

- b. Smokers marked as frequency *: smoked daily. Regular smokers: smoked at least once a week.

- 29, 30 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)**
- 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.
 - 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 29). 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 30). 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 <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.
- 31 Tobaksskaderådet (1998) quoting Marosi (1996)**
- Survey of 16-19 year olds. No other details given. This survey may be a precursor of the MULD surveys (see source 27).

Additional information (not presented in tables)

Wicklin (1998)

In an analysis of data from sources 2 and 26, the prevalence of use of handrolled tobacco (%), with or without concurrent use of manufactured cigarettes ("smoked yesterday" for 1970-1993; "smokers" for 1994-1996) was:

	Males	Females
1970	42	36
1971	41	36
1972	40	37
1973	41	37
1974	42	38
1975	40	38
1976	41	39
1977	40	39
1978	41	39
1979	41	38
1980	42	38
1981	40	38
1982	40	38
1983	39	38
1984	40	39
1985	40	37
1986	40	40
1987	39	38
1988	38	39
1989	38	38
1990	38	38
1991	39	38
1992	39	37
1993	37	37
1994	28	30
1995	31	31
1996	28	31

Scientific Committee on Emerging and Newly Identified Health Risks (SCENIHR) (2008)

“In Denmark, the use of oral tobacco has been very limited since the second world war. In spite of the proximity to Sweden, snus has never become a significant source of nicotine here. In recent years, medicinal nicotine has emerged as the substitute of choice when Danes are not permitted to smoke.”

Sundhedsstyrelsen (2005a, 2005b, 2007a, 2008a)

According to Gallup surveys (see source 26 for details), prevalence of use of snus, chewing tobacco or other smoke-free tobacco (%) was:

	Males	Females
2004	0.9	0.1
2005	1.5	0.4
2006	1.3	0.1
2007	2.5	0.4

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