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# **International Smoking Statistics**

Web Edition

A collection of worldwide historical data

## **Finland**

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This report is an updated version of Chapter 8 of International Smoking Statistics 2nd edition,  
Wolfson Institute of Preventive Medicine and OUP, 2002, [www.oup.co.uk/isbn/0-19-850856-5](http://www.oup.co.uk/isbn/0-19-850856-5)

Date of issue: 4-Jul-2011

(First issue)

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**Issue History:**

First issued 4-Jul-2011

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<sup>1</sup> 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](http://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](http://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 20<sup>th</sup> 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](http://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.

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*.

Finland was one of the first countries to adopt manufactured cigarette smoking; production started there in 1859. By the beginning of the 1880s, annual production had reached 100 million cigarettes, and in 1901 this had risen to nearly 500 million cigarettes (Pernu (1960)). Russian-type manufactured cigarettes, *pilli* or *papyrosses*, increased rapidly in the early decades of the 20<sup>th</sup> century (Karvonen *et al* (1993), Hutson (1937)). Half the length of this cigarette is filled with tobacco, and the other half is an open mouth-piece made of thin cardboard. On average the *pilli* contains 0.5 g of tobacco and this is usually completely smoked. Until about 1940 a wooden mouth-piece was provided with each pack of manufactured cigarettes of the conventional type (*pölli*) and even this type of cigarette was usually smoked down to a very small butt (Pedersen *et al* (1969)). In the 1950s American-type filter cigarettes became associated with modern life and Russian-type cigarettes gradually lost their popularity (Karvonen *et al* (1993)).

Since the early 1930s, around 80-90% of tobacco has been consumed as manufactured cigarettes, although dropping briefly to around 75% in the late 1970s and again since the early 1990s. From 1974, pipe and (hand-rolling) cigarette tobacco accounts for most of the remainder, with consumption of cigars, snuff and chewing tobacco quite low. The same pattern may have been true earlier, although the combinations of categories for which data are available makes this unclear. Hand-rolling of cigarettes has fluctuated, being very uncommon by the early 1960s but increasing in the 1990s, and use of pipes has been low from the 1970s (Pedersen *et al* (1969), Karvonen *et al* (1993)).

From 1920 until 1944 average consumption of manufactured cigarettes per adult varied between 3 and 4.5 cigarettes per day. It dipped briefly at the end of the Second World War to 2 cigarettes, after which it increased again to vary between 4.5 and 6 cigarettes from 1950 to 1992. It then fell below 4 cigarettes per day, and has been around 3.5 cigarettes since 2000 (except where the data are distorted by abnormal sales in 2008 ahead of a tax increase in 2009). Our estimates of hand-rolled cigarettes are somewhat speculative but suggest consumption per adult was between 0.5 and 1 hand-rolled cigarette per day since the 1970s.

The consumption of all tobacco products combined per adult followed a similar pattern to manufactured cigarettes, although the post-war increase was more marked, reaching a peak of about 6.5 g per day in the early 1970s; this was partly due to the increasing average weight of a cigarette. The apparent fall in the estimated consumption in 1974 is an artefact caused by a discrepancy between two sources in the assumed average weight of a cigarette, and estimates before and after this date cannot be compared directly.

Sales of Swedish-style moist snuff (snus) have always been low, and were banned in 1995, although personal imports continue.

## Survey data

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

Although many early surveys did not specify which tobacco products were covered, the difference between the prevalence of cigarette smoking and tobacco smoking has been small (about 4% in men and 1% in women) because manufactured cigarettes have consistently been the major category. In the post-war period, the prevalence of smoking among those aged 15 years and over was over 70% in men, reducing to below 60% for regular smoking in the early 1960s. Over this period it was 12-14% in women. The difference in prevalence between men and women has decreased since then. The prevalence among men has continued to decrease, to about 30% in the mid 1980s, 25% around 2000 and reaching 20% in the most recent survey (2009, source 6). Among women the prevalence has remained relatively constant, varying between 15-20%, although reducing slightly since 2005, to 13% in 2009. A further 5-8% of both men and women are occasional smokers.

Some data on adult smoking by age have been available from various non-representative sources since 1961 and from a national source since 1978 (source 6). Among men, the prevalence of smoking has fallen at all ages, while for women, there has been some decrease at age 25-34 in the 1990s but an increase among those aged 35-54. No early surveys of teenage smoking are available, although Karvonen *et al* (1993) reported that smoking was already prevalent among boys at the beginning of the 20<sup>th</sup> century, but remained rare among girls until the 1960s, and smoking among military conscripts (males only) was around 50-60% in 1960-61 (sources 22-23). According to a nationally-representative postal survey conducted regularly since 1973 (source 9), the prevalence of smoking among boys and girls decreased during the 1970s, fluctuated during the 1980s and 1990s and decreased during the 2000s; initially more boys than girls smoked, but this position reversed from the early 1990s at age 14, and from the late 1990s at age 16; there has been little difference between the sexes in prevalence at age 18 since the mid-2000s. However a school-based survey conducted since the mid-1990s (source 34) shows more boys than girls smoking at ages 14-15; it also shows more girls than boys smoking at ages 16-17 for those years based only on upper secondary schools, but more boys than girls when vocational schools were also surveyed.

Comparisons with sales data suggest that surveys of the number of cigarettes smoked under-reported consumption, generally by 25-30%, although somewhat less (15-25%) in the late 1990s. Between 1967 and 2009, the estimated number of cigarettes smoked per person per day (sales-adjusted) decreased for men from about 10 to 5, or to about 4 manufactured cigarettes. For women it remained around 2-3 throughout the same period.

*Note: Some estimates of sales-adjustment differ from those presented in earlier editions of this book, where we disregarded hand-rolled cigarette consumption on the assumption that it was negligible.*



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

Year	Cigarettes					Cigars and cigarillos		Smoking and chewing tobacco	Snuff	All tobacco products		
	Russian style		Other		Total		tonnes				tonnes	tonnes
	tonnes	millions	tonnes	millions	tonnes	millions						
1920					1 910	2 781	90	21	540	50	2 590	
1921					1 450	2 132	90	17	320	50	1 910	
1922					1 590	2 337	90	18	320	90	2 090	
1923					1 950	2 835	140	25	540	90	2 720	
1924					2 040	3 002	90	19	640	90	2 860	
1925					2 090	3 035	90	19	500	90	2 770	
1926					2 040	3 024	90	21	500	90	2 720	
1927					2 310	3 423	90	21	450	90	2 950	
1928					2 450	3 616	90	21	450	90	3 080	
1929					2 540	3 721	90	22	500	90	3 220	
1930					2 680	3 913	90	14	500	90	3 360	
1931					2 220	3 104	50	8	450	90	2 810	
1932					2 130	2 960	50	9	450	50	2 680	
1933					2 270	3 037	50	10	410	50	2 770	
1934					2 630	3 322	50	11	360	50	3 080	
1935					2 770	3 497	50	12	360	50	3 220	
1936					2 810	3 616	90	16	410	90	3 400	
1937					3 220	3 989	90	19	410	90	3 810	
1938					3 490	4 488	90	22	360	90	4 040	
1939					3 310	3 963	90	19	450	90	3 950	
1940					3 040	3 780	90	15	450	50	3 630	
1941	950	2 080	2 680	2 393	3 630	4 473	50	12	450	50	4 170	
1942	1 040	2 316	1 540	1 305	2 590	3 621	50	7	230	50	2 900	
1943	1 130	2 565	1 090	1 059	2 220	3 624	50	7	230	50	2 540	
1944	1 090	2 414	540	511	1 630	2 925	50	6	140	50	1 860	
1945	820	1 866	320	274	1 130	2 140	50	5	180	0	1 360	
1946	950	2 094	950	792	1 910	2 886	50	5	320	50	2 310	
1947	1 000	2 222	1 720	1 386	2 720	3 608	50	6	450	50	3 270	
1948	1 000	2 220	2 490	2 038	3 490	4 258	50	7	590	50	4 170	
1949	860	1 886	2 720	2 440	3 580	4 326	50	9	680	50	4 350	
1950	950	2 104	2 680	2 476	3 630	4 580	50	10	820	50	4 540	
1951	950	2 104	2 950	2 562	3 900	4 666	50	12	680	50	4 670	
1952	1 040	2 331	3 310	2 856	4 350	5 187	50	13	590	50	5 030	
1953	1 040	2 320	3 220	2 845	4 260	5 165	50	12	500	50	4 850	
1954	1 180	2 612	3 450	2 949	4 630	5 561	50	12	500	50	5 220	
1955	1 180	2 668	3 490	3 036	4 670	5 704	50	13	410	50	5 170	
1956	1 180	2 653	3 670	3 215	4 850	5 868	50	9	360	50	5 310	
1957	950	2 135	3 950	3 410	4 900	5 545	50	9	590	50	5 580	
1958	860	1 912	3 270	3 329	4 130	5 241	50	9	730	0	4 900	
1959	820	1 863	3 860	3 975	4 670	5 838	50	10	590	0	5 310	
1960	770	1 723	4 220	4 564	4 990	6 287	50	16	500	0	5 530	
1961	640	1 467	4 990	5 154	5 620	6 621	50	15	360	0	6 030	
1962	590	1 352	5 030	5 349	5 620	6 701	50	18	500	0	6 170	
1963	590	1 393	5 810	5 838	6 400	7 231	90	22	640	50	7 170	
1964	410	950	4 580	4 596	4 990	5 546	90	31	950	50	6 080	
1965	410	920	5 580	5 597	5 990	6 517	90	37	820	50	6 940	
1966	320	750	5 620	5 633	5 940	6 383	180	85	820	50	6 990	
1967	270	629	6 030	6 055	6 300	6 684	140	73	950	50	7 440	
1968	230	482	5 850	5 866	6 080	6 348	140	72	1 180	50	7 440	
1969	180	428	6 120	6 107	6 300	6 535	180	97	1 180	50	7 710	
1970	140	350	6 120	6 130	6 260	6 480	270	190	1 000	50	7 570	
1971	140	300	6 670	6 700	6 800	7 000	230	140	1 040	0	8 070	
1972	140	280	7 300	7 300	7 440	7 580	230	120	1 040	0	8 710	
1973	140	240	7 080	7 100	7 210	7 340	230	140	1 000	0	8 440	

Source: see Notes on sources of sales data: Sales data 1920-1973, p. 56

**Table 1.2** Total annual sales of tobacco products, 1974-2009

Year	Manufactured cigarettes			Cigars		Pipe and cigarette tobacco tonnes	Snuff and chewing tobacco <sup>1</sup> tonnes	All tobacco products tonnes	
	tonnes	millions		tonnes	millions				
		taxable	tax-free						total
1974	5 193	7 989			266	133	968	26	6 453
1975	5 291	8 140			286	143	812	27	6 416
1976	4 190	6 446			272	136	1 198	28	5 688
1977	4 317	6 642			188	94	1 292	28	5 825
1978	4 354	6 698			166	83	1 180	31	5 731
1979	4 555	7 007			152	76	1 208	31	5 946
1980	4 627	7 119			128	64	905	23	5 683
1981	4 322	6 649			120	60	930	27	5 399
1982	4 502	6 926			108	54	928	27	5 565
1983	4 641	7 140			116	58	906	25	5 688
1984	4 887	7 518			128	64	912	25	5 952
1985	4 439	6 829			132	66	851	27	5 449
1986	4 697	7 226			140	70	784	28	5 649
1987	5 009	7 706			158	79	765	23	5 955
1988	4 841	7 448			152	76	686	22	5 701
1989	5 022	7 726			178	89	684	17	5 901
1990	4 654	7 160			172	86	619	87	5 532
1991	4 531	6 971			152	76	711	92	5 486
1992	4 485	6 900			168	84	889	109	5 651
1993	3 786	5 824			134	67	1 072	94	5 086
1994	3 609	5 553			118	59	1 062	91	4 880
1995	3 375	5 192			130	65	929		4 434
1996	3 404	4 537	700	5 237	130	65	1 081		4 615
1997	3 470	4 728	610	5 338	126	63	1 016		4 612
1998	3 453	4 813	500	5 313	134	67	1 013		4 600
1999	3 459	4 810	511	5 321	148	74	1 147		4 754
2000	3 388	4 682	531	5 213	158	79	853		4 399
2001	3 483	4 833	525	5 358	166	83	946		4 595
2002	3 561	4 925	553	5 478	174	87	948		4 683
2003 <sup>2</sup>	3 440	4 799	494	5 293	172	86	867		4 479
2004 <sup>2</sup>	3 506	4 930	464	5 394	178	89	867		4 551
2005 <sup>2</sup>	3 622	5 078	495	5 573	190	95	867		4 679
2006 <sup>2</sup>	3 513	4 986	419	5 405	194	97	867		4 574
2007 <sup>2</sup>	3 451	4 928	381	5 309	208	104	867		4 525
2008 <sup>3</sup>	4 818	6 983	429	7 412	234	117	785		5 837
2009 <sup>2,3</sup>	2 520	3 522	355	3 877	232	116	785		3 537

1 1974-1989 excludes imports, 1990-1994 includes imports, 1995 onwards see *Notes on sources of sales data: Snuff sales for 1995 onwards*, p. 57.

2 Data on pipe and cigarette tobacco not available, values shown are averages of adjacent years and are included in total.

3 See *Notes on sources of sales data: Sales data for 1974 onwards*, p. 57 regarding exceptional sales in 2008 associated with a tax increase in 2009.

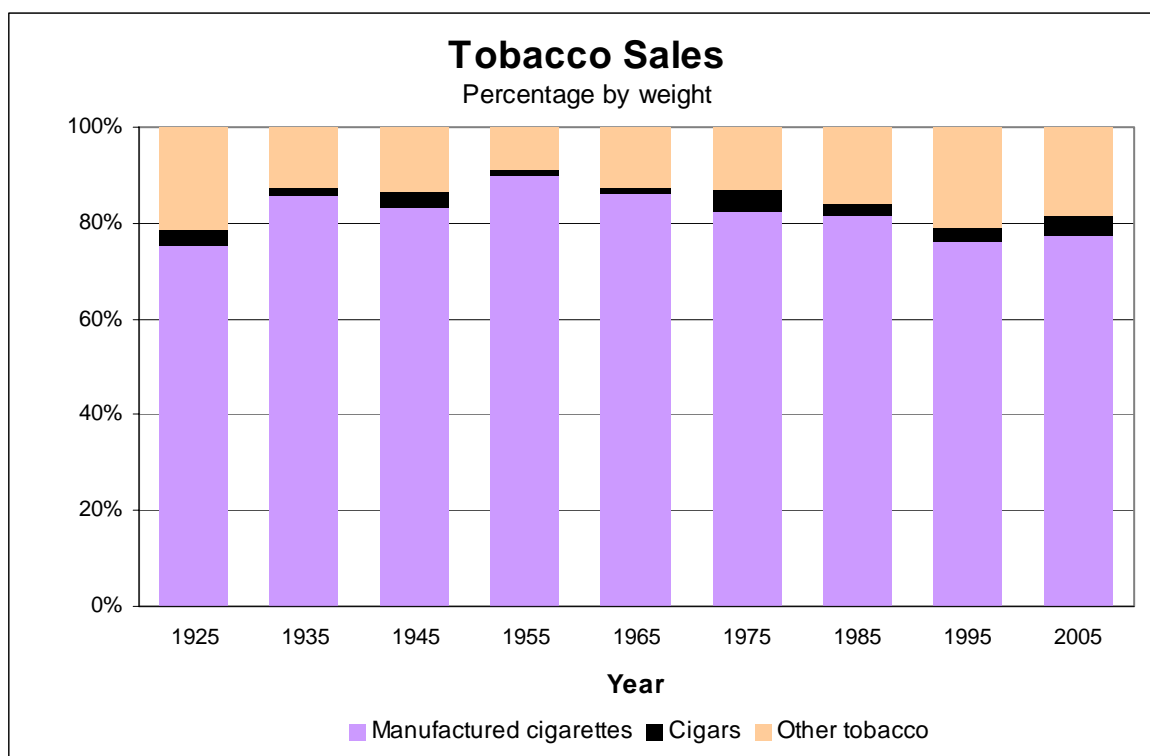
Source: see *Notes on sources of sales data: Sales data for 1974 onwards*, p. 57

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

Year	Manufactured cigarettes %	Cigars %	Other tobacco %
1925	75.5	3.2	21.3
1935	85.8	1.5	12.7
1945	83.1	3.7	13.2
1955	90.2	1.0	8.9
1965	86.2	1.3	12.5
1975	82.5	4.5	13.1
1985	81.5	2.4	16.1
1995	76.1	2.9	21.0
2005	77.4	4.1	18.5

Source: calculated from Tables 1.1 & 1.2

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



Source: Table 1.3

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

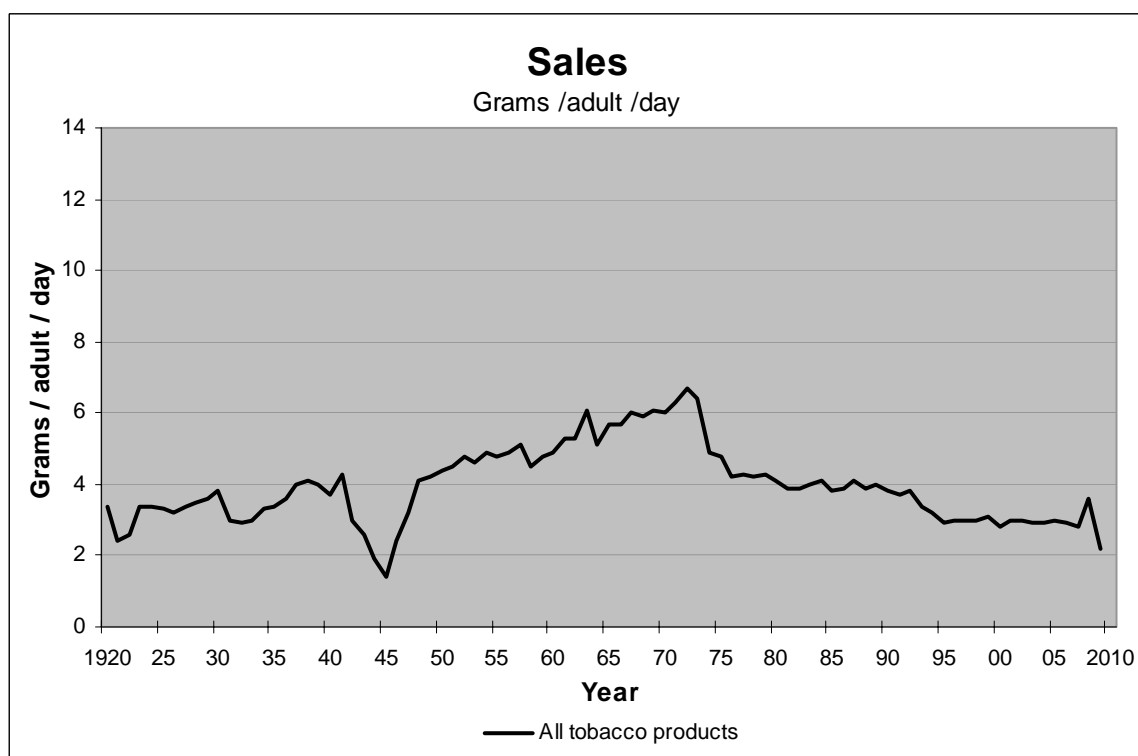
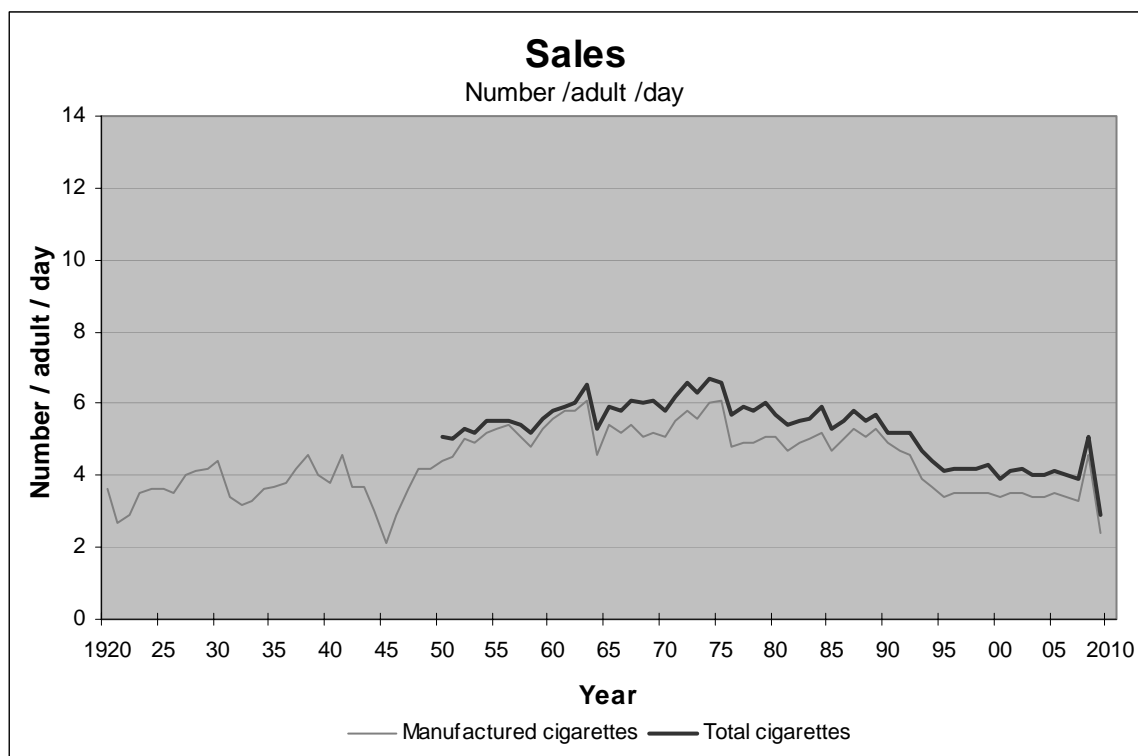
Year	Manufactured cigarettes		Hand-rolled cigarettes		Total cigarettes		All tobacco products	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day
1920	2 781	3.6					2 590	3.4
1921	2 132	2.7					1 910	2.4
1922	2 337	2.9					2 090	2.6
1923	2 835	3.5					2 720	3.4
1924	3 002	3.6					2 860	3.4
1925	3 035	3.6					2 770	3.3
1926	3 024	3.5					2 720	3.2
1927	3 423	4.0					2 950	3.4
1928	3 616	4.1					3 080	3.5
1929	3 721	4.2					3 220	3.6
1930	3 913	4.4					3 360	3.8
1931	3 104	3.4					2 810	3.0
1932	2 960	3.2					2 680	2.9
1933	3 037	3.3					2 770	3.0
1934	3 322	3.6					3 080	3.3
1935	3 497	3.7					3 220	3.4
1936	3 616	3.8					3 400	3.6
1937	3 989	4.2					3 810	4.0
1938	4 488	4.6					4 040	4.1
1939	3 963	4.0					3 950	4.0
1940	3 780	3.8					3 630	3.7
1941	4 473	4.6					4 170	4.3
1942	3 621	3.7					2 900	3.0
1943	3 624	3.7					2 540	2.6
1944	2 925	3.0					1 860	1.9
1945	2 140	2.1					1 360	1.4
1946	2 886	2.9					2 310	2.4
1947	3 608	3.6					3 270	3.2
1948	4 258	4.2					4 170	4.1
1949	4 326	4.2					4 350	4.2
1950	4 580	4.4	650	0.6	5 230	5.1	4 540	4.4
1951	4 666	4.5	475	0.5	5 141	5.0	4 670	4.5
1952	5 187	5.0	363	0.3	5 550	5.3	5 030	4.8
1953	5 165	4.9	250	0.2	5 415	5.2	4 850	4.6
1954	5 561	5.2	250	0.2	5 811	5.5	5 220	4.9
1955	5 704	5.3	138	0.1	5 842	5.5	5 170	4.8
1956	5 868	5.4	75	0.1	5 943	5.5	5 310	4.9
1957	5 545	5.1	363	0.3	5 908	5.4	5 580	5.1
1958	5 241	4.8	538	0.5	5 779	5.2	4 900	4.5
1959	5 838	5.3	363	0.3	6 201	5.6	5 310	4.8
1960	6 287	5.6	250	0.2	6 537	5.8	5 530	4.9
1961	6 621	5.8	80	0.1	6 701	5.9	6 030	5.3
1962	6 701	5.8	260	0.2	6 961	6.0	6 170	5.3
1963	7 231	6.1	440	0.4	7 671	6.5	7 170	6.1
1964	5 546	4.6	833	0.7	6 379	5.3	6 080	5.1
1965	6 517	5.4	675	0.6	7 192	5.9	6 940	5.7
1966	6 383	5.2	680	0.6	7 063	5.8	6 990	5.7
1967	6 684	5.4	848	0.7	7 532	6.1	7 440	6.0
1968	6 348	5.1	1 140	0.9	7 488	6.0	7 440	5.9
1969	6 535	5.2	1 145	0.9	7 680	6.1	7 710	6.1
1970	6 480	5.1	925	0.7	7 405	5.8	7 570	6.0
1971	7 000	5.5	980	0.8	7 980	6.2	8 070	6.3
1972	7 580	5.8	985	0.8	8 565	6.6	8 710	6.7
1973	7 340	5.6	940	0.7	8 280	6.3	8 440	6.4
1974	7 989	6.0	905	0.7	8 894	6.7	6 453	4.9
1975	8 140	6.1	715	0.5	8 855	6.6	6 416	4.8
1976	6 446	4.8	1 203	0.9	7 649	5.7	5 688	4.2
1977	6 642	4.9	1 325	1.0	7 967	5.9	5 825	4.3
1978	6 698	4.9	1 190	0.9	7 888	5.8	5 731	4.2
1979	7 007	5.1	1 230	0.9	8 237	6.0	5 946	4.3

**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
1980	7 119	5.1	856	0.6	7 975	5.7	5 683	4.1
1981	6 649	4.7	893	0.6	7 542	5.4	5 399	3.9
1982	6 926	4.9	895	0.6	7 821	5.5	5 565	3.9
1983	7 140	5.0	873	0.6	8 013	5.6	5 688	4.0
1984	7 518	5.2	885	0.6	8 403	5.9	5 952	4.1
1985	6 829	4.7	814	0.6	7 643	5.3	5 449	3.8
1986	7 226	5.0	735	0.5	7 961	5.5	5 649	3.9
1987	7 706	5.3	716	0.5	8 422	5.8	5 955	4.1
1988	7 448	5.1	623	0.4	8 071	5.5	5 701	3.9
1989	7 726	5.3	625	0.4	8 351	5.7	5 901	4.0
1990	7 160	4.9	549	0.4	7 709	5.2	5 532	3.8
1991	6 971	4.7	669	0.5	7 640	5.2	5 486	3.7
1992	6 900	4.6	896	0.6	7 796	5.2	5 651	3.8
1993	5 824	3.9	1 130	0.8	6 954	4.7	5 086	3.4
1994	5 553	3.7	1 123	0.7	6 676	4.4	4 880	3.2
1995	5 192	3.4	961	0.6	6 153	4.1	4 434	2.9
1996	5 237	3.5	1 156	0.8	6 393	4.2	4 615	3.0
1997	5 338	3.5	1 080	0.7	6 418	4.2	4 612	3.0
1998	5 313	3.5	1 081	0.7	6 394	4.2	4 600	3.0
1999	5 321	3.5	1 254	0.8	6 575	4.3	4 754	3.1
2000	5 213	3.4	891	0.6	6 104	3.9	4 399	2.8
2001	5 358	3.5	1 013	0.7	6 371	4.1	4 595	3.0
2002	5 478	3.5	1 020	0.7	6 498	4.2	4 683	3.0
2003	5 293	3.4	923	0.6	6 216	4.0	4 479	2.9
2004	5 394	3.4	928	0.6	6 322	4.0	4 551	2.9
2005	5 573	3.5	933	0.6	6 506	4.1	4 679	3.0
2006	5 405	3.4	938	0.6	6 343	4.0	4 574	2.9
2007	5 309	3.3	943	0.6	6 252	3.9	4 525	2.8
2008	7 412	4.6	846	0.5	8 258	5.1	5 837	3.6
2009	3 877	2.4	851	0.5	4 728	2.9	3 537	2.2

Source: Manufactured cigarettes and all tobacco products, Tables 1.1 and 1.2. Hand-rolled cigarettes, see *Notes on sources of sales data: Estimates of numbers of hand-rolled cigarette*, p. 58. Population, see *Population, Methods* p. 14.

**Figure 2** Sales of (i) manufactured and total<sup>1</sup> cigarettes and (ii) all tobacco products. Average per adult (aged 15 years and over) per day



<sup>1</sup> 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
	Consumption %	Production %	
1960	49.1		
1961	54.6		
1962	59.9		
1963	62.1		
1964	66.4		
1965	71.3		
1966	74.3		
1967	79.1		
1968	83.3		
1969	85.8		
1970	88.0		25.0
1971	89.8		
1972	91.2		
1973	93.2		
1974	93.4		
1975	94.2		
1976	95.6		19.1
1977	95.4		19.1
1978	95.9		18.3
1979	96.3		18.4
1980	96.9		16.9
1981		97.5	15.7
1982		97.8	15.2
1983		98.1	13.3
1984		98.3	13.0
1985		98.2	13.6
1986		98.4	13.0
1987		98.2	12.6
1988		98.5	11.6
1989		98.1	11.4
1990		98.2	11.5
1991		98.7	10.7
1992		98.7	10.4
1993		99.0	
1994		99.5	
1995		100.0	
1996		100.0	
1997	100.0	100.0	
1998	100.0	100.0	
1999		100.0	
2000		100.0	
2001		100.0	
2002		100.0	
2003		100.0	

Source: see *Notes on sources of sales data: Plain/Filter cigarette sales*, p. 58 and *Tar, nicotine and CO machine yields of cigarettes*, p. 59

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

Year	Source	Product	Frequency	Age Groups																	All ages					
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+	
50	28	U	U	76																						
59	26	UC	R	69																						
59	27	UC	R	57																						
60	2	U	R	58																						
61	2	U	R	57																						
61	22	MC	U														47									
61	22	TC	U														47									
61	22	A	U														53									
61	23	MC	U														59									
61	23	TC	U														61									
61	23	A	U														64									
61	36	UC	R														57	64	60	58					54	
61	36	A	R														58	64	61	58					56	
62	3	TC	U														61	59	54	51	44					
62	3	A	U														64	62	58	55	48					
63	2	U	R	58																						
64	2	U	R	56																						
65	2	U	R	57																						
66	2	U	R	53																						
66	17	UC	U	41																						
66	17	A	U	8	44				60	58	49								46							
67	2	U	R	50																						
67	18	UC	U	37				55	52	56	50	46	35													
68	2	U	R	48																						
69	2	U	R	48																						
70	2	U	R	44																						
71	2	U	R	45																						
71	4	UC	U	48				60	50	40	34	54	44	41												
71	17	UC	U	39																						
71	17	A	U	37				56	56	51	38								46							
72	2	U	R	46																						
73	1	A	R	46																						
73	2	U	R	44																						
73	8	UC	R	46																						
73	9	TC	*	18	39	44																				
74	1	A	R	42																						
75	1	A	R	42																						
75	2	U	R	40																						
75	15	UC	U	39				49	44	46	43	39	42	42	35	28	27	14								
75	15*	UC	R	37				48	43	45	40	37	40	40	32	26	26	15	7		41					
76	1	A	R	40																						
76	2	U	R	34																						
76	2	U	A	40																						
76	20	U	U	38				43	40	41	34	26				38										
77	1	A	R	40																						
77	2	U	R	40																						
77	2	U	A	45																						
77	9	TC	*	1	11	30	41																			
77	9	A*	*	1	11	30	41																			
78	1	A	R	37																						
78	5	UC	U	13				40	48	33	36	27	28	29	30	26	25	27	3	16						
78	6	M	R	32				39	30	28	26					32										
78	6	A	R	33				43	34	34	33					36										
78	6	A	A	42				50	39	39	35					42										



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

Year	Source	Product	Frequency	Age Groups																	All ages												
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+								
50	28	U	U	13																													
59	26	UC	R																														
59	27	UC	R																														
60	2	U	R	14																													
61	2	U	R	12																													
61	22	MC	U																														
61	22	TC	U																														
61	22	A	U																														
61	23	MC	U																														
61	23	TC	U																														
61	23	A	U																														
61	36	UC	R												21	11	7	4					4										
61	36	A	R												21	11	7	4					4										
62	3	TC	U																														
62	3	A	U																														
63	2	U	R	13																													
64	2	U	R	16																													
65	2	U	R	14																													
66	2	U	R	15																													
66	17	UC	U	13																													
66	17	A	U	0	8			24		16		12									13												
67	2	U	R	15																													
67	18	UC	U	19				25		16		16		9		4		2															
68	2	U	R	19																													
69	2	U	R	17																													
70	2	U	R	16																													
71	2	U	R	18																													
71	4	UC	U				30		29		30		16		24		18		20		12												
71	17	UC	U	23																													
71	17	A	U	30			42		29		20		12									23											
72	2	U	R	19																													
73	1	A	R	22																													
73	2	U	R	20																													
73	8	UC	R	21																													
73	9	TC	*	21		32		40																									
74	1	A	R	20																													
75	1	A	R	22																													
75	2	U	R	17																													
75	15	UC	U					38		36		30		24		19		14		12		14		9		7		5		2			
75	15*	UC	R					38		36		29		22		19		12		11		14		10		7		5		2		2	
76	1	A	R	20																													
76	2	U	R	17																													
76	2	U	A	23																													
76	20	U	U	25				28		16		13		9		3							17										
77	1	A	R	19																													
77	2	U	R	17																													
77	2	U	A	22																													
77	9	TC	*	1	15		27		32																								
77	9	A*	*	2	15		27		32																								
78	1	A	R	19																													
78	5	UC	U	19			32		28		23		14		18		14		14		11		5		7		4		3		0		
78	6	MCR	R	21				23		16		11		7								17											
78	6	A	R	23				23		16		11		8								17											
78	6	A	A	37				31		22		14		9								24											

**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+																								
79	1	A	R	40																																													
79	6	M	R					36				37				30				26				22					31																				
79	6	A	R					37				40				36				32				30					36																				
79	6	A	A					46				49				41				35				32					41																				
79	9	TC	*	1			9			25			33																																				
79	9	A	*	1			9			25			34																																				
79	10	A	R					27				37				37									34																								
79	29	UC	R	34																																													
79	29	A	R									40				40				35				30				15					36																
80	1	A	R	39																																													
80	6	M	R					28				41				32				26				24					32																				
80	6	A	R					29				44				37				32				28					35																				
80	6	A	A					38				52				41				35				30					41																				
80	10	A	R					31				41				34									37																								
80	19	U	*	1			11			37																																							
80	19	U	A	10			33			58																																							
81	6	M	R					29				39				36				24				22					31																				
81	6	A	R					30				42				40				32				30					36																				
81	6	A	A					41				48				44				36				33					41																				
81	9	TC	*	2			15			30			36																																				
81	9	A	*	3			16			31			37																																				
81	10	A	R					30				42				35									37																								
82	6	M	R					25				39				28				26				18					28																				
82	6	A	R					25				41				32				31				24					32																				
82	6	A	A					36				48				38				34				27					38																				
82	10	A	R					26				38				32									33																								
82	11	UC	R									35				29				33				27					30																				
82	11	UC	A									45				35				37				31					35																				
82	11	A	A									47				37				39				32					36																				
82	12	UC	R									39				36				36				30					34																				
82	12	UC	A									50				44				40				37					41																				
82	12	A	A									52				45				42				41					43																				
82	13	UC	R									42				32				27				32					30																				
82	13	UC	A									51				39				31				34					35																				
82	13	A	A									54				44				33				38					39																				
83	6	M	R					21				37				28				26				22					28																				
83	6	A	R					22				39				33				32				27					32																				
83	6	A	A					34				48				41				35				28					38																				
83	9	TC	*	1			15			27			34																																				
83	9	A	*	1			15			28			36																																				
83	10	A	R					28				37				29									33																								
83	21	U	R		17		30																																										
84	6	M	R					27				38				34				26				24					31																				
84	6	A	R					28				41				37				30				29					34																				
84	6	A	A					36				51				42				34				33					40																				
84	10	A	R					32				36				31									33																								
85	6	M	R					16				36				36				38				35				28				28				18				25				23					29
85	6	A	R					17				36				38				40				39				31				31				24				33				25					32
85	6	A	A					30				46				48				49				43				39				37				25				37				28					39
85	7	A	R																		17	15	10		15																								
85	7	A	A																		19	16	11																										
85	9	TC	*	1			13			28			32																																				
85	10	M	R					30				34				27																																	
85	10	A	R					30				38				34									35																								
85	10	A	A					43				48				37																																	

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

Year	Source	Product	Frequency	Age Groups																	All ages																							
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+																			
79	1	A	R	19																																								
79	6	M	R	27				24				17				12				7				18																				
79	6	A	R	28				25				18				13				8				18																				
79	6	A	A	39				31				23				15				8				23																				
79	9	TC	*	1		9		25		26																																		
79	9	A*	*	1		9		25		26																																		
79	10	A	R	21				18				10								16																								
79	29	UC	R	13																																								
79	29	A	R	20				14				9				5				2				13																				
80	1	A	R	21																																								
80	6	M	R	20				25				16				12				7				16																				
80	6	A	R	21				25				16				12				7				17																				
80	6	A	A	34				33				21				13				8				22																				
80	10	A	R	19				17				11								16																								
80	19	U	*	0		10		23																																				
80	19	U	A	4		37		49																																				
81	6	M	R	21				27				18				14				7				18																				
81	6	A	R	24				28				18				14				8				19																				
81	6	A	A	34				34				23				16				9				23																				
81	9	TC	*	1		12		25		26																																		
81	9	A*	*	1		12		26		26																																		
81	10	A	R	20				19				12								17																								
82	6	M	R	21				20				19				8				8				15																				
82	6	A	R	21				22				20				9				8				16																				
82	6	A	A	30				32				22				11				9				21																				
82	10	A	R	19				21				11								17																								
82	11	UC	R	22				12				8				5				9																								
82	11	UC	A	28				20				12				8				14																								
82	11	A	A	29				20				12				10				15																								
82	12	UC	R	23				12				12				5				10																								
82	12	UC	A	34				17				16				8				14																								
82	12	A	A	34				17				16				8				14																								
82	13	UC	R	27				23				13				12				17																								
82	13	UC	A	39				28				17				15				21																								
82	13	A	A	40				28				17				17				21																								
83	6	M	R	21				27				21				10				9				18																				
83	6	A	R	22				28				21				10				9				19																				
83	6	A	A	34				37				25				14				11				25																				
83	9	TC	*	1		13		23		25																																		
83	9	A*	*	1		13		24		25																																		
83	10	A	R	18				21				11								17																								
83	21	U	R		11	25																																						
84	6	M	R	18				26				20				11				6				17																				
84	6	A	R	18				26				21				12				7				17																				
84	6	A	A	32				33				25				15				8				23																				
84	10	A	R	20				16				10								15																								
85	6	M	R	11				20				22				19				16				15				8				5				8				14				
85	6	A	R	11				21				22				20				16				15				8				12				5				8				14
85	6	A	A	24				32				34				27				19				19				11				16				7				10				21
85	7	A	R																	6				5				3				5												
85	7	A	A																	7				6				3																
85	9	TC	*	0		10		25		25																																		
85	10	M	R	18				21				9																																
85	10	A	R	19				22				10								17																								
85	10	A	A	29				29				14																																



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

Year	Source	Product	Frequency	Age Groups																	All ages		
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74
86	6	MCR		25					26			19		12		7							18
86	6	A R		25					26			19		12		8							18
86	6	A A		37					35			23		16		10							25
86	21	U *		6	20																		
86	21	U R		9	27																		
86	21	U A		13	37																		
87	6	MCR		23					25			16		16		10							21
87	6	A R		23					25			16		16		10							21
87	6	A A		36					35			20		20		12							28
87	7	A R												6		5	4				5		
87	7	A A												7		6	5						
87	9	TC *	0		10		28		32														
87	9	A* *	0		10		29		33														
87	10	A R		21					23			12							19				
87	11	UC R							18		16		11		5							12	
87	11	UC A							30		21		15		6							15	
87	11	A A							30		22		15		6							15	
87	12	UC R							20		18		9		3							11	
87	12	UC A							29		24		12		6							15	
87	12	A A							29		24		12		6							15	
87	13	UC R							25		26		11		12							17	
87	13	UC A							34		34		14		15							22	
87	13	A A							34		34		14		15							22	
88	6	MCR		22					28			22		13		11							20
88	6	A R		22					29			23		13		11							20
88	6	A A		36					36			28		16		12							27
88	10	A R		21					25			12							20				
89	6	MCR		25					23			19		15		10							19
89	6	A R		25					23			20		15		10							19
89	6	A A		38					33			27		20		12							26
89	7	A R												7		6	3				6		
89	7	A A												8		7	3						
89	9	TC *	1		13		29		29														
89	9	A* *	1		13		29		30														
89	10	A R		23					24			13							20				
90	6	MCR		23					22			23		16		10							19
90	6	A R		23					23			24		17		11							20
90	6	A A		36					30			32		21		14							27
90	10	A R		23					26			14							21				
90	21	U *		8	25																		
90	21	U R		13	32																		
90	21	U A		21	39																		
91	6	MCR		27					27			23		18		7							21
91	6	A R		28					27			24		18		7							22
91	6	A A		38					32			29		21		9							26
91	9	TC *	1		15		27		28														
91	9	A* *	1		15		27		28														

**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	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59		60-64	65-69	70-74	75-79	80+		
92	6	M	R														29								29		
92	6	A	R														30								33		
92	6	A	A														43								40		
92	11	U	C	R																					27		
92	11	U	C	A																					32		
92	11	A	A																						34		
92	12	U	C	R																					30		
92	12	U	C	A																					35		
92	12	A	A																						38		
92	13	U	C	R																					29		
92	13	U	C	A																					36		
92	13	A	A																						39		
93	6	M	C	R																					25		
93	6	A	R																						30		
93	6	A	A																						37		
93	7	A	R																				20	10	9	7	14
93	7	A	A																				22	13	9	8	
93	9	T	C	*																							
93	9	A	*	*																							
94	6	M	C	R																						22	
94	6	A	R																							27	
94	6	A	A																							34	
94	21	U	*																								
94	21	U	R																								
94	31	M	C	U																						32	
94	31	T	C	U																						32	
94	31	A	U																							39	
95	6	M	C	R																						24	
95	6	A	R																							29	
95	6	A	A																							36	
95	7	A	R																								
95	7	A	A																								
95	9	T	C	*																							
95	9	A	*	*																							
95	16	U	C	*																							
95	16	U	C	A																							
95	32	M	C	U																						21	
95	32	T	C	U																						26	
95	32	A	U																							28	
96	6	M	C	R																						26	
96	6	A	R																							27	
96	6	A	A																							35	
96	6*	A	R																							26	
96	34	A	*																								
96	34	A	R																								
96	37	A	R																								
97	6	M	C	R																						23	
97	6	A	R																							30	
97	6	A	A																							37	
97	6*	A	R																							28	
97	7	A	R																							12	
97	7	A	A																								
97	9	T	C	*																							
97	9	A	*	*																							

**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 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69		70 - 74	75 - 79	80+		
92	6	MCR						22				23		23		19		5								19	
92	6	A R						23				24		25		20		7									20
92	6	A A						37				34		31		22		8									27
92	11	UC R										19		17		10		6									12
92	11	UC A										29		26		14		8									17
92	11	A A										29		26		14		8									17
92	12	UC R										22		21		12		5									13
92	12	UC A										31		28		16		8									19
92	12	A A										31		28		16		8									19
92	13	UC R										27		21		19		14									19
92	13	UC A										34		30		21		17									24
92	13	A A										34		30		21		17									24
93	6	MCR						22				20		23		14		8									18
93	6	A R						22				20		25		15		9									19
93	6	A A						36				29		33		18		10									26
93	7	A R																8		8		4		2			7
93	7	A A																9		9		5		2			
93	9	TC *	1		13			26				25															
93	9	A* *	1		13			26				25															
94	6	MCR						21				19		19		18		6									17
94	6	A R						22				22		20		19		8									19
94	6	A A						36				28		25		23		9									25
94	21	U *						19																			
94	21	U R		11				26																			
94	31	MC U						26				37		20				13									24
94	31	TC U						26				37		20				13									24
94	31	A U						28				40		22				15									26
95	6	MCR						22				19		21		15		9									18
95	6	A R						23				21		24		17		11									20
95	6	A A						34				29		31		20		12									26
95	7	A R																9		5		3		1			
95	7	A A																11		7		5		1			
95	9	TC *	1		13			26				28															
95	9	A* *	1		13			26				28															
95	16	UC *						24																			
95	16	UC A						39																			
95	32	MC U						21				26		22				4									17
95	32	TC U						24				32		26				5									20
95	32	A U						24				32		26				5									20
96	6	MCR						23				21		19		19		8									18
96	6	A R						23				21		20		19		8									18
96	6	A A						33				27		29		22		9									25
96	6*	A R						22				20		18		18		9								18	
96	34	A *			16		23																				
96	34	A R			22		29																				
96	37	A R												19													
97	6	MCR						19				18		22		20		8									18
97	6	A R						21				21		24		21		9									20
97	6	A A						31				30		30		25		10									26
97	6*	A R						21				20		22		21		9									19
97	7	A R																6		7		3		1			5
97	7	A A																6		7		3		2			
97	9	TC *	0		17			27				28															
97	9	A* *	0		17			28				28															

**Table 4M** (continued from p. 22, continues on p. 26)  
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+	
98	6	M	R							21					29		28		22		16					23
98	6	A	R							25					35		37		32		21					30
98	6	A	A							35					42		43		36		23					36
98	6*	A	R							24					34		37		31		21					30
98	21	A	*			7				19																
98	21	A	R			10				25																
98	33	UC	*			7																				
98	33	UC	R			8																				
98	34*	A	*			20	27	16	17																	
98	34*	A	R			25	32	21	23																	
98	35	UC	R							25			36		31		32		25		13		7	*		27
98	35	A	R							25			37		32		34		27		14		7	*		28
98	35	A	A							33			43		38		37		32		15		11	*		34
99	6	M	R							15			28		23		23		15							21
99	6	A	R							18			32		30		32		24							27
99	6	A	A							33			42		36		35		26							34
99	6*	A	R							20			31		28		29		24							26
99	6*	A	A							32			43		38		36		28							35
99	7	M	R																		8	9	11	4		9
99	7	A	R																		12	11	13	5		11
99	7	A	A																		13	15	14	5		13
99	7*	A	R																		12	13	12	6		12
99	7*	A	A																		13	16	13	7		13
99	9	TC	*		0		12		28			34														
99	9	A*	*		0		12		30			36														
99	16	UC	*							31																
99	16	UC	A							44																
99	24	UC	R										35													
99	24	UC	A										58													
99	32	U	U							33			46		53					20						39
99	33	UC	*				14																			
99	33	UC	R				17																			
99	35	UC	R							27			32		29		29		27		12		4	*		26
99	35	A	R							27			32		30		31		30		14		4	*		28
99	35	A	A							35			39		37		36		32		17		5	*		33
00	6	M	R							18			22		26		23		14							21
00	6	A	R							22			28		34		30		20							27
00	6	A	A							32			37		40		34		23							34
00	6*	A	R							23			27		33		29		19							27
00	6*	A	A							32			39		41		37		26							36
00	30	A	R									36		35		33		24		21		11	11		29	
00	30	A	A									45														
00	33	UC	*							26																
00	33	UC	R							29																
00	34*	A	*					22	29	17	19															
00	34*	A	R					27	34	22	24															
00	35	UC	R							23			33		28		29		26		15		6	*		26
00	35	A	R							23			33		30		31		29		16		6	*		27
00	35	A	A							30			39		37		36		32		19		9	*		32



**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	80+
98	6	MCR								20			19		23		16		8						18
98	6	A R								23			23		26		18		11						20
98	6	A A								32			30		33		21		12						26
98	6*	A R								22			20		24		18		11						19
98	21	A *		8					20																
98	21	A R		14					29																
98	33	UC *		9																					
98	33	UC R		11																					
98	34*	A *			19	24	18	18																	
98	34*	A R			26	31	24	25																	
98	35	UC R						18			22		23		22		10		5		3	1	*		16
98	35	A R						18			22		23		22		10		5		3	1	*		16
98	35	A A						27			26		30		25		13		6		3	1	*		20
99	6	MCR						18			21		22		16		8								18
99	6	A R						21			23		25		18		11								20
99	6	A A						32			30		30		22		13								26
99	6*	A R						21			21		25		17		11								19
99	6*	A A						32			32		30		23		14								27
99	7	MCR																5	4	3	4				4
99	7	A R																7	5	4	4				5
99	7	A A																9	5	4	4				6
99	7*	A R																6	5	4	4				5
99	7*	A A																9	6	5	4				6
99	9	TC *	0		17		30		30																
99	9	A* *	0		17		30		30																
99	16	UC *					26																		
99	16	UC A					43																		
99	24	UC R																							
99	24	UC A																							
99	32	U U						29			28		24				12								21
99	33	UC *			18																				
99	33	UC R			23																				
99	35	UC R						16			19		23		20		13		5		3	1	*		16
99	35	A R						16			19		23		20		13		5		3	1	*		16
99	35	A A						24			23		28		24		15		6		4	1	*		19
00	6	MCR						20			18		22		17		13								18
00	6	A R						22			20		24		20		15								20
00	6	A A						39			28		28		24		17								27
00	6*	A R						22			19		23		20		14								20
00	6*	A A						40			28		31		26		19								29
00	30	A R							24			24		24		14		7		3	2				18
00	30	A A							33																
00	33	UC *					30																		
00	33	UC R					35																		
00	34*	A *			19	26	19	20																	
00	34*	A R			26	33	25	27																	
00	35	UC R						15			21		22		25		15		3		6	1	*		17
00	35	A R						15			21		22		25		15		3		6	1	*		17
00	35	A A						25			26		28		28		17		4		6	1	*		21

**Table 4M** (continued from p. 24, continues on p. 28)  
Prevalence of smoking, males

Year	Source	Product	Frequency	Age Groups															All ages						
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54		55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+
01	6	MC	R						25			27		23		23		16							23
01	6	A	R						31			31		31		31		19							29
01	6	A	A						40			40		38		36		24							35
01	6*	A	R						31			30		31		30		19							28
01	6*	A	A						40			39		41		37		24							36
01	7	MC	R															9	11	6	5			9	
01	7	A	R															15	15	8	7			13	
01	7	A	A															17	16	9	7			14	
01	7*	A	R															13	16	6	7			12	
01	7*	A	A															17	18	8	7			14	
01	9	TC	*	1		13		29		33															
01	9	A*	*	1		13		31		36															
01	33	UC	*							28															
01	33	UC	R							33															
01	35	UC	R						25			32		29		27		25		14	3	*		25	
01	35	A	R						25			33		30		29		28		15	4	*		26	
01	35	A	A						30			37		35		34		30		20	9	*		31	
02	6	MC	R						20			28		21		23		17						22	
02	6	A	R						25			33		27		30		24						28	
02	6	A	A						35			41		36		33		27						34	
02	6*	A	R						25			32		26		30		23						27	
02	6*	A	A						34			43		38		34		28						35	
02	14	A	R									41		36		39		27						36	
02	21	A	*			7				22															
02	21	A	R			10				28															
02	32	MC	R							27			37		33			16						29	
02	32	TC	R							29			42		46			17						34	
02	32	A	R							29			42		50			19						36	
02	32	MC	U							31			46		36			18						33	
02	32	TC	U							33			53		50			21						40	
02	32	A	U							33			53		54			24						42	
02	34*	A	*			18	26	17	18																
02	34*	A	R			22	31	22	23																
03	6	MC	R						20			26		21		18		20						21	
03	6	A	R						23			31		24		25		26						26	
03	6	A	A						33			40		31		30		28						32	
03	6*	A	R						24			30		22		24		24						25	
03	6*	A	A						34			42		34		32		29						34	
03	7	MC	R															10	7	6	3			7	
03	7	A	R															18	13	8	3			13	
03	7	A	A															19	14	9	4			14	
03	7*	A	R															19	11	7	4			12	
03	7*	A	A															22	14	8	4			15	
03	9	TC	*	1		7		23		35															
03	9	A*	*	1		7		25		37															
03	16	UC	*							23															
03	16	UC	A							35															
04	6	MC	R						18			26		27		22		16						22	
04	6	A	R						21			30		32		30		23						27	
04	6	A	A						29			40		39		36		27						34	
04	6*	A	R						20			28		30		29		22						26	
04	6*	A	A						28			42		40		39		28						35	
04	34*	A	*			15	22	13	15																
04	34*	A	R			19	26	17	20																

**Table 4F** (continued from p. 25, continues on p. 29)  
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																	All ages						
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79	80+		
01	6	M	R							21		19		21		17		8								17	
01	6	A	R							23		22		23		20		11									20
01	6	A	A							36		28		27		23		11									25
01	6*	A	R							22		21		21		20		11									19
01	6*	A	A							35		30		29		25		12									26
01	7	M	R																7	3	6	3				5	
01	7	A	R																7	3	6	4				5	
01	7	A	A																7	3	7	4				5	
01	7*	A	R																7	3	6	4				5	
01	7*	A	A																8	5	7	4				6	
01	9	TC	*	1		15		31		31																	
01	9	A*	*	1		15		31		32																	
01	33	UC	*					33																			
01	33	UC	R					37																			
01	35	UC	R					17		17		19		24		13		4		5		*					15
01	35	A	R					17		17		20		24		13		4		5		*					15
01	35	A	A					22		24		23		27		14		4		5		*					19
02	6	M	R					22		19		18		18		12											18
02	6	A	R					24		21		20		21		14											20
02	6	A	A					35		30		27		25		17											27
02	6*	A	R					23		19		18		19		13											18
02	6*	A	A					35		30		29		25		18											27
02	14	A	R							28		28		26		13											24
02	21	A	*		6			23																			
02	21	A	R		12			32																			
02	32	M	R					19		33		29		9													22
02	32	TC	R					21		35		31		11													24
02	32	A	R					21		35		31		11													24
02	32	MC	U					31		40		35		10													27
02	32	TC	U					33		42		38		12													29
02	32	A	U					33		42		38		12													29
02	34*	A	*		16	24	18	20																			
02	34*	A	R		22	29	24	26																			
03	6	M	R					19		20		20		17		13											18
03	6	A	R					20		21		21		19		16											19
03	6	A	A					32		31		28		22		17											25
03	6*	A	R					21		20		19		18		15											18
03	6*	A	A					32		32		29		24		18											26
03	7	M	R															6	5	7	2					5	
03	7	A	R															7	5	8	2					6	
03	7	A	A															8	8	8	3					7	
03	7*	A	R															6	5	7	2					5	
03	7*	A	A															8	8	8	3					7	
03	9	TC	*	0		11		29		35																	
03	9	A*	*	0		11		30		36																	
03	16	UC	*					26																			
03	16	UC	A					41																			
04	6	M	R					22		18		18		16		15											18
04	6	A	R					24		20		20		19		16											20
04	6	A	A					35		29		25		23		17											25
04	6*	A	R					23		19		18		16		16											18
04	6*	A	A					37		31		25		25		18											27
04	34*	A	*		15	20	14	17																			
04	34*	A	R		20	25	19	23																			

**Table 4M** (continued from p. 26, continues on p. 30)  
Prevalence of smoking, males

Year	Source	Product	Frequency	Age Groups																All ages				
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59		60 - 64	65 - 69	70 - 74	75 - 79
05	6	MC	R						17		23	26	23	16										21
05	6	A	R						20		27	32	29	21										26
05	6	A	A						29		36	39	37	25										33
05	6*	A	R						18		27	30	28	20										25
05	6*	A	A						30		38	41	40	26										35
05	7	MC	R																7	7	4	3		6
05	7	A	R																12	11	7	3		9
05	7	A	A																14	12	10	5		11
05	7*	A	R																12	11	5	4		9
05	7*	A	A																15	13	10	4		12
05	9	MC	*			6			20		32													
05	9	TC	*	1		7			23		34													
05	9	A*	*	1		8			24		36													
05	32	MC	R						21		23	32	14											23
05	32	TC	R						23		25	39	17											26
05	32	A	R						23		26	40	19											27
05	32	MC	U						25		26	37	15											26
05	32	TC	U						27		28	44	17											29
05	32	A	U						27		29	45	22											31
06	6	MC	R						18		24	21	17	20										20
06	6	A	R						21		27	25	25	25										24
06	6	A	A						30		38	30	32	29										31
06	6*	A	R						20		24	22	25	23										23
06	6*	A	A						28		39	31	33	30										32
06	21	A	*		3				19															
06	21	A	R		5				23															
06	32	MC	R						15		28	18	11											18
06	32	TC	R						17		33	24	15											22
06	32	A	R						17		34	26	16											23
06	32	MC	U						24		34	22	13											22
06	32	TC	U						29		39	29	17											27
06	32	A	U						31		40	32	19											29
06	34*	A	*			13	20	10	12															
06	34*	A	R			16	24	14	17															
07	6	MC	R						23		27	24	17	18										21
07	6	A	R						24		30	30	22	24										26
07	6	A	A						35		42	40	26	28										33
07	6*	A	R						23		27	29	21	24										25
07	6*	A	A						36		44	43	28	30										35
07	7	MC	R																13	7	5	3		8
07	7	A	R																17	10	6	5		11
07	7	A	A																20	12	7	7		13
07	7*	A	R																17	8	6	5		10
07	7*	A	A																21	11	7	6		13
07	9	MC	*			5			18		26													
07	9	TC	*	0		5			20		28													
07	9	A*	*	0		5			21		30													
07	14	MC	*						29		28	22	18	11										23
07	14	A	R						33		33	29	23	15										28
07	14*	A	R						23		26	27	21	12										23
07	14*	A	A						39		37	32	27	17										32
07	16	UC	*					20																
07	16	UC	A					30																

**Table 4F** (continued from p. 27, continues on p. 31)  
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																	All ages				
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79	80+
05	6	MCR								17		18		14		18		13							16
05	6	A R								20		19		17		23		13							18
05	6	A A								32		32		21		26		17							25
05	6*	A R								21		18		16		22		13							18
05	6*	A A								32		33		22		28		17							26
05	7	MCR																	5	3	2	3			3
05	7	A R																	6	4	2	3			4
05	7	A A																	7	4	3	3			5
05	7*	A R																	5	3	2	3			4
05	7*	A A																	7	6	4	4			5
05	9	MC *			10		25		31																
05	9	TC *	0		10		27		33																
05	9	A* *	0		10		27		33																
05	32	MCR								19		19		16		5									13
05	32	TC R								20		19		17		6									14
05	32	A R								20		19		17		6									14
05	32	MC U								26		23		20		8									17
05	32	TC U								28		24		22		9									18
05	32	A U								28		25		22		9									19
06	6	MCR								17		16	22	21	14										18
06	6	A R								18		17	23	22	15										19
06	6	A A								26		27	27	27	17										25
06	6*	A R								19		14	21	21	14										18
06	6*	A A								26		27	27	28	19										25
06	21	A *		5		15																			
06	21	A R		7		21																			
06	32	MCR								16		18		26		7									16
06	32	TC R								22		19		28		8									17
06	32	A R								22		19		28		8									17
06	32	MC U								30		21		31		9									20
06	32	TC U								36		22		34		9									22
06	32	A U								36		22		34		10									23
06	34*	A *		11	17	12	13																		
06	34*	A R		15	22	17	19																		
07	6	MCR								15		19	14	15	14										15
07	6	A R								16		20	15	17	16										17
07	6	A A								26		29	21	20	18										23
07	6*	A R								16		18	15	15	14										16
07	6*	A A								27		30	23	21	19										23
07	7	MCR														8	5	3	2						5
07	7	A R														10	5	3	2						5
07	7	A A														11	5	4	2						6
07	7*	A R														9	4	3	2						5
07	7*	A A														11	6	5	2						6
07	9	MC *			7		23		27																
07	9	TC *	1		7		23		28																
07	9	A* *	1		7		23		29																
07	14	MC *									22	19	23	13	8										18
07	14	A R									25	22	25	15	9										20
07	14*	A R									15	17	23	12	8										15
07	14*	A A									29	25	28	17	10										22
07	16	UC *				19																			
07	16	UC A				32																			

**Table 4M** (continued from p. 28 )  
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+				
08	6	MC	R						18			25		22		22		17										20	
08	6	A	R						18			27		27		27		21										24	
08	6	A	A						26			38		36		30		26										31	
08	6*	A	R						16			23		25		26		21										23	
08	6*	A	A						24			39		39		32		26										32	
08	34	A	*						13	20	25	25																	
08	34	A	R						17	25	29	30																	
09	6	MC	R									13		17		21		20		14								17	
09	6	A	R									15		21		23		29		20								22	
09	6	A	A									24		38		32		35		24								30	
09	6*	A	R									15		21		22		27		19								21	
09	6*	A	A									22		39		33		35		25								30	
09	7	MC	R																						12	7	3	2	7
09	7	A	R																						16	9	4	3	10
09	7	A	A																						17	10	5	4	11
09	7*	A	R																						15	9	3	2	9
09	7*	A	A																						19	11	5	4	11
09	9	TC	*							8		21		28															
09	25	U	R																										48
10	34	A	*									13	20	25	25														
10	34	A	R									17	25	30	31														

Source: see *Notes on sources of survey data*, p. 59  
 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. 59  
 All ages: relates to ages reported; as given in original source

**Table 4F** (continued from p. 29)  
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																		All ages				
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69		70 - 74	75 - 79	80+	
08	6	MC	R								14			16		16		21		15						17
08	6	A	R								14			17		17		23		17						18
08	6	A	A								24			26		21		26		20						23
08	6*	A	R								13			16		15		21		16						16
08	6*	A	A								25			27		22		28		20						24
08	34	A	*			11	17	22	22																	
08	34	A	R			15	22	27	27																	
09	6	MC	R								13			16		16		16		12						14
09	6	A	R								14			17		17		18		14						16
09	6	A	A								23			29		22		21		16						21
09	6*	A	R								13			17		15		16		14						15
09	6*	A	A								23			31		22		21		17						22
09	7	MC	R																	7	6	2	2			4
09	7	A	R																	8	6	2	2			5
09	7	A	A																	9	7	2	3			6
09	7*	A	R																	7	5	1	2			4
09	7*	A	A																	9	7	2	3			6
09	9	TC	*			8			22		26															
09	25	U	R																							
10	34	A	*			12	17	22	23																	
10	34	A	R			16	23	27	29																	

Source: see *Notes on sources of survey data*, p. 59  
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. 59  
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. 34)

Year	Source	Product	Estimated	Age Groups																	All ages
				12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	
59	26	UC	E																		
59	27	UC	E																		
61	22	TC	E																		
61	23	TC	E																		
61	36	UC	E																		21
62	3	TC	E*																		
67	18	UC	E*																		
71	4	UC	E*																		
75	15	UC	E																		
77	9	MC																			
77	9	TC																			
78	5	UC	E*																		
78	6	MCE																			19
79	6	MCE																			19
79	9	MC																			
79	9	TC																			
79	29	UC	E																		
80	6	MCE																			19
80	19	UC																			
81	6	MCE																			19
81	9	MC																			
81	9	TC																			
82	6	MCE																			19
82	11	UC																			19
82	12	UC																			19
82	13	UC																			21
83	6	MCE																			19
83	9	MC																			
83	9	TC																			
84	6	MCE																			20
85	6	MCE																			20
85	6	A	E																		20
85	9	MC																			
85	9	TC																			
85	10	MC																			18
86	6	MCE																			19
86	6	A	E																		19
87	6	MCE																			19
87	6	A	E																		19
87	9	TC																			
87	11	UC																			20
87	12	UC																			21
87	13	UC																			21
88	6	MCE																			20
88	6	A	E																		20
89	6	MCE																			20
89	6	A	E																		20
89	9	TC																			
90	6	MCE																			19
90	6	A	E																		20
91	6	MCE																			19
91	6	A	E																		20
91	9	TC																			



**Table 5F** Number of cigarettes smoked per smoker per day, females:  
selected surveys by age  
(continues on p. 35)

Year	Source	Product	Estimated	Age Groups																	All ages					
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60		65	70	75	80+	
59	26	UC	E																							
59	27	UC	E																							
61	22	TC	E																							
61	23	TC	E																							
61	36	UC	E*											9.5	7.9	9.7	7.9									7.9
62	3	TC	E																							
67	18	UC	E*				8.4				9.1		9.5		9.7		10			9.3		11				
71	4	UC	E*					9.5	10	12	12	11	14	13	11											
75	15	UC	E					9.0	10	11	12	11	11	12	10	9.6	9.6	9.7			6.7					
77	9	MC			5.2		7.9		8.9																	
77	9	TC			5.2		7.9		8.8																	
78	5	UC	E*			10			12		14	19	16	15	12	12	12	18	16	22	7.9	0.0				
78	6	MCE					11				13		15		15		15									13
79	6	MCE					11				13		14		16		12									13
79	9	MC			7.2		8.3		9.2																	
79	9	TC			7.1		8.3		9.2																	
79	29	UC	E																							
80	6	MCE					11				13		16		16		13									13
80	19	UC			6.4			9.0																		
81	6	MCE					12				13		16		14		13									13
81	9	MC			6.3		6.8		8.8																	
81	9	TC			6.2		6.8		8.8																	
82	6	MCE					12				14		16		14		14									14
82	11	UC									12		14		13		9.9									12
82	12	UC									13		14		12		12									12
82	13	UC									14		16		15		14									15
83	6	MCE					11				14		15		16		12									14
83	9	MC			6.9		8.9		10																	
83	9	TC			6.9		8.9		9.7																	
84	6	MCE					11				15		15		16		17									14
85	6	MCE					11		12	12	13	14	14	16	15	18	11									13
85	6	A E					11		12	12	13	14	14	16	15	18	11									13
85	9	MC			7.6		11		11																	
85	9	TC			7.6		11		11																	
85	10	MC					9.9				13				14											12
86	6	MCE					11				12		15		14		14									13
86	6	A E					11				12		15		13		14									13
87	6	MCE					11				13		16		13		13									13
87	6	A E					11				13		16		13		13									13
87	9	TC			7.4		8.3		11																	
87	11	UC									12		15		14		13									14
87	12	UC									12		13		11		9.0									11
87	13	UC									13		16		15		13									15
88	6	MCE					13				12		14		15		14									13
88	6	A E					13				12		14		15		14									14
89	6	MCE					12				12		13		16		12									13
89	6	A E					13				13		13		16		12									13
89	9	TC			8.6		9.0		9.5																	
90	6	MCE					12				14		15		16		13									14
90	6	A E					13				14		15		16		14									14
91	6	MCE					12				14		14		15		11									14
91	6	A E					12				14		15		15		12									14
91	9	TC			9.2		10		11																	

**Table 5M** (continued from p. 32, continues on p. 36)  
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 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79
92	6	MC E						15				18		21		23		22						19
92	6	A E						15				18		21		23		23						20
92	11	UC										20		17		20		19						19
92	12	UC										17		18		21		17						19
92	13	UC										17		23		22		21						22
93	6	MC E						14				18		19		21		20						18
93	6	A E						15				20		20		21		19						19
93	9	TC		9.2			11					13												
94	6	MC E						13				18		19		21		18						18
94	6	A E						16				19		20		22		20						19
94	31	TC E						13				16		19				14						16
95	6	MC E						14				17		19		20		19						18
95	6	A E						15				18		20		20		19						19
95	9	TC		9.0			12					13												
95	16	UC E					11																	
95	32	TC E						12				17		18				16						16
96	6	MC E						15				19		19		23		22						20
96	6	A E						16				18		19		23		22						20
96	37	UC												17										
97	6	MC E						12				16		18		20		18						17
97	6	A E						13				18		19		21		19						18
97	9	TC		9.6			12					13												
98	6	MC E						14				17		19		21		20						18
98	6	A E						16				18		19		20		21						19
98	21	UC		1.4			3.7																	
98	35	UC E*						15				18		20		19		20		18		13	*	19
99	6	MC E						14				16		18		19		19						17
99	6	A E						16				17		20		20		19						19
99	7	MC E																	18	16	14	14		16
99	7	A E																	18	16	14	13		16
99	9	TC		9.2			12					14												
99	16	UC E					12																	
99	24	UC E*										14												
99	35	UC E*						15				17		18		20		20		16		15	*	18
00	6	MC E						15				17		17		17		19						17
00	6	A E						17				19		18		18		20						18
00	30	UC E*										15												
00	35	UC E*						16				18		20		19		19		18		16	*	18
01	6	MC E						13				16		18		20		17						17
01	6	A E						13				17		19		20		18						18
01	7	MC E																	15	16	12	16		15
01	7	A E																	18	15	15	14		16
01	9	TC		9.5			12					13												
01	35	UC E*						15				18		19		19		20		17		18	*	18
02	6	MC E						14				17		19		19		20						18
02	6	A E						15				17		20		20		20						19
02	32	TC E						11				16		21				16						17
03	6	MC E						14				16		19		19		21						18
03	6	A E						14				16		19		20		20						18
03	7	MC E																	18	16	11	16		16
03	7	A E																	19	15	11	14		16
03	9	TC					11					12												
03	16	UC E						11																

**Table 5F** (continued from p. 33, continues on p. 37)  
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 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79	80+
92	6	MCE								10			13		15		16		14						14
92	6	A E								11			14		16		17		15						14
92	11	UC										12		13		15		15							14
92	12	UC										11		12		13		13							13
92	13	UC										13		14		16		13							15
93	6	MCE								11			11		13		17		13						13
93	6	A E								12			12		13		18		14						13
93	9	TC			7.5		8.7		11																
94	6	MCE								11			12		14		15		14						13
94	6	A E								11			12		14		15		15						13
94	31	TC E							9.7			12		11				12							11
95	6	MCE								11			12		13		15		14						13
95	6	A E								12			13		14		16		15						14
95	9	TC			7.2		9.0		10																
95	16	UC E				8.9																			
95	32	TC E								11			15		12			12							13
96	6	MCE								12			11		16		14		14						13
96	6	A E								12			11		15		14		14						13
96	37	UC												12											
97	6	MCE								9.3			12		13		12		15						12
97	6	A E								10			13		15		13		15						13
97	9	TC			7.4		8.8		10																
98	6	MCE								9.8			12		12		13		13						12
98	6	A E								12			13		13		14		13						13
98	21	UC			1.3		2.9																		
98	35	UC E*								13			13		14		16		13		11		13	*	14
99	6	MCE								10			11		13		15		12						12
99	6	A E								11			13		14		15		14						13
99	7	MCE																		11	16	13	7.9		13
99	7	A E																		10	18	14	7.9		13
99	9	TC			9.0		9.6		10																
99	16	UC E				10																			
99	24	UC E*																							
99	35	UC E*								12			12		13		16		14		12		16	*	13
00	6	MCE								10			12		13		13		15						13
00	6	A E								11			13		14		14		14						13
00	30	UC E*									11														
00	35	UC E*								12			13		13		15		14		12		12	*	14
01	6	MCE								9.6			12		13		12		13						12
01	6	A E								10			13		13		13		14						13
01	7	MCE																		16	12	10	7.9		13
01	7	A E																		16	12	10	7.9		13
01	9	TC			8.2		9.8		10																
01	35	UC E*								11			13		14		15		14		15		9.7	*	14
02	6	MCE								11			13		12		13		12						12
02	6	A E								12			13		12		15		13						13
02	32	TC E								9.3			11		13				11						12
03	6	MCE								9.9			12		13		13		14						12
03	6	A E								11			12		13		14		15						13
03	7	MCE																		11	17	9.4	16		12
03	7	A E																		11	17	11	16		13
03	9	TC			8.8		9.9		10																
03	16	UC E				9.0																			

**Table 5M** (continued from p. 34)  
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 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79	80+	
04	6	MC	E							13			15		19		18		19							17
04	6	A	E							14			16		20		18		19							18
05	6	MC	E							11			17		18		18		20							17
05	6	A	E							12			18		19		19		19							18
05	7	MC	E																	17	14	12	10			15
05	7	A	E																	16	12	13	10			14
05	9	TC			9.3			11		13																
05	32	MC	E							14			15		19				19							17
05	32	TC	E							13			15		19				19							17
06	6	MC	E							14			15		15		18		19							16
06	6	A	E							14			17		16		20		18							17
06	32	MC	E							11			16		15				17							15
06	32	TC	E							13			16		16				18							16
07	6	MC	E							15			16		18		18		17							17
07	6	A	E							16			17		20		18		17							18
07	7	MC	E																	17	13	14	14			15
07	7	A	E																	16	13	15	15			15
07	9	TC				12			12		13															
07	16	UC	E				12																			
08	6	MC	E							13			14		19		20		19							17
08	6	A	E							13			14		19		19		20							18
09	6	MC	E							13			17		17		17		18							17
09	6	A	E							15			17		18		19		19							18
09	7	MC	E																	17	14	13	11			16
09	7	A	E																	16	15	13	10			15

Source: see *Notes on sources of survey data*, p. 59  
 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. 59  
 All ages: relates to ages reported; as given in original source

**Table 5F** (continued from p. 35)  
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 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64		65 - 69	70 - 74	75 - 79
04	6	MC	E						10			11		12		13		13						12
04	6	A	E					12			11		13		13		14							12
05	6	MC	E					9.9			11		11		13		14							12
05	6	A	E					10			12		12		15		14							13
05	7	MC	E															15	9.4	17	9.7			13
05	7	A	E															15	9.2	15	9.7			13
05	9	TC				7.9		9.4		9.5														
05	32	MC	E						11		8.1		11		11		11							10
05	32	TC	E						11		8.5		11		11		11							10
06	6	MC	E					10			11		12		13		12							12
06	6	A	E					11			11		13		14		12							12
06	32	MC	E					8.2			12		14		14		12							12
06	32	TC	E					9.8			13		13		13		12							12
07	6	MC	E					11			12		14		13		13							13
07	6	A	E					12			13		15		14		14							13
07	7	MC	E															11	10	17	11			11
07	7	A	E															12	10	17	11			12
07	9	TC				8.6		9.0		8.8														
07	16	UC	E					8.7																
08	6	MC	E					10			12		13		14		14							13
08	6	A	E					11			12		13		15		14							13
09	6	MC	E					9.6			10		12		12		13							12
09	6	A	E					9.8			10		12		13		13							12
09	7	MC	E															9.6	12	11	7.9			10
09	7	A	E															9.3	14	11	7.9			11

Source: see *Notes on sources of survey data*, p. 59  
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. 59  
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. 40)

Year	Source	Product	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+																														
59	26	UC																				**																																	
59	27	UC																				**																																	
61	36	UC																			11	**																																	
62	3	UC*																			11	**																																	
67	18	UC*	3.8			8.4			8.9			9.7			8.3			6.8			4.9				72%T																														
71	4	UC*				8.6			12			9.5			8.5			6.6			12			8.7			6.7				**																								
75	15	UC				4.7			7.0			7.3			8.2			7.4			7.0			7.4			7.2			6.3			4.4			3.8			1.7				60%T												
77	9	TC	0.8			3.0			5.5																						**																								
78	5	UC*	1.4			6.4			9.7			6.5			7.4			6.0			5.7			6.1			6.8			4.6			4.4			4.5			0.7			2.5				71%T									
78	6	MC				5.1			8.0			6.5			5.8			5.0																					6.3	77%M															
79	6	MC				4.9			7.3			6.3			5.4			4.3																					5.9	73%M															
79	9	TC	0.7			2.7			4.4																						**																								
79	29	UC																			6.0		**																																
80	6	MC				4.1			8.0			6.9			5.7			4.7																					6.1	73%M															
80	19	UC	0.8			4.5																						**																											
81	6	MC				4.2			7.8			7.7			5.1			3.9																					6.1	80%M															
81	9	TC	1.1			3.0			4.5																						**																								
82	6	MC				3.7			7.3			5.9			5.4			3.1																					5.4	69%M															
82	11	UC				7.0			6.2			6.5			5.2																					6.1	**																		
82	12	UC				7.8			8.2			7.0			5.5																					7.1	**																		
82	13	UC				8.7			7.2			5.8			6.4																					6.5	**																		
83	6	MC				3.1			6.9			6.1			4.9			4.0																					5.3	69%M															
83	9	TC	1.2			3.2			4.4																						**																								
84	6	MC				4.4			7.3			7.7			5.7			4.4																					6.0	73%M															
85	6	MC				2.3			5.8			7.5			8.1			7.9			5.6			6.9			4.2			5.2			4.2																					5.9	75%M
85	6	A				2.5			5.9			7.7			8.5			8.5			6.1			7.6			5.0			6.7			4.8																					6.4	71%T
85	9	TC	1.3			3.3			4.6																						**																								
85	10	MC				4.2			6.3			5.3																						72%M																					
86	6	MC				4.5			7.3			7.1			5.9			4.3																					6.0	75%M															
86	6	A				4.6			7.7			7.9			6.3			4.9																					6.4	72%T															
87	6	MC				4.0			6.8			7.8			5.8			4.7																					5.9	71%M															
87	6	A				4.2			7.1			8.4			6.6			5.5																					6.4	69%T															
87	9	TC	1.3			3.7			5.1																						**																								
87	11	UC				6.0			6.6			5.7			3.8																					5.6	**																		
87	12	UC				7.7			8.3			7.4			4.5																					7.0	**																		
87	13	UC				8.1			9.0			6.2			3.3																					6.5	**																		
88	6	MC				4.8			7.2			7.5			5.6			4.5																					6.1	77%M															
88	6	A				4.9			7.6			8.4			6.4			5.1																					6.6	76%T															
89	6	MC				4.8			6.4			7.5			5.7			4.3																					5.9	71%M															
89	6	A				5.2			7.0			8.5			7.0			5.0																					6.7	72%T															
89	9	TC	1.5			4.5			5.4																						**																								
90	6	MC				4.2			5.9			6.5			5.9			4.8																					5.6	75%M															
90	6	A				4.5			6.1			7.5			7.2			5.9																					6.3	77%T															
91	6	MC				4.0			6.9			6.0			6.2			3.5																					5.5	77%M															
91	6	A				4.4			7.5			7.7			7.6			4.6																					6.5	80%T															
91	9	TC	1.3			4.1			5.1																						**																								

**Table 6F** Number of cigarettes smoked per person per day, females:  
selected surveys by age; with percentage total sales  
(continues on p. 41)

Year	Source	Product	Age Groups																	All ages	%																
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64			65 - 69	70 - 74	75 - 79	80+												
59	26	UC																			**																
59	27	UC																			**																
61	36	UC*																		2.0	0.8	0.6	0.3	0.3						0.9	**						
62	3	UC*																																		**	
67	18	UC*				1.6				2.3				1.5		1.5		1.0		0.4		0.2				72%T											
71	4	UC*					2.9		3.1		3.5		1.9		1.5		2.5		2.7		1.3				**												
75	15	UC				3.4				3.6		3.3		2.9		2.1		1.5		1.4		1.4		0.9		0.6		0.5		0.1			60%T				
77	9	TC	0.8		2.1		2.8																		**												
78	5	UC*	2.0				3.7		4.0		4.3		2.3		2.7		1.6		1.7		1.3		0.9		1.0		0.8		0.2		0.0			71%T			
78	6	MC					2.4				2.9				2.3		1.7		1.0									2.2	77%M								
79	6	MC					3.0				3.2				2.4		1.9		0.9									2.3	73%M								
79	9	TC	0.6		2.1		2.4																		**												
79	29	UC																			**																
80	6	MC					2.2				3.3				2.5		2.0		0.8									2.2	73%M								
80	19	UC	0.6		2.1																		**														
81	6	MC					2.5				3.6				2.9		1.9		0.9									2.4	80%M								
81	9	TC	0.7		1.7		2.3																		**												
82	6	MC					2.5				2.8				3.1		1.2		1.1									2.1	69%M								
82	11	UC									2.7				1.8		1.0		0.6									1.2	**								
82	12	UC									3.4				1.7		1.5		0.7									1.4	**								
82	13	UC									4.2				4.0		2.1		1.8									2.7	**								
83	6	MC					2.4				3.8				3.0		1.6		1.0									2.4	69%M								
83	9	TC	0.9		2.0		2.4																		**												
84	6	MC					1.9				4.0				3.1		1.8		1.1									2.4	73%M								
85	6	MC					1.2				2.5		2.7		2.5		2.2		2.1		1.3		1.6		0.8		0.9									1.9	75%M
85	6	A					1.2				2.6		2.7		2.5		2.2		2.1		1.3		1.7		0.8		0.9									1.9	71%T
85	9	TC	0.8		2.7		2.6																		**												
85	10	MC					1.8				2.6				1.3										72%M												
86	6	MC					2.7				3.1				2.9		1.6		1.1									2.3	75%M								
86	6	A					2.7				3.2				2.9		1.7		1.1									2.4	72%T								
87	6	MC					2.4				3.4				2.5		2.1		1.3									2.8	71%M								
87	6	A					2.5				3.4				2.5		2.1		1.3									2.8	69%T								
87	9	TC	0.7		2.3		3.4																		**												
87	11	UC									2.6				2.5		1.6		0.7									1.7	**								
87	12	UC									2.8				2.5		1.1		0.4									1.4	**								
87	13	UC									3.7				4.6		1.7		1.7									2.8	**								
88	6	MC					3.0				3.4				3.1		1.9		1.6									2.7	77%M								
88	6	A					3.0				3.4				3.3		1.9		1.6									2.7	76%T								
89	6	MC					3.1				2.8				2.4		2.4		1.2									2.4	71%M								
89	6	A					3.2				2.9				2.7		2.4		1.2									2.5	72%T								
89	9	TC	1.1		2.6		2.8																		**												
90	6	MC					2.8				3.0				3.6		2.5		1.4									2.8	75%M								
90	6	A					2.9				3.2				3.7		2.7		1.5									2.9	77%T								
91	6	MC					3.2				3.7				3.3		2.6		0.8									2.8	77%M								
91	6	A					3.3				3.8				3.6		2.7		0.9									3.0	80%T								
91	9	TC	1.4		2.8		3.0																		**												

**Table 6M** (continued from p. 38, continues on p. 42)  
Number of cigarettes smoked per person per day, males

Year	Source	Product	Age Groups																	All ages	%					
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64			65 - 69	70 - 74	75 - 79	80+	
92	6	MC								4.4		5.9		6.2		6.5		4.2						5.5	78%M	
92	6	A								4.6		6.6		7.5		8.0		5.5						6.5	79%T	
92	11	UC										6.9		5.5		5.3		4.8						5.3	**	
92	12	UC										6.0		6.1		7.5		3.5						5.9	**	
92	13	UC										7.5		7.4		7.7		4.7						6.8	**	
93	6	MC										3.3		5.2		5.7		5.1		3.1				4.6	79%M	
93	6	A										4.1		6.3		7.3		6.4		4.1				5.7	78%T	
93	9	TC			1.4			3.3		4.6															**	
94	6	MC										3.0		4.7		4.6		4.3		2.7				3.9	74%M	
94	6	A										4.1		5.4		6.0		5.8		4.7				5.3	77%T	
94	31	TC*										4.7		5.5		7.1		3.0						5.2	87%T	
95	6	MC										2.8		5.2		5.4		4.3		3.0				4.2	84%M	
95	6	A										3.5		6.2		7.3		5.7		4.3				5.4	88%T	
95	9	TC			1.1			3.5		4.4															**	
95	16	UC										2.6													**	
95	32	TC*										3.0		6.0		5.4		2.1						4.3	84%T	
96	6	MC										3.6		5.8		5.5		6.5		4.0				5.2	97%M	
96	6	A										3.6		5.9		5.6		6.8		4.3				5.4	81%T	
96	37	UC*														5.4									**	
97	6	MC										2.5		4.4		4.7		3.8		3.9				3.9	77%M	
97	6	A										3.0		6.0		6.5		5.5		5.8				5.5	83%T	
97	9	TC			1.3			3.0		4.4															**	
98	6	MC										3.0		5.1		5.3		4.6		3.1				4.3	82%M	
98	6	A										4.0		6.4		7.0		6.5		4.4				5.7	88%T	
98	21	UC			0.1			0.9																	**	
98	35	UC*										3.6		6.4		6.3		6.1		4.9		2.3		5.1	86%T	
99	6	MC										2.1		4.5		4.2		4.6		2.9				3.7	74%M	
99	6	A										3.0		5.2		5.8		6.4		4.5				5.0	79%T	
99	7	MC																			1.4	1.5	1.5	0.5	1.4	**
99	7	A																			2.3	2.1	1.6	0.8	1.9	**
99	9	TC			1.1			3.4		4.6															**	
99	16	UC										3.7													**	
99	24	UC*																							**	
99	35	UC*										4.1		5.5		5.4		5.6		5.4		1.9		0.6	4.7	79%T
00	6	MC										2.7		3.7		5.2		6.2		5.5		3.9		5.0	84%T	
00	30	UC														5.3									**	
00	35	UC*										3.7		5.7		5.5		5.5		5.0		2.7		0.9	4.7	87%T
01	6	MC										3.1		4.3		4.3		4.6		2.7				3.9	75%M	
01	6	A										4.2		5.2		6.0		6.3		3.5				5.1	81%T	
01	7	MC																			1.3	1.8	0.7	0.8	1.3	**
01	7	A																			2.3	2.4	0.9	0.9	1.9	**
01	9	TC			1.2			3.4		4.4															**	
01	35	UC*										3.6		5.8		5.6		5.3		5.0		2.3		0.5	4.6	81%T
02	6	MC										2.8		4.7		4.1		4.3		3.4				3.9	75%M	
02	6	A										3.8		5.7		5.2		6.0		4.8				5.2	80%T	
02	32	TC										3.2		6.6		9.4		2.7						5.8	100%T	
03	6	MC										2.8		4.2		4.2		3.5		4.2				3.8	77%M	
03	6	A										3.2		5.1		4.6		5.0		5.2				4.7	79%T	
03	7	MC																			1.9	1.1	0.6	0.4	1.2	**
03	7	A																			3.5	1.6	0.8	0.5	2.0	**
03	9	TC			0.8			2.8		4.7															**	
03	16	UC										2.6													**	



**Table 6F** (continued from p. 39, continues on p. 43)  
Number of cigarettes smoked per person per day, females

Year	Source	Product	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	6	MC					2.3				3.0		3.5		3.0		0.8						2.6	78%M
92	6	A					2.6				3.3		3.9		3.4		1.0						2.9	79%T
92	11	UC									2.6		2.4		1.5		1.0						1.7	**
92	12	UC									2.7		2.8		1.6		0.7						1.9	**
92	13	UC									3.8		3.2		3.1		1.9						2.8	**
93	6	MC						2.5			2.3		2.9		2.5		1.1						2.3	79%M
93	6	A						2.6			2.4		3.3		2.5		1.2						2.5	78%T
93	9	TC		1.0		2.3		2.8																**
94	6	MC						2.3			2.3		2.6		2.6		0.9						2.2	74%M
94	6	A						2.5			2.7		2.8		2.8		1.3						2.5	77%T
94	31	TC*					2.5			4.3		2.2				1.6							2.7	87%T
95	6	MC						2.4			2.3		2.8		2.3		1.3						2.3	84%M
95	6	A						2.6			2.7		3.3		2.6		1.7						2.7	88%T
95	9	TC		0.9		2.3		2.9																**
95	16	UC			2.1																			**
95	32	TC*					2.6			4.6		3.1				0.6							2.6	84%T
96	6	MC						2.7			2.3		3.0		2.6		1.1						2.4	97%M
96	6	A						2.7			2.4		3.0		2.6		1.1						2.4	81%T
96	37	UC*										2.4												**
97	6	MC						1.8			2.2		2.9		2.5		1.1						2.2	77%M
97	6	A						2.1			2.8		3.4		2.8		1.4						2.6	83%T
97	9	TC		1.3		2.4		2.8																**
98	6	MC						1.9			2.4		2.9		2.1		1.0						2.1	82%M
98	6	A						2.7			2.9		3.6		2.5		1.4						2.6	88%T
98	21	UC		0.2		0.8																		**
98	35	UC*						2.2			2.8		3.2		3.5		1.3		0.6		0.3	*	2.2	86%T
99	6	MC						1.9			2.4		2.8		2.4		1.0						2.2	74%M
99	6	A						2.2			3.0		3.4		2.6		1.6						2.6	79%T
99	7	MC															0.6	0.7	0.4	0.3			0.5	**
99	7	A															0.6	0.9	0.5	0.3			0.6	**
99	9	TC		1.5		2.9		3.0																**
99	16	UC			2.6																			**
99	24	UC*																						**
99	35	UC*						1.9			2.3		3.0		3.2		1.8		0.6		0.5	*	2.1	79%T
00	6	MC						2.0			2.2		2.8		2.2		1.8						2.2	75%M
00	6	A						2.4			2.6		3.2		2.8		2.2						2.7	84%T
00	30	UC							2.7															**
00	35	UC*						1.8			2.7		2.9		3.8		2.0		0.4		0.7	*	2.3	87%T
01	6	MC						2.0			2.3		2.6		2.0		1.0						2.0	75%M
01	6	A						2.3			2.8		3.1		2.5		1.5						2.5	81%T
01	7	MC															1.1	0.3	0.6	0.2			0.6	**
01	7	A															1.1	0.3	0.6	0.3			0.6	**
01	9	TC		1.2		3.0		3.1																**
01	35	UC*						1.8			2.2		2.6		3.7		1.9		0.6		0.5	*	2.1	81%T
02	6	MC						2.4			2.5		2.1		2.4		1.4						2.2	75%M
02	6	A						2.8			2.7		2.4		3.0		1.7						2.6	80%T
02	32	TC						2.0			3.9		4.1				1.3						2.8	100%T
03	6	MC						1.9			2.4		2.6		2.2		1.9						2.2	77%M
03	6	A						2.3			2.6		2.8		2.7		2.4						2.5	79%T
03	7	MC															0.7	0.9	0.6	0.2			0.7	**
03	7	A															0.6	0.9	0.8	0.2			0.7	**
03	9	TC		1.0		2.9		3.5																**
03	16	UC			2.3																			**

**Table 6M** (continued from p. 40)  
Number of cigarettes smoked per person per day, males

Year	Source	Product	Age Groups																	All ages	%																			
			12	13	14	15	16	17	18	19	20 -	24	25 -	29	30 -	34	35 -	39	40 -			44	45 -	49	50 -	54	55 -	59	60 -	64	65 -	69	70 -	74	75 -	79	80+			
04	6	MC	2.4				3.9				5.1				4.0				3.2				3.7	74%M																
04	6	A	2.9				4.6				6.2				5.6				4.3				4.8	78%T																
05	6	MC	2.0				4.0				4.7				4.3				3.1				3.7	67%M																
05	6	A	2.5				4.8				6.1				5.5				4.1				4.7	72%T																
05	7	MC														1.2	1.0	0.5	0.3	0.9	**																			
05	7	A														1.8	1.4	0.7	0.3	1.3	**																			
05	9	TC	0.7		2.6		4.6																														**			
05	32	MC	2.9				3.5				6.1				2.7				4.0	72%M																				
05	32	TC	3.0				3.8				7.2				3.2				4.5	70%T																				
06	6	MC	2.5				3.5				3.2				3.1				3.8				3.2	67%M																
06	6	A	2.9				4.5				3.9				4.9				4.5				4.2	70%T																
06	32	MC	1.7				4.5				2.6				1.9				2.6	67%M																				
06	32	TC	2.2				5.4				3.7				2.6				3.5	70%T																				
07	6	MC	3.3				4.4				4.3				3.0				3.1				3.6	72%M																
07	6	A	3.8				5.0				5.9				4.0				4.2				4.6	75%T																
07	7	MC														2.1	1.0	0.7	0.5	1.3	**																			
07	7	A														2.6	1.0	0.9	0.7	1.5	**																			
07	9	TC	0.6		2.3		3.5																															**		
07	16	UC	2.3																																					**
08	6	MC	2.3				3.5				4.2				4.3				3.1				3.5	52%M																
08	6	A	2.3				3.8				4.9				5.2				4.2				4.2	54%T																
09	6	MC	1.7				2.9				3.6				3.5				2.6				2.9	82%M																
09	6	A	2.1				3.6				4.3				5.4				3.8				3.9	85%T																
09	7	MC														2.0	1.0	0.3	0.2	1.1	**																			
09	7	A														2.4	1.4	0.3	0.2	1.3	**																			

Source: Notes on sources of survey data, p. 59  
 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. 59  
 All ages: relates to ages reported; as given in original source  
 % Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined  
 \*\* = cannot be calculated  
 -- = adjusted by original author  
 See also footnote 10 to Table 8 (p. 52)

**Table 6F** (continued from p. 41)  
Number of cigarettes smoked per person per day, females

Year	Source	Product	Age Groups																	All ages	%		
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60			65	70
04	6	MC	2.3						2.0		2.2		2.1		2.0							2.1	74%M
04	6	A	2.8						2.1		2.6		2.5		2.2							2.4	78%T
05	6	MC	1.7						2.1		1.6		2.4		1.8							1.9	67%M
05	6	A	2.0						2.3		2.0		3.3		1.9							2.3	72%T
05	7	MC														0.8	0.3	0.3	0.3	0.4	**		
05	7	A														0.8	0.3	0.3	0.3	0.5	**		
05	9	TC	0.8		2.5		3.1												**				
05	32	MC	2.0						1.5		1.8		0.5							1.3	72%M		
05	32	TC	2.2						1.7		2.0		0.6							1.4	70%T		
06	6	MC	1.8						1.7		2.7		2.7		1.7							2.2	67%M
06	6	A	1.9						1.8		3.0		3.0		1.9							2.3	70%T
06	32	MC	1.3						2.2		3.6		0.9							1.9	67%M		
06	32	TC	2.2						2.4		3.8		0.9							2.1	70%T		
07	6	MC	1.7						2.3		2.0		2.0		1.8							1.9	72%M
07	6	A	2.0						2.5		2.2		2.3		2.2							2.2	75%T
07	7	MC														0.9	0.5	0.4	0.2	0.5	**		
07	7	A														1.0	0.4	0.4	0.2	0.6	**		
07	9	TC	0.6		2.1		2.5												**				
07	16	UC	1.6																		**		
08	6	MC	1.4						1.9		2.1		2.9		2.1							2.1	52%M
08	6	A	1.5						2.1		2.2		3.3		2.4							2.4	54%T
09	6	MC	1.2						1.6		1.9		2.0		1.6							1.7	82%M
09	6	A	1.3						1.8		2.1		2.3		1.9							1.9	85%T
09	7	MC														0.7	0.7	0.2	0.2	0.5	**		
09	7	A														0.6	0.7	0.1	0.2	0.4	**		

Source: Notes on sources of survey data, p. 59  
 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. 59  
 All ages: relates to ages reported; as given in original source  
 % Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined,  
 \*\* = cannot be calculated  
 -- = adjusted by original author  
 See also footnote 10 to Table 8 (p. 52)

**Table 7M** Number of cigarettes smoked per person per day, sales-adjusted, males: selected surveys<sup>1</sup> by age; with percentage total sales (continues on p. 46)

Year	Source	Product	Age Groups																	All ages	%																										
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64			65 - 69	70 - 74	75 - 79	80+																						
67	18	UC*	5.3				12			12			14			12			9.5			6.8				72%T																					
75	15	UC					8.0			12			12			12			11			7.4			6.4			2.9				60%T															
78	5	UC*	2.0				9.0			14			9.2			10			8.5			8.0			8.6			9.6			6.5			6.2			6.3			1.0			3.5				71%T
78	6	MC					6.6			10			8.4			7.5			6.4															8.1	77%M												
79	6	MC					6.7			10			8.6			7.4			5.8															8.0	73%M												
80	6	MC					5.6			11			9.5			7.8			6.4															8.4	73%M												
81	6	MC					5.3			9.8			9.6			6.4			4.9															7.6	80%M												
82	6	MC					5.3			11			8.5			7.7			4.5															7.8	69%M												
83	6	MC					4.5			10			8.9			7.1			5.9															7.7	69%M												
84	6	MC					6.0			10			10			7.8			6.0															8.2	73%M												
85	6	MC					3.1			7.7			10			11			11			7.5			9.3			5.6			6.9			5.6				7.9	75%M								
85	6	A					3.5			8.3			11			12			12			8.6			11			7.0			9.4			6.7				9.0	71%T								
85	10	MC					5.9			8.8			7.4																									72%M									
86	6	MC					6.0			9.8			9.4			7.8			5.7															7.9	75%M												
86	6	A					6.4			11			11			8.8			6.9															8.9	72%T												
87	6	MC					5.6			9.6			11			8.1			6.7															8.3	71%M												
87	6	A					6.2			10			12			9.6			7.9															9.3	69%T												
88	6	MC					6.3			9.3			9.7			7.3			5.9															7.9	77%M												
88	6	A					6.5			10			11			8.4			6.7															8.8	76%T												
89	6	MC					6.8			9.1			11			8.0			6.0															8.3	71%M												
89	6	A					7.2			9.8			12			9.7			6.9															9.3	72%T												
90	6	MC					5.6			7.8			8.7			7.9			6.5															7.5	75%M												
90	6	A					5.9			8.0			9.8			9.4			7.6															8.3	77%T												
91	6	MC					5.2			8.9			7.7			8.0			4.6															7.1	77%M												
91	6	A					5.4			9.4			9.6			9.4			5.7															8.1	80%T												
92	6	MC					5.7			7.7			8.0			8.4			5.4															7.1	78%M												
92	6	A					5.8			8.4			9.5			10			7.0															8.2	79%T												
93	6	MC					4.2			6.6			7.2			6.5			3.9															5.8	79%M												
93	6	A					5.2			8.1			9.3			8.2			5.2															7.3	78%T												
94	6	MC					4.1			6.4			6.1			5.8			3.6															5.3	74%M												
94	6	A					5.4			7.1			7.8			7.6			6.2															6.9	77%T												
94	31	TC*					5.4			6.4			8.2			3.5																		6.0	87%T												
95	6	MC					3.3			6.1			6.4			5.1			3.5															4.9	84%M												
95	6	A					4.0			7.0			8.3			6.4			4.9															6.2	88%T												
95	32	TC*					3.6			7.2			6.5			2.6																		5.2	84%T												
96	6	MC					3.7			6.0			5.7			6.7			4.1															5.4	97%M												
96	6	A					4.5			7.3			6.9			8.4			5.3															6.6	81%T												
97	6	MC					3.2			5.7			6.1			4.9			5.1															5.1	77%M												
97	6	A					3.6			7.3			7.8			6.7			7.0															6.6	83%T												
98	6	MC					3.7			6.2			6.4			5.6			3.8															5.2	82%M												
98	6	A					4.5			7.2			8.0			7.3			5.1															6.5	88%T												
98	35	UC*					4.2			7.4			7.3			7.1			5.7			2.7			1.1			*			5.9	86%T															
99	6	MC					2.9			6.0			5.7			6.2			3.9															4.9	74%M												
99	6	A					3.8			6.7			7.4			8.1			5.7															6.4	79%T												
99	35	UC*					5.2			7.0			6.8			7.1			6.9			2.4			0.7			*			6.0	79%T															
00	6	MC					3.6			5.0			6.0			5.1			3.5															4.8	75%M												
00	6	A					4.4			6.2			7.3			6.5			4.6															5.9	84%T												
00	35	UC*					4.3			6.5			6.3			6.3			5.7			3.1			1.0			*			5.4	87%T															
01	6	MC					4.2			5.8			5.8			6.2			3.6															5.2	75%M												
01	6	A					5.1			6.4			7.4			7.8			4.3															6.3	81%T												
01	35	UC*					4.5			7.1			6.9			6.5			6.2			2.9			0.6			*			5.7	81%T															

**Table 7F** Number of cigarettes smoked per person per day, sales-adjusted, females: selected surveys<sup>1</sup> by age; with percentage total sales (continues on p. 47)

Year	Source	Product	Age Groups																	All ages	%				
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64			65 - 69	70 - 74	75 - 79	80+
67	18	UC*	2.2				3.2			2.1		2.1		1.4		0.5		0.3				72%T			
75	15	UC	5.7					6.1	5.5	4.8	3.6	2.5	2.3	2.4	1.5	1.0	0.8	0.2					60%T		
78	5	UC*	2.8				5.2			5.6	6.1	3.2	3.8	2.3	2.4	1.8	1.3	1.4	1.1	0.3	0.0		71%T		
78	6	MC	3.1					3.7			3.0		2.2		1.3							2.8	77%M		
79	6	MC	4.2					4.4			3.3		2.6		1.2							3.2	73%M		
80	6	MC	3.1					4.5			3.4		2.7		1.2							3.0	73%M		
81	6	MC	3.1					4.5			3.6		2.4		1.2							3.0	80%M		
82	6	MC	3.6					4.0			4.5		1.7		1.5							3.1	69%M		
83	6	MC	3.6					5.5			4.4		2.3		1.5							3.5	69%M		
84	6	MC	2.6					5.4			4.2		2.5		1.5							3.3	73%M		
85	6	MC	1.7				3.3	3.6	3.3	2.9	2.9	1.8	2.1	1.1	1.2						2.5	75%M			
85	6	A	1.7				3.7	3.8	3.6	3.1	3.0	1.8	2.4	1.2	1.3						2.7	71%T			
85	10	MC	2.5					3.6			1.8														72%M
86	6	MC	3.6					4.2			3.8		2.2		1.4							3.1	75%M		
86	6	A	3.8					4.5			4.0		2.3		1.5							3.3	72%T		
87	6	MC	3.4					4.7			3.6		3.0		1.9							3.9	71%M		
87	6	A	3.6					4.9			3.7		3.1		2.0							4.1	69%T		
88	6	MC	3.9					4.4			4.1		2.5		2.1							3.5	77%M		
88	6	A	3.9					4.5			4.3		2.6		2.1							3.6	76%T		
89	6	MC	4.4					4.0			3.4		3.4		1.6							3.4	71%M		
89	6	A	4.4					4.1			3.7		3.4		1.6							3.5	72%T		
90	6	MC	3.8					4.0			4.8		3.4		1.9							3.7	75%M		
90	6	A	3.8					4.2			4.8		3.5		2.0							3.8	77%T		
91	6	MC	4.1					4.8			4.2		3.4		1.0							3.7	77%M		
91	6	A	4.2					4.7			4.5		3.4		1.1							3.7	80%T		
92	6	MC	3.0					3.8			4.5		3.8		1.0							3.3	78%M		
92	6	A	3.2					4.1			5.0		4.3		1.2							3.7	79%T		
93	6	MC	3.1					2.9			3.7		3.1		1.4							2.9	79%M		
93	6	A	3.3					3.0			4.2		3.2		1.5							3.2	78%T		
94	6	MC	3.1					3.1			3.5		3.5		1.2							2.9	74%M		
94	6	A	3.3					3.5			3.6		3.7		1.6							3.2	77%T		
94	31	TC*	2.9				4.9			2.6		1.8							3.1	87%T					
95	6	MC	2.8					2.8			3.4		2.7		1.5							2.7	84%M		
95	6	A	3.0					3.1			3.8		3.0		1.9							3.0	88%T		
95	32	TC*	3.1				5.5			3.7		0.7							3.1	84%T					
96	6	MC	2.8					2.4			3.1		2.7		1.2							2.5	97%M		
96	6	A	3.4					2.9			3.7		3.2		1.4							3.0	81%T		
97	6	MC	2.3					2.8			3.8		3.2		1.5							2.8	77%M		
97	6	A	2.5					3.3			4.2		3.4		1.7							3.1	83%T		
98	6	MC	2.3					2.9			3.5		2.6		1.2							2.5	82%M		
98	6	A	3.0					3.3			4.0		2.8		1.6							3.0	88%T		
98	35	UC*	2.6				3.3			3.7		4.1		1.5		0.7	0.4		*			2.6	86%T		
99	6	MC	2.5					3.3			3.7		3.2		1.3							2.9	74%M		
99	6	A	2.9					3.8			4.3		3.3		2.0							3.3	79%T		
99	35	UC*	2.4				3.0			3.8		4.0		2.2		0.8	0.7		*			2.7	79%T		
00	6	MC	2.7					2.9			3.8		2.9		2.5							3.0	75%M		
00	6	A	2.9					3.0			3.8		3.3		2.6							3.2	84%T		
00	35	UC*	2.0				3.0			3.3		4.4		2.3		0.5	0.8		*			2.6	87%T		
01	6	MC	2.7					3.1			3.5		2.7		1.4							2.7	75%M		
01	6	A	2.9					3.5			3.8		3.1		1.9							3.0	81%T		
01	35	UC*	2.2				2.7			3.3		4.6		2.3		0.8	0.6		*			2.6	81%T		

**Table 7M** (continued from p. 44)  
 Number of cigarettes smoked per person per day, sales-adjusted, males

Year	Source	Product	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
02	6	MC						3.8						6.2				5.5			5.7					4.6									5.2	75%M
02	6	A						4.7						7.1				6.5			7.5					6.0									6.4	80%T
02	32	TC						3.2						6.6				9.4								2.7									5.7	100%T
03	6	MC						3.7						5.5				5.4			4.6				5.5										4.9	77%M
03	6	A						4.1						6.5				5.9			6.3				6.6										5.9	79%T
04	6	MC						3.2						5.3				6.9			5.4				4.3										5.0	74%M
04	6	A						3.7						5.9				7.8			7.1				5.5										6.1	78%T
05	6	MC						2.9						6.0				7.0			6.4				4.6										5.5	67%M
05	6	A						3.5						6.7				8.4			7.6				5.7										6.5	72%T
05	32	MC						3.9						4.9				8.5						3.8											5.5	72%M
05	32	TC						4.3						5.4				10						4.6											6.4	70%T
06	6	MC						3.7						5.1				4.7			4.6				5.7										4.8	67%M
06	6	A						4.2						6.5				5.6			7.1				6.5										6.1	70%T
06	32	MC						2.5						6.7				3.8						2.8											3.9	67%M
06	32	TC						3.1						7.7				5.3						3.7											5.0	70%T
07	6	MC						4.6						6.1				5.9			4.2				4.3										5.0	72%M
07	6	A						5.1						6.7				7.9			5.3				5.6										6.1	75%T
08	6	MC						4.3						6.7				8.1			8.2				6.0										6.8	52%M
08	6	A						4.3						7.0				9.1			9.7				7.8										7.8	54%T
09	6	MC						2.1						3.5				4.4			4.3				3.2										3.5	82%M
09	6	A						2.5						4.3				5.1			6.4				4.5										4.7	85%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. 59  
 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. 59  
 All ages: relates to ages reported; as given in original source  
 % Total sales: Adjustment factor used, estimated % of total sales  
 of M = manufactured or T = total cigarette consumption implied by survey, sexes combined  
 -- = adjusted by original author  
 See also footnote 10 to Table 8 (p. 52)

**Table 7F** (continued from p. 45)  
Number of cigarettes smoked per person per day, sales-adjusted, females

Year	Source	Product	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
02	6	MC						3.2					3.3		2.8		3.2		1.9				2.9	75%M
02	6	A						3.5					3.4		3.0		3.7		2.2				3.2	80%T
02	32	TC						1.9					3.9		4.1				1.3				2.8	100%T
03	6	MC						2.4					3.2		3.4		2.9		2.5				2.9	77%M
03	6	A						2.9					3.2		3.5		3.4		3.0				3.2	79%T
04	6	MC						3.1					2.7		3.0		2.8		2.7				2.8	74%M
04	6	A						3.6					2.7		3.3		3.1		2.9				3.1	78%T
05	6	MC						2.5					3.1		2.4		3.6		2.7				2.9	67%M
05	6	A						2.8					3.2		2.7		4.6		2.7				3.2	72%T
05	32	MC						2.8					2.1		2.5				0.8				1.8	72%M
05	32	TC						3.2					2.4		2.8				0.9				2.0	70%T
06	6	MC						2.7					2.6		4.1		4.0		2.6				3.2	67%M
06	6	A						2.7					2.6		4.2		4.3		2.7				3.4	70%T
06	32	MC						1.9					3.3		5.4				1.3				2.8	67%M
06	32	TC						3.1					3.4		5.4				1.3				3.0	70%T
07	6	MC						2.3					3.2		2.8		2.7		2.5				2.7	72%M
07	6	A						2.6					3.4		3.0		3.1		2.9				3.0	75%T
08	6	MC						2.7					3.6		4.0		5.6		4.0				4.1	52%M
08	6	A						2.9					3.9		4.1		6.1		4.3				4.4	54%T
09	6	MC						1.5					1.9		2.3		2.4		2.0				2.1	82%M
09	6	A						1.6					2.1		2.4		2.7		2.2				2.3	85%T

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

Source: See *Notes on sources of survey data*, p. 59  
 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. 59  
 All ages: relates to ages reported; as given in original source  
 % Total sales: Adjustment factor used, estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined  
 -- = adjusted by original author  
 See also footnote 10 to Table 8 (p. 52)

**Table 8** Estimated<sup>1</sup> prevalence of smoking and estimated<sup>1</sup> 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 <sup>2</sup>	Product <sup>3</sup>	Prevalence <sup>4</sup>						Number of cigarettes							
			Manufactured cigarettes		Total cigarettes <sup>5</sup>		All products <sup>6</sup>		Unadjusted <sup>7</sup>			Sales-adjusted <sup>8</sup>				
			M	F	M	F	M	F	Number/ person/day	Total sales %	Manufactured cigarettes number/ person/day	Total cigarettes <sup>9</sup> number/ person/day				
M	F	M	F	M	F	M	F	M	F	M	F	M	F			
1950	28	U					76	13								
1960	2	U					58	14								
1961	2	U					57	12								
1963	2	U					58	13								
1964	2	U					56	16								
1965	2	U					57	14								
1966	2	U					53	15								
1967	2 18	U UC			50	14	50	15	7.7	1.3	72			10.7	1.9	
1968	2	U					48	19								
1969	2	U					48	17								
1970	2	U					44	16								
1971	2 17	U UC+A			38	20	45	18 20						( 9.0	3.7 )	
1972	2	U					46	19								
1973	1 2 8	A U UC					46 44	22 20						( 9.5	3.5 )	
1974	1	A					42	20								
1975	1 2 15 15*	A U UC UC			39 37	18 17	42 40	22 17	6.2	1.9	60			10.4	3.1	
1976	1 2 2 20	A U U U					40 34 40 38	20 17 23 17								
1977	1 2 2	A U U					40 40 45	19 17 22								
1978	1 5 6 6	A UC MC+A A	30	14	30	16	37 34 40	19 15 21	6.1 5.9	2.3 1.9	71 77	7.6	2.4	8.5	3.2	



**Table 8** (continued)

Year	Source <sup>2</sup>	Product <sup>3</sup>	Prevalence <sup>4</sup>				Number of cigarettes											
			Manufactured cigarettes		Total cigarettes <sup>5</sup>		All products <sup>6</sup>				Unadjusted <sup>7</sup>			Sales-adjusted <sup>8</sup>				
			M	F	M	F	M	F	M	F	Total sales %	Manufactured cigarettes number/person/day		Total cigarettes <sup>9</sup> number/person/day				
1979	1	A					40	19										
	6	MC+A	30	16			34	16	5.5	2.1	73	7.5	2.8					
	6	A					40	21										
	10	A					33	14										
1980	1	A					39	21										
	6	MC+A	30	15			33	15	5.7	1.9	73	7.8	2.7					
	6	A					39	20										
	10	A					35	14										
1981	6	MC+A	30	16			34	17	5.6	2.1	80	7.0	2.6					
	6	A					40	21										
	10	A					35	15										
1982	6	MC+A	27	14			30	15	5.0	1.9	69	7.3	2.8					
	6	A					36	19										
	10	A					32	15										
1983	6	MC+A	26	16			30	16	4.9	2.1	69	7.1	3.1					
	6	A					37	22										
	10	A					31	15										
1984	6	MC+A	29	15			32	15	5.7	2.1	73	7.8	2.9					
	6	A					39	20										
	10	A					32	13										
1985	6	MC	28	12					5.7	1.6	75	7.6	2.1					
	6	A					30	13	6.1	1.6	71					8.6	2.3	
	6	A					37	18										
	10	MC+A	29	14			33	15	5.2	1.7	72	7.3	2.4					
	10	A					41	20										
1986	6	MC	29	16					5.6	2.0	75	7.5	2.7					
	6	A					31	16	6.0	2.1	72					8.4	2.9	
	6	A					37	21										
1987	6	MC	28	16					5.6	2.1	71	7.9	2.9					
	6	A					31	16	6.1	2.1	69					8.9	3.0	
	6	A					37	21										
	10	A					32	16										
1988	6	MC	29	17					5.7	2.3	77	7.5	2.9					
	6	A					32	17	6.3	2.3	76					8.3	3.0	
	6	A					38	22										
	10	A					33	17										
1989	6	MC	28	16					5.6	2.0	71	7.9	2.9					
	6	A					31	16	6.3	2.1	72					8.7	3.0	
	6	A					37	22										
	10	A					32	17										
1990	6	MC	27	16					5.1	2.3	75	6.8	3.1					
	6	A					30	17	5.8	2.4	77					7.5	3.1	
	6	A					36	23										
	10	A					33	18										

**Table 8** (continued/2)

Year	Source <sup>2</sup>	Product <sup>3</sup>	Prevalence <sup>4</sup>						Number of cigarettes							
			Manufactured cigarettes		Total cigarettes <sup>5</sup>		All products <sup>6</sup>		Unadjusted <sup>7</sup>			Sales-adjusted <sup>8</sup>				
			M	F	M	F	M	F	Number/ person/day	Total sales %	Manufactured cigarettes number/ person/day	Total cigarettes <sup>9</sup> number/ person/day				
						M	F	M	F	M	F	M	F			
1991	6	MC	26	18					5.1	2.4	77	6.5	3.0			
	6	A					31	18	6.0	2.5	80			7.4	3.1	
	6	A					37	22	6.0							
1992	6	MC	27	16					5.1	2.2	78	6.6	2.8			
	6	A					31	17	6.0	2.4	79			7.6	3.1	
	6	A					37	23								
1993	6	MC	24	15					4.3	1.9	79	5.5	2.5			
	6	A					28	16	5.3	2.1	78			6.8	2.6	
	6	A					35	22								
1994	6	MC	21	15					3.7	1.8	74	5.0	2.5			
	6	A					25	16	4.9	2.1	77			6.3	2.7	
	6	A					31	21								
	31	MC+IC+A	32	23	32	23	40	25	5.2	2.6	87			6.0	3.0	
1995	6	MC	23	15					4.0	1.9	84	4.7	2.3			
	6	A					28	16	5.1	2.2	88			5.8	2.5	
	6	A					34	22								
	32	MC+TC+A	21	17	26	20	28	20	4.4	2.5	84			5.2	3.0	
1996	6	MC	25	15					4.8	2.0	97	4.9	2.1			
	6	A					26	15	4.9	2.0	81			6.1	2.5	
	6	A					33	21								
	6*	A					25	15								
1997	6	MC	21	15					3.6	1.8	77	4.7	2.4			
	6	A					27	16	4.9	2.1	83			6.0	2.6	
	6	A					33	21								
	6*	A					26	16								
1998	6	MC	22	15					4.0	1.8	82	4.9	2.2			
	6	A					28	17	5.3	2.2	88			6.0	2.5	
	6	A					33	22								
	6*	A					28	16								
	35	UC+A			27	16	28	16	5.1	2.2	86			5.9	2.6	
35	A					34	20									
1999	6	MC	20	15					3.4	1.8	74	4.6	2.4			
	6	A					25	17	4.6	2.2	79			5.9	2.8	
	6	A					32	21								
	6*	A					24	16								
	6*	A					33	22								
	32	U					39	21								
	35	UC+A			26	16	28	16	4.7	2.1	79			6.0	2.7	
	35	A					33	19								

**Table 8** (continued/3)

Year	Source <sup>2</sup>	Product <sup>3</sup>	Prevalence <sup>4</sup>				Number of cigarettes								
			Manufactured cigarettes		Total cigarettes <sup>5</sup>		All products <sup>6</sup>		Unadjusted <sup>7</sup>			Sales-adjusted <sup>8</sup>			
			M	F	M	F	M	F	Number/ person/day	Total sales %	Manufactured cigarettes number/ person/day	Total cigarettes <sup>9</sup> number/ person/day			
2000	6	MC	19	15				3.2	1.9	75	4.3	2.5			
	6	A			25	17		4.5	2.2	84			5.4	2.6	
	6	A			31	22									
	6*	A			24	16									
	6*	A			32	24									
	30	A			30	18									
	35	UC+A			26	17		4.7	2.3	87			5.4	2.6	
35	A					32	21								
2001	6	MC	21	14				3.5	1.7	75	4.7	2.3			
	6	A			27	16		4.7	2.1	81			5.8	2.6	
	6	A			33	21									
	6*	A			26	16									
	6*	A			33	22									
	35	UC+A			25	15		4.6	2.1	81			5.7	2.6	
	35	A					31	19							
2002	6	MC	20	15				3.5	1.8	75	4.7	2.4			
	6	A			25	17		4.7	2.1	80			5.8	2.6	
	6	A			31	22									
	6*	A			25	15									
	6*	A			32	23									
	32	MC+TC+A	28	21	34	23	36	23	5.7	2.7	100			5.7	2.7
	32	MC+IC+A	32	26	39	29	41	29							
2003	6	MC	19	15				3.4	1.8	77	4.4	2.4			
	6	A			24	16		4.2	2.1	79			5.4	2.7	
	6	A			29	21									
	6*	A			23	15									
	6*	A			31	22									
2004	6	MC	20	15				3.3	1.8	74	4.5	2.4			
	6	A			25	16		4.3	2.0	78			5.5	2.6	
	6	A			31	21									
	6*	A			24	15									
	6*	A			32	22									
2005	6	MC	19	13				3.2	1.6	67	4.8	2.3			
	6	A			23	15		4.1	1.9	72			5.7	2.6	
	6	A			30	20									
	6*	A			22	15									
	6*	A			31	21									
	32	MC	22	13				3.9	1.3	72	5.4	1.8			
	32	TC+A			26	14	27	14	4.4	1.4	70			6.3	2.0
32	MC+IC+A	25	17	29	18	31	18								
2006	6	MC	18	15				2.8	1.8	67	4.2	2.6			
	6	A			22	15		3.7	1.9	70			5.3	2.7	
	6	A			28	20									
	6*	A			20	14									
	6*	A			29	20									
	32	MC	18	16				2.6	1.9	67	3.9	2.9			
	32	TC+A			22	17	23	17	3.5	2.1	70			5.0	3.0
	32	MC+TC+A	22	20	27	22	29	23							

**Table 8** (continued/4)

Year	Source <sup>2</sup>	Product <sup>3</sup>	Prevalence <sup>4</sup>				Number of cigarettes										
			Manufactured cigarettes		Total cigarettes <sup>5</sup>		All products <sup>6</sup>				Unadjusted <sup>7</sup>			Sales-adjusted <sup>8</sup>		Total cigarettes <sup>9</sup>	
			M	F	M	F	M	F	M	F	Total sales %	Manufactured cigarettes number/person/day	Total cigarettes number/person/day	M	F		
2007	6	MC	19	13					3.2	1.6	72	4.5	2.2				
	6	A			23	14			4.1	1.8	75			5.4	2.5		
	6	A			30	19											
	6*	A			22	13											
	6*	A			32	20											
2008/10	6	MC	18	14					3.1	1.7	52	5.9	3.3				
	6	A			22	15			3.7	1.9	54			6.8	3.5		
	6	A			28	19											
	6*	A			20	13											
	6*	A			29	20											
2009/10	6	MC	15	12					2.6	1.4	82	3.1	1.7				
	6	A			20	13			3.4	1.5	85			4.1	1.8		
	6	A			27	18											
	6*	A			19	12											
	6*	A			28	18											

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. 59. Method: see *Summary of adult smoking*, Methods p. 13. Exceptionally, calculation is based on the *All ages* value from Tables 4, 6 and 7 in those surveys for which some age-specific data are not available (age groups marked as \* in Tables 4, 6 and 7)

2 See *Notes on sources of survey data*, p. 59

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 Estimated from data in Table 4 (see also extended version of Table 4 in the Excel tables workbook)

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 Estimated from data in Table 6 (see also extended version of Table 6 in the Excel tables workbook)

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) and times smoked per day classified as A (all products) have been adjusted to total cigarette sales and included in this column

10 As there were exceptional sales in 2008 ahead of a tax increase in 2009 (see *Notes on sources of sales data: Sales data for 1974 onwards*, p. 57), the % Total sales is likely to be understated for 2008 and overstated for 2009, and thus the sales-adjusted number of cigarettes is likely to be overstated for 2008 and understated for 2009

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

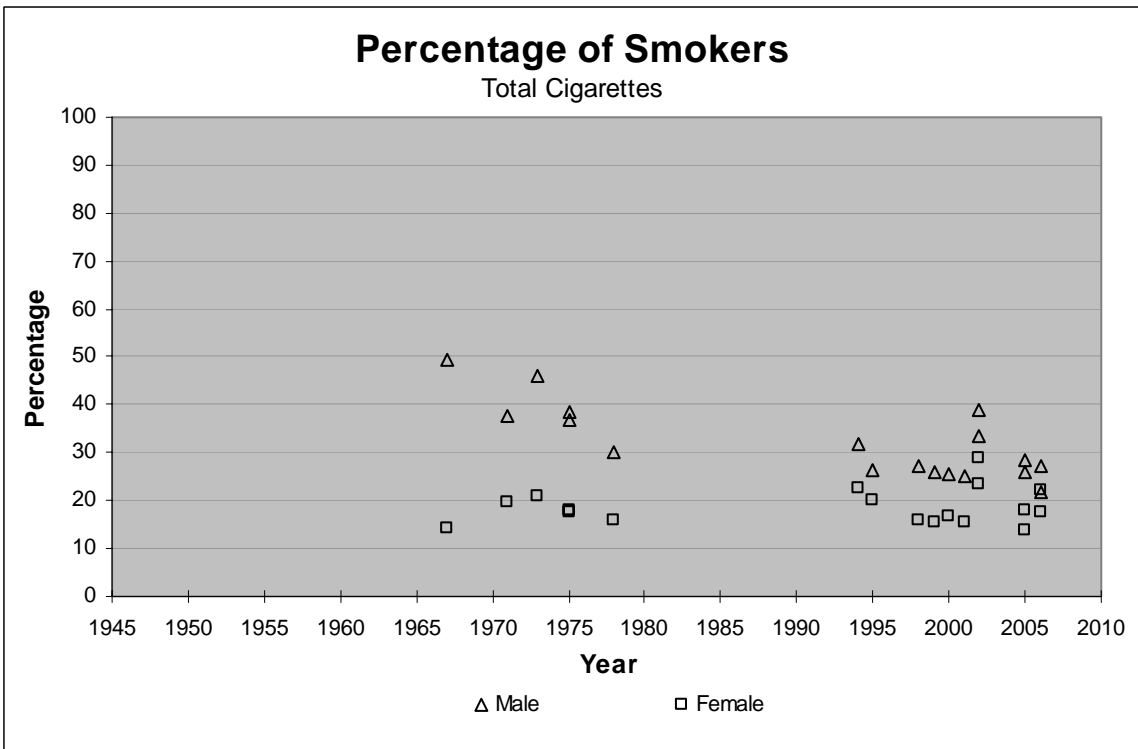
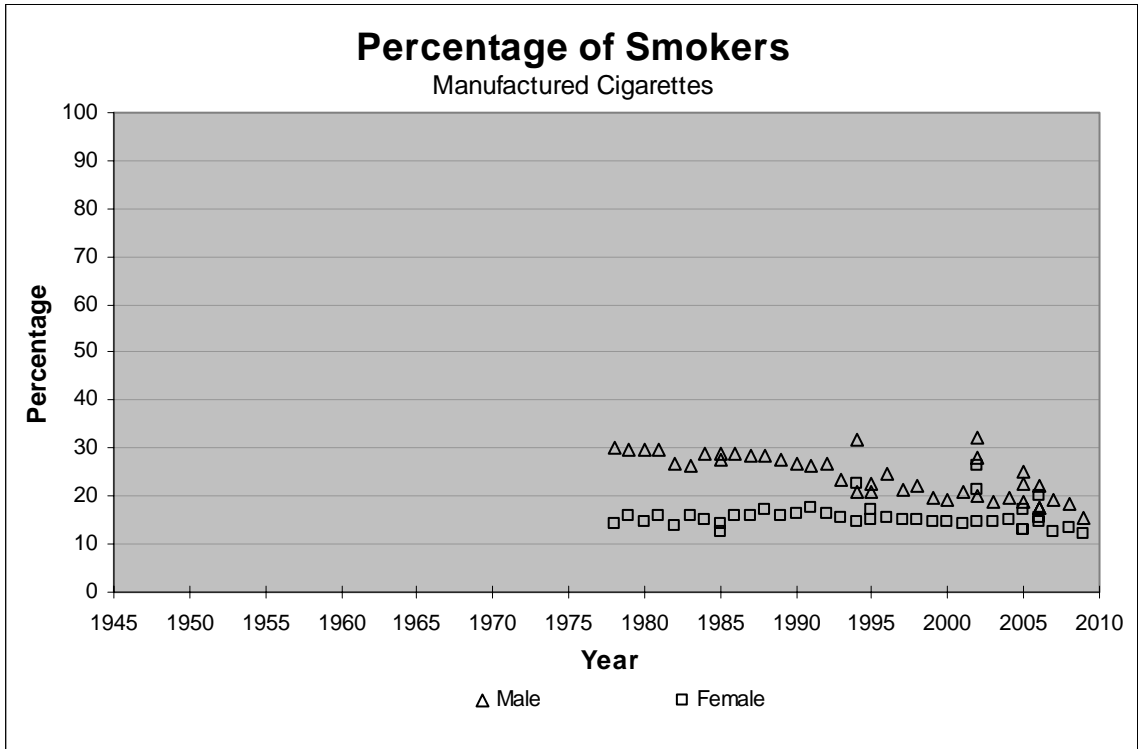
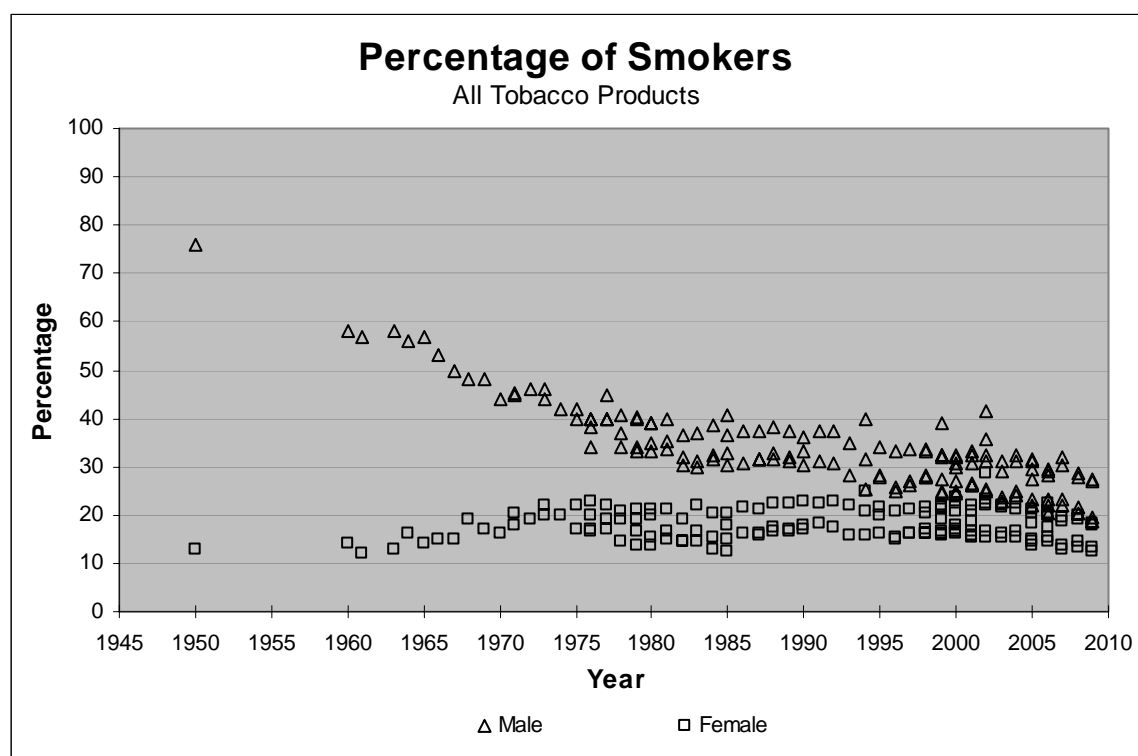
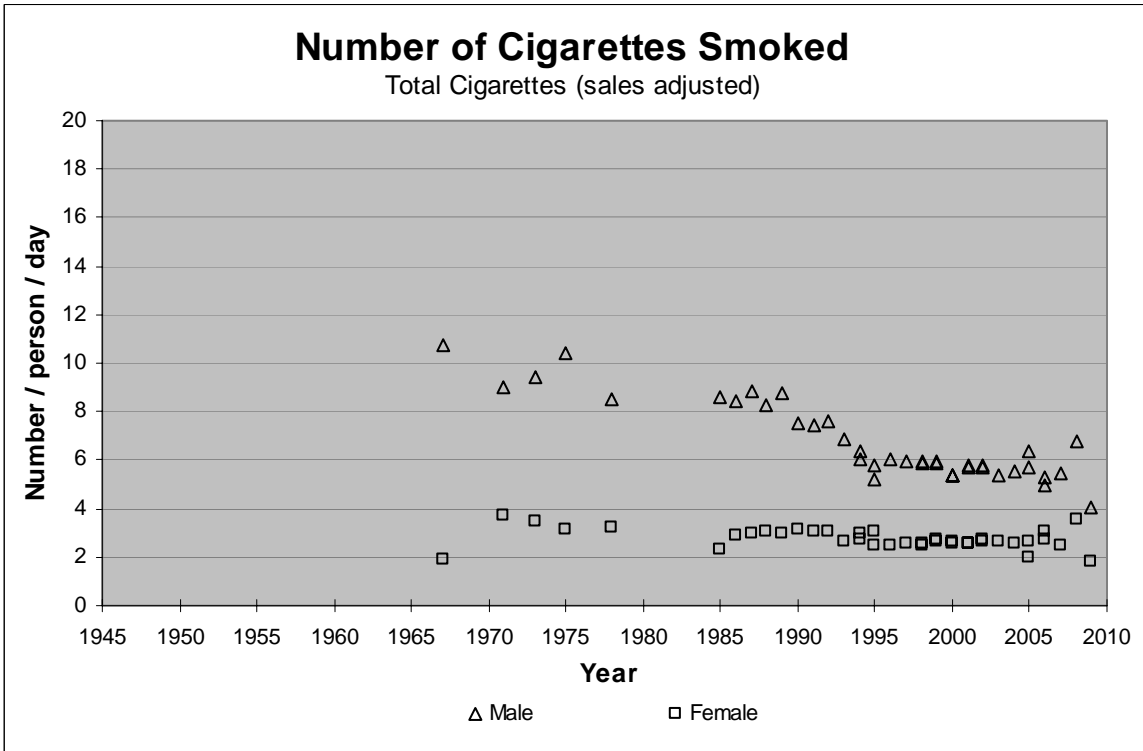
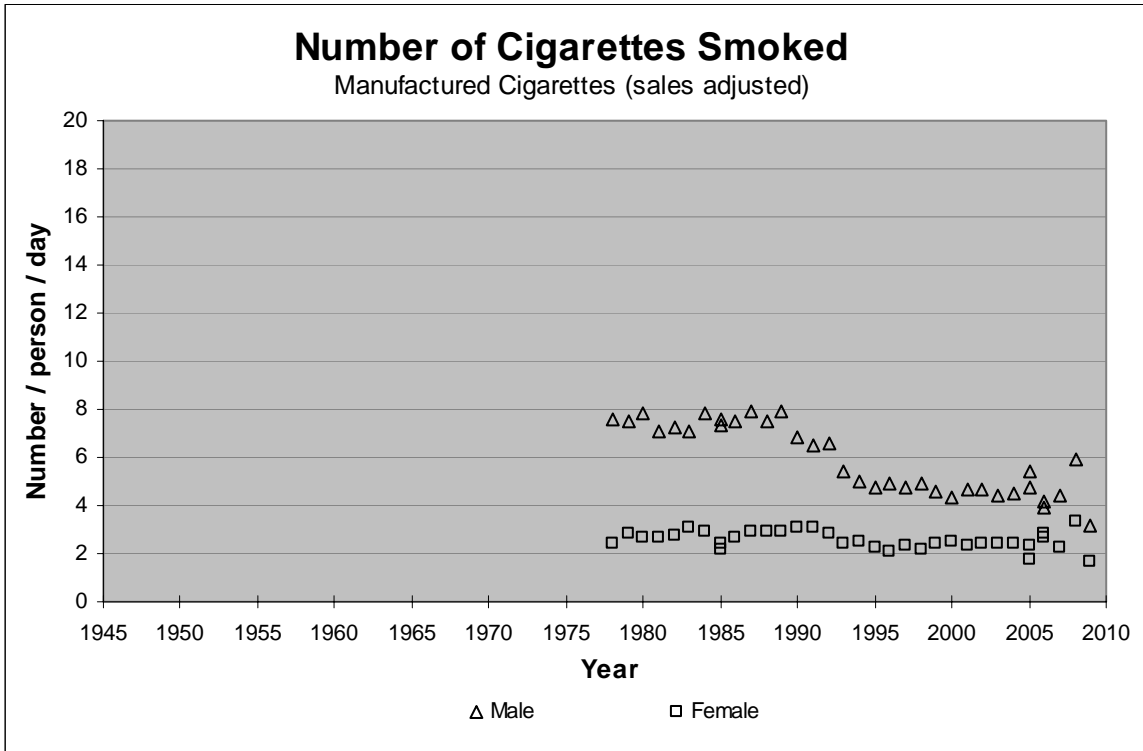


Figure 3 (continued)



Source: Table 8

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



Source: Table 8

## Notes

### Notes on sources of sales data

The data presented in the tables and figures were obtained from several sources, details of which are given below, together with estimations and related assumptions. Full citations of the sources are given on p. 71 under *References*.

#### *Sales data before 1920*

Pernu (1960) described the development of the tobacco industry from the first imports in the 17<sup>th</sup> century. Some tobacco was cultivated in the 17<sup>th</sup> and 18<sup>th</sup> centuries, but the quantity was probably insignificant and the quality low, although some tobacco continued to be grown in rural areas into the early 20<sup>th</sup> century.

By 1805, 11 tobacco factories were established producing pipe and roll tobacco, and using some home-grown tobacco. By 1836 only two factories remained using duty-free imports of Russian tobacco. In 1830 cigars appeared and in the mid-century “papyrosses” (Russian-style cigarettes with cardboard holder) were imported from Russia, but when duty was imposed the imports fell. Cigarettes were first manufactured in Finland in 1859 and production was reported as follows:

	<u>Cigarettes</u>		<u>Cigars</u>		<u>Other</u>						
	Total (millions)	Per capita	Total (millions)	Per capita	<u>Pipe tobacco</u>		<u>Chewing tobacco</u>		<u>Snuff</u>		<u>Total</u>
					Total (tonnes)	Per capita (kgs)	Total (tonnes)	Per capita (kgs)	Total (tonnes)	Per capita (kgs)	Per capita (kgs)
1880	100										
1901	481	175	68	25	1 362		84		252		0.6
1905		252				0.491		0.020			0.097
1906		287				0.450		0.021			0.099
1907		330				0.418		0.023			0.105
1908		341				0.384		0.022			0.110

Although data were not shown, Pernu also reported that between 1901 and 1906 consumption of cigars had increased somewhat and pipe tobacco declined.

Karvonen *et al* (1993) described the situation differently, reporting that in the late 19<sup>th</sup> century much tobacco was home-grown and smoked in pipes. At the turn of the century, hand-rolled cigarettes, snuff, pipes and cigars were all popular.

Hutson (1937) commented that there had been a marked increase in cigarette consumption during the period 1913-1920.

#### *Sales data 1920-1973*

##### RP6 (Lee (1975))

Data by weight, originally given to nearest 100 000 pounds, have been converted to tonnes and are given in Table 1.1 to the nearest 10 tonnes (100 000 lbs = 45.359 tonnes).

Notes as given in RP6:

- Details of the number of cigarettes and cigars, and of the weight of pipe and chewing tobacco and snuff consumed were obtained from trade sources.
- Factors for conversion from number to weight of cigarettes and cigars were obtained from trade sources.

There are some discrepancies between the data shown for the period 1940-1973 and alternative data given by Tilastokeskus (Statistics Finland) (2010) (not shown), but they are fairly small.

Comparison of the RP6 data given as numbers and as weights implies that the average weight of Russian-style cigarettes was around half a gram, of conventional cigarettes was 1.1-1.2 g in the 1940s and 1950s and 1 g thereafter, and of all cigarettes was about 0.7 g in the 1920s rising (apart from a sharp dip to 0.5 g during the second world war) to about 1 g by the 1970s.



Pedersen *et al* (1969) described the Russian-style cigarette or “pilli” as having only half the length of the cigarette filled with tobacco, on average half a gram, the other half being an open mouth-piece made of thin cardboard. Until about 1940 a wooden mouth-piece was provided with each pack of conventional cigarettes (known as “pölli”) and these were usually smoked down to a very small butt.

Tilastokeskus reported that from 1940-1959 the weight of a cigarette was estimated as 0.77 g and of a cigar as 6.59 g., and from 1960 onwards, the weight of a cigarette was estimated as 0.65 g, a cigar as 4 g and a small cigar as 2 g. This agrees with Mørck *et al* (1982) who stated that the average weight of tobacco in Finnish factory-made cigarettes had been low since the 1920s, the average during recent years being about 0.6 - 0.7 g. However for the 1960s-1970s this disagrees with the higher weights implied by the RP6 data (as mentioned above).

Hutson (1937) presented consumption data by weight only, from 1920-1934. Values for the total weights of cigarettes were somewhat higher than those shown in Table 1.1, by 10-20% in 1921-1930, and by <10% otherwise; values for other products agree with those shown. Data presented separately show chewing tobacco decreased over this period, both absolutely and as a proportion of smoking and chewing tobaccos combined (from about 20% to 4%). About 60% of cigarette consumption was in the form of Russian-style cigarettes.

Karvonen *et al* (1993) also reported that use of Russian-style cigarettes increased rapidly in the 1920s, while in the 1950s American-style filter cigarettes became associated with modern life and Russian-style cigarettes lost their popularity. He also reported that snuff use peaked in the 1920s, although that appears inconsistent with the data shown above (*Sales data before 1920*, p.56) and in Table 1.1 from Pernu (1960) and RP6.

#### *Sales data for 1974 onwards*

##### Tilastokeskus (Statistics Finland) (2010)

Sales data up to 1994 (shown in Table 1.2) are based on wholesale trade purchases from Finnish tobacco factories and imports (January-December). From 1995, data are based on exports, imports and tobacco products delivered for taxable consumption (using customs and excise statistics).

From 1996 onwards, estimates of consumption of tax-free cigarettes are also shown (and included in the total). These are based on the annual interview survey “Finnish travel” by Statistics Finland (sample size 8 000 adults).

Data were given in numbers and have been converted to weight assuming an average of 0.65 g per cigarette and 2 g per cigar (following Tilastokeskus, although elsewhere weights of small cigars (2 g) and cigars (4 g) are given separately).

Data for pipe and cigarette tobacco are not available for 2003-2007 and 2009 for reasons of confidentiality. We have included averages from adjacent years in the total.

Data as shown (from Tilastokeskus (2010)) for snuff and chewing tobacco for 1974-1989 exclude imports, for 1990-1994 include imports. Data given in the previous edition of this report (based on Tilastokeskus (1998)) differed in including imports also for the years 1988 and 1989, and comparison suggests imports were 94 and 87 tonnes respectively. See also *Snuff sales for 1995 onwards* below.

The total consumption by weight (Tables 1.2, 2) should be regarded with caution from 1990 onwards due to differing scope in different years (inclusion or exclusion of tax-free cigarettes and snuff/chewing tobacco imports), and estimation of pipe/cigarette tobacco.

An increase in tobacco tax (10% on cigarettes and 25% on fine-cut rolling tobacco on average) effective as from January 2009 was associated with “exceptional amounts of tobacco products ... supplied at the end of 2008”.

Data from 1992-2002 show that most cigarettes were sold in packs of 20, with the exception of 1995-1997 when between 31% and 45% were sold in packs of 18.

Around 1999-2001, menthol cigarettes accounted for 18.2% of the total cigarette market (Giovino *et al* (2004) quoting ERC Group PLC (1999, 2001)).

#### *Snuff sales for 1995 onwards*

Oral snuff (or “snus”) was banned in 1995 when Finland joined the EU, under Directive 2001/37/EC. Sales continue in Sweden (which joined in the same year) where a derogation was

granted (ASPECT (Analysis of the Science and Policy for European Control of Tobacco) Consortium (2004)). Sales also continued in the Åland Islands (a Swedish-speaking semi-autonomous region) until 2007, on Åland-registered ships until 2008 (Suomen ASH (accessed June 2011)), and on Estonian-registered ships until Estonia joined the EU (Hakala and Waller (2003)). Imports for personal use continue to be permitted, and according to Huhtala *et al* (2006) “imports from ferries [*formed*] ... a convenient channel ... for importing snus, not only for personal use but also for friends and the black market. School trips by ferries to Sweden were common among schoolchildren, further increasing the opportunities for obtaining snus ... The magnitude of this channel is illustrated by the over 15 million passengers per year, compared to the total population of the three countries of 15.45 million.”

Esmerk Norwegian News (2011) reported that tightening of controls under the Tobacco Act of October 2010 had had little effect on snuff sales onboard vessels sailing between Finland and Sweden. Sales in 2009 of 478 tonnes were expected to rise to 493 tonnes in 2011 (based on sales for the first 4 months).

### *Estimates of smuggling and cross-border sales*

In 2002, it was estimated that 1 in 10 cigarettes were personal imports by Finnish travellers (Helsingin Sanomat (2003)). It was also reported by the Norwegian News Digests (2004) that cross-border purchases by Norwegians of hand-rolling tobacco in 2004 from Sweden and Finland increased by 36%, to 530 tonnes, following a tax increase in Norway.

In 1998, Joossens and Raw (1998) considered that Finland probably belonged in a “low smuggling” group of countries (with contraband share <5%), although there were no relevant studies. Smuggled cigarettes as a percentage of domestic sales were estimated in the range 25-49% for 2000-2004 (Mackay *et al* (2006) quoting ERC (2004)), and as 17.2% of legal sales in 2005 (Shafey *et al* (2009) quoting Euromonitor International (2006)). Helsingin Sanomat (2009) reported estimates by the Finnish Customs and the Ministry of Finance that some 5% of cigarettes are imported illegally, whereas estimates from the tobacco industry were higher, such as an estimate from Philip Morris International that the proportion could be in the region of 15%.

The numbers of cigarettes confiscated by Customs in criminal cases was very low (less than 1 million) from 1980 to 1994, but increased sharply in the late 1990s to 72 million in 2000 (1.5% of taxable consumption). Thereafter it was in the range 14 – 33 million (<1%). (Tilastokeskus (2010))

### *Estimates of numbers of hand-rolled cigarettes*

According to Pedersen *et al* (1969), hand-rolling of cigarettes was very uncommon in Finland, while Mørck *et al* (1982) commented that hand-rolling had fluctuated, but around 1980 accounted for a small percentage of cigarette consumption. However survey data suggest that hand-rolling increased in popularity during the 1990s, with about 20-25% of daily smokers smoking some hand-rolled cigarettes by the end of the 20<sup>th</sup> century (see Notes 6e and 7c below).

The Coresta task force on roll-your-own (fine cut) tobacco (1999) reported that, according to the latest available data, 90% of consumer-made cigarettes were made by machine-rolling and 10% by tubing (none by simple hand-rolling), with 20% using loose filters. They also reported data from 1991 giving the weight of tobacco per cigarette as 800 mg (range 600-1000 mg).

Given the lack of any information on the split of sales of loose tobacco, we have assumed that the amount used per year as pipe tobacco was 300 tonnes from 1950 to 1960, and that it then declined linearly (by 4 tonnes per year) to 100 tonnes in 2010. We have further assumed that the remainder was used for hand-rolling, with an average weight of 800 mg per hand-rolled cigarette. Although these estimates should be regarded as fairly speculative, they appear compatible with the sources mentioned earlier in this section, with the limited data on the prevalence of pipe smoking (see Notes 3c and 6g below), and with the comment by Karvonen *et al* (1993) that use of pipes has been low from the 1970s.

### *Plain/Filter cigarette sales*

#### Consumption:

1960-1980: Maxwell, Jr. (Successive years)

1997-1998: Maxwell, Jr. (1998)

#### Production:

US Department of Agriculture (accessed March 2011)

*Tar, nicotine and CO machine yields of cigarettes*

1970: Mørck *et al* (1982) quoting tobacco industry  
Tar yield, defined as dry condensate, calculated by the Coresta method.

1976-1984: Saarelma (1986)

1985-1992: Tilastokeskus (Statistics Finland) (1993)

Tar yield, calculated by the State Technical Research Centre. Data on average tar content are not published after 1992, but data on individual brands on sale in Finland are available from 1995 (Tilastokeskus (2010)). The average of the brands was in the range 7.3-7.8, and the distribution of brands (%) was as follows (selected years):

mg/cigarette	1995	2000	2005	2009
1-5	30.8	28.0	22.8	19.3
6-10	40.4	42.7	63.0	79.5
11+	28.8	29.3	14.1	1.1

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; nicotine yield is limited to 1.2 mg (Harkin *et al* (1997)). Limits of 10 mg tar, 1 mg nicotine and 10 mg CO per cigarette came into force from 2004 (ASPECT Consortium (2004)).

In 1982, Przewoźniak *et al* (1987) tested 5 brands of Finnish cigarettes (for comparison with 5 brands comprising 61% of the Polish market, although the Finnish brands were not identified). The average machine tar yield was 11.3 mg/cigarette, lower than the SWAT shown in Table 3. The average nicotine and CO yields were 0.73 and 8.9 respectively.

**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. 71 under *References*.

In other chapters of *International Smoking Statistics*, we have not attempted to include information related specifically to the use of smokeless tobacco. However, as there has been considerable interest regarding Swedish-style moist snuff (snus) in the medical and tobacco control literature, we have on occasion included some data in this chapter. The prevalence of snuff use, and on the joint distribution of smoking and snuff use are given in the *Notes* below, and some data on the prevalence of “smoking or smokeless tobacco use” is included in Table 4, using the product code A\*.

**Source number**

- 1 Mørck *et al* (1982)**
  - a. Studies by Suomen Tupakka OY.
  - b. Results were shown in Table 4 of previous editions of this report as frequency A but in fact refer to daily smoking.
- 2 Valtonen and Rimpelä (1984)**
  - a. Surveys operated by Finnish Gallup on representative sample of population.
  - b. Smokers: smoked ‘yesterday’.
- 3 Pedersen *et al* (1969), Martelin (1984)**
  - a. Baseline of a study of male lung cancer in Finland and Norway, May 1962-Feb 1963 (see also Norway source 11). Finnish part of the study was conducted in 3 urban and 3 rural areas. Personal interviews at home or work. Results presented here are weighted by region and urban/rural status. Age groups correspond to men born in 1916-1917, 1911-1915, 1906-1910, 1901-1905 and 1898-1900. Sample size 4 602, response rate 88%.
  - b. The proportion of cigarette smokers reporting smoking only pilli (Russian style cigarettes) was 20-40% (average 30%), pölli 40-60% (average 51%) and both types 15-25% (average

19%) in the different areas. The proportion smoking only pilli decreased with age, while the proportion smoking only pölli increased, but these differences were quite small. (These results refer to current product smoked by current smokers, and most recent product smoked by ex-smokers.)

- c. The joint distribution of cigarette and pipe smoking (expressed as % of all ever smokers, all regions combined) was:

	Pipe	Cigarettes		
		Never	Past	Current
Never	–	25	50	
Past	1	6	10	
Current	1	3	4	

- d. Consumption category estimation based on two categories, 1-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution.

#### 4 Martelin (1984), quoting Sievers *et al* (1974)

- a. TEI survey. Representative survey carried out by interview, mainly focused on sexual habits.
- b. Consumption category estimation based on two categories, 1-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution

#### 5 Martelin (1984)

- a. Unpublished data from the Central Statistical Office. Living conditions (ELO) survey. Sample size 2 523.
- b. Consumption category estimation based on two categories, 1-14 and 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution.
- c. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

#### 6 National Public Health Institute/Health Behaviour Research Unit, Helakorpi *et al* (2000, 2001, 2002, 2003, 2005a, 2005b, 2007, 2008, 2009, 2010)

- a. Health Behaviour and Health among the Finnish Adult Population (Suomalaisen aikuisväestön terveystietäytyminen ja terveys, AVTK). Annual postal questionnaire sent to a random sample drawn from the National Population Register, two reminders sent to non-respondents. Sample size 5 000. Response rates have fallen from 83% (1978-79) to 56% (2008) in men, and from 86% to 73% in women.
- b. For 1985-1995, data shown in Tables 4-8 as product MC refers to filter cigarettes. In 1984, 86% of all male smokers and 92% of female smokers smoked filter cigarettes, compared with 6% and 3% respectively smoking non-filter cigarettes (Hakulinen (1985)).
- c. In Tables 5-8, consumption shown as product A relates to daily smoking frequency (irrespective of product).
- d. Main results shown in Table 4 are described originally as “Smoking index 1”. Regular smokers: (1996-2003) had smoked at least 100 cigarettes, had ever smoked daily and had smoked yesterday or today, (2004-2008) had smoked at least 100 cigarettes, had ever smoked daily for at least a year and had smoked yesterday or today. Detailed definition not available for 1978-1995 but does not refer to smoking of 100 cigarettes, and refers to regular rather than daily smoking. All smokers: as for regular smokers except had smoked in last month.

In addition, results shown with \* against source are described originally as “present smoking”. Regular smokers: daily smoker (self-defined). All smokers: daily or occasional smoker (self-defined).

- e. The percentage of daily smokers who smoked hand-rolled cigarettes was as follows:

	Males						Females					
	15-24	25-34	35-44	45-54	55-64	Total	15-24	25-34	35-44	45-54	55-64	Total
1978-1982	7	4	7	11	15	8	7	2	1	3	7	4
1983-1987	5	3	5	6	12	5	3	1	0	2	4	2
1988-1991	7	6	10	13	14	10	4	3	6	4	4	4
1992-1995	23	16	18	19	25	20	18	8	10	10	18	12
1996-1999	29	24	24	25	26	25	27	16	16	12	20	18
2000-2003	29	21	22	23	25	24	25	13	10	16	16	16
2004-2007	22	14	18	23	17	19	15	7	11	15	10	12
2008	6	5	14	16	21	13	5	6	5	9	9	7
2009	20	22	10	28	25	22	6	8	4	13	17	10

- f. Use of snuff was reported in some years from 2001. The prevalence of snuff use (%) was as follows (selected years):

		Males						Females					
		15-24	25-34	34-44	45-54	55-64	Total	15-24	25-34	34-44	45-54	55-64	Total
2001	Daily	2.2	4.0	1.2	0.0	0.0	1.3	0.0	0.3	0.0	0.0	0.0	0.1
	Occasional	10.1	4.0	1.5	0.0	0.0	2.7	0.0	0.0	0.0	0.0	0.0	0.0
	Total	12.3	8.0	2.7	0.0	0.0	4.0	0.0	0.3	0.0	0.0	0.0	0.1
2008	Daily	1.6	3.3	3.7	0.3	0.6	1.7	0.0	0.3	0.3	0.0	0.2	0.2
	Occasional	5.7	8.4	3.7	2.0	0.8	3.6	1.1	0.3	0.3	0.0	0.0	0.3
	Total	7.3	11.7	7.4	2.3	1.4	5.3	1.1	0.6	0.6	0.0	0.2	0.5

In a pooled analysis of 2004/05 results, Patja *et al* (2009) reported that no former or never smoking women reported snuff use. Among men, the prevalence of snuff use (%) by smoking habits was as follows:

Snuff use	Overall	Among former daily smokers	Among never smokers
Daily	3	3	2
Occasional	*	1	2

\* not reported. Snuff use among current smokers also not reported.

- g. In an analysis of the 1978-1990 surveys, Rahkonen *et al* (1992) reported that 4% of male smokers smoked pipe or cigars daily, and none of the female smokers did.
- h. Consumption category estimation based on 1-14, 15-24 and 25+ cigarettes/cigarette smoker/day, or times/smoker/day.
- i. 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. Where data for the same year/product/frequency were available from the Health Behaviour and Health among the Finnish Elderly series (EVTK, source 7) for ages 65-79 or 65-84, those data were used as the basis of the extensions to the age distribution for this survey series. For even numbered years, the EVTK data from the previous year are used. These were further extended as follows: for percentage of smokers, age 80+ (1985-1990) : males (A/R) 8%, (A/A) 10%; females 3%. For age 85+ (1993 on) : males (MC/R) 2%, (A/R) 3%, (A/A) 4%; females 1%. Number of cigarettes/person/day: males (MC) 0.3, (A) 0.4, females 0.2. In Supplement 1, the data from the two surveys are shown as combined, with the EVTK data repeated for the even numbered years.
- j. In Tables 6-8, consumption shown as product A (times per day) has been adjusted to the estimated total number of cigarettes (manufactured and hand-rolled). As pipe tobacco and cigars are not taken into account in this calculation, the % Total sales should be lower than that shown. This is likely to be a small difference, but may explain why the % Total sales for manufactured cigarettes is generally a few percentage points lower than that for all products.

## 7 Tilastokeskus (Statistics Finland) (2010), Sulander *et al* (2000, 2001, 2004, 2006), Laitalainen *et al* (2008, 2010), Laitalainen (2010)

- a. Health Behaviour and Health among the Finnish Elderly (Eläkeikäisen Väestön Terveyskäyttäytyminen ja Terveys, EVTK). Biennial postal survey (except 1991) by National Institute for Health and Welfare (THL). Stratified random samples of 300 men and women in 5-year age groups drawn from the National Population Register. Until 1989 the age range was 65-79, thereafter 65-84.

Year	Respondents		Response rate	
	Males	Females	Males	Females
1985	648	683	73	76
1987	786	783	88	87
1989	783	779	87	87
1993	1033	1002	87	84
1995	989	970	82	81
1997	953	933	80	78
1999	858	936	72	78
2001	993	956	83	80
2003	914	949	76	79
2005	924	939	77	78
2007	903	944	76	79
2009	853	888	72	74

- b. Definitions of smoking are the same as for source 6 (see source 6 notes c and d)

- c. The percentage of daily smokers who smoked hand-rolled cigarettes (age 65-84) was as follows:

	<b>Males</b>	<b>Females</b>
1993	9.4	2.4
1995	24.3	2.5
1997	22.4	20.5
1999	25.0	24.8
2001	27.4	8.0
2003	30.8	8.3
2005	22.7	12.2
2007	15.1	15.8

- d. Consumption category estimation based on 1-14, 15-24 and 25+ cigarettes/cigarette smoker/day, or times/smoker/day.  
e. In Supplement 1, data from source 7 are shown combined with source 6, see also Note 6i.

## 8 Le Meitour-Kaplan (1977), quoting Nordic Research Association (1973)

- a. Survey conducted in four Nordic countries in November-December 1973. Total sample size 6 000. Age group not stated. (See also Denmark source 3, Norway source 3, and Sweden source 4).  
b. Smokers: smoked 'yesterday'.

## 9 Rimpelä (1986), Rimpelä *et al* (2005, 2007), Tilastokeskus (Statistics Finland) (2010)

- a. Adolescent Health and Lifestyle Survey (Nuorten terveystapatutkimus). Nationally representative survey conducted alternate years among 12-, 14-, 16- and 18-year-olds. Postal questionnaires sent to cross-sectional sample based on consecutive dates of birth. Comparable methods and questions have been used since 1977. Additional data for 1973 supplied by Rimpelä (1986).

	<b>Participation rate (%)</b>		<b>Sample size</b>	
	<b>Males</b>	<b>Females</b>	<b>Males</b>	<b>Females</b>
1977	86	91	1 447	1 385
1979	83	89	2 107	2 166
1981	85	91	2 025	2 115
1983	78	89	1 781	1 940
1985	74	86	1 601	1 752
1987	76	87	3 859	4 254
1989	71	84	1 457	1 648
1991	69	84	3 523	4 111
1993	70	85	3 799	4 390
1995	72	86	3 875	4 507
1997	67	85	3 809	4 581
1999	69	83	3 851	4 368
2001	62	79	3 268	4 024
2003	60	77	3 033	3 728
2005	58	73	2 974	3 529
2007	50	72	2 467	3 373

- b. Smokers marked as frequency \* : smoked daily. In Table 4, data shown as product A\* refers to smoking of any product (cigarettes, pipe or cigars), or use of snuff (i.e. includes non-smokers who use only snuff). Data shown as product MC estimated from % of daily smokers smoking factory-made cigarettes.  
c. Results shown in Table 5 (and used to calculate results shown in Table 6) refer to number of cigarettes, pipefulls or cigars smoked by daily cigarette smokers. As the use of cigars and pipe was very rare, this is likely to be very close to the number of cigarettes per cigarette smoker.  
d. The percentage of daily cigarette smokers who smoked hand-rolled cigarettes (with or without manufactured cigarettes) was as follows (selected years):

	<b>Males</b>			<b>Females</b>		
	<b>14</b>	<b>16</b>	<b>18</b>	<b>14</b>	<b>16</b>	<b>18</b>
1977	36	25	22	28	18	11
1987	20	18	9	11	8	6
1997	52	43	32	31	31	22
2007	37	28	21	33	24	11

- e. The questions on snuff use altered in 1981, and earlier data are not available. The prevalence of snuff use (irrespective of smoking) was as follows (% , selected years):

		Males				Females			
		12	14	16	18	12	14	16	18
1981	Daily		0.6	1.3	1.2				
	Daily+occ	0.9	2.5	4.2	2.4	–	0.4	0.2	0.4
1987	Daily		0.6	1.0	1.0				
	Daily+occ	0.5	2.8	5.3	3.9	0.3	0.3	0.6	0.6
1997	Daily		0.6	1.5	3.0				
	Daily+occ	0.7	4.3	7.4	9.7	–	0.5	1.2	0.7
2007	Daily	–	0.4	1.4	2.3	–	–	–	0
	Daily+occ	–	1.7	8.6	10.7	–	0.2	1.6	2.0

Blank cells indicate data not available, dash as given originally.

- f. For boys, the joint distribution of daily smoking and daily snuff use (%) was as follows (selected years):

	Smoking:	Age 14			Age 16			Age 18		
		yes*	yes†	no	yes*	yes†	no	yes*	yes†	no
		no	yes	yes	no	yes	yes	no	yes	yes
1981		15.5	0.4	0.2	30.2	0.0	1.3	36.3	0.2	1.0
1987		14.0	0.1	0.4	32.6	0.4	0.5	36.9	0.3	0.7
1997		13.7	0.3	0.4	25.6	0.7	0.8	33.0	0.6	2.4
2007		4.9	0.2	0.3	19.6	1.1	0.3	27.5	0.7	1.6

\* Smokes cigarettes only

† Estimated by subtraction from the percentage using any tobacco (as shown in Table 4), and may include a very small percentage smoking cigars/pipes but not using snuff.

#### 10 Nieminen (1986), Sosiaali- ja terveystieteiden tutkimuskeskus (National Agency for Welfare and Health) (1992)

- Surveys on health education conducted by Statistics Finland for National Agency for Welfare and Health. Sample size 3 000-4 000 (except 1984: 1 593, and 1990: 1 902).
- Cigarettes include small cigars.
- Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

#### 11-13 Tolonen *et al* (2000), Kuulasmaa *et al* (1998), Wolf *et al* (1998), Molarius *et al* (1999)

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

Region	Phase	Participation rate (%)*		Sample used*		Date
		Males	Females	Males	Females	
North Karelia	1	76	81	1 482	1 606	Jan 1982-Apr 1982
Kuopio Province	1	82	88	1 454	1 321	Jan 1982-Apr 1982
Turku/Loimaa	1	82	87	1 581	1 679	Jan 1982-Apr 1982
North Karelia	2	80	86	1 490	1 610	Jan 1987-Apr 1987
Kuopio Province	2	83	88	770	826	Jan 1987-Apr 1987
Turku/Loimaa	2	80	83	742	799	Jan 1987-Apr 1987
North Karelia	3	71	84	652	780	Jan 1992-Mar 1992
Kuopio Province	3	78	84	738	813	Jan 1992-Mar 1992
Turku/Loimaa	3	78	86	728	819	Jan 1992-Mar 1992

\* 'Sample used' includes age 25-34, 'Participation rate' age 35-64 only.

- All ages* column relates only to age 35-64 and is standardized to world population.
- The Finnish centres did not use the standard MONICA smoking questionnaires, and it is not clear if the standard MONICA definitions of smoking (as follows) are relevant. Regular cigarette smokers: smoked cigarettes daily. All smokers: smoked cigarettes daily or occasionally, or smoked 1 g pipe tobacco or 1 cigar per week.
- Results for cigarettes per regular smoker (Table 5) and per person (Tables 6) are as given by Tolonen *et al* (2000). Interpretation of these results is unclear as the percentage of occasional smokers reported smoking 5 or more cigarettes per day was very high, varying from 26% to 39% in the different regions/phases (Molarius *et al* (1999)).
- For phase 1, there are minor discrepancies between the data shown in Table 4 and equivalent data taken from WHO (1989) used in earlier editions of this report. For 1992, North Karelia, there are minor discrepancies with the results presented by Laatikainen *et al* (1999), Matilainen *et al* (1994).

**14 Laatikainen *et al* (2003), Peltonen *et al* (2008)**

- a. Series of regional cross-sectional surveys started in 1972, forming the FINRISK Study. From 1982, the methods followed the MONICA protocol, and were comparable to the methods used in earlier years. Regional results are not presented in this report (other than those given as sources **11-13** for 1982-1992 for which comparable results in other countries are also available). From 2002, some results for all regions are available and are presented here.
- b. For 2002, conducted in 6 regions: the cities of Helsinki and Vantaa, the areas of Turku and Loimaa, and the provinces North Savo, North Karelia, Oulu and Lapland. Stratified random sample of the population. In 2002, the main sample comprised persons aged 25-64, plus a subsample in 3 regions aged 65-74 (from which no results are presented). Sample size (2002) 13 500, (2007) 11 953. Response rate (2002) about 70%, (2007) 67%. Results presented here are averages for all regions, weighted by sex and age. Self-administered questionnaire mailed to all subjects with invitation to health examination.
- c. Manufactured cigarettes smokers with frequency marked as \*: had smoked in last month and smoked at least 3 manufactured cigarettes/day when last smoked. Smokers of any product (main results shown in Table 4): had smoked regularly for a year and had smoked in last month. In addition, results shown with \* against source refer to current smoking (cigarettes, cigars or pipe). Regular smokers: daily smoker (self-defined). All smokers: daily or occasional smoker (self-defined).
- d. In 2007, hand-rolled cigarette smoking (at least one per day on average when last smoked, among those who smoked in the last month) was as follows:

	Males						Females					
	25-34	35-44	45-54	55-64	65-74	Total	25-34	35-44	45-54	55-64	65-74	Total
as % of smokers:	14.0	12.4	21.1	17.1	14.0	15.8	6.0	8.2	13.3	12.5	9.8	9.9
as % of total:	5.3	4.3	6.7	4.3	2.3	4.8	1.6	1.9	3.6	2.0	0.9	2.1

**15 Kaprio (1986), Kaprio *et al* (1978)**

- a. Finnish Twin Cohort Study. Most results shown are for all twins and 'pseudo-twins' respondents to the questionnaire, treated as individuals, from Kaprio (1986). Sample size (males) 14 763, (females) 15 747.
- b. Results marked \* against source in Table 4 are given by Kaprio *et al* (1978), based on true twins only, referring to daily smokers. The distribution by cigarette type, expressed as % of current cigarette smokers, was as follows (selected age groups shown):

		Filter	Non-filter	Equal amounts of both
Males	20-24	94	2	4
	40-44	80	4	17
	60-64	50	27	23
	70-74	39	31	31
Females	20-24	99	1	1
	40-44	94	2	5
	60-64	91	6	3
	70-74	40	40	20

Results are also available (not shown here) for the joint distribution of cigarette, pipe and cigar smoking among men.

- c. Consumption category estimation based on 1-9, 10-19, and 20+ cigarettes/smoker/day
- d. Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

**16 Hibell *et al* (1997, 2000, 2004, 2009)**

- 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. At least 99% of 15-16 year-olds were still in school in each survey year, with 93% in the surveyed grade. 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		
Mar 1995	1 182	1 118	92	92	1979	–
Mar 1999	1 642	1 640	99	90	1983	15.2
Mar-Apr 2003	1 739	1 804	97	91	1987	15.7
Mar-Apr 2007	2 297	2 691	96	91	1991	15.7

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

### 17 Rimpelä *et al* (1974)

- a. Study of asthma in Harjavalta community in 1966. Sample size 1 092 (20% of population), response rate 78%. Mailed follow-up in 1971. Lower age limit (1966) 10.  
b. The amount smoked by male smokers was reported to be unchanged between the 2 surveys; among female smokers, the proportion smoking 15+ cigarettes per day increased from 8% to 15%.  
b. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

### 18 Heinonen *et al* (1972)

- a. Multiphasic screening programme in 13 communities during 1966-1968. Within each community, rural, urban and industrial areas were selected. Sample size (males) 11 361, (females) 11 662.  
b. Smokers: includes those who gave up smoking less than 1 year ago.  
c. Consumption category estimation based on 1-14, 15+ cigarettes/smoker/day, and resulting figures should be regarded with caution, particularly as very few women smoked more than 15 cigarettes per day.

### 19 Byckling and Sauri (1985), Juonala *et al* (2004)

- a. Baseline of the Cardiovascular Risk in Young Finns study. Conducted in five cities (Helsinki, Kuopio, Oulu, Tampere, Turku) and rural surroundings. Subjects aged 3, 6, 9, 12, 15, 18 randomly selected within those areas. Mailed questionnaire in advance of medical examination, but smoking information was collected privately during the medical examination. Sample size (ages 12-18 only) 1 790, participation rate 83%.  
b. Smokers marked as frequency \*: smoked daily. All smokers: smoked daily or occasionally. Cigarettes per smoker refers to the mean number smoked daily, currently or before quitting.

### 20 Benjamin (1978)

- a. Study by the Finnish Health and Social Security Department in 1976, no further details given.

### 21 Aarø *et al* (1986), Nutbeam and Aarø (1990), King and Coles (1992), King *et al* (1996), WHO (1997), Currie *et al* (2000, 2004, 2008)

- a. Part of the HBSC (Health Behaviour in School-Aged Children) Study, a collaborative cross-national research study sponsored by the WHO. School classes or schools were randomly selected, targeting age groups 11 (not presented here), 13 and 15. The target sample size in each age group was 1 000 – 1 500.

Year	Mean age				Sample size		
	Target age 13		Target age 15		Target age 13	Target age 15	Total*
	Boys	Girls	Boys	Girls			
1983-1984	13.6	13.6	15.6	15.6	1 152	1 125	
1985-1986	–	–	–	–	935	1 095	
1990		13.8		15.8			2 996
1994		13.8		15.8	1 279	1 194	
1998		13.7		15.7	1 628	1 545	
2002		13.8		15.8	1 201	1 226	
2006		13.8		15.8	1 725	1 685	

\* Includes age 11

- b. Number of cigarettes per smoker per day (Table 5, 1998 only) is derived from the median number smoked per week.  
c. Smokers marked as frequency \*: smoked daily. Regular smokers: smoke once a week or more. All smokers: includes those smoking less than once a week.

**22-23 Hirvonen *et al* (1965)**

- a. Survey among military conscripts, 1960-1963. Age group not stated.

		Sample size
22	Officer trainees	852
23	Other ranks	1 180

- b. Product shown as MC relates to smoking of blended or oriental cigarettes, TC includes paper mouthpiece cigarettes.  
 c. Consumption category estimation based on  $\leq 5$ , 6-10, 11-15, 16-20,  $>20$  cigarettes/smoker/day.

**24 Niemelä *et al* (2009)**

- a. 10-year follow-up of the nationwide study "From a Boy to a Man". Initial sample consisted of 10% of Finnish children born in 1981, response rate 97%. Follow-up of boys only, questionnaire at obligatory military call-up in 1999 at age 18. Sample size 2 307 (76% of original target group, or 89% of those attending military call-up).  
 b. Regular smokers: smoked at least one cigarette a day in last 6 months. All smokers: smoked cigarettes occasionally or daily in last 6 months.  
 c. Consumption category estimation based on two categories, 1-10 and  $>10$  cigarettes/smoker/day, and resulting figures should be regarded with caution.

**25 Nieminen *et al* (2010)**

- a. Survey among military conscripts in Northern Command of Finnish Defence Forces. Age range 18-26, of whom 65% are age 18-19. Military service is completed by 81-82% of the male age group every year. Self-completion questionnaire during teaching session at start of military service. Sample size 1 167.  
 b. Smokers: had smoked at least 50 times and now smoke daily or trying to quit.

**26-27 Keys *et al* (1966)**

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

	Location	Description	Sample size	Response rate (%)
26	Karelia, East Finland	Farming and forestry villages	817	99
27	West Finland	Small farming villages	860	97

- b. The Russian type of cigarette, with a hollow paper mouthpiece and relatively small amount of tobacco was smoked in East Finland, but rarely in West Finland. There were additionally 'a few' pipe smokers, and cigars are stated to be smoked 'occasionally on festive occasions'.  
 c. In 1974, complete data from 5-, 10- and 15-years of follow-up were available for 1 007 men, and they were categorised as never smokers (20%), ex-smokers at baseline (13%), permanent quitters (23%), intermittent quitters (7%) and continuous smokers (37%) (Pelkonen *et al* (2001)). At 25 year follow-up of 679 men (age 65-84, response rate 94%), 19% were smokers (Houterman *et al* (2002)).  
 d. Consumption category estimation based on 1-9, 10-19 and 20+ cigarettes/smoker/day.

**28 Tilastokeskus (Statistics Finland) (2009)**

- a. No original source. Age group not stated. Year approximate ("at the beginning of the 1950s, after the Second World War").  
 b. Similar data were given by Helakorpi *et al* (2004) citing Rimpelä (1978) : "The prevalence of smoking in the Finnish adult male population was close to 70% until the 1950s, subsequently declining to about 45% in 1965-70. In contrast, Finnish women smoked little; at the beginning of the 1960s the prevalence was 13%."

**29 Aromaa *et al* (1989), Korpilähde *et al* (2004)**

- a. Mini-Finland Health Survey, conducted in 1978-1980. Two-stage cluster sample, representative of Finnish population age 30+, carried out by Social Insurance Institution. Screening phase involved interview by nurse and examination at mobile clinic. Target sample size 8 000, participation rate 90%.  
 b. Results for all smokers (Table 4) from Aromaa *et al* (1989) referring to whole sample. Results for cigarettes smokers (Tables 5-6) from Korpilähde *et al* (2004) referring to 6 947 persons (87%) without arthritis; the prevalence of all smoking (not shown) was very similar to that in the whole sample.  
 c. Regular smokers: had smoked every day for at least 1 year and now smoke regularly. Occasional smoking was not enquired because it was rare in the 1970s (Heliövaara (2011))  
 d. Consumption category estimation (males only) based on 1-9, 10-19, 20-29 and 30+ cigarettes/smoker/day, averaged over cigarette only smokers (17.6), and cigarette and pipe/cigar smokers (18.3).

**30 Aromaa and Koskinen (2004), Kestilä *et al* (2006)**

- a. Health 2000 Survey. Health interview and examination survey conducted 2000-2001, using a 2-stage stratified cluster sample, nationally representative of those age 30+ living in mainland Finland. The main survey was of adults (age 30+), considered comparable to the Mini-Finland Health Survey (see source 29). A linked survey was of young adults (18-29). Interview at home, followed by examination at local centre. Non-respondents were offered home examination, telephone interview and finally postal questionnaire. Smoking was included in the home interview using computer-assisted interviewing (CAPI). Main survey, sample size (males) 3 126, (females) 3 860; participation rate (males) 86%, (females) 88%. Young adult survey, sample size 1 894, participation rate 79%.
- b. Regular smokers: had smoked at least 100 times, had smoked daily for at least a year and smoked today or yesterday (cigarettes, cigars or pipe). All smokers: had smoked at least 100 times, and smoked in last month. Cigarette type (Tables 5-6) not specified, although questionnaire asks separately about factory-made and self-rolled.
- c. The *All ages* values shown in Table 4 refer to age 30+ only. The highest age groups shown for regular smoking are 75-84 and 85+.
- d. Consumption category estimation based on 1-9, 10-14, 15-19 and 20+ cigarettes/smoker/day. Base assumed to include non-cigarette smokers, so may underestimate consumption per cigarette smoker.

**31, 32 Reif and Melich (1998), Reif and Marlier (1998), Melich (2006), Christensen (2004), Papacostas (2008, 2009)**

- a. 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 1 000.
- b. These surveys provide results that are comparable across countries. However, they have been criticised for having small sample sizes and for generating “estimates that are in some cases widely discrepant from more substantive national sources” (Bogdanovica *et al* (2011)).
- c. Finland was first included in 1994. For the 1994 survey (Eurobarometer survey 41.0), the sample consisted of people aged 15 and over who were resident in the country and had Finnish nationality (source 31). 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 32). Exceptionally for Finland, results equivalent to source 32 were not available for 1994.
- d. 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; however the estimated prevalence of regular manufactured cigarette smoking may be too high because the estimate includes any regular smokers of pipe/cigar/hand-rolled who smoked manufactured cigarettes only occasionally (and similarly for regular smoking of total cigarettes).
- e. Use of snuff or chewing tobacco was reported in some years. There were no female users; the prevalence of use among men by age was as follows (%):

	15-24	25-39	40-54	55+	15+
1995	0.0	1.0	0.0	0.0	0.3
2002	6.1	4.6	1.0	0.0	2.6
2005	5.1	2.9	0.0	0.5	1.5
2006	2.0	6.0	0.0	0.5	1.9

Except for 15-24 year-olds in 2005 (where 3.4% both used and smoked hand-rolled cigarettes), none of these users also smoked.

- f. 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.
- g. 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.

**33 de Vries *et al* (2003), Haukkala *et al* (2006), Vartiainen *et al* (2007)**

- a. Part of the European Smoking prevention Framework Approach (ESFA). Longitudinal study in all 27 lower secondary schools in Helsinki (except special and Swedish-speaking schools). 13 schools were allocated randomly to intervention (smoking prevention programme), with the other 14 schools as controls (standard health education curriculum). Two control schools did not participate in the final (2001) survey. Pupils were informed of confidentiality, then completed questionnaires in class with teacher present, and forms were then sealed in envelopes. Survey took place in September of each year, except fourth wave in April (so only 6 months after 3<sup>rd</sup> wave).

Year	Participants	Participation rate (%)
1998	2 745	98
1999	2 430	86
2000	2 188	78
2001	1 821	65

Dropouts were due to absenteeism, change of school, uncompleted or non-returned questionnaires

- b. Table 4 shows approximate ages corresponding to school grades 7 (1998) to 9 (2000-2001).  
 c. Smokers marked as frequency \*: smoked daily. Regular smokers: smoked weekly.  
 d. The prevalence of ever snuff use (%), categorised by times ever used, was as follows:

Year	Age	Boys			Girls		
		Once	2-50 times	50+ times	Once	2-50 times	50+ times
1998	13	4.1	2.2	1.1	1.8	0.3	0.3
1999	14	9.1	9.5	5.3	3.8	1.9	0.2
2000	15	11.6	18.3	13.1	7.9	5.1	0.3
2001	16	11.0	18.1	13.7	8.0	5.0	0.5

The joint distribution of smoking and snuff use among boys was (% , selected years):

	Smoking	Snuff use		
		Never	1-50 times	50+ times
1998	Never	59.6	0.7	0.1
	Occasional or ex	28.5	2.9	0.3
	Current weekly	4.5	2.7	0.7
2000	Never	31.1	3.3	0.5
	Occasional or ex	21.0	11.8	3.9
	Current weekly	5.3	14.7	8.3

(Estimated from Haukkala *et al* (2006), based on slightly more subjects than are given in Note a.)

- e. Results for daily smokers for 1999-2001 have been estimated by combining results from experimental and control schools.

### 34 Rimpelä *et al* (1996), STAKES (National Research and Development Centre for Welfare and Health) (successive years)

- a. School Health Promotion Study (Kouluterveyskysely). Conducted in all schools in participating Municipalities in April, with different regions included in alternate years. In 2008-2009 90% of Municipalities participated, corresponding to 82% of all secondary and 74% of all upper secondary pupils in Finland. Anonymous self-completion questionnaire in class, with teacher present, and forms were then sealed in envelope. Except for 1996 and 2010, results shown in Table 4 are averages of two years. Sample sizes:

Year <sup>1</sup>	Survey year	Municipalities	Schools			Students <sup>2</sup>
			Secondary	Upper secondary	Vocational <sup>3</sup>	
1996	1996	96	254			19 074
1998	1998	136	285	159		61 066
	1999	179	324	186		73 571
2000	2000	160	334	200		71 195
	2001	173	244	161		56 701
2002	2002	150	416	219		81 077
	2003	215	352	205		70 929
2004	2004	145	433	222		83 916
	2005	212	398	207		71 844
2006	2006	148	431	228		86 738
	2007	206	361	202		72 828
2008	2008	146	435	223	209	105 844
	2009	180	379	209	214	90 792
2010	2010	136	435	215	196	102 267

<sup>1</sup> As shown in Table 4.

<sup>2</sup> Responding to smoking question.

<sup>3</sup> Some vocational schools participating in earlier years not shown as not contributing to results presented.

- b. Table 4 shows approximate ages corresponding to school grades. Results shown as ages 14-15 correspond to secondary grades 8-9. For 2008-09 and 2010 results shown as ages 16-17 are calculated as the averages of upper secondary school years 1-2 and vocational school years 1-2. Smoking prevalence was higher in vocational school students (Pietikäinen *et al* (2008)). For 1998-99 to 2006-07 (marked \* against source), results for these ages are based on upper secondary school years 1-2 only, so are likely to understate. Vocational school students were included up to maximum age 20.5.
- c. Smokers marked as frequency \*: smoked daily. Regular smokers: smoked weekly.
- d. The prevalence of current snuff use was (% , selected years):

Year		Boys				Girls			
		14	15	16	17	14	15	16	17
1998-99*	Daily	2.5	4.1	4.0	4.1	0.0	0.0	0.0	0.0
	Any	13.6	17.3	15.0	12.6	2.0	2.0	1.0	1.5
2008-09	Daily	2.0	3.0	4.1	4.5	0.0	0.0	0.0	0.0
	Any	9.9	14.4	16.3	16.9	1.0	2.4	2.6	2.2

\* see Note b

- e. Results for 1996 read from chart.

### 35 Eurostat (2005, accessed August 2007)

- a. European Community Household Panel (ECHP), a longitudinal survey, centrally designed and co-ordinated by the Statistical Office of the European Communities (Eurostat). The survey started in 1994 (1996 in Finland) and smoking was first included in 1998. Participants were age 15+ and living in private households. In each wave, the original participants are contacted again (except if previously refused or incapacitated), and new respondents are also added.

Year	Number of respondents	Original respondents remaining (%)
1998	7 381	77
1999	7 109	69
2000	5 614	51

(Sample size not available for 2001.)

- b. The *All ages* values (Tables 4-7) refer to age 15+. Highest age group shown is 75-84. Age-specific data not available for age group 85+ marked \*.
- c. Consumption category estimation based on two categories, 1-19 and 20+ cigarettes/smoker/day, and resulting figures should be regarded with caution.

### 36 Huhti (1965)

- a. Survey conducted in Harjavalta, western Finland, a rural commune with some industry. About half the sample were examined in conjunction with mass radiography in September 1961, the remainder were invited to examination and interview at hospital up to December of that year, with a very few interviewed at home. All residents age 40-64 were included in the sample, but smoking results presented excluded those with TB or certain pulmonary diseases (other than chronic bronchitis, emphysema and asthma).

	Males	Females
Population	771	931
Attended	730	890
% attended	96	96
Sample used (no TB or pulmonary disease)	653	823

- b. Regular cigarette smokers: had smoked one cigarette daily for one year, and now smoke cigarettes daily. Regular smokers: had smoked one cigarette daily or equivalent for one year, and now smoke pipe or cigars, or smoke cigarettes daily. There were no subjects who smoked both cigarettes and pipe/cigars.
- c. Consumption category estimation based on 1-14, 15-24 and 25+ cigarettes/smoker/day. As very few women smoked more than 15 cigarettes per day, resulting figures should be regarded with caution.

### 37 Laaksonen *et al* (2001)

- a. Part of the Bridging the East-West Health Gap survey. The Finnish part was conducted in North Karelia, using postal questionnaires directed to a random sample of the general population. Sample size (males) 514, (females) 529; response rate (males) 62%, (females) 71%.

- b. Regular smokers: had smoked regularly for at least a year, had smoked at least 100 cigarettes, cigars or pipefuls in lifetime and smoked in last month.
- c. It is not stated whether mean number of cigarettes per day is based on all smokers or only on cigarette smokers. If the former, then calculation of cigarettes per person may overestimate.

*Additional information (sources not presented in tables)*

**Merne *et al* (1998)**

Cross-sectional study in 4 senior high schools in Turku, 1994. Targeted all first and second-year students attending on a particular day, age-range 15-22 years. The study was repeated in 1995, targeting the same population, but not necessarily including the same individuals. Participation rate (1994) 92%, (1995) 64%.

The prevalences of smoking and snuff use in 1994 were 29% and 19% respectively among boys, and 27% and 1% among girls. Other results are available only for sexes combined:

		<b>1994</b>	<b>1995</b>
Snuff use	(as % of population)	9	8
Daily snuff use	(as % of snuff users)	42	60
Times per day:	(as % of daily snuff users)		
	1-3	24	26
	4-7	38	19
	8-10	17	37
	10-15	21	11
	>15	0	7

Snuff users were more likely than non-users to be smokers – odds ratios (95% confidence intervals) were 4.7 (2.64-8.44) for 1994 (adjusted for sex and alcohol use) and 3.31 (1.69-6.48) for 1995 (adjusted for sex).

**Karvonen *et al* (1993) quoting Rimpelä (1980)**

Smoking among boys was already prevalent at the beginning of the 20<sup>th</sup> century, but among girls it was rare until the 1960s.

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