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# **International Smoking Statistics**

**Web Edition**

**A collection of worldwide historical data**

## **France**

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**Barbara Forey, Jan Hamling,  
John Hamling, Peter Lee**

P N Lee Statistics & Computing Ltd  
17 Cedar Road  
Sutton SM2 5DA, UK  
[www.pnlee.co.uk](http://www.pnlee.co.uk)

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# Contents

Contents .....	3
List of Figures .....	4
Preface .....	5
Downloads .....	5
Acknowledgements .....	6
Introduction.....	7
Sales data .....	7
Survey data.....	7
<b>Table 1.1</b> Total annual sales of tobacco products, 1861-1924.....	9
<b>Table 1.2</b> Total annual sales of tobacco products, 1932-1959.....	10
<b>Table 1.3</b> Total annual sales of tobacco products, 1960-1989.....	11
<b>Table 1.4</b> Total annual sales of tobacco products, 1990-2008.....	12
<b>Table 1.5</b> Percentage of sales of tobacco in different forms (by weight), selected years .....	13
<b>Table 2</b> 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.....	14
<b>Table 3</b> Manufactured cigarettes: percentage of total sales as filter cigarettes; percentage of total sales as blond cigarettes; sales-weighted average machine yields per cigarette of tar (SWAT) .....	17
<b>Table 4M</b> Prevalence of smoking, males: selected surveys by age.....	18
<b>Table 4F</b> Prevalence of smoking, females: selected surveys by age.....	19
<b>Table 5M</b> Number of cigarettes smoked per smoker per day, males: selected surveys by age .....	30
<b>Table 5F</b> Number of cigarettes smoked per smoker per day, females: selected surveys by age .....	31
<b>Table 6M</b> Number of cigarettes smoked per person per day, males: selected surveys by age; with percentage total sales .....	34
<b>Table 6F</b> Number of cigarettes smoked per person per day, females: selected surveys by age; with percentage total sales .....	35
<b>Table 7M</b> Number of cigarettes smoked per person per day, sales-adjusted, males: selected surveys <sup>1</sup> by age; with percentage total sales .....	38
<b>Table 7F</b> Number of cigarettes smoked per person per day, sales-adjusted, females: selected surveys <sup>1</sup> by age; with percentage total sales .....	39
<b>Table 8</b> 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 .....	42
Notes .....	49
Notes on sources of sales data .....	49
Sales data before 1960 .....	49
Sales data for 1960-1989 .....	49
Sales data for 1990 onwards.....	50
Estimates of smuggling and cross-border sales.....	50
Estimates of numbers of hand-rolled cigarettes .....	52
Plain/Filter cigarette sales .....	52
Dark/Blond cigarette sales.....	53
Tar and nicotine machine yields of cigarettes .....	53
Notes on sources of survey data .....	53
Abbreviations and acronyms .....	64
References .....	65

## List of Figures

<b>Figure 1</b>	Percentage of sales of tobacco in different forms (by weight), selected years .....	13
<b>Figure 2</b>	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 .....	16
<b>Figure 3</b>	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 .....	46
<b>Figure 4</b>	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 .....	48

<sup>1</sup> See footnotes to Tables and 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. It is planned to update the chapter for each country separately, and make them 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*.

Data on the sales of tobacco in France are available from 1861. The consumption of manufactured cigarettes started around the 1870s and reached 0.7 cigarettes per adult per day by 1923. Consumption per adult then increased to nearly 6 cigarettes per day by the late 1970s and was then steady until the early 1990s. Consumption then decreased to 3 per day by 2004. In addition to these general trends, there was a dip in the consumption of manufactured cigarettes during the Second World War.

We estimate that consumption of hand-rolled cigarettes per adult declined from about 1.5 to about 0.2 cigarettes per day between 1950 and 1990, then increased slightly, to 0.5 by 2005. Estimates of hand-rolled cigarette consumption are based on sales of 'scaferlatis' which is fine-cut tobacco used for hand-rolling and pipes.

Apart from a fall during the Second World War, the consumption per adult of all tobacco products combined increased from nearly 3 g per day in 1865 to around 7 g in the period between 1974 and 1979. Since then it has declined steadily, to about 3 g by 2005.

In 1865 the majority of tobacco was consumed in the form of scaferlatis, with chewing tobacco and snuff also popular. The use of manufactured cigarettes increased rapidly during the 1920s: by 1932 over 37% of all tobacco consumed was as manufactured cigarettes. This increased to nearly 90% by the mid 1980s but declined after the mid 1990s, reaching 75% by 2004. Most of the remainder was sold as pipe and hand-rolling tobacco, with a small surge in cigar and cigarillo consumption in the 2000s. The percentage of manufactured cigarettes that were filtered increased steadily from less than 10% in 1950s to over 90% in the 2000s. Traditionally a high proportion of the cigarettes sold in France have been of dark tobacco, but in recent years blond cigarettes have almost completely taken over, the proportion rising from 20% in 1978 to 90% by 2005.

Smuggling was not a major feature of the French market before 2000: it was estimated as around 3% of consumption. However, cross-border sales and smuggling may have increased since then.

### Survey data

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

In 1953, the prevalence of all tobacco smoking among those aged 15 years and over was 76% in men and 30% in women. The difference between the percentages of men and women who smoke has decreased since then owing to a steady decrease in the prevalence among men to around 30% in the 2000s (although one source (source 8) has given consistently lower estimates since the 1960s).

Estimates for the prevalence among women varied around 15-35%, with no trend evident over time. Several surveys in the 1960s and 1970s showed a high prevalence of occasional smoking (about 10-15% in both sexes) so, when interpreting the prevalence estimates, the definition of smoking used by each survey should be taken into account.

The percentage of men who smoked other products but not cigarettes dropped from 15% in 1960 to 3-4% since the mid-1970s, with the prevalence somewhat higher for older men. Very few women smoked other tobacco products but not cigarettes. There are few data on prevalence by type of cigarette, but smoking of hand-rolled cigarettes only appears to be around 6% among men (perhaps rising to 9% in the 2000s) and 1% among women (perhaps rising to 4% in the 2000s). Several authors have noted that a higher proportion of men than women prefer dark tobacco brands (sources 11 and 12, see *Notes on sources of survey data*, p. 53).

During the period from the 1950s to the present, a decrease was seen within each age group in the percentages of men smoking; this appeared greatest among men aged over 65. There has always been a strong tendency for prevalence to decline with increasing age, this being particularly marked among women. Results of surveys of teenage smoking varied considerably, but most showed the prevalence of smoking among girls to be similar to that among boys, particularly when occasional smoking was included.

Comparison of survey and sales data suggests that surveys generally under-reported consumption by 5-30%. The estimated number of manufactured cigarettes smoked per person per day (sales-adjusted, averaged for the whole adult population) for men increased from 7 in 1960 to around 8 in the 1970s and 1980s, then decreased again to below 6 by the late 1990s. This may have decreased further during the 2000s. The number of cigarettes including hand-rolled cigarettes remained, for men, around 9 until the 1980s, after which it decreased to 7 by 2000 and possibly further since then. For women the number of cigarettes per person per day was 1-2 in the 1960s and 3-4 thereafter.

**Table 1.1** Total annual sales of tobacco products, 1861-1924

Year	Manufactured cigarettes & cigarillos		Cigars		Smoking tobacco tonnes	Chewing tobacco tonnes	Snuff tonnes	All tobacco products tonnes
	tonnes	millions	tonnes	millions				
1861	8	7	3 108	777	16 743	977	7 243	28 079
1862	10	8	3 120	780	17 093	981	7 320	28 524
1863	10	8	3 064	766	17 650	1 062	7 455	29 241
1864	10	8	3 108	777	17 982	1 093	7 734	29 927
1865	11	9	2 960	740	18 005	1 092	7 846	29 914
1866	12	10	3 248	812	18 237	1 119	7 946	30 562
1867	13	11	3 268	817	18 824	1 159	7 927	31 191
1868	14	12	3 120	780	19 045	1 224	9 747	33 150
1869	18	15	3 124	781	19 560	1 232	8 239	32 173
1870	20	17	2 860	715	19 412	1 200	7 808	31 300
1871	18	15	2 712	678	16 670	987	6 576	26 963
1872	48	40	3 336	834	16 190	950	6 508	27 032
1873	282	235	3 300	825	17 308	974	6 510	28 374
1874	502	418	3 284	821	17 775	998	6 643	29 202
1875	630	525	3 348	837	18 607	1 029	6 859	30 473
1876	736	613	3 396	849	19 470	1 079	6 924	31 605
1877	751	626	3 416	854	19 974	1 149	7 004	32 294
1878	826	688	3 360	840	20 028	1 175	6 983	32 372
1879	826	688	3 292	823	20 529	1 211	6 894	32 752
1880	946	788	3 400	850	21 230	1 244	6 886	33 706
1881	1 050	875	3 396	849	21 696	1 237	6 897	34 276
1882	1 127	939	3 604	901	22 266	1 269	6 962	35 228
1883	1 127	939	3 672	918	22 964	1 284	6 860	35 907
1884	1 105	921	3 724	931	23 729	1 222	6 775	36 555
1885	1 063	886	3 628	907	23 955	1 225	6 586	36 457
1886	1 030	858	3 524	881	23 771	1 210	6 446	35 981
1887	1 002	835	3 536	884	23 992	1 219	6 242	35 991
1888	1 115	929	3 496	874	24 389	1 249	6 049	36 298
1889	1 026	855	3 508	877	24 704	1 214	5 898	36 350
1890	1 062	885	3 368	842	24 962	1 223	5 732	36 347
1891	1 141	951	3 276	819	25 160	1 250	5 507	36 334
1892	1 289	1 074	3 272	818	25 225	1 232	5 478	36 496
1893	1 405	1 171	3 196	799	24 935	1 194	5 353	36 083
1894	1 457	1 214	3 128	782	25 107	1 181	5 308	36 181
1895	1 571	1 309	3 108	777	25 530	1 148	5 237	36 594
1896	1 776	1 480	3 124	781	26 411	1 142	5 187	37 640
1897	1 766	1 472	3 080	770	26 752	1 129	4 954	37 681
1898	1 859	1 549	3 140	785	27 431	1 144	4 915	38 489
1899	1 950	1 625	3 092	773	27 912	1 198	4 905	39 057
1900	2 161	1 801	2 880	720	27 734	1 135	4 918	38 828
1901	2 215	1 846	2 624	656	27 874	1 085	4 855	38 653
1902	2 372	1 977	2 580	645	28 429	1 075	4 606	39 062
1903	2 556	2 130	2 628	657	27 833	1 108	4 554	38 679
1904	2 641	2 201	2 660	665	28 340	1 181	4 640	39 462
1905	2 710	2 258	2 684	671	28 498	1 185	4 716	39 793
1906	3 026	2 522	2 688	672	28 388	1 162	4 831	40 095
1907	3 353	2 794	2 384	596	28 724	1 150	4 851	40 462
1908	3 488	2 907	2 316	579	29 156	1 157	4 756	40 873
1909	3 661	3 051	2 312	578	29 493	1 142	4 861	41 469
1910	3 900	3 250	2 368	592	29 960	1 151	4 879	42 258
1911	4 224	3 520	2 336	584	30 513	1 156	4 650	42 879
1912	4 607	3 839	2 444	611	31 498	1 150	4 719	44 418
1913	4 858	4 048	2 592	648	31 552	1 147	4 715	44 864
1923	10 121	8 434	1 452	363	38 082	1 078	4 224	54 957
1924	12 035	10 029	1 348	337	40 222	1 076	3 917	58 598

Source: see *Notes on sources of sales data: Sales data before 1960*, p. 49

**Table 1.2** Total annual sales of tobacco products, 1932-1959

Year	Manufactured cigarettes		Cigars		Cigarillos		Smoking tobacco tonnes	Chewing tobacco tonnes	Snuff tonnes	All tobacco products tonnes
	tonnes	millions	tonnes	millions	tonnes	millions				
1932	22 106	18 422	764	191	163	102	32 348	937	2 551	58 870
1933	21 767	18 139	720	180	165	103	32 274	923	2 413	58 262
1934	20 815	17 346	656	164	176	110	31 874	891	2 309	56 721
1935	20 082	16 735	616	154	189	118	30 364	848	2 169	54 268
1936	20 628	17 190	632	158	208	130	30 723	853	2 026	55 070
1937	21 684	18 070	680	170	256	160	29 574	810	1 897	54 901
1938	22 468	18 723	592	148	256	160	29 314	767	1 716	55 113
1939	24 601	20 501	620	155	258	161	31 841	685	1 628	59 633
1940	22 802	19 002	632	158	278	174	29 990	564	1 396	55 663
1941	18 276	15 230	268	67	182	114	24 425	603	1 112	44 866
1942	13 228	11 023	240	60	182	114	15 011	542	1 246	30 449
1943	12 048	10 040	232	58	130	81	11 560	447	1 175	25 592
1944	10 690	8 908	164	41	136	85	9 259	335	802	21 386
1945	15 930	13 275	192	48	141	88	14 470	470	883	32 086
1946	22 260	18 550	200	50	144	90	18 581	572	880	42 637
1947	29 551	24 626	236	59	149	93	23 961	696	892	55 485
1948	32 257	26 881	212	53	125	78	26 649	721	856	60 820
1949	34 186	28 488	272	68	160	100	21 075	644	786	57 123
1950	38 252	31 877	396	99	245	153	21 643	612	757	61 905
1951	41 546	34 622	424	106	251	157	19 856	613	729	63 420
1952	43 649	36 374	412	103	304	190	18 415	574	699	64 053
1953	43 426	36 188	400	100	366	229	18 519	536	656	63 903
1954	43 878	36 565	416	104	381	238	18 120	515	555	63 865
1955	47 683	39 736	472	118	440	275	17 414	520	560	67 089
1956	51 042	42 535	588	147	472	295	17 505	529	574	70 710
1957	53 549	44 624	576	144	530	331	17 839	558	559	73 610
1958	55 264	46 053	764	191	573	358	18 327	507	493	75 927
1959	52 844	44 037	868	217	517	323	17 783	533	508	73 053

Source: see *Notes on sources of sales data: Sales data before 1960*, p. 49

**Table 1.3** Total annual sales of tobacco products, 1960-1989

Year	Manufactured cigarettes		Cigars and cigarillos			Smoking tobacco tonnes	Chewing tobacco and snuff tonnes	All tobacco products tonnes
	tonnes	millions	tonnes	cigars millions	cigarillos millions			
1960	52 729	44 617	1 490	242	325	18 057	985	73 261
1961	53 999	46 046	1 614	264	350	18 075	946	74 635
1962	55 765	47 923	1 746	285	380	18 262	883	76 656
1963	57 268	49 602	1 906	328	372	18 371	821	78 365
1964	57 732	50 401	2 105	378	371	17 269	884	77 990
1965	61 508	54 127	2 251	406	393	16 636	816	81 211
1966	63 843	56 635	2 426	440	416	15 952	790	83 011
1967	67 513	60 377	2 498	451	434	15 549	775	86 335
1968	70 186	63 282	2 648	492	425	15 540	723	89 097
1969	72 428	65 844	2 788	533	410	14 359	721	90 296
1970	75 982	69 650	2 866	546	426	13 366	694	92 907
1971	78 046	72 143	3 282	656	411	12 514	705	94 546
1972	77 312	72 070	3 477	710	398	11 513	681	92 982
1973	80 176	75 379	3 785	795	378	10 713	668	95 342
1974	84 883	80 492	4 466	965	379	10 263	683	100 295
1975	88 704	84 847	5 286	1 172	374	9 683	685	104 358
1976	86 922	83 872	5 973	1 358	338	8 705	691	102 291
1977	88 793	86 436	6 790	1 572	314	8 260	671	104 515
1978	86 444	84 900	6 685	1 562	273	7 613	655	101 396
1979	88 708	87 909	6 683	1 568	257	7 257	581	103 229
1980	87 628	87 628	7 053		1 926	7 140	516	102 337
1981	86 269	87 098	6 830		1 865	6 972	427	100 497
1982	86 266	87 941	6 321		1 726	6 908	416	99 911
1983	86 995	89 554	5 907		1 613	6 689	416	100 007
1984	87 681	91 153	5 680		1 551	6 469	391	100 220
1985	91 628	96 209	6 405		1 749	6 550	404	104 987
1986	89 200	94 606	5 870		1 603	5 846	372	101 288
1987	87 942	94 224	5 610		1 532	5 529	374	99 456
1988	85 913	92 999	5 405		1 476	5 235	382	96 936
1989	86 792	94 929	5 343		1 459	4 988	380	97 503

Source: see *Notes on sources of sales data: Sales data for 1960-1989*, p. 49

**Table 1.4** Total annual sales of tobacco products, 1990-2008

Year	Manufactured cigarettes		Cigars and cigarillos			Hand-rolling tobacco	Pipe chewing tobacco		Snuff	All tobacco products
			large	small						
	tonnes	millions	tonnes	millions	millions		tonnes	tonnes	tonnes	tonnes
1990	86 684	95 809	5 398	87	1 387	2 023	2 910	397	97 412	
1991	86 928	97 100	5 398	88	1 386	2 193	2 712	394	97 624	
1992	85 303	96 310	5 046	82	1 296	2 515	2 454	351	95 722	
1993	82 026	93 617	5 013	80	1 289	3 067	2 467	340	92 965	
1994	78 098	90 113	5 156	79	1 329	3 759	2 436	322	47	89 818
1995	75 717	88 336	5 350	75	1 386	4 110	2 334	334	47	87 892
1996	73 033	86 163	5 607	76	1 455	4 768	2 230	328	45	86 011
1997	69 548	82 983	5 753	76	1 495	5 270	2 045	319	44	82 979
1998	69 463	83 835	5 973	78	1 553	5 369	1 915	303	43	83 066
1999	68 534	83 675	6 123	80	1 592	5 611	1 775	309	42	82 394
2000	66 797	82 514	6 269	80	1 632	5 581	1 589	319	39	80 594
2001	66 771	83 464	6 335	85	1 645	5 633	1 454	333	38	80 565
2002	64 423	80 529	6 255	83	1 625	5 721	1 236	332	34	78 001
2003	55 719	69 649	6 335	1 730		5 954	1 041	352		69 402
2004	43 939	54 924	6 929	1 892		6 970	891			58 790
2005	43 841	54 801	6 767	1 848		7 009	773			58 389
2006	44 618	55 772	6 661	1 819		7 168	627			59 096
2007	43 956	54 945	6 196	1 692		7 095	611			57 902
2008	42 871	53 589	5 965	1 629		7 400	431			56 676

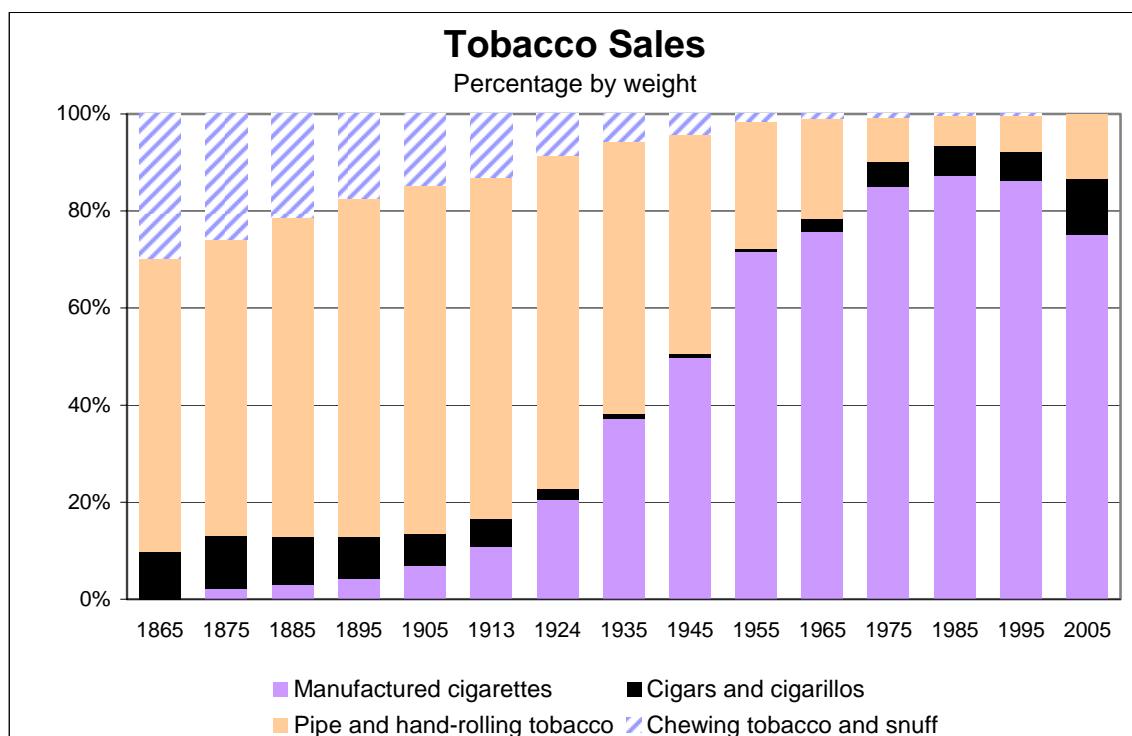
Source: see *Notes on sources of sales data: Sales data for 1990 onwards*, p. 50

**Table 1.5** Percentage of sales of tobacco in different forms (by weight), selected years

Year	Manufactured cigarettes	Cigars and cigarillos	Pipe and hand-rolling tobacco	Chewing tobacco and snuff
	%	%	%	%
1865	0.0	9.9	60.2	29.9
1875	2.1	11.0	61.1	25.9
1885	2.9	10.0	65.7	21.4
1895	4.3	8.5	69.8	17.4
1905	6.8	6.7	71.6	14.8
1913	10.8	5.8	70.3	13.1
1924	20.5	2.3	68.6	8.5
1935	37.1	1.1	56.1	5.6
1945	49.9	0.6	45.3	4.2
1955	71.5	0.7	26.1	1.6
1965	75.7	2.8	20.5	1.0
1975	85.0	5.1	9.3	0.7
1985	87.3	6.1	6.2	0.4
1995	86.1	6.1	7.3	0.4
2005	75.1	11.6	13.3	0.0

Source: calculated from Tables 1.1 - 1.4

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



Source: Table 1.5

**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
1865	9	0.0					29 914	2.9
1870	17	0.0					31 300	3.1
1875	525	0.1					30 473	3.1
1880	788	0.1					33 706	3.3
1885	886	0.1					36 457	3.5
1890	885	0.1					36 347	3.5
1895	1 309	0.1					36 594	3.5
1900	1 801	0.2					38 828	3.7
1901	1 846	0.2					38 653	3.7
1902	1 977	0.2					39 062	3.7
1903	2 130	0.2					38 679	3.6
1904	2 201	0.2					39 462	3.7
1905	2 258	0.2					39 793	3.7
1906	2 522	0.2					40 095	3.8
1907	2 794	0.3					40 462	3.8
1908	2 907	0.3					40 873	3.8
1909	3 051	0.3					41 469	3.9
1910	3 250	0.3					42 258	3.9
1913	4 048	0.4					44 864	4.1
1923	8 434	0.7					54 957	4.8
1924	10 029	0.9					58 598	5.1
1932	18 422	1.6					58 870	5.1
1933	18 139	1.6					58 262	5.0
1934	17 346	1.5					56 721	4.9
1935	16 735	1.4					54 268	4.7
1936	17 190	1.5					55 070	4.8
1937	18 070	1.6					54 901	4.8
1938	18 723	1.6					55 113	4.8
1939	20 501	1.8					59 633	5.2
1940	19 002	1.7					55 663	5.0
1941	15 230	1.4					44 866	4.1
1942	11 023	1.0					30 449	2.8
1943	10 040	0.9					25 592	2.3
1944	8 908	0.8					21 386	2.0
1945	13 275	1.2					32 086	2.9
1946	18 550	1.6					42 637	3.7
1947	24 626	2.1					55 485	4.8
1948	26 881	2.3					60 820	5.2
1949	28 488	2.4					57 123	4.8
1950	31 877	2.7	19 934	1.7	51 811	4.4	61 905	5.2
1951	34 622	2.9	18 288	1.5	52 910	4.5	63 420	5.4
1952	36 374	3.1	16 961	1.4	53 335	4.5	64 053	5.4
1953	36 188	3.0	17 057	1.4	53 245	4.5	63 903	5.4
1954	36 565	3.1	16 689	1.4	53 254	4.5	63 865	5.4
1955	39 736	3.3	16 039	1.3	55 775	4.7	67 089	5.6
1956	42 535	3.5	16 123	1.3	58 658	4.9	70 710	5.9
1957	44 624	3.7	16 431	1.4	61 055	5.1	73 610	6.1
1958	46 053	3.8	16 880	1.4	62 933	5.2	75 927	6.3
1959	44 037	3.6	16 379	1.3	60 416	4.9	73 053	6.0

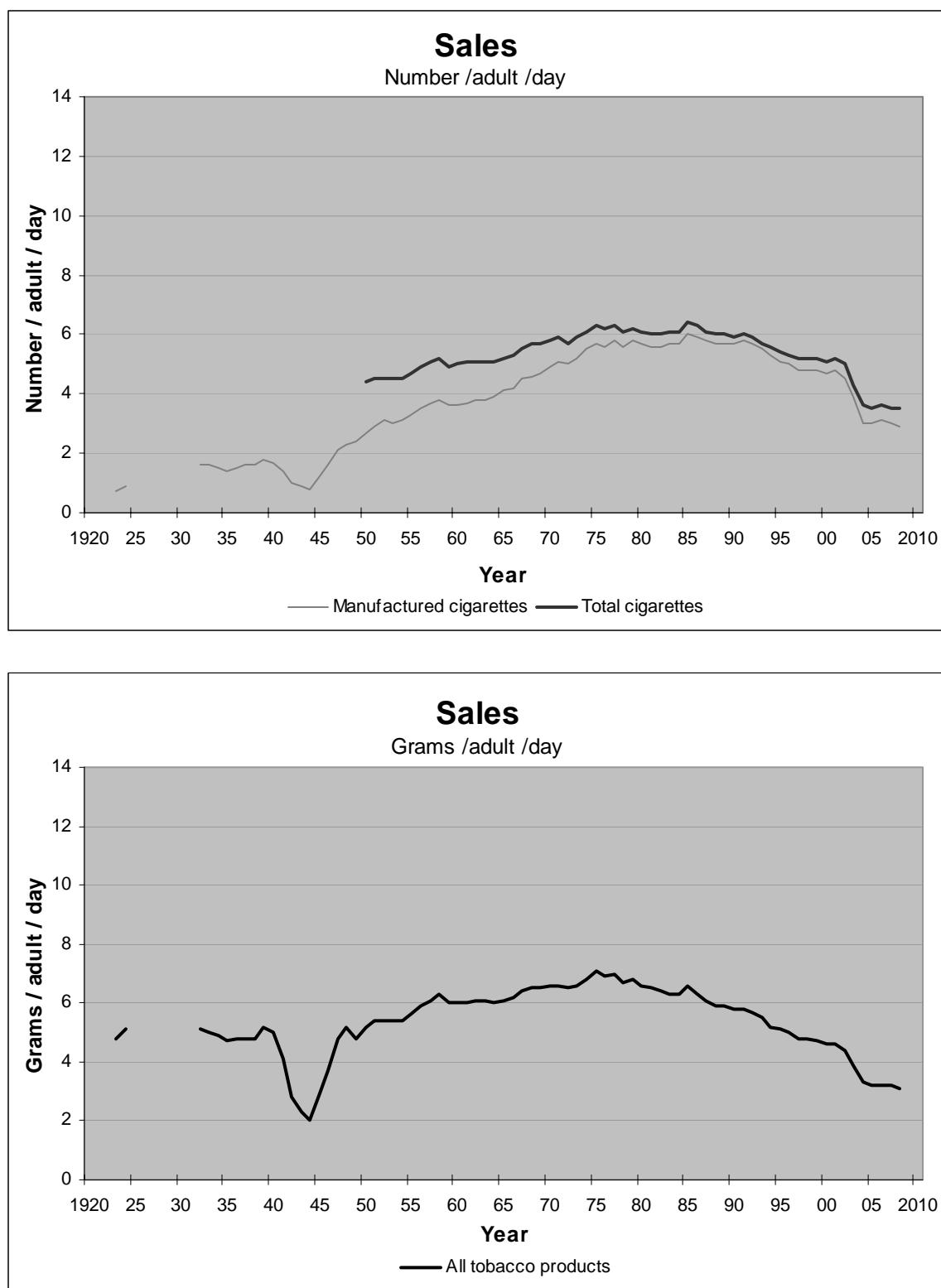
**Table 2** (continued)

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
1960	44 617	3.6	16 631	1.4	61 248	5.0	73 261	6.0
1961	46 046	3.7	16 648	1.3	62 694	5.1	74 635	6.0
1962	47 923	3.8	16 820	1.3	64 743	5.1	76 656	6.1
1963	49 602	3.8	16 921	1.3	66 523	5.1	78 365	6.1
1964	50 401	3.9	15 906	1.2	66 307	5.1	77 990	6.0
1965	54 127	4.1	15 323	1.2	69 450	5.2	81 211	6.1
1966	56 635	4.2	14 693	1.1	71 328	5.3	83 011	6.2
1967	60 377	4.5	14 321	1.1	74 698	5.5	86 335	6.4
1968	63 282	4.6	14 313	1.0	77 595	5.7	89 097	6.5
1969	65 844	4.7	13 225	0.9	79 069	5.7	90 296	6.5
1970	69 650	4.9	12 311	0.9	81 961	5.8	92 907	6.6
1971	72 143	5.1	11 526	0.8	83 669	5.9	94 546	6.6
1972	72 070	5.0	10 604	0.7	82 674	5.7	92 982	6.5
1973	75 379	5.2	9 867	0.7	85 246	5.9	95 342	6.6
1974	80 492	5.5	9 453	0.6	89 945	6.1	100 295	6.8
1975	84 847	5.7	8 919	0.6	93 766	6.3	104 358	7.1
1976	83 872	5.6	8 018	0.5	91 890	6.2	102 291	6.9
1977	86 436	5.8	7 608	0.5	94 044	6.3	104 515	7.0
1978	84 900	5.6	7 012	0.5	91 912	6.1	101 396	6.7
1979	87 909	5.8	6 684	0.4	94 593	6.2	103 229	6.8
1980	87 628	5.7	6 576	0.4	94 204	6.1	102 337	6.6
1981	87 098	5.6	6 422	0.4	93 520	6.0	100 497	6.5
1982	87 941	5.6	6 363	0.4	94 304	6.0	99 911	6.4
1983	89 554	5.7	6 161	0.4	95 715	6.1	100 007	6.3
1984	91 153	5.7	5 958	0.4	97 111	6.1	100 220	6.3
1985	96 209	6.0	6 033	0.4	102 242	6.4	104 987	6.6
1986	94 606	5.9	5 384	0.3	99 990	6.3	101 288	6.3
1987	94 224	5.8	5 093	0.3	99 317	6.1	99 456	6.1
1988	92 999	5.7	4 822	0.3	97 821	6.0	96 936	5.9
1989	94 929	5.7	4 594	0.3	99 523	6.0	97 503	5.9
1990	95 809	5.7	2 662	0.2	98 471	5.9	97 412	5.8
1991	97 100	5.8	2 886	0.2	99 986	6.0	97 624	5.8
1992	96 310	5.7	3 309	0.2	99 619	5.9	95 722	5.7
1993	93 617	5.5	4 036	0.2	97 653	5.7	92 965	5.5
1994	90 113	5.3	4 946	0.3	95 059	5.6	89 818	5.2
1995	88 336	5.1	5 408	0.3	93 744	5.4	87 892	5.1
1996	86 163	5.0	6 274	0.4	92 437	5.3	86 011	5.0
1997	82 983	4.8	6 934	0.4	89 917	5.2	82 979	4.8
1998	83 835	4.8	7 064	0.4	90 899	5.2	83 066	4.8
1999	83 675	4.8	7 383	0.4	91 058	5.2	82 394	4.7
2000	82 514	4.7	7 343	0.4	89 857	5.1	80 594	4.6
2001	83 464	4.8	7 412	0.4	90 876	5.2	80 565	4.6
2002	80 529	4.5	7 528	0.4	88 057	5.0	78 001	4.4
2003	69 649	3.9	7 834	0.4	77 483	4.3	69 402	3.9
2004	54 924	3.0	9 171	0.5	64 095	3.6	58 790	3.3
2005	54 801	3.0	9 222	0.5	64 023	3.5	58 389	3.2
2006	55 772	3.1	9 432	0.5	65 204	3.6	59 096	3.2
2007/1	54 945	3.0	9 336	0.5	64 281	3.5	57 902	3.2
2008/1	53 589	2.9	9 737	0.5	63 326	3.5	56 676	3.1

1 Uses population data for 2006

Source: Manufactured cigarettes and all tobacco products, Tables 1.1 - 1.4. Hand-rolled cigarettes, see *Notes on sources of sales data: Estimates of numbers of hand-rolled cigarette*, p. 52. 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 2 includes data for earlier years (not shown in this figure).

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

Year	Filter %	Blond %	SWAT mg/cig
1950			35.0
1958	7.5		
1959	8.7		
1960	11.5		30.0
1961	14.3		
1962	17.0		
1963	19.0		
1964	21.5		
1965	24.8		
1966	28.7		
1967	31.9		
1968	33.6		
1969	35.6		
1970	38.3		25.0
1971	42.4		
1972	46.6		
1973	49.9		
1974	53.8		
1975	56.6		
1976	59.3		
1977	59.0		
1978	58.3	20.1	
1979	60.5	24.5	
1980	61.4	30.2	
1981	62.5	34.7	
1982	63.8	38.4	
1983	65.4	42.2	
1984	67.9	46.4	16.5
1985	70.2	50.7	
1986	71.7	53.5	15.9
1987	73.3	56.5	
1988	74.9	58.8	
1989	76.3	60.8	
1990	78.5	63.8	13.4
1991	80.5	67.6	12.8
1992	82.3	68.6	12.3
1993	83.2	70.0	11.5
1994	84.2	71.2	11.3
1995	85.3	72.7	11.3
1996	86.7	74.2	11.0
1997	87.5	76.1	10.2
1998	88.9	78.7	10.1
1999	90.1	80.7	10.1
2000	91.0	82.5	10.1
2001	91.8	84.2	9.9
2002	92.6	85.8	8.9
2004	94.4	88.1	
2005	94.2	89.9	

Source: see *Notes on sources of sales data: Plain/Filter cigarette sales*, p. 52, *Dark/Blond cigarette sales*, p. 53 and *Tar and nicotine machine yields of cigarettes*, p. 53.

**Table 4M** Prevalence of smoking, males: selected surveys by age  
(continues on p. 20)

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
53	1	A	R									74		74			73			65			72
53	1	A	A									79		78			76			69			77
56	26	UC	R										84		79			69			77		
56	26	A	R										88		82			74			74		81
60	1	MCR											57										
60	1	U	A									69		75		75			72			73	
60	8	U	R										49										
63	10	UC	U											59									
63	10	A	U											66									
64	13	UC	U*											64									
64	40	UC	*									49											
64	40	U	A									69		67									68
65	1	MCR											43										
65	1	U	A									75		73		77		75		66			72
65	8	U	R										50										
67	1	MCR											45										
67	1	MCA											62										
67	1	U	A									76		76		74		70		61			72
70	8	U	R										53										
71	17	U	R			21	33	47	51														
71	17	U	A			60	64	69	70														
71	19	A	U									81	80	76									78
74	4	U	A												59								
74	25	U	R			35																	
76	1	MCR											45										
76	1	MCA											56										
76	1	A	U										62										
76	4	UC	U										57										
76	4	U	A									74		62		64		51		54		60	
76	4*	UC	U											53									
76	4*	U	U											57									
76	8	U	R										47										
76	11	UC	U											64									
76	18	UC	*			32																	
76	18	U	U			20	27	35	40	44												33	
77	3	MCR				10		31	55													29	
77	3	U	A			31		53	69													48	
77	4	U	R											41									
77	4	UCA												47									
77	4	U	A									64		56		51		53		38		51	
77	8	U	R										51										
78	12	MCR												45									
78	12	TCR										61		59		63		52		39		28	
78	12	AR										64		65		67		56		43		50	
78	17	U	R			10	22	30	40													54	
78	20	UC	U									55											
78	20	A	U									73											
78	24	UC	R			5		20		40		38											

**Table 4F** Prevalence of smoking, females: selected surveys by age  
(continues on p. 21)

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	
53	1	A	R									24	-	-	-	-	-	54	-	-	-	-	2	17
53	1	A	A									29	34	39	44	49		59	64	69	74	79		35
56	26	UC	R																					
56	26	A	R																					
60	1	MCR																						
60	1	U	A									54	38	32	24									28
60	8	U	R																					
63	10	UC	U																					
63	10	A	U																					
64	13	UC	U*																					
64	40	UC	*									15												
64	40	U	A									49	40											46
65	1	MCR																						
65	1	U	A									63	47	40	29									33
65	8	U	R																					
67	1	MCR																						
67	1	MCA																						
67	1	U	A									66	48	30	20									32
70	8	U	R																					
71	17	U	R									16	22	28	32									
71	17	U	A									67	76	80	76									
71	19	A	U																					
74	4	U	A																					
74	25	U	R									24												
76	1	MCR																						
76	1	MCA																						
76	1	A	U																					
76	4	UC	U																					
76	4	U	A										56	39	26		17		7					31
76	4*	UC	U																					
76	4*	U	U																					
76	8	U	R																					
76	11	UC	U																					
76	18	UC	*									26												
76	18	U	U									15	22	31	34	38								28
77	3	MCR										5	30	38										
77	3	U	A									20	62	60										
77	4	U	R																					
77	4	UC	A																					
77	4	U	A										50	35	29		19		10					29
77	8	U	R																					
78	12	MCR																						
78	12	TC	R																					
78	12	A	R																					
78	17	U	R									16	16	28	34									
78	20	UC	U																					
78	20	A	U																					
78	24	UC	R									3	32	46	50									

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

Year	Source	Product	Frequency	Age Groups																				All ages		
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	80+		
79	1	MCR										-	-	-	-	-	-	-	-	-	-	-	-			
79	1	MCA										24	29	34	39	44	49	54	59	64	69	74	79	80+		
79	1	AU																								
79	4	UAA										63	65	54	45	45	43								54	
79	4*	UCU																								
79	4*	UAA										52	49	59	46	46	38								48	
79	8	UR																								
79	21	UC*										26														
79	28	UU											64													
80	3	UC*										27														
80	3	UA										26	46	63												45
80	6	UCR																								
80	6	AR										28	53	55	50	46	40	34	30							44
80	7	MCU																								
80	7	UU																								
80	8	UR																								
81	3	UC*										9	24	48												26
81	3	UA										24	44	60												43
81	4	UAA																								
81	9	UCU																								
81	9	AU																								
81	22	UU										36														
82	4	UAA											63	61	54	49	49	33								49
83	3	UC*										4	23	41	53											26
83	3	UA										16	36	47	58											36
83	4	UAA																								
83	4*	UA																								
83	23	UC*										2	9	20	34	45										16
84	3	UC*										5	20	42	60											27
84	3	UA										10	34	52	66											36
85	4	UU																								
86	4	UCR											29		51	52	39	34	22							39
86	4	UAA											37		59	60	46	39	27							46
86	5	UCR												40	57	54	48	42	35	27	22					44
86	14	UCR																								
86	14	UCA																								
86	14	AAA																								
86	15	UCR																								
86	15	UCA																								
86	15	AAA																								
87	8	UR																								
87	16	UCR																								
87	16	UCA																								
87	16	AAA																								
87	29	UCU																								
87	29	AU																								

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

Year	Source	Product	Frequency	Age Groups																				All ages		
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	80+		
79	1	MCR																								
79	1	MCA																								
79	1	AU																								
79	4	UA																								
79	4*	UCU																								
79	4*	UA																								
79	8	UR																								
79	21	UC*																								
79	28	UU																								
80	3	UC*																								
80	3	UA																								
80	6	UCR																								
80	6	AR																								
80	7	MCU																								
80	7	UU																								
80	8	UR																								
81	3	UC*																								
81	3	UA																								
81	4	UA																								
81	9	UCU																								
81	9	AU																								
81	22	UU																								
82	4	UA																								
83	3	UC*																								
83	3	UA																								
83	4	UA																								
83	4*	UA																								
83	23	UC*		1	12	16	35	39																		
84	3	UC*		7		23	45	50																		
84	3	UA		14		37	61	65																		
85	4	UU																								
86	4	UCR																								
86	4	UA																								
86	5	UCR																								
86	14	UCR																								
86	14	UCA																								
86	14	AAA																								
86	15	UCR																								
86	15	UCA																								
86	15	AAA																								
87	8	UR																								
87	16	UCR																								
87	16	UCA																								
87	16	AAA																								
87	29	UCU																								
87	29	AU																								

**Table 4M** (*continued from p. 20, continues on p.24*)  
Prevalence of smoking, males

Year	Source	Product	Frequency	Age Groups																			All ages		
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75		
88	3	UC *		2		21		42		54		-	-	-	-	-	-	-	-	-	-	-	26		
88	3	U A		5		27		51		62		24	29	34	39	44	49	54	59	64	69	74	79	33	
88	8	U R																						39	
88	27	U R										20	47	46	40		31							36	
88	29	TC U										51		57		40								42	
88	29	A U										53		62		43								45	
88	29*	TC U										48		53		48								41	
88	29*	A U										48		54		54								44	
89	4	UC R															45								
89	4	U A															49								
89	27	U R										21	46	46	46		29							37	
89	29	TC U										49		51		42								36	
89	29	A U										49		55		46								41	
89	29*	TC U										55		61		47								47	
89	29*	A U										55		63		49								49	
90	3	UC *										24													
90	3	U A										14	33	57	62									39	
90	8	U R															38								
90	15	UC R															40	25	24					31	
90	15	U C A															40	25	25					31	
90	15	A A															41	33	31					36	
90	23	UC *		1	2	7	23	34																	
90	27	U R										25	45	49	45		34							39	
90	29	MC U										61		47		45								44	
90	29	TC U										62		48		49								46	
90	29	A U										62		52		52								49	
90	32	U *										6	11												
90	32	U R		0		10																			
91	3	U *		3		8		31		50														19	
91	3	U A		9		20		48		68														32	
91	4	U R										59		36		44		47		27		22		38	
91	4	U A										69		48		51		54		33		26		46	
91	6	U C R										12	34	50	51	45	39	30	23	17				38	
91	27	U R										20	46	53	44		32							39	
91	29	MC U										57		50		43								42	
91	29	TC U										58		58		45								47	
91	29	A U										59		59		52								50	
91	31	MC U															39								
92	3	U *		2		24		37		69														29	
92	3	U A		5		30		43		76														35	
92	4	U R										63		59		54		53		40		20		48	
92	27	U R										22	42	48	45		32							37	
92	29	MC U										52		53		38								40	
92	29	TC U										53		56		42								43	
92	29	A U										55		58		51								47	
92	31	MC U										21		31		26								38	
92	34	UC R															40								
92	34	U A										54		56		47		45		29		23		44	

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

Year	Source	Product	Frequency	Age Groups																				All ages		
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	80+		
88	3	UC *		3		19		40		43		-	-	-	-	-	-	-	-	-	-	-	-	24		
88	3	U	A		5		30		47		57														32	
88	8	U	R														19									
88	27	U	R									17	35	31	17	7									18	
88	29	TC	U									48		42		21									31	
88	29	A	U									48		42		21									31	
88	29*	TC	U									47		34		23									27	
88	29*	A	U									47		34		23									27	
89	4	UC	R														30									
89	4	U	A														33									
89	27	U	R									18	34	36	16	9									19	
89	29	TC	U									41		36		20									27	
89	29	A	U									41		37		20									28	
89	29*	TC	U									55		40		27									30	
89	29*	A	U									55		40		28									30	
90	3	UC	*									20														
90	3	U	A		9		23	54	51																32	
90	8	U	R														19									
90	15	UC	R																							
90	15	UC	A																							
90	15	A	A																							
90	23	UC	*	0	3	13	23	38																		
90	27	U	R									16	42	35	19	9									21	
90	29	MC	U									54		41		20									28	
90	29	TC	U									56		42		21									30	
90	29	A	U									56		42		22									30	
90	32	U	*		4	7																				
90	32	U	R	2		7																				
91	3	U	*	2		10	33	34																	18	
91	3	U	A	6		23	49	53																	30	
91	4	U	R									42		42		29		15		9		3		26		
91	4	U	A									62		54		35		26		9		5		35		
91	6	UC	R		7		27	38				35		24		15		9		4		2		20		
91	27	U	R									20	38	37	22	10								22		
91	29	MC	U									56		43		24									31	
91	29	TC	U									57		44		24									31	
91	29	A	U									57		44		24									31	
91	31	MC	U													28										
92	3	U	*	6		23	36	49																	26	
92	3	U	A	9		31	44	57																	33	
92	4	U	R														27									
92	4	U	A									63		52		39		21		12		8		33		
92	27	U	R									20	34	35	21										22	
92	29	MC	U									46		47		27									32	
92	29	TC	U									47		47		27									32	
92	29	A	U									47		47		27									33	
92	31	MC	U									27		34		25				14					28	
92	34	UC	R														27									
92	34	U	A									54		44		32		14		8		10			29	

**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+			
93	4	U	R									-	-	-	-	-	-	-	-	-	-	-	-				
93	4	U	A									24	29	34	39	44	49	54	59	64	69	74	79		40		
93	27	U	R							15		48		48		42		32				18			36		
93	31	MC	U								21		31		26						22				37		
93	34	UC	R																								
93	34	U	A									55		58		42									40		
93	37	U	*		2	9	19			34															15		
93	37	U	A		6	17	29			43															22		
94	3	UC	*				28																				
94	3	U	A		8	24	52	55																		31	
94	27	U	R					16		41		46		40			31				18				35		
94	29	MC	U						45			58			34						21				40		
94	29	TC	U						50			60			37						25				44		
94	29	A	U						50			63			42						33				47		
94	30	MC	U						48			59			34						22				41		
94	30	TC	U						51			61			37						26				44		
94	30	A	U						51			63			41						33				48		
94	31	MC	U							21		31		26							22				36		
94	36	U	R		11		23																				
95	3	UC	*		2	17	38	58																		27	
95	3	U	A		5	30	47	62																		35	
95	3*	U	A			53																					
95	4	U	A					55		59			37			33			14							41	
95	15	UC	R										31		21		19									24	
95	15	UC	A										32		22		20									25	
95	15	A	A										33		28		25									29	
95	27	U	R				20		44		47			42			27				19					36	
95	30	MC	U					44			45			40							13					35	
95	30	TC	U					49			50			45							17					40	
95	30	A	U					50			50			47							21					42	
95	31	MC	U						22		31		25								22					34	
95	34	A	R						46		47		45			38			17							39	
95	34	U	A						52		53		47			39			18							42	
96	3	U	*		4	19	45	52																		27	
96	3	U	A		10	29	52	60																		35	
96	3*	U	A				40																				
96	14	UC	R										30		21		16										23
96	14	UC	A										33		25		18										26
96	14	A	A										36		29		20										29
96	16	UC	R										38		34		25										33
96	16	UC	A										40		34		28										35
96	16	A	A										44		41		33										40
96	27	U	R					19		41		40			38		25				16					30	
96	31	MC	U						21		31		26								23					33	

**Table 4F** (*continued from p.23, continues on p.27*)  
Prevalence of smoking, females

Year	Source	Product	Frequency	Age Groups																				All ages										
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	80+										
93	4	U	R																						23									
93	4	U	A																						40	44	29	9	5	27				
93	27	U	R																						19	34	37	21	11	6	21			
93	31	MC	U																						25	35	24			16	28			
93	34	UC	R																						23									
93	34	U	A																						40	44	29	9	5		27			
93	37	U	*		1																				31						15			
93	37	U	A		5																				23	36	41				24			
94	3	UC	*																						26									
94	3	U	A		8																				26	45	49				31			
94	27	U	R																						17	36	35	24	9	5	21			
94	29	MC	U																						43		44	27		11	29			
94	29	TC	U																						46		46	27		11	31			
94	29	A	U																						46		46	27		11	31			
94	30	MC	U																						42		45	27		11	30			
94	30	TC	U																						46		47	27		11	31			
94	30	A	U																						46		47	27		11	31			
94	31	MC	U																						26		33	25		16	28			
94	36	U	R		13		25																											
95	3	UC	*		3		23		40	45																					25			
95	3	U	A		9		31		57	55																					35			
95	3*	U	A				51																											
95	4	U	A																						62		33	35	14	4	30			
95	15	UC	R																						34		19	7			22			
95	15	UC	A																						36		20	8			23			
95	15	A	A																						37		20	9			24			
95	27	U	R																						14		31	34	24	12	4	21		
95	30	MC	U																						51		44	30		9		31		
95	30	TC	U																						53		45	30		9		31		
95	30	A	U																						53		45	30		9		31		
95	31	MC	U																						25		34	25		16		28		
95	34	A	R																						52		35	33	19	8		28		
95	34	U	A																						59		39	37	21	10		31		
96	3	U	*		2		18		40	49																						26		
96	3	U	A		3		29		49	56																						33		
96	3*	U	A																						38									
96	14	UC	R																														15	
96	14	UC	A																														17	
96	14	A	A																														17	
96	16	UC	R																														17	
96	16	UC	A																														18	
96	16	A	A																														18	
96	27	U	R																						18		29	30	24	10	4	19		
96	31	MC	U																						24		33	24		18		27		

**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	25	30	35	40	45	50	55	60	65	70	75	80+			
97	3	UC *		1		14		32		37	49	-	-	-	-	-	-	-	-	-	-	-	-	24			
97	3	U A		3		20		37		42	54	24	29	34	39	44	49	54	59	64	69	74	79		28		
97	4	U A									48		57		46			26					18		40		
97	5	U R									32		48		43		35		26					15		34	
97	27	U R									26		38		46		38		28					15		33	
97	31	MCU									20		30		26								24		32		
97	34	U R		1		14		31		43																	
97	34	U A		3		20		36		48																	
98	4	UC R									15		44		51		44			29		12			39		
98	4	U A									18		47		53		47			30		12			41		
98	4*	U A																									
98	5	U R									35		48		44		34		28					11		34	
98	27	U R									20		34		41		38			26				15		31	
98	31	MCU									20		31		26								23		32		
98	36	A *		5		20																					
98	36	A R		9		28																					
99	4	U A									46		63		57		49		49		27		15		44		
99	4*	U A									32		55		47		50		41		20		14		39		
99	5	U R									38				49		42		36		23		12		34		
99	30	U U									53				54				44					22		43	
99	31	MCU									19		30		26									25		31	
99	34	TC R		2		13		32		41		43		45		40		28		22		15			31		
99	34	U A		4		18		40		46		52		52		46		33		26		17			37		
99	38	UC *				9	18	30	31	39	*														30		
99	38	UC *									30																
99	38	UC A					18	32	41	44	51	54													41		
99	38	UC A					41																				
00	4	U A									56		56		34			39					14		39		
00	4*	U A									44		58		54		52		46		20		8		41		
00	5	U R									34				46		42		34		24		13		33		
00	27	U R									25		39		40		38			26				12		31	
00	39	UC *									42		46	54													
00	39	UC A									50		53	60													
01	4	U A									36		40		46			23					14		33		
01	4*	U A									43		55		59		44		45		25		14		41		
01	5	U R									33				45		42		34		26		11		32		
01	39	UC *									43																
01	39	UC A									53																
02	5	U R													32												
02	27	U R									37				43			33					10		32		
02	30	MCR									51				46			33					16		35		
02	30	TC R									52				47			42					24		40		
02	30	A R									52				48			47					27		43		
02	30	MCU									54				51			39					17		39		
02	30	TC U									57				53			48					26		45		
02	30	A U									57				54			55					29		47		
02	33	U *									32																
02	33	U A									45																
02	35	U R													31												
02	35	U A									49				46		41		39		29		16		38		
02	36	A *		4		20																					
02	36	A R		7		26																					
02	39	UC *									40		43	51												42	
02	39	UC A									48		51	58												50	

**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	25	30	35	40	45	50	55	60	65	70	75				
97	3	UC *		2		15		33		39		39	-	-	-	-	-	-	-	-	-	-	23				
97	3	U A			6		21		41		45		48											30			
97	4	U A											50		48		33		15					30			
97	5	U R											27		38		31		20		11			4			
97	27	U R											26		28		36		23		9			22			
97	31	MC U											24		34		26							21			
97	34	U R			1		15		33		39													27			
97	34	U A				5		21		41		47															
98	4	UC R											24		46		39		28		10		8		26		
98	4	U A											24		46		40		28		11		10		27		
98	4*	U A																	28								
98	5	U R											29				36		34		19		12		23		
98	27	U R											20		30		32		24		10		5		20		
98	31	MC U											23		32		29								26		
98	36	A *			6		25																				
98	36	A R				11		31																			
99	4	U A											41		52		52		43		22		12		6	33	
99	4*	U A											41		46		48		43		25		15		8	32	
99	5	U R											28				38		31		18		11		5	22	
99	30	U U											52				47				37					34	
99	31	MC U											21		32		27									26	
99	34	TC R			2		21		33		39		37		37		33		22		11		7		25		
99	34	U A				4		32		43		49		43		43		39		26		14		8		30	
99	38	UC *					9	21	33	37	41	*													32		
99	38	UC *											33														
99	38	UC A											22	38	48	48	52	57								45	
99	38	UC A											47														
00	4	U A											52		44		38		28							34	
00	4*	U A											44		59		47		37		25		15		7	34	
00	5	U R											26				35		31		19		11		5	21	
00	27	U R											17		31		32		26		13					21	
00	39	UC *											40														
00	39	UC A											51														
01	4	U A											39		50		38		18							32	
01	4*	U A											36		47		39		40		25		7		2	29	
01	5	U R											29				36		32		21		11		3	21	
01	39	UC *											41														
01	39	UC A											52														
02	5	U R															21										
02	27	U R											31				32				20					21	
02	30	MC R											46				43				39					32	
02	30	TC R											49				46				40					34	
02	30	A R											49				46				40					34	
02	30	MC U											51				47				42					35	
02	30	TC U											54				50				43					37	
02	30	A U											54				50				43					37	
02	33	U *											33														
02	33	U A											44														
02	35	U R																	26								
02	35	U A															47		43		37		24		16	9	31
02	36	A *			3		20																				
02	36	A R				6		27																			
02	39	UC *											39	43	55											42	
02	39	UC A											48	52	60											50	

**Table 4M** (*continued from 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+			
03	5	U	R									-	-	-	-	-	-	-	-	-	-	-					
03	38	UC	*	1	4	7	11	21	29	37																	
03	38	UC	*				21		37																		
03	38	UC	A				31		46																		
03	39	UC	*					37	43															40			
03	39	UC	A					45	49																47		
04	5	U	R																								
04	27	U	R																								
04	34	A	R		3			36				39		35		30		18		10					28		
04	34	A	A		7			43				46		40		35		21		12					33		
05	30	MCR					35				28			22							10				23		
05	30	TCR						43				37		36								15				32	
05	30	AR						43				39		39								19				34	
05	30	MCU						37				32		28								12				26	
05	30	TCU						45				41		42								17				35	
05	30	AU						45				43		47								21				38	
05	39	UC	*						34																		
05	39	UC	A						41																		
06	27	UR																									
06	33	U	*						24																		
06	33	UA							35																		
06	36	A	*		3		13																				
06	36	AR			5		17																				
07	38	UC	*					18																			
07	38	UC	A					29																			

Source: see *Notes on sources of survey data*, p. 53  
 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. 53  
 All ages:     relates to ages reported; as given in original source

**Table 4F** (*continued from p.27*)  
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+		
03	5	U	R																							
03	38	UC	*	0	2	6	14	24	31	34																
03	38	UC	*				25		34																	
03	38	UC	A				36		45																	
03	39	UC	*					38	42																40	
03	39	UC	A					47	49																48	
04	5	U	R																							
04	27	U	R																							
04	34	A	R	5			30		30		30		21		9		6								22	
04	34	A	A	11			38		36		35		25		11		7								27	
05	30	MC	R				25			29		24							7						20	
05	30	TC	R				33			36		27							8						24	
05	30	A	R				33			36		27							8						24	
05	30	MC	U				31			38		27							9						24	
05	30	TC	U				39			45		31							10						29	
05	30	A	U				39			45		31							10						29	
05	39	UC	*					32																		
05	39	UC	A					41																		
06	27	U	R															21								
06	33	U	*					23																		
06	33	U	A					35																		
06	36	A	*	2		16																				
06	36	A	R	5		21																				
07	38	UC	*				16																			
07	38	UC	A				31																			

Source: see *Notes on sources of survey data*, p. 53  
 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. 53  
 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. 32)

Year	Source	Product	Estimated	Age Groups																			All ages	
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	
53	1	UC										-	-	-	-	-	-	-	-	-	-	-		
56	26	A *										24	29	34	39	44	49	54	59	64	69	74	79	15
60	1	MCE																						
64	13	UC E*																						
64	40	UC E										13												
65	1	MCE																						
71	17	UC E*										6.5	7.8	10	12	13								
71	19	A E										15	16	18										17
74	4	UC E																						
76	18	UC										9.3												
77	3	MCE										9.9												
77	4	UC E																						
78	12	TC										16	17	16	16	16	15	15	15	10	17			
78	20	A E										18												
79	4	UC E																						
79	21	UC										9.6												
80	3	UC E										12												
80	6	UC																						
81	3	UC E										12												
81	9	UC E																						
81	22	UC										9.5												
82	4	UC E																						
83	3	UC E										12												
83	4	UC E											14	18	18	17	17	14	17					
83	4*	UC E																						
83	23	UC										6.1												
84	3	UC E										12												
86	4	UC																						
86	5	UC																						
86	14	UC																						19
86	15	UC																						18
87	16	UC																						21
87	29	UC E										13	19	17										15
88	3	UC E										12												
88	27	UC																						
88	29	TC E										12	18	14										15
89	4	UC E																						
89	27	UC																						
89	29	TC E										13	19	21										18
90	3	UC E										14												
90	15	UC																						19
90	23	UC										5.0												
90	27	UC																						
90	29	TC E										15	16	17										15
91	3	UC E										9.9												
91	4	UC E																						
91	6	A																						
91	27	UC																						
91	29	TC E										14	18	17										16

**Table 5F** Number of cigarettes smoked per smoker per day, females:  
selected surveys by age  
(continues on p. 33)

Year	Source	Product	Estimated	Age Groups																		All ages		
				12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	
53	1	UC										-	-	-	-	-	-	-	-	-	-	4.0		
56	26	A *																						
60	1	MC E																						
64	13	UC E*																						10
64	40	UC E										7.7				7.9	9.1	9.4	8.6					
65	1	MC E																						
71	17	UC E*										5.3	5.6	7.8	7.9	6.4								
71	19	A E																						
74	4	UC E																						
76	18	UC										7.1												
77	3	MC E										7.8												
77	4	UC E																						
78	12	TC										11	11	12	11	11	11	8	3				11	
78	20	A E																						
79	4	UC E																						
79	21	UC										7.7												
80	3	UC E										9.6												
80	6	UC																						
81	3	UC E										10												
81	9	UC E																						
81	22	UC										8.0												
82	4	UC E																						
83	3	UC E										9.1												
83	4	UC E											11	11	14	10	11							12
83	4*	UC E																						
83	23	UC										7.6												
84	3	UC E										9.8												
86	4	UC																						
86	5	UC																						
86	14	UC														15	14	11						14
86	15	UC														15	15	12						14
87	16	UC														17	16	8.1						14
87	29	UC E										10		13		13								12
88	3	UC E										10												
88	27	UC																						
88	29	TC E										12		14		13								14
89	4	UC E																						
89	27	UC																						
89	29	TC E										11		15		13								12
90	3	UC E										12												
90	15	UC																						
90	23	UC										5.5												
90	27	UC																						
90	29	TC E											13		15		17							14
91	3	UC E										8.0												
91	4	UC E																						
91	6	A																						
91	27	UC																						
91	29	TC E																						
												14		14		13								14

**Table 5M** (*continued from p. 30*)  
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	-24	25	30	35	40	45	50	55	60	65	70	75			
92	3	UC E		11																						
92	4	UC E																								
92	27	UC																								
92	29	TC E		14							19			21			14						18			
92	34	TC												15												
93	27	UC												15												
93	34	TC												15												
93	37	UC E*		15																						
94	27	UC									16															
94	29	TC E		17							18			23			14						18			
94	30	TC E		17							19			23			15						19			
95	3	UC E		9.1																						
95	3	UC		6.0			10			11																
95	4	UC									17												18			
95	15	UC									16												17			
95	27	UC									16															
95	30	TC E		12							18			18			11						16			
95	34	TC									16															
96	3*	UC E		13																						
96	14	UC									21			20			20						21			
96	16	UC									22			23			16						21			
96	27	UC									14															
97	3	UC E		7.3													15									
97	4	UC E									16															
97	5	UC E*									16															
97	27	UC									14															
98	4	UC E*									13															
98	4*	UC E*									13															
98	5	UC E*									16															
98	27	UC		9.6			13						15			16			9.9			14				
98	36	UC		0.6	1.0																					
99	4*	UC E									14															
99	5	UC E*									16															
99	34	TC									15															
99	34	TC E		8.3																						
99	34	A		5.2	8.6			13						16												
99	38	UC		13	*	10	*	10	*													10				
99	38	UC E		10																						
00	4	UC E									13															
00	5	UC E*									16															
00	27	UC									14			16			16						16			
00	39	UC		11							12															
01	39	UC									12															
02	30	TC E		14							16			18			16						16			
02	39	UC		11							12															
03	38	UC E		9.8							12															
03	39	UC		11							12												12			
04	34	A		6.4	8.4			12			14			16			16			15			14			
05	30	MC E		11																						

**Table 5F** (continued from p. 31)  
Number of cigarettes smoked per smoker per day, females

Year Source Product Estimated	Age Groups																				All ages	
	12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	80+	
92 3 UC E	9.9								-	-	-	-	-	-	-	-	-	-	-	-		
92 4 UC E																						
92 27 UC																						
92 29 TC E									12		15		12									13
92 34 TC																						
93 27 UC																						
93 34 TC																						
93 37 UC E*		12																				
94 27 UC																						
94 29 TC E									14		14		16									14
94 30 TC E									14		14		18									14
95 3 UC E	7.8																					
95 3 UC	6.2	9.2	11																			
95 4 UC																						
95 15 UC																						13
95 27 UC																						
95 30 TC E									12		14		16									14
95 34 TC																						
96 3* UC E		10																				
96 14 UC																	14	16	9.5			14
96 16 UC																	15	18	18			17
96 27 UC																	13					
97 3 UC E	6.4																					
97 4 UC E																	12					
97 5 UC E*																		14				
97 27 UC																		12				
98 4 UC E*																		11				
98 4* UC E*																		12				
98 5 UC E*																		13				
98 27 UC									8.3		11		13					14			10	13
98 36 UC	0.4	1.4																				
99 4* UC E																		12				
99 5 UC E*																		13				
99 34 TC																		13				
99 34 TC E		7.6																				
99 34 A	3.4		8.0						11									14				
99 38 UC	6.4	*	8.1	*	9.5	*																9.2
99 38 UC E		8.3																				
00 4 UC E																		11				
00 5 UC E*																		13				
00 27 UC																		13				
00 39 UC			10																			
01 4 UC E																		13				
01 5 UC E*																		13				
01 39 UC			11																			
02 30 TC E				13							14		14						21			15
02 39 UC				9.7	11	12																10
03 38 UC E		9.9	9.5																			
03 39 UC		10	11																			11
04 34 A	3.4		8.3		9.3		11		13		12		12		12							11
05 30 MC E			10						11				18						12			13
05 30 TC E			10						11				18						12			13
05 39 UC			10																			
06 33 UC E			11																			

Source: see *Notes on sources of survey data*, p. 53  
 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)  
 All ages: \* = refer to *Notes on sources of survey data*, p. 53 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. 36)

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		
56	26	A*																					12	**
60	1	MC																						114%T
64	13	UC*																						**
64	40	UC																						**
65	1	MC																						83%T
71	17	UC*																						**
71	19	A																						13
76	18	UC																						**
77	3	MC																						**
78	12	TC																						79%T
78	20	A																						**
79	21	UC																						**
80	2	MC																						--
80	3	UC																						**
80	6	UC																						68%T
81	3	UC																						**
81	9	UC																						93%T
81	22	UC																						**
83	3	UC																						**
83	4	UC*																						95%T
83	4*	UC*																						100%T
83	23	UC																						**
84	3	UC																						**
86	4	UC																						87%T
86	5	UC																						78%T
86	14	UC																						6.5
86	15	UC																						6.7
87	16	UC																						8.1
87	29	UC*																						82%T
88	3	UC																						**
88	27	UC																						62%T
88	29	TC*																						87%T
89	4	UC																						94%T
89	27	UC																						62%T
89	29	TC*																						82%T
90	3	UC																						**
90	15	UC																						**
90	27	UC																						70%T
90	29	TC*																						92%T
91	3	UC																						**
91	4	UC*																						84%T
91	6	UC*																						72%T
91	27	UC																						72%T
91	29	TC*																						96%T
92	3	UC																						**
92	4	UC*																						89%T
92	27	UC																						70%T
92	29	TC*																						97%T
92	34	TC																						70%T

**Table 6F** Number of cigarettes smoked per person per day, females:  
selected surveys by age; with percentage total sales  
(continues on p. 37)

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+	
56	26	A*																							**
60	1	MC																							114%M
64	13	UC*																							1.1
64	40	UC																							**
65	1	MC																							83%M
71	17	UC*																							**
71	19	A																							**
76	18	UC																							**
77	3	MC																							**
78	12	TC																							1.5
78	20	A																							79%T
79	21	UC																							**
80	2	MC																							--
80	3	UC																							**
80	6	UC																							68%T
81	3	UC																							**
81	9	UC																							93%T
81	22	UC																							**
83	3	UC																							**
83	4	UC*																							95%T
83	4*	UC*																							100%T
83	23	UC																							**
84	3	UC																							**
86	4	UC																							87%T
86	5	UC																							78%T
86	14	UC																							2.0
86	15	UC																							2.5
87	16	UC																							2.1
87	29	UC*																							82%T
88	3	UC																							**
88	27	UC																							62%T
88	29	TC*																							87%T
89	4	UC																							94%T
89	27	UC																							62%T
89	29	TC*																							82%T
90	3	UC																							**
90	15	UC																							**
90	27	UC																							70%T
90	29	TC*																							4.1
91	3	UC																							92%T
91	4	UC*																							**
91	6	UC*																							84%T
91	27	UC																							72%T
91	29	TC*																							72%T
92	3	UC																							96%T
92	4	UC*																							**
92	27	UC																							89%T
92	29	TC*																							70%T
92	34	TC																							70%T

**Table 6M** (*continued from p. 34*)  
Number of cigarettes smoked per person per day, males

Year	Source	Product	Age Groups																			All ages	% T	
			12	13	14	15	16	17	18	19	20	25	30	35	40	45	50	55	60	65	70	75	80+	
93	27	UC																						69%
93	34	TC																						68%
93	37	UC*																						**
94	27	UC																						72%
94	29	TC*																						106%
94	30	TC*																						110%
95	3	UC																						**
95	3	UC																						**
95	4	UC*																						94%
95	15	UC																						4.1
95	27	UC																						76%
95	30	TC*																						96%
95	34	TC																						80%
96	14	UC																						4.8
96	16	UC																						**
96	27	UC																						62%
97	3	UC																						**
97	4	UC*																						91%
97	5	UC*																						82%
97	27	UC																						68%
98	4	UC*																						74%
98	4	UC*																						75%
98	5	UC*																						82%
98	27	UC																						66%
98	36	A	0.4	2.0																				**
99	4	UC*																						86%
99	5	UC*																						79%
99	34	TC																						74%
99	34	TC																						**
99	34	A	0.1	2.8																				82%A
99	38	UC	1.1	*	3.0	*	4.0	*																3.1
99	38	UC																						**
00	4	UC*																						82%
00	5	UC*																						79%
00	27	UC																						67%
00	39	UC				4.6	5.6	6.8																**
01	4	UC*																						78%
01	5	UC*																						76%
01	39	UC					5.0																	**
02	30	TC									7.4		7.7		7.5									6.6
02	39	UC									4.3	5.0	6.6											4.8
03	38	UC									2.1	4.4												**
03	39	UC									5.1	5.8												5.5
04	34	A	0.4	*							6.4		6.3		5.4		3.2		1.5					4.6
05	30	MC									3.8		3.9		3.3									3.1
05	30	TC									4.7		5.4		5.5									105%
05	39	UC									3.7													***
06	33	U									2.9													***

Source: *Notes on sources of survey data*, p. 53  
 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. 53  
 All ages: relates to ages reported; as given in original source  
 % Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined  
 \*\* = cannot be calculated  
 -- = adjusted by original author

**Table 6F** (continued from p. 35)  
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	80+		
93	27	UC									2.5													69%T	
93	34	TC									2.8													68%T	
93	37	UC*							1.8															**	
94	27	UC									2.7													72%T	
94	29	TC*								6.4		6.5		4.4										4.2	106%T
94	30	TC*								6.5		6.6		4.8										4.3	110%T
95	3	UC							1.9															**	
95	3	UC							1.9	5.2	6.0													**	
95	4	UC*									4.4													94%T	
95	15	UC									5.0		2.4		0.8									3.0	**
95	27	UC									2.7													76%T	
95	30	TC*								6.6		6.1		4.7										4.4	96%T
95	34	TC									3.4													80%T	
96	14	UC									3.5		1.8		0.5									2.1	**
96	16	UC									4.0		2.2		1.5									2.7	**
96	27	UC									2.5													62%T	
97	3	UC							1.9															**	
97	4	UC*									3.7													91%T	
97	5	UC*									3.0													82%T	
97	27	UC									2.6													68%T	
98	4	UC*									2.9													74%T	
98	4*	UC*									3.3													75%T	
98	5	UC*									3.0													82%T	
98	27	UC							1.8	3.6	4.3			2.4										2.8	66%T
98	36	A	0.3	3.1																				**	
99	4*	UC*									3.8													86%T	
99	5	UC*									2.9													79%T	
99	34	TC									3.4													74%T	
99	34	TC							1.8															**	
99	34	A	0.2	2.8					4.0			3.3												82%A	
99	38	UC	0.5	*	2.6	*	3.9	*																3.0	**
99	38	UC			2.7																			**	
00	4	UC*									3.7													82%T	
00	5	UC*									2.8													79%T	
00	27	UC									2.7													67%T	
00	39	UC				4.0																		**	
01	4	UC*									4.0													78%T	
01	5	UC*									2.7													76%T	
01	39	UC				4.3																		**	
02	30	TC				6.4					6.7		5.6			2.6								5.0	114%T
02	39	UC				3.8	4.6	6.6																4.3	**
03	38	UC				2.5	3.2																	**	
03	39	UC				4.9	5.6																	5.2	**
04	34	A	0.4	*						4.1		4.4		3.1		1.3		0.8						2.9	114%A
05	30	MC				2.6					3.2		4.3											2.6	93%M
05	30	TC				3.3					4.1		4.8											3.1	105%T
05	39	UC				3.3																		**	
06	33	U				2.5																		**	

Source: Notes on sources of survey data, p. 53  
 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. 53  
 All ages: relates to ages reported; as given in original source  
 % Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined  
 \*\* = cannot be calculated  
 -- = adjusted by original author

**Table 7M** Number of cigarettes smoked per person per day, sales-adjusted, males:  
selected surveys<sup>1</sup> 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+			
60	1	MC									-	-	-	-	-	-	-	-	-	-	-	-		114%M		
65	1	MC									24	29	34	39	44	49	54	59	64	69	74	79			83%M	
78	12	TC							12	13	13		11		7.5		6.4		3.6	11					79%T	
80	2	MC																							--	
80	6	UC																							68%T	
81	9	UC													8.9										93%T	
83	4	UC*													8.2	12	10	7.9							95%T	
83	4*	UC*																							100%T	
86	4	UC																							87%T	
86	5	UC																							78%T	
87	29	UC*													8.7	12	9.4								8.0	82%T
88	27	UC																							62%T	
88	29	TC*													7.2	12	6.4								7.2	87%T
89	4	UC																							94%T	
89	27	UC																							62%T	
89	29	TC*													8.1	12	11								7.9	82%T
90	27	UC																							70%T	
90	29	TC*													10	8.2	8.9								7.7	92%T
91	4	UC*																							84%T	
91	6	UC*																							72%T	
91	27	UC																							72%T	
91	29	TC*													8.4	11	7.9								7.7	96%T
92	4	UC*																							89%T	
92	27	UC																							70%T	
92	29	TC*													7.7	11	9.0								7.8	97%T
92	34	TC																							70%T	
93	27	UC																							69%T	
93	34	TC																							68%T	
94	27	UC																							72%T	
94	29	TC*													7.9	10	8.2								7.5	106%T
94	30	TC*													8.1	11	7.6								7.5	110%T
95	4	UC*																							94%T	
95	27	UC																							76%T	
95	30	TC*													6.1	9.5	8.2								6.5	96%T
95	34	TC																							80%T	
96	27	UC																							62%T	
97	4	UC*																							91%T	
97	5	UC*																							82%T	
97	27	UC																							68%T	
98	4	UC*																							74%T	
98	4*	UC*																							75%T	
98	5	UC*																							82%T	
98	27	UC													3.2	6.7	9.3								6.9	66%T
99	4*	UC*																							86%T	
99	5	UC*																							79%T	
99	34	TC																							74%T	
99	34	A													0.2	3.4	6.7									82%A

**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. 41)

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+		
60	1	MC									24	29	34	39	44	49	54	59	64	69	74	79		114%M		
65	1	MC																							83%M	
78	12	TC										5.7	2.9	2.4	1.8	1.0	0.3	0.0							1.9	79%T
80	2	MC																							--	
80	6	UC																							68%T	
81	9	UC																							93%T	
83	4	UC*										6.2	4.5	4.5	1.8										95%T	
83	4*	UC*																							100%T	
86	4	UC																							87%T	
86	5	UC																							78%T	
87	29	UC*										6.3	6.0	2.7											4.2	82%T
88	27	UC																							62%T	
88	29	TC*										6.6	6.9	3.1											4.8	87%T
89	4	UC																							94%T	
89	27	UC																							62%T	
89	29	TC*										5.4	6.4	3.0											4.0	82%T
90	27	UC																							70%T	
90	29	TC*										7.6	7.1	3.9											4.4	92%T
91	4	UC*																							84%T	
91	6	UC*																							72%T	
91	27	UC																							72%T	
91	29	TC*										8.0	6.3	3.1											4.5	96%T
92	4	UC*																							89%T	
92	27	UC																							70%T	
92	29	TC*										5.9	7.1	3.4											4.4	97%T
92	34	TC																							70%T	
93	27	UC																							69%T	
93	34	TC																							68%T	
94	27	UC																							72%T	
94	29	TC*										6.0	6.2	4.2											3.9	106%T
94	30	TC*										5.9	6.0	4.3											3.9	110%T
95	4	UC*																							94%T	
95	27	UC																							76%T	
95	30	TC*										6.9	6.4	4.9											4.6	96%T
95	34	TC																							80%T	
96	27	UC																							62%T	
97	4	UC*																							91%T	
97	5	UC*																							82%T	
97	27	UC																							68%T	
98	4	UC*																							74%T	
98	4*	UC*																							75%T	
98	5	UC*																							82%T	
98	27	UC										2.7	5.4	6.5		3.6									4.2	66%T
99	4*	UC*																							86%T	
99	5	UC*																							79%T	
99	34	TC																							74%T	
99	34	A										0.2	3.4	4.9		4.1										82%A

**Table 7M** (*continued from p. 38*)

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	25	30	35	40	45	50	55	60	65	70	75		
00	4	UC*								-	24	29	34	39	44	49	54	59	64	69	74	79	80+	
																							82%T	
00	5	UC*																						79%T
00	27	UC																						67%T
01	4	UC*																						78%T
01	5	UC*																						76%T
02	30	TC																						5.7
																								114%T
04	34	A									0.4	*												4.0
																								114%A
05	30	MC																						3.4
05	30	TC																						93%M
																								4.3
																								105%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. 53

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. 53

All ages: relates to ages reported; as given in original source

% Total sales: Adjustment factor used, estimated % of total sales

of M = manufactured or T = total cigarette consumption

implied by survey, sexes combined

-- = adjusted by original author

**Table 7F** (*continued from p. 39*)  
Number of cigarettes smoked per person per day, sales-adjusted, females

Year	Source	Product	Age Groups																			All ages	% T					
			12	13	14	15	16	17	18	19	20	-	25	30	35	40	45	50	55	60	65	70	75	80+				
00	4	UC*									24	29	34	39	44	49	54	59	64	69	74	79			82%T			
00	5	UC*																								79%T		
00	27	UC																								67%T		
01	4	UC*																								78%T		
01	5	UC*																								76%T		
02	30	TC									5.6		5.8		4.9						2.3				4.4	114%T		
04	34	A		0.3		*							3.6		3.8		2.7				1.2		0.7			2.6	114%A	
05	30	MC											2.8		3.4		4.6										2.8	93%M
05	30	TC											3.2		3.9		4.5										2.9	105%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. 53  
 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. 53  
 All ages: relates to ages reported; as given in original source  
 % Total sales: Adjustment factor used, estimated % of total sales  
 of M = manufactured or T = total cigarette consumption implied by survey, sexes combined  
 -- = adjusted by original author

**Table 8** 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>		Manufactured cigarettes number/person/day		
			M	F	M	F	M	F	M	F	Total sales %	M	F	M	F
1953	1 1	A A					70 76	15 30							
1960	1 8	MC+U U	57	11			73 49	26	7.7	0.9	114	6.8	0.8		
1963	10	UC+A			57	15	64	15						( 8.8	1.8 )
1965	1 8	MC+U U	43	10			72 50	32	6.0	0.9	83	7.3	1.1		
1967	1 1	MC MC+U	45 62	10 26			70	27				( 7.8	1.4 )		
1970	8	U					53								
1974	4	U					58	28							
1976	1 1 4 4* 8 11	MC MC+A UC+U UC+U U UC	45 56 33	20			62 56 30 52 27 47	33 60 27 56 28 47				( 8.4	3.0 )		
1977	4 4 8	U UC+U U			47	30	41 52 51	19 28 29				( 8.4	4.3 )		
1978	12	MC+TC+A	45	17	52	18	56	18	7.9	1.8	79	( 8.8	2.6 )	10.0	2.3
1979	1 1 4 4* 8	MC MC+A U UC+U U	37 42 29	22			50 53 25	30 23 49				( 7.9	3.8 )		
1980	2 6 7 8	MC UC+A MC+U U			41	16	45 52 46	16 28 16	8.6 6.5 --	3.2 1.9 68		8.6 ( 7.7	3.2 3.8 )	9.6	2.8
1981	4 9	U UC+A			46	33	51	33	7.5	3.8	93			8.1	4.1
1982	4	U					52	25							

**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>		
			M	F	M	F	M	F	M	F	M	M	F	M	F	M	F
1983	4	UC+U					51	29	8.4	3.3	95					8.8	3.5
	4*	UC+U					54	34	8.3	4.0	100					8.3	4.0
1985	4	U					50	25									
1986	4	UC+U					39	23	46	30	6.9	4.1	87			8.0	4.7
	5	UC					43	21			7.3	2.6	78			9.4	3.3
1987	8	U					43	20									
	29	UC+A					45	26	49	26	7.1	3.0	82			8.7	3.7
1988	8	U					39	19									
	27	UC+U					35	17	5.4	2.1	62					8.8	3.4
	29	TC+A					43	29	47	29	6.6	3.9	87			7.6	4.5
	29*	TC+A					42	25	45	25						( 8.2 )	( 3.9 )
1989	4	UC+U					45	30	49	33	7.3	4.2	94			7.8	4.4
	27	UC+U					36	18	5.3	2.2	62					8.6	3.6
	29	TC+A					39	25	43	26	7.1	3.0	82			8.6	3.7
	29*	TC+A					46	30	49	30						( 8.1 )	( 4.1 )
1990	8	U					38	19									
	27	UC+U					38	19	5.8	2.5	70					8.3	3.6
	29	MC+TC+A	43	28			46	29	48	29	7.0	4.0	92	( 7.7 )	( 3.9 )	7.6	4.3
1991	4	UC+U					39	23								7.9	4.2
	4	U					47	31									
	6	UC					38	19	6.1	2.6	72					8.5	3.6
	27	UC+U					38	20	5.9	2.8	72					8.2	3.8
	29	MC+IC+A	42	30			47	30	50	31	7.3	4.2	96	( 7.4 )	( 4.2 )	7.6	4.4
	31	MC	38	28												( 7.4 )	( 4.3 )
1992	4	UC+U					40	27	6.8	3.7	89					7.7	4.2
	4	U					48	32									
	27	UC+U					36	20	5.7	2.6	70					8.2	3.8
	29	MC+IC+A	39	31			42	32	47	32	7.5	4.1	97	( 7.0 )	( 4.5 )	7.7	4.3
	31	MC	24	22												( 6.7 )	( 4.7 )
	34	TC+UC+U					39	25	43	26	5.6	2.8	70			8.0	3.9
1993	4	U					36	24									
	4	U					36	22									
	27	UC+U					36	20	5.5	2.5	69					8.0	3.7
	31	MC	24	22												7.9	3.7
	34	TC+UC+U					35	21	40	24	5.4	2.5	68				

**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	M	F	Total sales %	M	F	M	F	Total cigarettes number/person/day	
1994	27	UC+U					34	20	5.5	2.7	72	( 6.7 )	3.9 )	7.5	3.7		
	29	MC+TC+A	39	29	43	30	47	30	7.8	4.1	106			7.4	3.9		
	30	MC+IC+A	40	29	43	30	47	30	8.2	4.2	110			7.4	3.8		
	31	MC	24	22								( 6.2 )	4.4 )				
1995	4	UC+U					39	27	6.4	3.9	94			6.8	4.2		
	27	UC+U					35	19	5.7	2.7	76			7.4	3.6		
	30	MC+IC+A	35	30	39	31	41	31	6.2	4.3	96	( 6.1 )	4.2 )	6.5	4.5		
	31	MC	24	22			39	27	5.7	3.1	80	( 6.0 )	4.3 )			7.2	3.8
	34	TC+A					42	30									
	34	U															
1996	27	UC+U					31	18	4.2	2.5	62	( 5.7 )	4.3 )	6.8	4.0		
	31	MC	24	23													
1997	4	UC+U					39	30	5.9	3.6	91			6.5	4.0		
	5	UC+U					34	22	5.6	3.0	82			6.8	3.6		
	27	UC+U					33	19	4.5	2.6	68			6.6	3.8		
	31	MC	25	22								( 5.6 )	4.0 )				
1998	4	UC+U			36	23	37	24	5.1	2.7	74			6.9	3.7		
	4*	UC+U					37	25	4.8	3.1	75			6.5	4.1		
	5	UC+U					34	22	5.6	3.0	82			6.8	3.7		
	27	UC+U					31	19	4.5	2.5	66			6.8	3.8		
	31	MC	25	22								( 5.6 )	4.1 )				
1999	4	U					45	31									
	4*	UC+U					39	31	5.3	3.8	86			6.1	4.4		
	5	UC+U					34	22	5.5	2.9	79			7.0	3.7		
	30	U					42	34									
	31	MC	25	23								( 5.6 )	4.1 )				
	34	TC+U			32	23	37	28	4.8	3.0	74			6.5	4.1		
	34	A							4.8	3.1	82			5.8	3.7 /10		
2000	4	UC+U					39	33	4.8	3.6	82			5.9	4.4		
	4*	U					42	31									
	5	UC+U					33	21	5.4	2.8	79			6.9	3.5		
	27	UC+U					30	19	4.3	2.7	67			6.4	4.0		
2001	4	UC+U					33	30	4.1	3.9	78			5.3	5.1		
	4*	U					42	26									
	5	UC+U					32	21	5.3	2.7	76			6.9	3.6		

**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>		Manufactured cigarettes number/person/day		
			M	F	M	F	M	F	M	F	Total sales %	M	F	M	F
2002	5	U					32	21							
	27	U					32	21							
	30	MC+TC+A	34	32	40	33	42	33	6.5	4.9	114	( 5.3	3.9 )	5.7	4.3
	30	MC+IC+A	38	34	44	36	47	36							
	35	U					30	23							
	35	U					37	27							
2003	5	U					32	22							
2004	5	U					28	19							
	27	U					28	19							
	34	A					27	19	4.6	2.9	114			4.0	2.6 /10
	34	A					32	24							
2005	30	MC	22	19					3.1	2.6	93	3.3	2.8		
	30	TC+A			31	23	34	23	4.4	3.0	105			4.2	2.9
	30	MC+IC+A	25	24	34	28	37	28							
2006	27	U					30	21							

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. 53. Method: see *Summary of adult smoking*, Methods p. 13.

2 See *Notes on sources of survey data*, p. 53

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

4 From Table 4

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

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

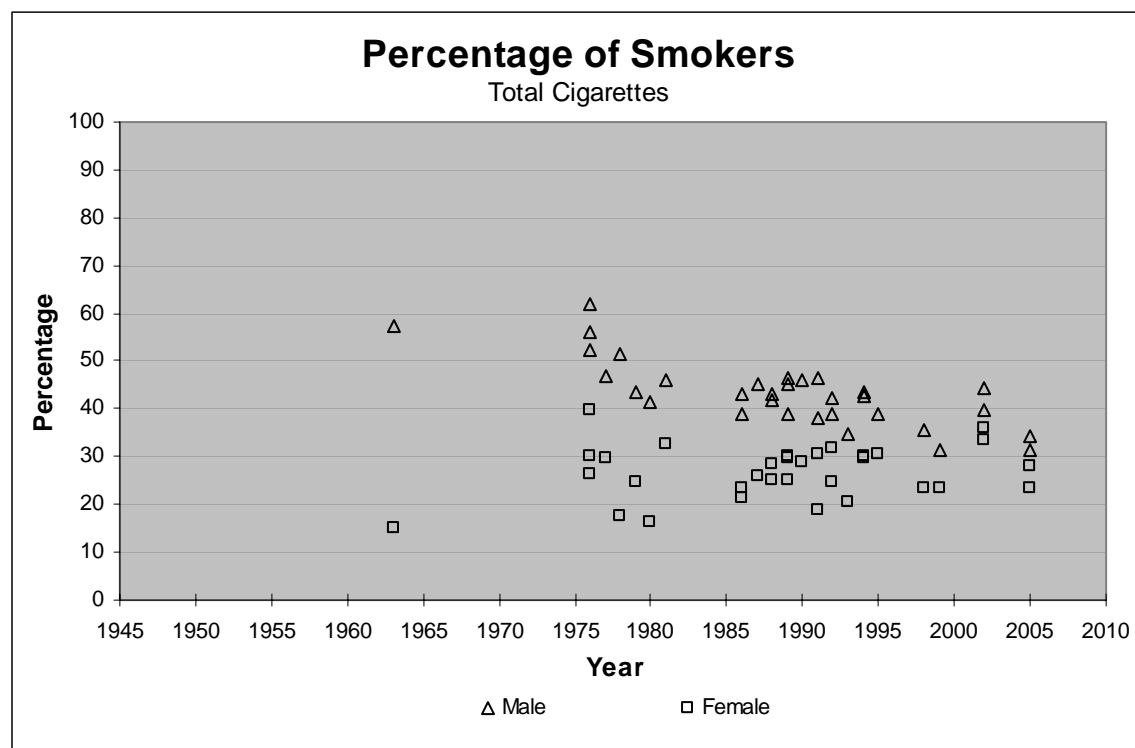
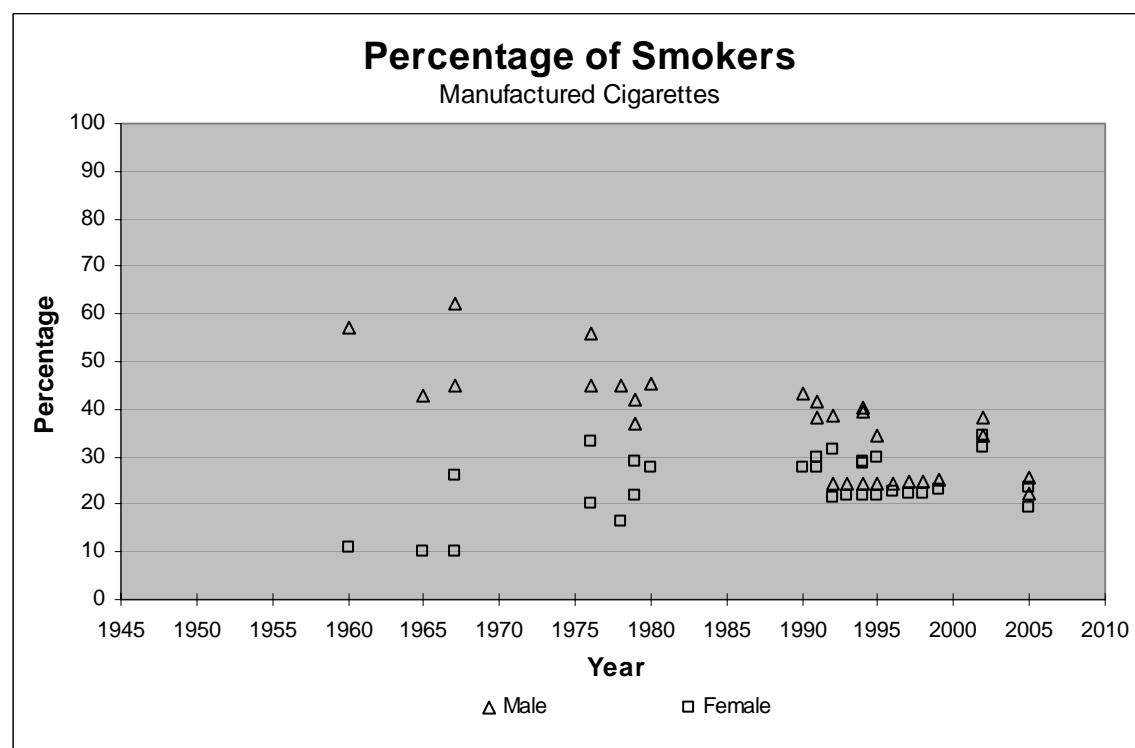
7 From Table 6

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

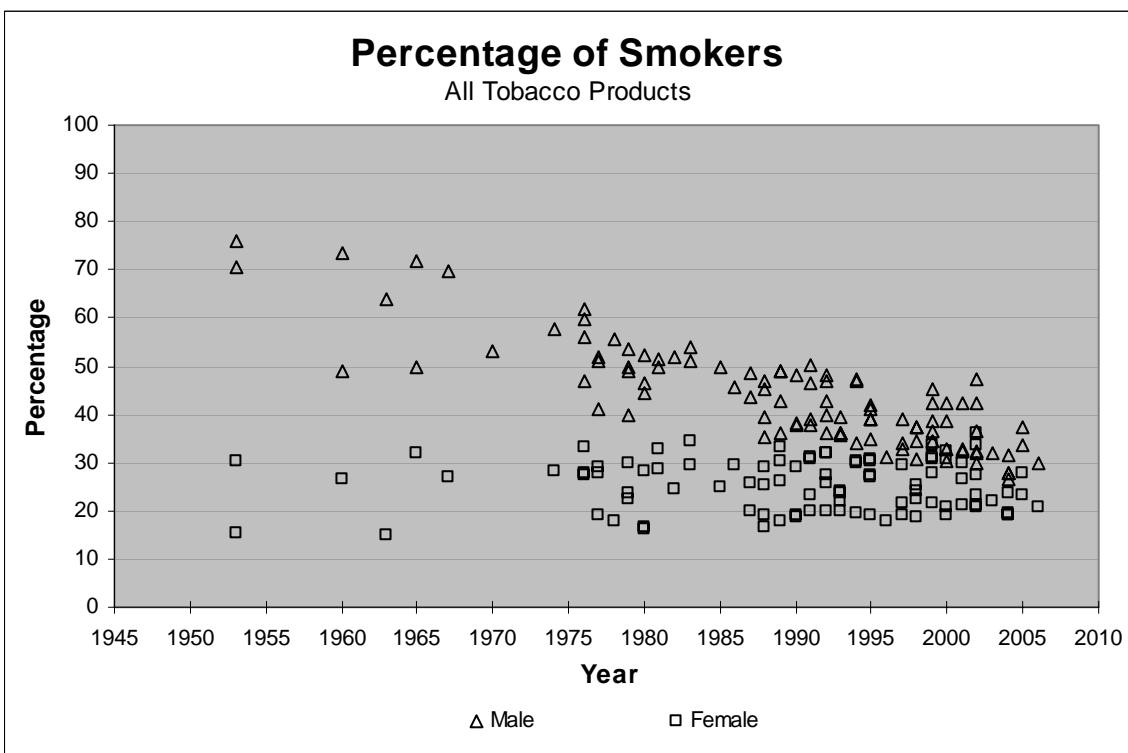
9 Number of cigarettes classified as UC = cigarettes (type unspecified) has been adjusted to total cigarette sales and included in this column

10 All tobacco products, grams/person/day

**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

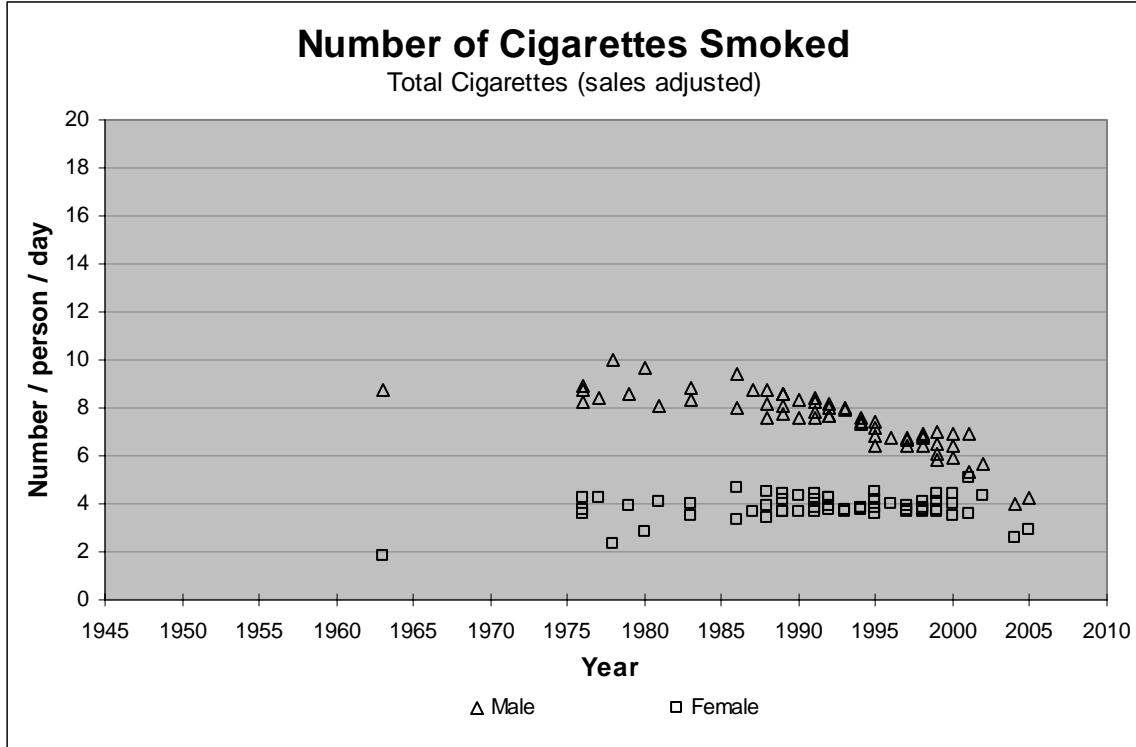
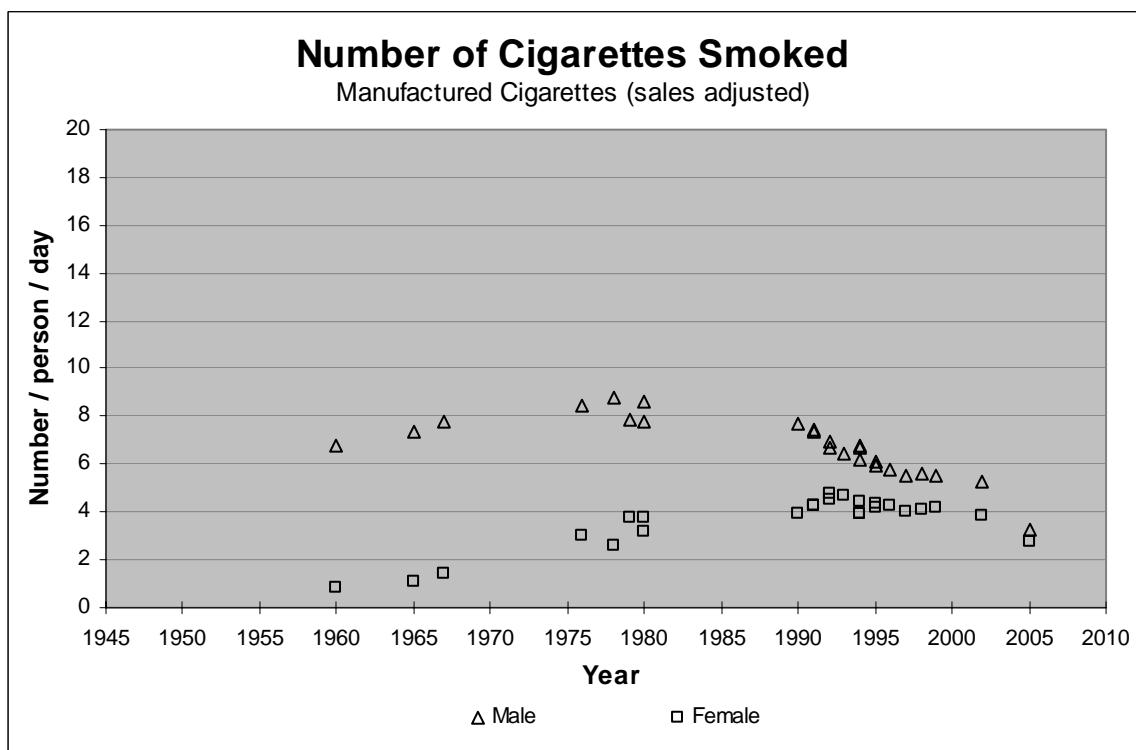


**Figure 3** (continued)



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. 65 under *References*. Acronyms used for organisations providing the data and French administrative regions are explained under *Abbreviations and acronyms* on p. 64.

#### *Sales data before 1960*

Société nationale d'exploitation industrielle des tabacs et allumettes (SEITA) (1961)  
In this period SEITA had the monopoly on tobacco manufacture and distribution in France (see notes on SEITA in *Abbreviations and acronyms* on p. 64).

Data (shown in Tables 1.1 and 1.2) are for all France (rather than continental France). Data are not available for 1914-1922 and 1925-1931. Cigarillos are included in the cigarette sales data until 1924.

Data for cigarettes, cigars and cigarillos were given as numbers of pieces (to the nearest million). They have been converted to tonnes using the factors 1 cigarette/cigarillo (1861-1924) or 1 cigarette (1932-1959) = 1.2 g, 1 cigar = 4 g, and 1 cigarillo (when data are given separately) = 1.6 g. These factors are equivalent to those used in RP6 (Lee (1975)) which had been provided by SEITA.

Smoking tobacco is known as “scaferlatis”. The tobacco was used in hand-rolled cigarettes and in pipes. Chewing tobacco (“chique”) was available in the form of “rôles” or “carottes”.

For 1932 onwards there are some differences between the values shown and those in the previous edition of this report, which used data from RP6 (Lee (1975)). The data shown in RP6 were also based on reports from SEITA. The differences are possibly due to the conversion to imperial measures in RP6 and subsequent re-conversion to tonnes for the previous edition. We therefore now use the SEITA values directly.

#### *Sales data for 1960-1989*

SEITA, provided by Padoleau (1985, 1990)  
In this period SEITA had the monopoly on tobacco manufacture in France (see notes on SEITA in *Abbreviations and acronyms* on p. 64).

The data shown in table 1.3 are for continental France.

The values shown have been calculated as the sum of imports, ordinary sales in France and special sales to organisations such as the army and old people's homes (“vente restreinte”). These special sales stopped in 1987 (Hill (1990)).

The values are from the same source as was used in Hill and Laplanche (2003) except that that report used data for all France rather than for continental France for 1960 and 1961.

In some years data are available from SEITA both for continental France and for all France, for example:

<b>Product</b>	<b>Year</b>	<b>All France</b>	<b>Continental France</b>
Cigarettes (millions)	1957	44 626	42 652
	1960	46 546	44 617
	1965	57 774	54 127
Cigars (millions)	1957	169	167
	1960	245	242
	1965	422	406
Cigarillos (millions)	1957	331	329
	1960	326	325
	1965	396	393
Smoking tobacco (tonnes)	1957	17 840	17 774
	1960	18 137	18 057
	1965	16 733	16 636
Snuff and chewing tobacco (tonnes)	1957	1 128	1 126
	1960	987	985
	1965	817	816

Data for cigarettes, cigars and cigarillos were given as numbers of pieces (to the nearest million). They have been converted to tonnes using the factors 1 cigar = 4 g, 1 cigarillo = 1.6 g (as given in RP6); 1 cigarette = 1.18 g in 1960, reducing to 0.91 in 1989 and, for cigars and cigarillos given together (1980-1989), 3.662 g per item (as in Hill and Laplanche (2003)).

There are some differences between the values shown and those in the previous edition of this report, which used data from RP6 for the years 1960-1973. As mentioned above, differences are possibly due to conversions between imperial and metric measures. In addition, we have revised the factor used for converting numbers of cigarettes to tonnes (1.2 g per cigarette was used in the previous edition).

#### *Sales data for 1990 onwards*

1990-2003: Hill and Laplanche (2003)

2004-2008: Observatoire français des drogues et des toxicomanies (2009b, 2009a)

See Table 1.4. Data for cigarettes and cigars were given in numbers and have been converted to tonnes using the factors used in Hill and Laplanche (2003) (1 cigarette = 0.90 g in 1990, reducing to 0.80 g in 2000, 0.80 g used from then on; 1 cigar = 3.662 g).

“Large cigars” weigh 3 g or more; “Small cigars” weigh less than 3 g and include cigarillos. The total number of cigars (large and small) was used in the conversion to tonnes. Data for snuff and chewing tobacco are not available after 2003.

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

Joossens and Raw (1998) estimated that smuggling accounted for around 2% of the market for cigarettes during 1991-1997.

Costes and Palle (1999) estimated that illegal sales at that time represented no more than 3% of the tobacco use in France but that such sales were probably on the increase.

Hill and Laplanche (2003) estimated that the contraband market was of the order of 3% of the total market in 2001, and stated that since then the amounts seized by customs had increased only slightly.

In 2003, Customs estimated that contraband cigarettes represented 1-2% of the cigarettes smoked (Kletzlen (2004)). This source also quotes Customs data for tobacco seizures:

Year	Tonnes of tobacco seized
1992	13
1993	60
1994	186
1995	117
1996	140
1997	181
1998	138
1999	194
2000	218
2001	215
2002	173

Ben Lakhdar (2005, 2006) estimated net cross-border sales into France (legal and illegal) using an analysis, by département, of changes in sales volumes:

Year	Sales (tonnes)	Estimated net cross-border sales (tonnes)	Estimated consumption (tonnes)	Estimated proportion of consumption that is cross-border sales (%)
2004	54 924	8 635	63 559	13.6
2005	54 805	9 934	64 739	15.3

Note that the Sales (tonnes) values are from Ben Lakhdar (2006) and are different from those quoted in Table 1.4.

From a study in 2004 of 10 000 adults aged from 18 to 64 years old, British American Tobacco (BAT) estimated that, of the 26 billion fall in sales of cigarettes between 2002 and 2004, 10 billion were accounted for by increases in cross-border sales (Les Echos (2005)).

In a 2005 study by BAT of people's cigarette packets, conducted in eight big towns in France, 22% of the packets were from outside France. The towns chosen were not all near borders with other countries. In Lille 31% of the cigarette packets examined were from outside France (Les Echos (2006), Le Bien Public (2007)).

According to Copé (2007), in 2006 seizures of smuggled smoking tobacco (for hand-rolling and pipes) reached a level never attained before. Customs services seized 75.2 tonnes of these goods, compared with 33.6 tonnes in 2005; an increase of 123.8%. No estimate was given of the total amount smuggled.

Ben Lakhdar (2008) used three methods of assessing cross-border sales and smuggling of tobacco into France. The first method (similar to that used in the 2006 report by the same author, mentioned above) was an analysis, by département, of changes in sales. This gave the estimates:

Year	Manufactured cigarettes: estimated net cross-border sales and smuggled	
	tonnes	proportion of total consumption (%)
2003	2 178	3.8
2004	8 635	16.4
2005	9 934	18.5
2006	9 930	18.2

The second method compared sales of cigarettes (manufactured and hand-rolled) with the amounts smoked as implied by Health Barometer survey of 2005. Survey results usually under-estimate true consumption, due to a tendency for survey subjects to underestimate their consumption, and so surveys generally imply a consumption that is lower than sales figures (see *Percentage of total sales*, Methods p.11). This was seen in the estimates for the year 1999. However, in 2005 implied consumption exceeded registered sales.

Year	Difference between implied consumption and registered sales	
	tonnes	proportion of registered sales (%)
1999	-11 185.34	-16
2005	13 109.63	+30

(See Tables 6 and 7 column "% Total sales" for source 34 for our estimates of implied consumption compared with registered sales.)

The third method assessed the cigarette packs retrieved from household waste on two days in each of 2005 and 2006 in Nanterre in Haut de Seine. The data may therefore not be representative of the whole of France. In 2005 106 out of 570 packs (18.6%) were not bought in France. In 2006 the equivalent figures were 113 out of 731 packs (15.5%).

In 2008, customs officers seized about 40 tonnes of cigarettes, which represents an increase of 68% in comparison with 2007. A study for BAT by the Institute Epsy estimated that 14 % of the hand-rolling tobacco used in 2008 in France was bought abroad. (Les Echos (2009))

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

For 1950-1989 we have taken as our estimate of hand-rolled cigarette consumption 70% of smoking tobacco ('Scaferlatis') sales. Data specifically for hand-rolling tobacco are available for 1990 onwards. Following Dymond (1996), we have assumed an average weight of 0.76 g per cigarette throughout.

This is similar to the estimates of 0.722 g (range approximately 0.510-0.910 g) calculated in a study by SEITA, involving 200 consumers in 1992. This study also reported differences in the mean weight by age: 690 mg for smokers under 35; 870 mg for smokers over 50. A mean weight of 0.810 mg was reported from a Coresta study involving 40 consumers in 1994. The cigarettes were mainly made by simple hand-rolling, with <1% made by tubing and no data available on machine-rolling. (Coresta task force on roll-your-own (fine cut) tobacco (1999)).

'Scaferlatis' is fine-cut tobacco for hand-rolling and pipes. There is little evidence on which to base estimates of the proportion used for hand-rolled cigarettes. For 1990-2003, Hill and Laplanche (2003) give the quantities (tonnes) of smoking tobacco and hand-rolling tobacco separately. This shows the proportion of smoking tobacco used in hand rolled cigarettes increasing from 41% to 85% during that period. By contrast Merzdorf *et al* (1982) allocate all 'Scaferlatis' sales to hand-rolled cigarette smoking, ignoring pipes, which (survey source 1) were smoked by 16% of men in 1976.

Our estimate for 1978 gives hand-rolled cigarettes as 8% of total cigarette consumption, which can be compared with the smoking prevalences reported by Tuyns and Hu (1982) (survey source 12) in that year. Approximately 9% of cigarette smokers smoked hand-rolled cigarettes only and a further 8% smoked both (sexes combined).

#### *Plain/Filter cigarette sales*

1958-1989: SEITA, provided by Padoleau (1990). This included SEITA yearly "Statistiques" bulletins.

Data for 1958-1969 were calculated from sales of imports (from the common market and other countries) and sales of SEITA products in France but excluded restricted sales ("vente restreinte") as these were not split by filter and plain cigarette sales. Data for 1970-1989 were calculated by SEITA.

Data for 1958-1960 are for all France; those for 1961 onwards are for continental France. For some years both are available:

Year	All France	Continental France
1961	14.1	14.3
1962	16.8	17.0
1963	18.8	19.0
1964	21.4	21.5
1965	24.8	24.8

1988-1997: Centre de Documentation et Information sur le Tabac (1998)

For years where data were also available from Padoleau (1990), the values were identical.

1998-2002: Hill and Laplanche (2003)

This source also gives values for the years 1959-1997. They are virtually identical to those quoted by us.

2004: Observatoire français des drogues et des toxicomanies (2009a)

2005: Besson (2006)

*Dark/Blond cigarette sales*

1978-2002: Hill and Laplanche (2003) quoting SEITA and Altadis  
 2004: Observatoire français des drogues et des toxicomanies (2009a)  
 2005: Besson (2006)

*Tar and nicotine machine yields of cigarettes*

1950-2002: Hill and Laplanche (2003) quoting CDIT

Alternative estimates for sales-weighted average tar and nicotine (SWAT and SWAN respectively), based on the market share of the top 10 cigarette brands sold in France (data supplied by Centre de Documentation et d'Information sur le Tabac (1998)), are:

Year	SWAT (mg/cig)	SWAN (mg/cig)
1992	13.6	1.03
1993	13.5	1.04
1994	13.2	1.01
1995	12.7	0.97
1996	12.9	0.98
1997	12.3	0.95

The values for 1992-1995 above were shown in the tables of the previous edition of this report.

In the previous edition of this report, the values for years before 1992 were taken from Joossens (1989) and Todd (1986a). Those sources gave the values:

Year	SWAT (mg/cig)
1950	30
1960	28
1971	24
1976	18
1986	17

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

**Notes on sources of survey data**

Each source of survey data—either an individual survey or a series of surveys repeated over a number of years—is cited by a source number. This number is shown in the tables and corresponds to the source numbers given below, where details of the source publication and of the survey methodology are given. Full citations of the sources are given on p. 65 under *References*. Acronyms used for survey organisations and French administrative regions are explained under *Abbreviations and acronyms* on p. 64.

**Source number**

- 1 **Merzdorf *et al* (1982), Hill and Flamant (1985), Hill (1990), Hill and Laplanche (2003)**  
 a. Surveys for SEITA.

Year	Survey organisation	Sample size
1953	ETMAR	3 573
1960	Sema-Sofres	24 427
1965	Sofres	13 710
1967/8	Sema-Sofres	12 940
1976	Sofres	6 000
1979	Unknown	Unknown

- b. Regular smokers: (1953) smoked at least 2 cigarettes/day or smoked tobacco bought in packets (Hill and Laplanche (2003)); (other years) undefined.

- c. According to Hill and Laplanche (2003), the prevalence of use of various tobacco products (%) among all smokers was:

Year	Males					Females	
	Cigarettes	Hand-rolling	Cigarillos	Cigars	Pipe	Cigarettes	Other products
1953	77	38			21	100	0
1960	78	36	16	20	17	100	0
1965	80	27	12	14	14	100	0

- d. In the previous edition of this report, the results for 1953 were assumed to relate to all adults (ages 15+). The source used in this edition clarifies that the age range for that year was 20+. This reduces the estimate of prevalence for all adults (Table 8) for that year because we assume that young people (aged 15-19) have a lower prevalence of smoking than older age groups (see note f below for details).
- e. Consumption category estimation based on 1-5, 6-10, 11-15, 16-20 and 21+ cigarettes/smoker/day.
- f. Assumed extension to age distribution for percentage smokers (1953) age 15-19: males (regular) 50%, (all smoking) 70%; females 15%.

## 2 Todd (1986a)

- a. Estimated by Todd.

## 3 Merzdorf *et al* (1982), Hill (1990), Sasco *et al* (1991, 1995), Grizeau *et al* (1997), Manninen (1997), Hill and Laplanche (2003)

- a. Surveys of adolescents for CFES. Quota samples representative of the national population. Personal interviews.

Year	Survey organisation	Sample size	Age group
1977	SOFRES	1 200	12-18
1980	BVA	1 200	12-17
1981	BVA	1 200	12-17
1983	Démoscopie	1 000	12-18
1984	Démoscopie	1 000	12-18
1988	MV2 conseil	987	12-18
1990	IPSOS	1 000	12-18
1991	IPSOS	1 000	12-18
1992	IPSOS	1 000	12-18
1994	MV2 conseil	1 005	12-18
1995 (Apr)	IPSOS	1 006	12-18
1995 (Jun)	IOD	600	15-25
1996 (Mar)	Louis Harris	1 018	12-18
1996 (Jun)	BVA	600	15-25
1997	BVA	4 115	12-19

When more than one survey was carried out in a single year (1995 and 1996), results for the second survey of the year are marked with \* against the source in Tables 4 and 5  
There are minor discrepancies in the sample sizes reported by different sources.

- b. Regular smokers: undefined (1977). Smokers marked as frequency \*: smoked at least one cigarette/day (1980, 1981, 1988, 1990, 1994, 1995, 1997); smoked more than 6 cigarettes/week (1983, 1984); smoked every day (1991); smoked almost every day (1992, 1996). Note that cigarettes/smoker values relate to all smokers (not regular smokers) in 1991, 1992 and 1997.
- c. According to Hill and Laplanche (2003), the prevalence of use of various tobacco products (%) among all smokers (1977-1984) or regular smokers (1988) was:

Year	Males		Females	
	Cigarettes	Cigars or pipe	Cigarettes	Cigars or pipe
1977	95	5	99	1
1980	100	0	100	0
1981	100	0	100	0
1983	100	0	100	0
1984	100	0	100	0
1988	100	0	100	0

- d. Consumption category estimation based on (1977, 1980) 1-5, 6-14, 15-20 and 21+ cigarettes/smoker/day; (1981, 1983, 1984, 1996) 1-5, 6-10, 11-14, 15-20 and 21+ cigarettes/smoker/day; (1988, 1990, 1995) 1-4, 5-10, 11-15, 16-20 and 21+ cigarettes/smoker/day; (1991, those smoking at least weekly) <5, 5-10, 11-15, 16-20 and 21+ cigarettes/smoker/day; (1992, all smokers) <5, 5-10, 11-15, 16-20 and 21+.

- 4 Merzdorf *et al* (1982), Hill and Flamant (1985), Hill (1990), Todd (1986a, 1986b), Joossens *et al* (1994), Sasco *et al* (1994, 1995), World Health Organization (1997), Guilbert *et al* (1999), Hill and Laplanche (2003)**
- Surveys of adults for CFES. Quota samples representative of the national population.  
Personal interviews.

Year	Survey organisation	Sample size	Age group
1974	SOFRES	1 000	18+
1976 (Sep)	SOFRES	1 050	18+
1976 (Dec)	Unknown	1 052	18+
1977	SOFRES	1 010	18+
1979 (Jan)	SOFRES	1 021	18+
1979 (Nov)	SOFRES	1 006	18+
1981	SOFRES	1 019	18+
1982	SOFRES	1 016	18-74
1983 (May)	BVA	1 977	15+
1983 (Dec)	BVA	1 515	18+
1985	SOFRES	1 000	15+
1986	BVA	2 000	15+
1989	BVA	1 044	15+
1991	Démoscopie	1 022	18+
1992	IPSOS	1 000	18+
1995	Démoscopie	1 000	18-75
1997	Louis Harris	1 005	18+
1998 (Aug)	IFOP	2 006	15-75
1998 (Nov)	IFOP	1 503	15-75
1999 (Jun)	IPSOS	2 014	15+
1999 (Oct)	IPSOS	2 034	15+
2000 (Oct)	IPSOS	932	18+
2000 (Dec)	IPSOS	1 015	15+
2001 (Apr)	IPSOS	937	18+
2001 (May)	IPSOS	1 006	15+

When more than one survey was carried out in a single year, results for the second survey of the year are marked in the tables with \* against the source.

There are minor discrepancies in the sample sizes reported by different sources.

- Regular smokers: smoked every day. All smokers: smoked, even if only from time to time.
- According to Hill and Laplanche (2003), the prevalence of use of cigarettes (%) among all smokers was:

Year	Proportion of smokers using cigarettes (manufactured or hand-rolled), %	
	Males	Females
1974	97	100
1977	92	100
1979 (Jan)	94	100
1979 (Nov)	91	99
1982	94	100
1983 (May)	96	99
1983 (Dec)	92	98
1989	98	100

According to Hill and Laplanche (2003), the prevalence of use of various tobacco products (%; possible use of more than one product) among all smokers was:

Product	Males		Females	
	1986	1991	1986	1991
Manufactured cigarettes	78	100	96	100
Hand-rolled cigarettes	12	4	2	2
Cigars	3		0	
Cigarillos	4		1	
Cigars or cigarillos		6		1
Pipe	3	3	0	0
Chewing tobacco	0		0	

- d. 1983: results in Table 5 are consumption per regular cigarette smoker, calculated by Todd, using consumption category estimation based on 1-10, 11-20, 21+ cigarettes/smoker/day; calculation of age-specific consumption per person based on percentage smokers of any product and number of cigarettes per regular cigarette smoker. They may overestimate for men.
- e. 1998, 2000, 2001: Cigarettes per smoker values relate to all smokers rather than regular smokers.
- f. 1992, 1995: Calculation of cigarettes per person based on prevalence of smoking (product unspecified) and number of cigarettes per cigarette smoker, so may over-estimate.
- g. 1997, 1999 (Oct): Calculation of cigarettes per person based on prevalence of smoking (any frequency, any product) and number of cigarette per regular cigarette smoker, so may over-estimate.
- h. 1998 (Aug and Nov): Calculation of cigarettes per person based on percentage smokers (any frequency, product unspecified) and number of cigarettes per cigarette smoker (any frequency), so should be regarded with caution.
- i. Consumption category estimation based on (1974, 1976, 1977, 1979, 1981, 1982, 1983) 1-10, 11-20 and 21+ cigarettes/smoker/day; (1986, 1992, 1995) 1-5, 6-10, 11-15, 16-20 and 21+ cigarettes/smoker/day; (1989, 1991) 1-5, 6-15, 16-20 and 21+; (1997) 1-4, 5-9, 10-14, 15-19, 20 and 21+ cigarettes/smoker/day; (1998) <6, 6-9, 10-15, 16-20 and 21+ cigarettes/smoker/day; (1999) 1-5, 6-10, 11-20 and 21+; (2000, 2001) <6, 6-10, 11-20 and 21+.
- j. Assumed extension to age distribution for percentage smokers: age 15-17, males (regular) (1977) 40%, (1991-1993) 35%; (cigarettes) (1976) 40%, (1977) 45%, (1979) 35%, (all/unspecified products) (1974) 40%, (1976-1977) 45%, (1979-1995) 40%, (1997) 30%, (2000) 40%, (2001) 30%; females (regular) 35%, (cigarettes) (1976) 35%, (1977) 40%, (1979) 35%, (all/unspecified products) (1974) 30%, (1976-2000) 40%, (2001) 30%. Age 65+ or 75+, males 10%, females 2%. Number of cigarettes/person/day, age 15-17, males (1974-1981) 2%, (1983-1995) 5%, (1997) 4%, (2000-2001) 3%; females 2%. Age 75+, males (1995) 3%, (1998) 2%; females 0.5%.

## **5 Hill and Laplanche (2003), Institut de recherche et documentation en économie de la santé (2009)**

- a. Conditions de vie des ménages (Household living conditions) surveys for INSEE. 1986-1987 (shown in Tables 4-6 as 1986): Etude de conditions de vie, 13 154 households from which one person age 18+ selected. 1997-2004: Enquête permanente sur les conditions de vie des ménages, conducted annually in May each year, 8 000 households, 11 000 subjects age 15+.
- b. Regular smokers: (1986) smoked at least one cigarette every day; (1997 onwards) smoked every day.
- c. Consumption category estimation (1997-2001) based on two categories, 1-10 and 11+ cigarettes/smoker/day, and resulting figures should be regarded with caution.
- d. Assumed extension to age distribution for percentage smokers, age 15-17: 35%. Number of cigarettes/person/day, age 15-17: males 5%, females 2%.

## **6 Service des Statistiques des Etudes et des Systèmes d'Information (SESI) (1983), Hill and Laplanche (2003)**

- a. Enquête décennale (ten-yearly survey). Household surveys by INSEE for CREDOC, Ministère des Affaires Sociales, Ministère de la Santé, and INSERM. Usually face-to-face interviews with one member of household. Persons living in institutions excluded. The household member interviewed gave answers for each of the people in the household. March 1980 - April 1981: Random sample of 7 323 households, 21 000 individuals, of which 16 220 were age 15+ and included in tobacco questions. Proxy responses for 24% of males, 57% of females. 1991-1992: 7 666 interviews representing 21 500 individuals age 14+.
- b. In tables 5-7, consumption shown as product code A (1991) refers to smoking of any product, expressed as cigarette equivalents, calculated as 1 pipe or 1 cigarillo = 2 cigarettes, 1 cigar = 4 cigarettes and one packet of loose tobacco = 40 cigarettes.
- c. According to Service des Statistiques des Etudes et des Systèmes d'Information (SESI) (1983), in 1980 the prevalence of use of various tobacco products, among smokers, was:

Tobacco product	Proportion of smokers using the product (%)	
	Males	Females
Cigarettes	93.6	99.5
Pipes	5.0	0.2
Cigarillos	3.9	0.9
Cigars	3.1	0.4

- d. In Table 4 (1980), percentages of smokers adjusted to exclude non-respondents from base.
- e. Calculation of cigarettes per person (1991) based on prevalence of cigarette smoking among those aged 15+ and number of cigarettes or cigarette equivalents per smoker aged 18+, so the resulting figures should be regarded with caution.
- f. Assumed extension to age distribution for percentage smokers (1986-1987 and 1991-1992, cigarettes), age 15-17: males and females 35%.

## **7 SEITA**

- a. Survey conducted by IFOP.

- 8 Organisation for Economic Co-operation and Development (1993)**
- No original source
- 9 Comité National contre le Tabagisme (1982)**
- Survey by IDEM representative of working population. Sample size 1 001.
  - There was one female smoker of only cigars/pipe.
  - Consumption category estimation based on >5, 5-10 (assumed 6-10), 11-20, and 21+ cigarettes/smoker/day.
  - Assumed extension to age distribution for percentage smokers, age 15: males 30%, females 15%. Number of cigarettes/person/day: 1.0. For age 65+: males (cigarettes) 30%, (all products) 40%; females 7%. Number of cigarettes/person/day: males 4.0 and females 0.5.
- 10 Readers Digest (1963)**
- Series of surveys conducted in European countries using identical questionnaires. French survey conducted by SOFRES. Random sample of about 2 000 people.
  - It is also reported that 11% of men (12% age <40 and 11% age 40+) smoke a pipe, and that 13% of men (13% age <40 and 12% age 40+) smoke cigars.
  - Assumed extension to age distribution for percentage smokers, age 15-20: males (all products) 50%, (cigarettes) 45%; females 15%.
- 11 Wynder *et al* (1981)**
- Subjects randomly selected in 65 départements, as they left factories, stores etc. Sample size (males) 2 163, (females) 1 290. Response rate about 90%, a further 8% excluded owing to history of alcoholism or psychiatric conditions.
  - Smokers: included those who had given up smoking within the last year.
  - Among cigarette smokers who listed a preferred brand, 86% of men and 49% of women preferred black to blond tobacco.
  - Assumed extension to age distribution for percentage smokers, age 15-19: males 50% and females 40%; age 81+: males 40% and females 5%.
- 12 Tuyns and Hu (1982) and Dr A.J. Tuyns (personal communication)**
- Département of Calvados. Tuyns and Hu (1982) stated that 'Calvados can ... be considered as an average French département with regard to tobacco consumption'. Sample size (males) 923, (females) 1 053. Response rate (males) 75%, (females) 78%.
  - There was only one female smoker of products other than cigarettes.
  - Black tobacco brands were the type most commonly consumed by 68% of male cigarette (including hand-rolled) smokers and 50% of female smokers.
  - Assumed extension to age distribution for percentage smokers, age 15-19:(all products or total cigarettes) males 50% and females 45%; (manufactured cigarettes) males 45% and females 40%. Number of cigarettes/person/day: males 5.0 and females 4.0.
- 13 Fréour *et al* (1969)**
- Study of chronic bronchitis conducted by INSERM in Bordeaux area in 1963-1967. Representative of the regional population. Sample size (males) 1 320, (females) 1 170.
  - The *All ages* data in Tables 4-6 are calculated from the prevalence of ever smokers of cigarettes and the proportions of smokers of more than 1 000 cigarettes who had given up smoking, or smoked in specific categories. The age-specific data (females only) are based on the prevalence of ever smokers of cigarettes and the proportion of smokers of more than 1 000 cigarettes who had given up smoking for more than 10 years, and may therefore overestimate as they include some ex-smokers.
  - Consumption category estimation based on (males) 0-10, 10-20, 20-30, 30+ and (females) 1-10, 10-20, 20+ cigarettes/smoker/day. This has been interpreted as 1-9, 10-19, 20-29, 30+, but a different interpretation would have had considerable impact on the estimates.
- 14-16 Tolonen *et al* (2000), Kuulasmaa *et al* (1998), Wolf *et al* (1998), Molarius *et al* (1999)**
- Surveys using interviews 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	
14 Strasbourg	1	47	51	667	714	Jan 1985-Aug 1987
15 Toulouse	1	73	67	678	645	May 1985-Feb 1987
16 Lille	1	71	67	646	544	Jun 1986-Feb 1989
15 Toulouse	2	65	-	586	-	Oct 1988-May 1991
14 Strasbourg	3	52	50	536	543	Mar 1995-Apr 1997
15 Toulouse	3	67	59	609	566	Dec 1994-Jul 1996
16 Lille	3	76	76	571	578	Jun 1995-Nov 1996

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

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

**17 Davidson et al (1973), Davidson and Choquet (1980)**

- a. Studies of secondary pupils in Paris and Paris region, Rennes and département (Bretagne), and Marseille and département (Bouches-du-Rhone) during 1971 and 1978-1979. Sample size (1971) 2 339, (1978-1979) 2 088. Studies covered all lycée students, and included some students up to age 20.
- b. 1971 survey: prevalences averaged over the three regions.
- c. Regular smokers: smoked daily.
- d. Consumption category estimation based on <5, 5-9, 10-19, and 20+ cigarettes/smoker/day, excluding about 10% of boys in each age group who smoked pipes, and 10-35% of boys and 35-45% of girls with amount smoked unknown.

**18 Cooreman et al (1978, 1979, 1985)**

- a. Survey in Bas-Rhin in spring 1976, covering all schoolchildren aged 13-19 in both public and private schools. Anonymous questionnaire completed by the students in class. Sample size 29 138, response rate 93%.
- b. Smokers marked as frequency \*: smoked daily.

**19 Lenoir et al (1973), Bernard and Boyer (1976)**

- a. Results combined from a study in 1971 at selection centre (CS) before military service and a study in 1972 at the end of military service (SM).

	Sample size	Average age
CS	47 942	19
SM	27 899	21

In the CS study, 1% smoked only pipe or cigars (no equivalent data for SM study).

- b. Numbers of cigarettes include equivalents of 1 pipe or cigarillo = 2 cigarettes and 1 cigar = 5 cigarettes.
- c. Results presented for individual ages 20-24 have been averaged.
- d. Consumption category estimation based on <10, 10-20, and 21+ cigarettes/smoker/day.

**20 Bernard et al (1980)**

- a. Part of a study on an anti-smoking campaign during military service.
- b. Numbers of cigarettes include equivalents of 1 pipe or cigarillo = 2 cigarettes and 1 cigar = 5 cigarettes.
- c. Consumption category estimation based on <10, 10-20, and 21+ cigarettes/smoker/day.

**21 Perdrizet et al (1982), Cooreman et al (1985) quoting Cooreman et al (1982a)**

- a. Survey in 1979 of all public secondary schools in Bas-Rhin. Sample size 7 963, response rate 87%. Classes from "Seconde" to "Terminale" were surveyed so the students are mainly aged 15-18 years, but some students were older or younger than this. Same method and questionnaire as was used in source 18.
- b. Smokers marked as frequency \*: smoked daily.
- c. Data on cigarettes smoked per day are not given by sex, but for the sexes combined:

Cigarettes smoked per day	Proportion of the daily smokers (%)
<5	15
5-9	31
10-14	21
15+	18

**22 Cooreman et al (1985), quoting Cooreman et al (1982b)**

- a. Survey in Bordeaux. Sample size 15 247. Age group 13/14 – 19 years. Same method and questionnaire as was used in source 18.

**23 Oriol et al (1988, 1994)**

- a. Studies conducted in département Yvelines (Ile-de-France). Sample drawn from all types of school (except an international school). Self-completed anonymous questionnaire, distributed by a medical researcher, completed during lesson time generally with a teacher present. Sample size (1983) 2 776, (1990) 1 916. Response rate (1983) 92%.

- b. Age range 11-16 years. Results for 11-year-olds are included in the lowest age group for prevalence in 1983 (Table 4) and in the *All ages* prevalence results for both years, but are not included in the age-specific prevalence results for 1990. Results for 11-year-olds are also included in the lowest age group for cigarettes per smoker and per person in 1983 and 1990.
  - c. Smokers marked as frequency \*: smoked at least 1 cigarette per day on average. Consumption levels based on numbers smoked per week.
- 24 Neukirch *et al* (1982)**
- a. Survey of all pupils at a secondary school in Paris. Upper age not stated, results for pupils under age 12 not presented here. Sample size 2 266.
  - b. Smokers: smoked at least 1 cigarette per day.
- 25 Chicou (1978) quoting SOFRES**
- a. Survey by SOFRES for ONSER and CNCT. Lower age limit not stated.
  - b. Results were erroneously shown as year 1977 in the previous edition of this report.
- 26 Schwartz *et al* (1961)**
- a. Patients hospitalized due to work or traffic accident in Paris or large provincial cities (control group in a study of cancer). Study started in 1954, but end year not stated. Age range not stated. Sample size 1 807.
  - b. Smokers: smoked an average of 1 cigarette or 1 g of pipe tobacco a day during the 10 years before interview.
  - c. The amount smoked shown in Tables 5-6 relates to all smokers and includes equivalents of 1 g pipe tobacco = 1 cigarette. The amount smoked per smoker was 14.5 cigarettes for cigarette only smokers, 13.6 cigarettes or 21.3 cigarette equivalents for smokers of cigarette and pipe, and 16.3 cigarette equivalents for pipe only smokers.
- 27 Bocagnano *et al* (1999a, 1999b), Auvray *et al* (2003), Hill and Laplanche (2003), Allonier *et al* (2006, 2008)**
- a. ESPS (Enquête sur la santé et la protection sociale) by IRDES (formerly CREDES). Survey of households in which at least one member has health insurance. This includes 85-95% of households in metropolitan France. Partly conducted by telephone (with some additional questionnaires sent by post), partly face to face (for those who could not be contacted by telephone). Results weighted to be representative of all insured households or to be representative of all households (2002 only).
  - b. Survey details:
- | Year | Sample size | Response rate (%) |
|------|-------------|-------------------|
| 1988 | 7 783       |                   |
| 1989 | 9 000       |                   |
| 1990 | 8 485       |                   |
| 1991 | 8 697       |                   |
| 1992 | 9 462       |                   |
| 1993 | 11 521      | 72                |
| 1994 | 9 934       | 69                |
| 1995 | 9 962       | 69                |
| 1996 | 12 203      | 66                |
| 1997 | 11 425      |                   |
| 1998 | 23 035      | 66                |
| 2000 | 20 045      |                   |
| 2002 | 20 834      | 65                |
| 2004 | 12 939      | 70                |
| 2006 | 12 428      | 63                |
- c. Regular smokers: smoked habitually ("de façon habituelle").
  - d. Assumed extension to age distribution for percentage smokers, age 15: (2002) males 20%, females 15%; (2006) males 10%, females 15%. Number of cigarettes/person/day, age 15: males 2%, females 1%.
- 28 Treguer *et al* (1983)**
- a. Two studies conducted at the Nancy selection centre before military service, in June and December 1979. Results presented here are average. Age limits are approximate, average age 19.5. Sample size 2 067, response rate 93%.

- 29, 30 Rabier et al (1989), Reif and Melich (1990, 1991a, 1991b, 1992, 1995, 1998a, 1998b, 2000), Reif and Marlier (1998), Christensen (2004), Melich (2006), Papacostas (2008)**
- Eurobarometer Surveys commissioned by the European Commission to monitor public opinion in the European Union. Some Eurobarometer surveys include questions on smoking habits. Sample size about 1 000.
  - For surveys before 1994 the sample consisted of people aged 15 and over who were resident in the country and had the country's nationality (source 29). For surveys after 1994 the sample consisted of people aged 15 and over who were resident in the country and had the nationality of any of the member states (source 30). For 1994 itself (Eurobarometer survey 41.0) results were available according to both sample definitions and both are presented.
  - Two waves of the survey were carried out in each of 1988 and 1989. Prevalence data from both waves are presented in Table 4 but data on cigarettes per smoker and per person are available only from the first. Results for the second survey of the year are marked with \* against the source.
  - 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.
  - In 2006, the prevalence of smoking (age 15+, sexes combined, sex-specific data not yet available) was 26% for packeted cigarettes, 8% for hand-rolled cigarettes and 2% for cigars or pipe. 89% of smokers smoked regularly. (Special Eurobarometer 272c, European Commission (2007))
  - Consumption category estimation based on <5, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39 and 40+ cigarettes/smoker/day.
  - Before 2002 the calculation of cigarettes per person was based on prevalence of smoking (daily and non-daily) and number of cigarettes per daily smoker, so may overestimate.
- 31 Tobacco industry, CDIT**
- Assumed extension to age distribution for percentage smokers, age 15-17: males and females 20%.
  - For prevalence of smoking in males (Table 4) the values for All ages appear to be incompatible with the age-specific values, from which the values in Table 8 were calculated.
- 32 van Reek et al (1992), van Reek and Adriaanse (1995)**
- A series of surveys of Young Europeans. About 800 children aged 11-15 years interviewed in each EC country except Luxembourg (where only 250 interviewed). Lowest age group 11-12. Interviews conducted at home, with parents absent.
  - Smokers marked as frequency \*: smoked daily. Regular smokers: smoked at least once a week.
- 33 Karsenty and Díaz-Gómez (2003), Karsenty et al (2007)**
- La lutte contre le tabagisme en milieu scolaire (Fight against smoking in schools). Surveys by OFDT, MILD'T and le Ministère de l'Éducation nationale. Representative sample of Lycées (secondary schools). Self-completed questionnaire.
  - Sample size (2002) 3 590, (2006) 9 476. Table 4 shows approximate ages corresponding to collège and lycée classes 6<sup>th</sup>, 5<sup>th</sup>, 4<sup>th</sup>, 3<sup>rd</sup>, 2<sup>nd</sup> and 1<sup>st</sup>.
  - Smokers marked as frequency \*: smoked at least one cigarette/day.
- 34 Arènes et al (1996), Baudier and Arènes (1997), Dressen et al (2001), Guilbert et al (2001), Hill and Laplanche (2003), Beck et al (2007)**
- Baromètre Santé (Health Barometer), a random sample telephone survey for CFES and INSERM, in cooperation with CNAMTS, Ministère du travail et des affaires sociales, le Haut-Comité de santé publique and MILD'T. Includes Baromètre santé adultes (surveys of adults), Baromètre santé jeunes (surveys of young people aged 12-19 years) and surveys that include both adults and young people.
- | Year | Study type              | Sample size | Survey dates      |
|------|-------------------------|-------------|-------------------|
| 1992 | Adults                  | 2 099       | Nov 1992          |
| 1993 | Adults                  | 1 950       | Nov-Dec 1993      |
| 1995 | Adults                  | 1 993       | Nov-Dec 1995      |
| 1997 | Young people            | 4 115       | Nov-Dec 1997      |
| 1999 | Adults and young people | 13 685      | Oct-Dec 1999      |
| 2004 | Adults and young people | 30 514      | Oct 2004-Feb 2005 |
- The questionnaire uses the same questions on smoking as the CFES quota samples (sources 3 and 4). For the adult surveys, a random sample of households is selected. One person aged 18 or older is randomly selected from each household.

- c. From 1999 survey results were weighted to correct for non-responses and household size. In 2004 the survey method was amended to include households on the “liste rouge” (ex-directory, unlisted) and those with no telephone land line but with a mobile phone (14% of households).
- d. Smokers marked as frequency \*: smoked daily. Regular smokers: (1992) smoked every day; (1993, 1997, 1999, 2004) smoked at least one cigarette a day; (1995) smoked at least one cigarette a day or tobacco in packets. Smokers: smoked, even if only occasionally.
- e. In Tables 5-7, consumption shown as product code A refers to smoking of all products expressed as cigarette equivalents at a rate of 1 pipe = 5 cigarettes; 1 cigar or cigarillo = 2 cigarettes. In 2004, cigarettes per smoker (Table 5) relate to all smokers rather than regular smokers.
- f. For 1999 Hill and Laplanche (2003) gives smoking prevalence for ages 18 and 19 separately:

Product, frequency	Prevalence of smoking (%)			
	Male		Female	
	age 18	age 19	age 18	age 19
Cigarettes, daily	39	44	38	41
All products, daily or occasionally	43	48	45	54

- g. In 1999 (according to Guilbert *et al* (2001)) pipe or cigar/cigarillo smoking was very rare among those aged 12-25 years (2.9% and 0.5% respectively). Among those aged 26-75, 4.9% smoked cigars/cigarillos and 1.2% smoked a pipe. Hand-rolled cigarettes were smoked by 5.8% of all subjects (ages 12-75 years, sexes combined). This proportion varied by age as follows:

Age group (years)	Prevalence of smoking hand-rolled cigarettes (%)	Prevalence of smoking hand-rolled cigarettes (%)			
		12-14	15-19	20-25	26-34
12-14	0.7				
15-19	10.8				
20-25	11.1				
26-34	7.9				
35-44	6.3				
45-54	4.2				
55-64	2.6				
65-75	1.8				

In 1999, product use among smokers (according to Hill and Laplanche (2003)) was:

Tobacco product	Proportion of smokers using the product (%)			
	Ages 12-19		Ages 18-75	
	Males	Females	Males	Females
Manufactured cigarettes	97	99	84	97
Hand rolling tobacco	33	17	23	9
Cigars/cigarillos	10	0	23	3
Pipes	0	0	6	0

In 1999 and 2004 (according to Beck *et al* (2007)), tobacco products were used by the following percentages of adult smokers:

Tobacco product	Proportion of smokers using the product (%)	
	1999	2004
Manufactured cigarettes	90.6	87.8
Hand rolling tobacco	17.4	22.7
Cigars/cigarillos	13.3	13.9
Pipes	3.2	2.5
Chewing tobacco	-	0.2

- h. In 1999, calculation of cigarettes per person based on prevalence of cigarette smoking (manufactured and hand-rolled) and cigarette equivalents (any product) per smoker per day and should be regarded with caution.
- i. Consumption category estimation (adolescents, 1999) based on 1-5, 6-10, 11-15, 16-20 and 21+ cigarettes/smoker/day.
- j. Assumed extension to age distribution for percentage smokers, age 15-17: (cigarettes, regular) males 35%, females 20%, (unspecified product) (1992, 1993) males 40%, females 30%, (1995) males and females 40%. For age 75+: (1992) males 20%, females 2%; (1993-1999) males 10%, females 2%; (2004) males 5%, females 2%. Number of cigarettes/person/day, age 15-17: males (1992-1993) 5%, (1995) 4%, (1999) 3%; females 2.0. For age 76+: males (1992-1995) 3.0, (1999) 2%, (2004) 1%; females 0.5%.

- 35 Beck et al (2003)**
- Enquête sur les représentations, opinions et perceptions sur les psychotropes (EROPP) 2002: a telephone survey of opinions on drugs carried out by SOFRES. Quota sample, age range 15-75. Sample size 2 009.
  - Although reported as EROPP 2002, the survey was carried out during November and December 2001.
  - Assumed extension to age distribution for percentage smokers, age 75+: males 10%, females 2%.

**36 King and Coles (1992), King et al (1996), Currie et al (2000, 2004, 2008)**

- Part of the HBSC (Health Behaviour in School-Aged Children) Study, a collaborative cross-national research study organised by the WHO. In 1994 and 1998, conducted in Nancy-Metz in Lorraine and Toulouse in Midi-Pyrénées. National survey for later years. School classes or schools were randomly selected, targeting age groups 11 (not presented here), 13 and 15. Questionnaires self-completed in class.

Year	Target age	Mean age	Sample size
1994	13	13.5	1 283
	15	15.5	1 260
1998	13	13.6	1 421
	15	15.6	1 245
2002	13	13.1	2 900
	15	15.1	2 614
2006	13	13.6	2 426
	15	15.6	2 222

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

**37 Choquet and Ledoux (1994)**

- Santé de l'adolescent (National Adolescent Health Survey) by INSERM in 1993. Representative national sample of those attending public secondary school aged 11-19. Self-completed questionnaire. Sample size 12 391, participation rate approximately 92%.
- Considered comparable with the ESPAD surveys (source 38) (Choquet et al (2004)).
- Smokers marked as frequency \*: smoked daily.
- Lowest age group includes 11 year olds.
- Consumption category estimation based on 2 categories, 1-9 and 10+ cigarettes/smoker/day, and the resulting figures should be regarded with caution.

**38 Hibell et al (2000, 2004), Choquet et al (2000, 2002, 2004), Andersson et al (2007), Legleye et al (2009)**

- ESPAD surveys (European School Survey Project on Alcohol and Other Drugs) carried out every 4 years. Conducted in France since 1999 under the "Santé de l'adolescent" programme by INSERM, OFDT and the Minister for Education. Anonymous questionnaire completed by the pupil, in class. A doctor or nurse was present, but discouraged from walking round the classroom.

Year	Sample size		Response rate (%)
	Age 12-19	Age 15-16	
1999	11 870	2 284	84
2003	16 833	2 119	78
2007		2 807	>90

- France was not involved in the 1995 survey, but the INSERM survey of 1993 (source 37) is considered comparable with the ESPAD surveys (Choquet et al (2004)). Although the international ESPAD surveys consider pupils aged 15-16 at the time of the survey (and, for some countries, pupils aged 17-18), the surveys carried out in France included a wider age range: students aged 12-19 years. Results are presented for ages 15-16 and 17-18 (for comparison with other countries) and also for the wider age range where available.
- A large proportion of young people in France stay in education (e.g. in 2003: 98% at ages 13-15, 92% at age 16, 82% at age 17 and 75% at age 18) so the survey can be considered representative of young people in France, especially in the younger age groups. However,

students who are often absent are under-represented and these students have a higher prevalence of smoking than other students (Choquet *et al* (2004)).

- d. Smokers marked as frequency \*: smoked 1 or more cigarettes per day in the last 30 days.  
All smokers: smoked in the last 30 days.
- e. The *All ages* values refer to ages 14-19; age-specific data are not available for the age groups marked \*.
- f. Consumption category estimation based on 1-5, 6-10, 11-20, 21+ cigarettes/smoker/day.

**39 Beck *et al* (2000, 2002, 2004, 2005, 2006), Beck and Legleye (2003), Legleye *et al* (2007)**

- a. ESCAPAD surveys (Enquête sur la Santé et les Comportements lors de l'Appel de Préparation À la Défense – inquiry into health and behaviours during the call to preparation for defence). Since the end of national service in 1996, each young person with French nationality (including those resident in the DOM) has been obliged to attend a “journée d'appel de préparation à la défense” (JAPD – day of preparation for defence). The certificate issued at the end of the day is required in order to sit public exams or to apply for a driving licence. Completing this survey is included as one of the activities of the day. Thus, unlike most surveys of young people, this survey includes those who are not in education. Young people with severe illness or handicap are not required to attend (approximately 1-2%). Non-nationals are not included (approximately 4% of the population in this age group). Self-completed questionnaire.
- b. Survey details:

Year	Sample size	Response rate (%)*	Regions reported	Age group reported (yrs)
2000	13 957	96	Metropolitan France	17-19
2001	12 512	97	Metropolitan France <sup>†</sup>	18
2002	16 552	97	Metropolitan France <sup>†</sup>	17-19
2003	15 069	98	Metropolitan France <sup>†‡</sup>	17-18
2005	29 393	92	Metropolitan France	17

\* Response among those attending the day.

<sup>†</sup> Prevalence of smoking in the DOM reported separately – see note c below.

<sup>‡</sup> Prevalence of smoking in the TOM reported separately – see note c below.

- c. Results quoted in the main tables are for metropolitan France only. Prevalence of smoking in the DOM-TOM was as follows:

Year	Age group	Region	Daily smoking (%)	
			Males	Females
2001	17-18	Réunion	19	19
		Guadeloupe	13	9
		Martinique	10	12
2002	17-19	Réunion	24	12
		Guadeloupe	16	9
		Martinique	12	10
2003	17-18	Réunion	28.5	23.8
		Guadeloupe	13.2	9.4
		Martinique	14.8	9.3
		New Caledonia	35.3	42.5
		French Polynesia	31.4	41.0

- d. Smokers marked as frequency \*: smoked daily in the last 30 days. All smokers: smoked in the last 30 days.

e. Consumption category estimation based on 1-5, 6-10, 11-20, 20+ (assumed 21+) cigarettes/smoker/day.

**40 Hill and Laplanche (2003)**

- a. Survey of young people aged 15-24 for SEITA. Random sample, size 6 317.
- b. Smokers marked as frequency \*: smoked at least one cigarette/day.
- c. Tobacco products smoked (multiple products used by some):
  - Boys: manufactured cigarettes (99%), hand-rolled cigarettes (6%), cigarillos (25%), cigars (6%), pipe (31%);
  - Girls: manufactured cigarettes (100%), pipe (2%).
- d. Consumption category estimation based on 1-4, 5-9, 10, 11-19 and 20+ cigarettes/smoker/day.

*Abbreviations and acronyms*

BVA	A survey organisation.
CDIT	Centre de Documentation et d'Information sur le Tabac
CFES	le Comité français d'éducation pour la santé
CNAMTS	Caisse Nationale d'Assurance Maladie des Travailleurs Salariés
CNCT	Comité National Contre le Tabagisme, Paris
Continental France	The part of France in mainland Europe (excludes Corsica and DOM-TOM).
CREDES	Centre de recherche d'étude et de documentation en économie de la santé
CREDOC	Centre de recherche pour l'étude et l'observation des conditions de vie
Département	An administrative region of France. France consists of 96 départements.
DOM	“Départements d'outre-mer”, the overseas départements of France: Réunion, French Guiana, Martinique and Guadeloupe.
DOM-TOM	“Départements et territoires d'outre mer”; DOM plus other overseas territories such as New Caledonia and French Polynesia.
ETMAR	A survey organisation.
IDEM	Institut Développement—Études—Marketing. A survey organisation.
IFOP	A survey organisation.
INSEE	Institut National de la Statistique et des Études Économiques
INSERM	Institut national de la santé et de la recherche médicale.
IOD	Institut d'Observation et de Décision. A survey organisation.
IPSOS	A survey organisation.
IRDES	Institut de recherche et documentation en économie de la santé
Metropolitan France	The part of France that is in Europe (includes Corsica but excludes DOM-TOM).
MILDT	Mission interministérielle de lutte contre les drogues et les toxicomanies.
MV2 conseil	A survey organisation.
OFDT	Observatoire français des drogues et des toxicomanies.
ONSER	A survey organisation.
SEITA	Société nationale d'exploitation industrielle des tabacs et allumettes. Until 1976 this was the monopoly for manufacture and supply of tobacco products in France. In 1976 it lost the monopoly on supply of tobacco but retained the monopoly on manufacture. Privatised in 1995. In 1999 SEITA merged with Tabacalera to become Altadis. In 2008 Altadis was acquired by Imperial Tobacco.
Sema-Sofres	A survey organisation.
SESI	Service des Statistiques des Etudes et des Systemes d'Information
SOFRES	A survey organisation.

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