International Smoking Statistics

Web Edition

A collection of worldwide historical data

Greece

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Preface

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

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

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

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

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

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

Downloads

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

> Methods, including
> > Appendix I: *Estimated size of adult population;*
> > Appendix II: *Comparisons of manufactured and hand-rolled cigarettes and differences in the way they are smoked;*
> > Appendix III: *Consumption category estimation*;

> Comparisons between countries;

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

> Tables from each updated chapter, in Excel format, including extended versions of Tables 4 and 6 and a customisable version of Figure 3;

> 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];

An updated version of Appendix V Bibliography. [This bibliography lists published papers that use an indirect method for estimating past smoking habits based on recall];

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

Introduction

Sales data

See Tables 1-3, Figures 1 and 2 and *Notes on sources of sales data*.

From 1920 until the Second World War, the consumption of manufactured cigarettes per adult decreased from 4 cigarettes per day to about 3 cigarettes. During the Second World War there was a dip in the consumption of manufactured cigarettes. Thereafter consumption rose fairly steadily until 1986 when it reached nearly 10 manufactured cigarettes per day. An apparent substantial dip in consumption in the following few years is probably largely an artefact of the increasing popularity of imported cigarettes, which were not included in the data until 1994, at which time consumption was about 9 manufactured cigarettes per day. It then grew again, and plateaued around 10 from 2000 to 2007, since when it has fallen to below 6 in 2012. The consumption of all tobacco products combined followed a similar trend until the mid-1990s, merely reflecting changes in the estimated average weight of manufactured cigarettes, as the consumption of forms of tobacco other than manufactured cigarettes was negligible. However, the consumption of other products has increased, with loose tobacco accounting for over 10% of all sales in 2011-2012. Consumption of hand-rolled cigarettes was rare until the mid-1990s, since when it has increased to over 1 cigarette per adult per day. This has to some extent offset the drop in consumption of manufactured cigarettes, with the consumption of all cigarettes falling from about 10.5 around 2005 to 7 cigarettes per adult per day in 2012.

The figures mentioned above refer to legally sold tobacco. The black market was reported to have become a problem in the early 1990s. Although estimates from different sources vary, most suggest that the market share of illicit sales was under 10% until about 2010, and 15-20% in 2010-2013.

The proportion of cigarettes that were filtered rose rapidly from zero in 1956 to 50% in the late 1960s, and over 90% since about 1980.

Survey data

See Tables 4-8, Figures 3 and 4 and *Notes on sources of survey data*.

Until the mid-1980s, very few surveys are available on the smoking situation in Greece, and none of the early sources used here for adults are nationally representative, being control populations of hospital case-control studies, conducted only in Athens or in small localities, restricted to military recruits, having non-standard definitions of 'a smoker', or being poorly described. The first nationally representative survey was conducted in 1984 (source 30) but was not repeated until 1998. The Eurobarometer survey (sources 18-19) provides data on a consistent basis from 1988, although it has been criticised (see *Notes on sources of survey data*, p. 37). Other nationally based surveys are available only from the mid-1990s onwards (e.g. the ECHP source 36), with representative surveys from the mid-2000s (sources 40, 42, 44, 45, 47).

Estimates of the prevalence of smoking up to 1984 varied considerably – between 41% and 67% among men aged 15 years and over and between 10 and 28% among women; in 1984, estimates based on the first national survey were 50% for men and 17% for women. For men, Eurobarometer showed a rapid decrease in the

prevalence of smoking any product, from over 60% in the late 1980s to about 50% in the early 1990s, then continuing to fall, but more slowly, to about 45% around 2012; among women it showed an increase from around 25% in the late 1980s to 38% by 2009, although the most recent survey (2012) gives a lower estimate of 33%. The prevalence estimates for manufactured cigarette smoking were similar until the mid-2000s, since when a gap of some 10 percentage points for men and 5 for women has opened up. However the Eurobarometer survey shows no consistent pattern in the distinction between all and regular smoking. Other national surveys gave a similar pattern, with for instance the prevalence of smoking among men estimated as 45% based on the most recent Hellas Health survey (source 42, 2011), and about 50% for any smoking and 36% for manufactured cigarette smoking based on the GATS survey (source 47, 2013); for women, the decrease in prevalence suggested by the most recent survey (GATS, source 47, 2013) was even more marked, the estimates being around 25% for any product and 19% for manufactured cigarette smoking. At all ages more men than women are reported to smoke, except for a few surveys among teenagers, and some waves of the Eurobarometer survey for young adults (ages 15-24), where there is little difference in the estimated prevalence between the sexes. Most surveys show a lower prevalence of smoking in older age groups, more marked among women than among men.

Comparison of survey and sales data was not possible until 1984. In both waves of the national surveys of 1984 and 1998 (source 30) consumption was under-reported by about 25%. From the Eurobarometer survey, there was considerable fluctuation, although the overstatement by 4% in 1991 and by 23% in 1992 may partly be attributed to omission from the sales data of imported cigarettes, as noted above. Few other surveys allowed for the comparison to be made, with the ECHP (source 36, 1998-2002) and EHIS (source 44, 2009) both understating consumption by 30-40%. However other more recent surveys (sources 42 and 46, 2010), and the most recent Eurobarometer (source 19, 2012) have understated by only 5% or overstated consumption by 9-14%, possibly reflecting the increasing market share of black market tobacco not included in the sales data.

In 1975, the estimated number of cigarettes smoked per person per day (sales-adjusted) was 13 for men and 2 for women. By the mid-1980s, this had increased to 16 and 4 respectively. Between 1990 and 2009, the estimated number varied around 12-15 for men and increased to about 7-8 for women. Since 2010, it has decreased to below 10 for men, and below 5 for women, with the estimated number of manufactured cigarettes some 1-2 lower still. However later estimates may be distorted by problems with the sales data (as mentioned above).

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

| Year | Manufactured cigarettes | | Cigars | | Smoking tobacco | All tobacco products |
	tonnes	millions	tonnes	millions	tonnes	tonnes
1920	4 490	3 937				
1921	5 900	5 203				
1922	6 170	5 439				
1923	5 350	4 725				
1924	5 310	4 663				
1925	6 030	5 323				
1926	4 900	4 310	9	3	76	4 985
1927	4 810	4 221	9	3	75	4 894
1928	4 670	4 115	13	4	68	4 751
1929	4 810	4 234	17	6	59	4 886
1930	4 670	4 123	22	7	64	4 756
1931	4 580	4 048	20	7	57	4 657
1932	4 310	3 796	16	5	51	4 377
1933	4 580	4 049	20	7	49	4 649
1934	4 850	4 256	20	7	41	4 911
1935	5 030	4 434	15	5	40	5 085
1936	5 260	4 625				
1937	5 310	4 655				
1938	5 760	5 076				
1939	5 900	5 179				
1940	6 260	5 490				
1941	5 400	4 734				
1942	5 620	4 964				
1943	4 760	4 197				
1944	2 680	2 345				
1945	4 810	4 248				
1946	6 990	6 136				
1947	8 480	7 447				
1948	8 890	7 841				
1949	9 620	8 447				
1950	9 840	8 656				
1951	9 800	8 607				
1952	9 750	8 595				
1953	10 070	8 871				
1954	10 210	8 964				
1955	10 430	9 187				
1956	10 480	9 206				
1957	10 890	9 578				
1958	11 430	10 074				
1959	11 750	10 335				
1960	12 020	10 563				
1961	12 290	10 820				
1962	12 660	11 135				
1963	13 290	11 719				
1964	13 520	11 894				
1965	14 110	12 328				
1966	14 830	13 073				
1967	15 470	13 644				
1968	15 970	14 066				
1969	16 370	14 432				
1970	17 190	15 144				
1971	17 330	15 300				
1972	18 280	16 250				
1973	19 550	17 360				

Source: see *Notes on sources of sales data: Sales data before 1974*, p. 33.

Table 1.2   Total annual sales of tobacco products, 1974-2012

Year	Manufactured cigarettes		Cigars		Pipe tobacco	Fine-cut tobacco	All tobacco products
	tonnes	millions	tonnes	millions	tonnes	tonnes	tonnes
1974	20 679	18 198					
1975	21 465	18 889					
1976	22 786	20 052					
1977	23 790	20 935					
1978	24 942	21 949					
1979	24 912	21 923					
1980	24 889	21 903	21	7			
1981	22 356	19 673					
1982	24 095	24 095	21	7	42		24 158
1983	25 336	25 336					
1984	27 019	27 019					
1985	27 757	27 757	21	7			
1986	28 523	28 523					
1987	27 825	27 825					
1988	26 536	26 536					
1989	25 744	25 744					
1990	24 856	24 856	36	12			
1991	24 425	24 425					
1992	21 869	21 869					
1993	20 807	20 807					
1994/1	29 354	29 354					
1995	28 079	28 079	48	16		220	28 347
1996	29 415	29 415	141	47			
1997	30 569	30 569	78	26			
1998	28 974	28 974					
1999	31 748	31 748					
2000	32 249	32 249	189	63			
2001	33 829	33 829	177	59			
2002	32 614	32 614	171	57			
2003	33 320	33 320	180	60		908	34 407
2004	35 404	35 404	153	51		998	36 554
2005	34 603	34 603	171	57		1 035	35 809
2006	33 468	33 468	165	55		1 178	34 810
2007	35 247	35 247	180	60		1 290	36 717
2008	30 278	30 278	189	63		1 437	31 905
2009	34 050	34 050	195	65		1 723	35 968
2010	24 005	24 005	195	65		2 216	26 415
2011	25 630	25 630	168	56		3 043	28 841
2012	19 399	19 399				2 451	

1   Manufactured cigarettes include imported cigarettes from 1994 onwards.
Source: see *Notes on sources of sales data: Sales data for 1974 onwards*, p. 33.

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

Year	Manufactured cigarettes	Cigars	Loose tobacco
	%	%	%
1926	98.3	0.2	1.5
1935	98.9	0.3	0.8
1982	99.7	0.1	0.2
1995	99.1	0.2	0.8
2005	96.6	0.5	2.9
2011	88.9	0.6	10.6

Source: calculated from Tables 1.1 & 1.2.

Figure 1   Percentage of sales of tobacco in different forms (by weight), selected years
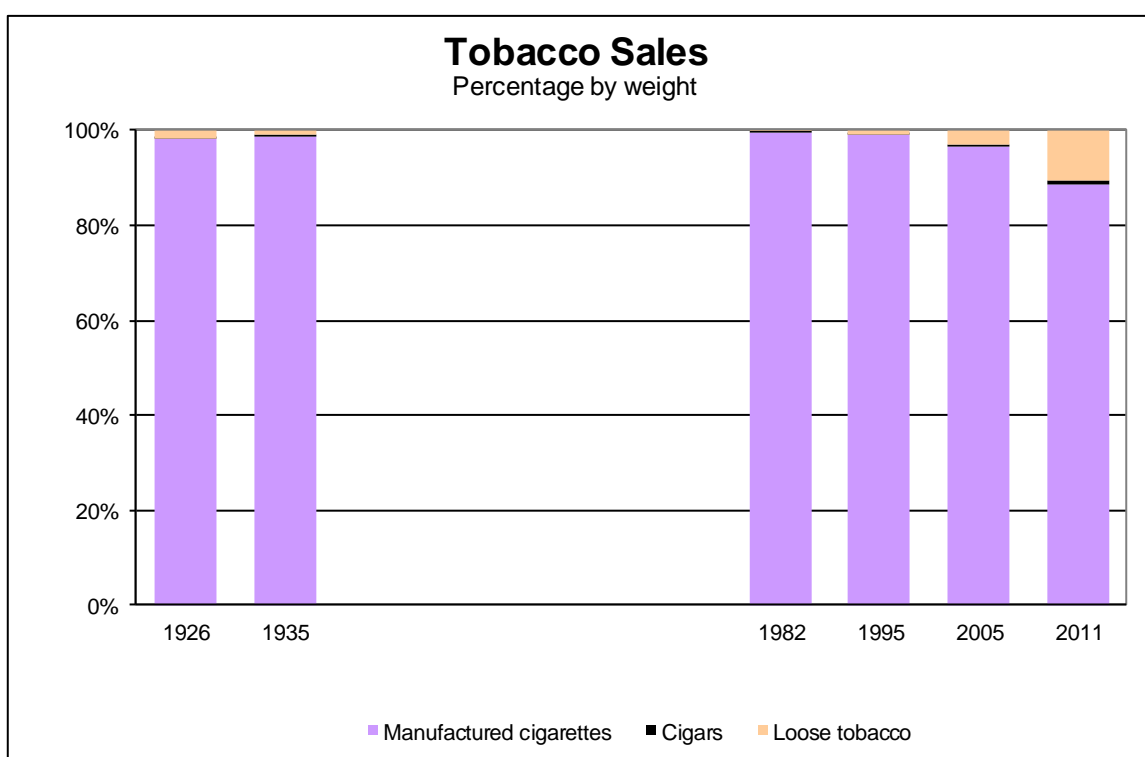
Source: Table 1.3.

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

Year	Manufactured cigarettes		Hand-rolled cigarettes		Total cigarettes		All tobacco products	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day
1920	3 937	3.2						
1921	5 203	4.3						
1922	5 439	4.3						
1923	4 725	3.5						
1924	4 663	3.3						
1925	5 323	3.6						
1926	4 310	2.9					4 985	3.4
1927	4 221	2.8					4 894	3.2
1928	4 115	2.7					4 751	3.1
1929	4 234	2.7					4 886	3.1
1930	4 123	2.6					4 756	3.0
1931	4 048	2.6					4 657	3.0
1932	3 796	2.4					4 377	2.7
1933	4 049	2.5					4 649	2.9
1934	4 256	2.6					4 911	3.0
1935	4 434	2.6					5 085	3.0
1936	4 625	2.7						
1937	4 655	2.7						
1938	5 076	2.9						
1939	5 179	2.9						
1940	5 490	3.1						
1941	4 734	2.6						
1942	4 964	2.8						
1943	4 197	2.3						
1944	2 345	1.3						
1945	4 248	2.4						
1946	6 136	3.3						
1947	7 447	4.0						
1948	7 841	4.1						
1949	8 447	4.5						
1950	8 656	4.4						
1951	8 607	4.3						
1952	8 595	4.2						
1953	8 871	4.3						
1954	8 964	4.2						
1955	9 187	4.3						
1956	9 206	4.3						
1957	9 578	4.4						
1958	10 074	4.6						
1959	10 335	4.7						
1960	10 563	4.7						
1961	10 820	4.8						
1962	11 135	4.9						
1963	11 719	5.1						
1964	11 894	5.1						
1965	12 328	5.3						
1966	13 073	5.6						
1967	13 644	5.7						
1968	14 066	5.9						
1969	14 432	6.0						
1970	15 144	6.3						
1971	15 300	6.4						
1972	16 250	6.6						
1973	17 360	7.0						
1974	18 198	7.3						
1975	18 889	7.5						
1976	20 052	7.9						
1977	20 935	8.1						
1978	21 949	8.4						
1979	21 923	8.3						

Table 2 *(continued)*

Year	Manufactured cigarettes		Hand-rolled cigarettes		Total cigarettes		All tobacco products	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day
1980	21 903	8.1						
1981	19 673	7.1						
1982	24 095	8.6					24 158	8.7
1983	25 336	9.0						
1984	27 019	9.5						
1985	27 757	9.7						
1986	28 523	9.9						
1987	27 825	9.6						
1988	26 536	9.1						
1989	25 744	8.7	0	0.0	25 744	8.7		
1990/1	24 856	8.3	*49*	*0.0*	*24 905*	*8.3*		
1991/1	24 425	8.1	*98*	*0.0*	*24 523*	*8.1*		
1992/1	21 869	7.1	*147*	*0.0*	*22 016*	*7.1*		
1993/1	20 807	6.7	*195*	*0.1*	*21 002*	*6.7*		
1994/1,2	29 354	9.3	*244*	*0.1*	*29 598*	*9.3*		
1995	28 079	8.8	293	0.1	28 372	8.8	28 347	8.8
1996/1	29 415	9.1	*408*	*0.1*	*29 823*	*9.2*		
1997/1	30 569	9.3	*522*	*0.2*	*31 091*	*9.5*		
1998/1	28 974	8.7	*637*	*0.2*	*29 611*	*8.9*		
1999/1	31 748	9.5	*752*	*0.2*	*32 500*	*9.7*		
2000/1	32 249	9.6	*866*	*0.3*	*33 115*	*9.8*		
2001/1	33 829	10.0	*981*	*0.3*	*34 810*	*10.2*		
2002/1	32 614	9.5	*1 095*	*0.3*	*33 709*	*9.9*		
2003	33 320	9.7	1 210	0.4	34 530	10.0	34 407	10.0
2004	35 404	10.3	1 330	0.4	36 734	10.6	36 554	10.6
2005	34 603	10.0	1 380	0.4	35 983	10.4	35 809	10.3
2006	33 468	9.6	1 570	0.5	35 038	10.0	34 810	10.0
2007	35 247	10.1	1 650	0.5	36 897	10.5	36 717	10.5
2008	30 278	8.6	1 820	0.5	32 098	9.1	31 905	9.1
2009	34 050	9.7	2 500	0.7	36 550	10.4	35 968	10.2
2010	24 005	6.8	2 860	0.8	26 865	7.6	26 415	7.5
2011	25 630	7.3	3 560	1.0	29 190	8.3	28 841	8.2
2012	19 399	5.6	4 750	1.4	24 149	7.0		

1   Hand-rolled cigarettes by interpolation, see *Notes on sources of sales data*: *Estimates of numbers of hand-rolled cigarettes*, p. 35.
2   Manufactured cigarettes includes imported cigarettes from 1994 onwards.
Source: Manufactured cigarettes and all tobacco products, Tables 1.1 and 1.2. Hand-rolled cigarettes, see *Notes on sources of sales data: Estimates of numbers of hand-rolled cigarettes*, p. 35. Population, see *Population*, Methods p. 14.

Figure 2   Sales of (i) manufactured and total[1] cigarettes and (ii) all tobacco products. Average per adult (aged 15 years and over) per day

Sales

Number /adult /day

Manufactured cigarettes —— Total cigarettes

Sales

Grams /adult /day

All tobacco products
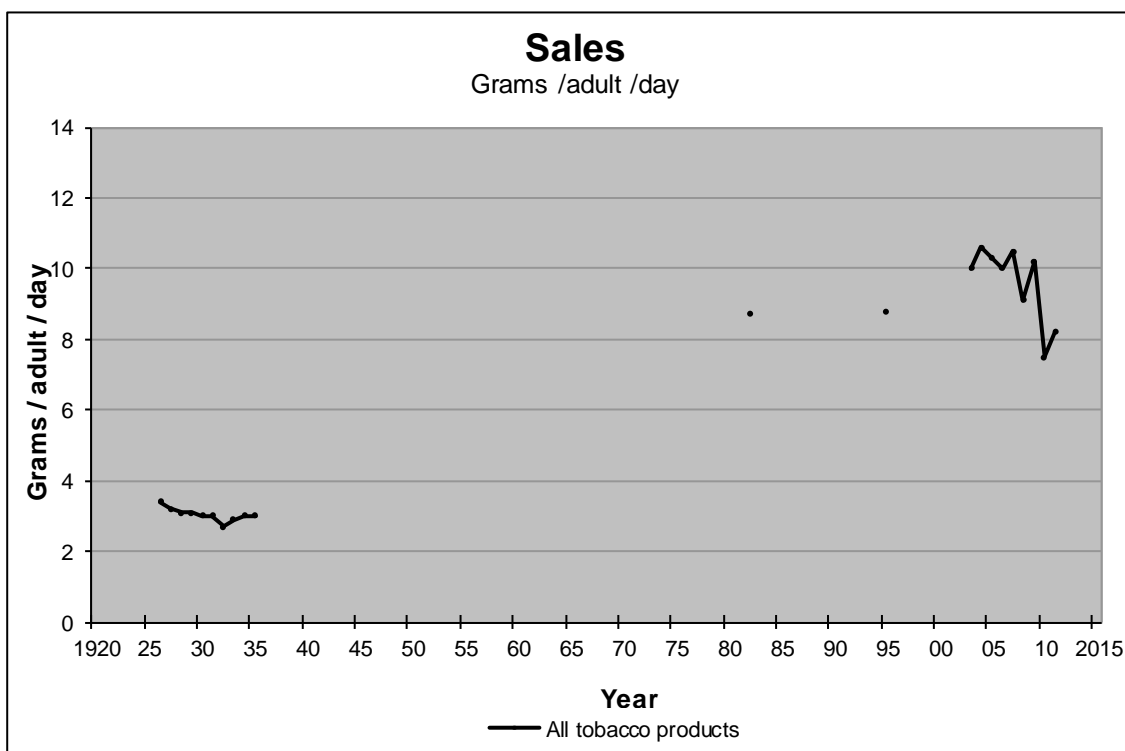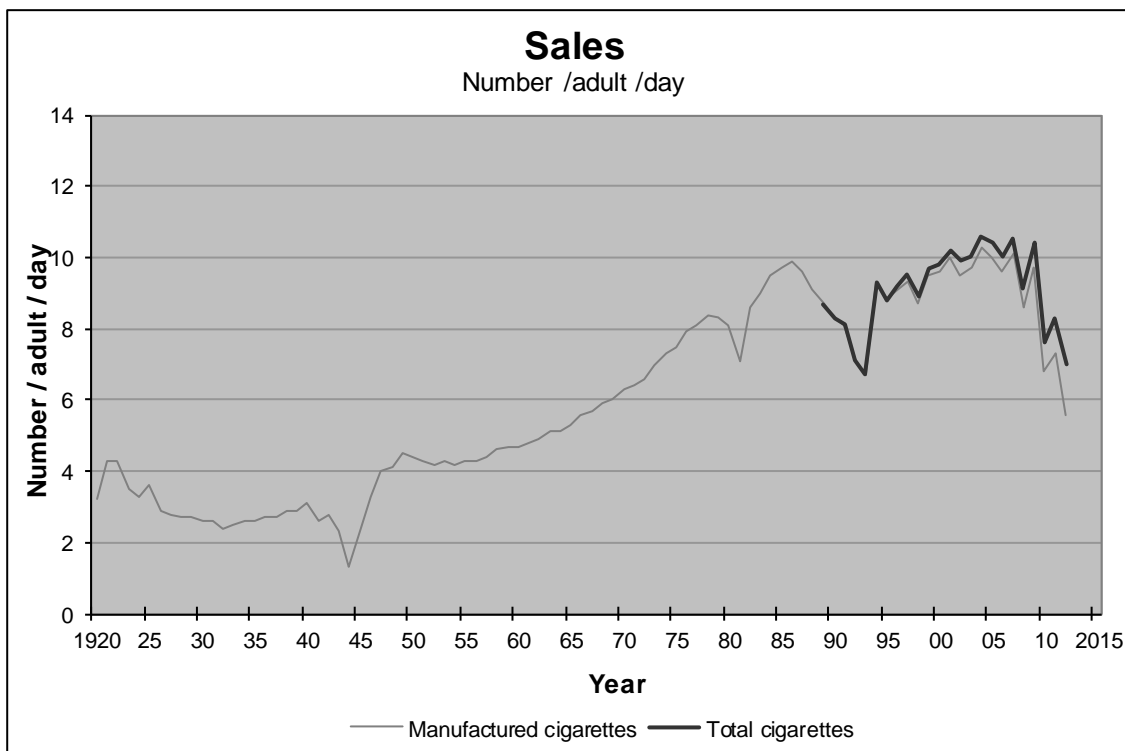
1   Includes estimated hand-rolled cigarette consumption.
Source: Table 2.

Table 3   Manufactured cigarettes: percentage of total sales as filter cigarettes

Year	Filter %
1956	0
1961	4.3
1962	5.7
1963	9.4
1964	15.2
1965	17.8
1966	27.6
1967	36.8
1968	51.9
1969	53.7
1970	56.3
1971	70.4
1972	75.2
1973	79.5
1974	82.0
1975	84.5
1976	86.9
1977	88.6
1978	89.5
1979	90.6
1980	91.5
1981	92.0
1982	92.0
1983	92.2
1984	92.4
1985	94.4
1986	94.5
1987	94.6
1988	94.9
1989	94.9
1990	95.2
1991	96.6
1992	96.6
1993	97.2
1994	98.4
1995	98.7
1996	99.0
1997	99.1
1998	99.2
1999	99.0
2000	99.2
2001	99.2
2002	99.1
2003	99.1
2004	96.8

Source: see *Notes on sources of sales data: Plain/Filter cigarette sales,* p. 36.
There is also limited information in the Notes on *Menthol cigarette sales*, p. 36 and *Tar and nicotine machine yields of cigarettes*, p. 36

Table 3   Manufactured cigarettes: percentage of total sales as filter cigarettes

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

Year	Source	Product	Frequency	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
56	6*	UC	R*									61		71		73		75		78		68		40	
60	9	UC	R													62	56	56	55						57
61	10	UC	R													66	60	66	61						64
75	1	MC	U												50										
78	8	U	R					29																	
79	7	UC	*	1	1	4																			
79	7	U	A	13	17	26																			
80	4	A	R									73	65												71
80	31	U	U																						
81	3	A	*															74		61		40			
81	15	UC	*						12			41	58	59	55	60	49	43	37	34	30	19	13		44
82	33	U	U													75	74	73	74						74
83	2	MC	U												67										
84	5	UC	*				65		79																
84	11	A	R			26																			
84	11	A	A			48																			
84	12	A	R			24																			
84	13	U	R																						
84	14	U	U												41										
84	30	U	R			*				52			*				56								54
85	16	U	U												54										
87	17	U	U						49																
87	18	UC	U						58					71		67					48				61
87	18	A	U						58					71		67					50				61
88	12	A	R			20																			
88	18	TC	U						65					71		69					41				61
88	18	A	U						65					72		70					41				62
88	18	TC	U						60					75		63					49				62
88	18	A	U						60					76		65					49				62
88	21	U	U			37																			
88	32	U	U											49											
88	34	UC	R									61						44			13				
89	18	TC	U						53					70		65					48				59
89	18	A	U						53					71		67					50				60
89	18	TC	U						47					74		58					41				55
89	18	A	U						49					76		60					43				57
90	18	MC	U						35					71		53					39				50
90	18	TC	U						35					72		54					39				50
90	18	A	U						35					73		54					41				51
90	20	U	U				34																		
90	22	U	*			3	6																		
90	22	U	R	0		7																			
90	23	U	U										70												
90	37	UC	R							65															
91	18	MC	U						43					66		53					41				51
91	18	TC	U						43					67		54					43				52
91	18	A	U						43					67		54					45				53
92	18	MC	U						36					65		61					37				50
92	18	TC	U						37					66		62					37				51
92	18	A	U						37					66		62					38				51

Table 4F Prevalence of smoking, females: selected surveys by age

Year	Source	Product	Frequency	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
56	6	UC	R																						
60	9	UC	R																						
61	10	UC	R																						
75	1	MC	U											10											
78	8	U	R				34																		
79	7	UC	*	0	0	2																			
79	7	U	A	6	8	11																			
80	4	A	R																						
80	31	U	U															13							
81	3	A	*																	5		4			
81	15	UC	*							10		25	25	20	23	20	12	16	12	12	7	3		9	17
82	33	U	U																						
83	2	MC	U											28											
84	5	UC	*				50		82																
84	11	A	R				19																		
84	11	A	A				43																		
84	12	A	R				22																		
84	13	U	R																12						
84	14	U	U											12											
84	30	U	R				*						28		*			14							20
85	16	U	U											13											
87	17	U	U						36																
87	18	UC	U					39						44			16				8				25
87	18	A	U					39						44			16				8				25
88	12	A	R			21																			
88	18	TC	U					38						48			24				9				27
88	18	A	U					38						48			24				9				27
88	18	TC	U					31						43			21				6				24
88	18	A	U					31						43			21				6				24
88	21	U	U			13																			
88	32	U	U													39									
88	34	UC	R									28							2			0			
89	18	TC	U					33						46			24				11				27
89	18	A	U					33						46			24				11				27
89	18	TC	U					38						39			28				19				30
89	18	A	U					38						40			30				19				30
90	18	MC	U					32						44			28				9				26
90	18	TC	U					32						45			28				9				26
90	18	A	U					32						45			28				9				26
90	20	U	U					26																	
90	22	U	*			1	2																		
90	22	U	R	0		4																			
90	23	U	U												40										
90	37	UC	R																						
91	18	MC	U					43						44			17				11				26
91	18	TC	U					43						44			17				11				26
91	18	A	U					43						44			17				11				26
92	18	MC	U					36						47			27				12				28
92	18	TC	U					36						48			27				12				29
92	18	A	U					36						48			27				12				29

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

Year	Source	Product	Frequency	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
93	11	A	R				16																		
93	11	A	A				29																		
93	23	U	U																						
93	24	UC	*				15																		
93	24	UC	A				23																		
94	18	MC	U					45						59		46				29					45
94	18	TC	U					47						59		46				30					45
94	18	A	U					47						59		46				31					46
94	19	MC	U					45						60		47				29					45
94	19	TC	U					47						60		47				30					46
94	19	A	U					47						60		48				31					46
94	25	U	R								30				50										
94	25	U	A								44				54										
94	26	U	R				49																		
95	19	MC	U					46						65		55				36					50
95	19	TC	U					47						66		55				36					51
95	19	A	U					47						67		58				36					51
95	28	U	U							47															
95	29	U	U					45							50						44				
96	27	U	U										57		50			35			23				42
98	11	A	R				22																		
98	11	A	A				34																		
98	30	U	R			9						51	60			49									47
98	35	A	*		3		13																		
98	35	A	R		5		18																		
98	36*	UC	R					34					55		60		53		40		26		13	9	44
98	36*	A	R					34					55		61		53		40		27		13	9	44
98	36*	A	A					48					69		69		65		53		39		29	23	56
99	19	U	U					47						69		78				41					58
99	24	UC	*				24																		
99	24	UC	A				34																		
99	36	UC	R					*					57		56		53		38		25		16	12	44
99	36	A	R					*					57		57		54		39		25		16	12	44
99	36	A	A					*					69		66		65		52		41		33	30	57
00	36*	UC	R					31					55		58		56		37		27		16	12	43
00	36*	A	R					31					55		58		57		38		28		16	13	44
00	36*	A	A					48					69		71		66		57		48		32	35	59
01	36*	UC	R					28					55		55		55		36		28		15	10	42
01	36*	A	R					28					55		56		56		37		28		15	11	42
01	36*	A	A					49					70		69		67		55		49		37	38	59
02	19	MC	R					32						60		55				30					44
02	19	TC	R					34						63		55				30					46
02	19	A	R					34						63		55				31					46
02	19	MC	U					36						61		59				32					47
02	19	TC	U					40						64		59				33					49
02	19	A	U					40						64		59				35					49
02	35	A	*		3		9																		
02	35	A	R		5		14																		
02	36	U	R					33					53		58		50		37		23		12	11	41
02	36	U	A					45					61		65		59		45		33		19	17	50
02	38	UC	R	1	3	8	15	21	34																12
03	24	UC	*				18	41																	
03	24	UC	A				27	50																	
03	39	A	A				9																		

Year	Source	Product	Frequency	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
93	11	A	R				14																		
93	11	A	A				28																		
93	23	U	U											56											
93	24	UC	*				14																		
93	24	UC	A				24																		
94	18	MC	U					34						38		34				10					27
94	18	TC	U					35						38		34				12					28
94	18	A	U					35						38		34				12					28
94	19	MC	U					34						36		35				10					27
94	19	TC	U					35						36		35				12					28
94	19	A	U					35						36		35				12					28
94	25	U	R								19			36											
94	25	U	A								29			43											
94	26	U	R				46																		
95	19	MC	U					35						49		29				8					28
95	19	TC	U					35						50		29				8					29
95	19	A	U					35						50		29				8					29
95	28	U	U																						
95	29	U	U					28							35						30				
96	27	U	U										46			26			8		3				19
98	11	A	R				20																		
98	11	A	A				35																		
98	30	U	R			10					36			38			28								29
98	35	A	*		2		14																		
98	35	A	R		5		19																		
98	36*	UC	R						20				28		33		20		8		3		3	1	18
98	36*	A	R						20				28		33		20		8		3		3	1	18
98	36*	A	A						35				44		47		35		21		17		19	12	32
99	19	U	U					44						50		37				11					32
99	24	UC	*				23																		
99	24	UC	A				36																		
99	36	UC	R						18				31		34		22		8		3		3	1	18
99	36	A	R						18				31		34		22		8		3		3	1	18
99	36	A	A						33				46		47		37		25		18		17	21	33
00	36*	UC	R						17				31		35		22		7		2		2	3	18
00	36*	A	R						17				31		35		22		7		2		2	3	18
00	36*	A	A						36				47		51		40		25		20		18	16	35
01	36*	UC	R						14				28		32		24		11		4		2	2	18
01	36*	A	R						14				28		32		24		11		4		2	2	18
01	36*	A	A						34				48		52		45		32		30		21	26	39
02	19	MC	R					31						37		37				15					28
02	19	TC	R					34						39		37				15					29
02	19	A	R					34						39		37				15					29
02	19	MC	U					35						41		45				17					32
02	19	TC	U					37						42		45				17					33
02	19	A	U					37						42		45				18					33
02	35	A	*		1		11																		
02	35	A	R		3		14																		
02	36	U	R						17				25		30		20		8		4		2	2	16
02	36	U	A						24				34		39		26		11		6		3	4	21
02	38	UC	R	2	3	6	16	23	30																14
03	24	UC	*				20		40																
03	24	UC	A				30		47																
03	39	A	A				11																		

Year	Source	Product	Freq.	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
04	40	UC	R														48								
05	19	MC	R									30		60			49				31				43
05	19	TC	R									31		63			57				33				47
05	19	A	R									31		63			57				33				47
05	19	MC	U									35		64			51				33				47
05	19	TC	U									37		68			59				35				50
05	19	A	U									37		68			59				35				50
05	41	UC	*		3																				
05	41	UC	U		11																				
05	41	UC	A	9	*		48																		13
05	41	A*	U		17																				
06	19	MC	R									28		47			49				33				40
06	19	TC	R									32		56			52				33				44
06	19	A	R									32		56			52				33				44
06	19	MC	U									30		50			57				35				44
06	19	TC	U									33		59			60				35				48
06	19	A	U									33		59			60				35				48
06	35	A	*		1		14																		
06	35	A	R		2		17																		
06	42	A	A										66			59				35					52
06	43	A	A											54											
07	24	UC	*				16																		
07	24	UC	A				24																		
08	42	A	A														49								
09	19	MC	R									29		53			57				32				43
09	19	TC	R									37		56			57				32				46
09	19	MC	A									35		56			57				32				45
09	19	TC	A									37		56			57				32				46
09	19	A	A									37		57			57				34				46
09	44	TC	R									23	50		48		46	41		22		13	5		38
09	45	UC	*											50											
10	35	A	*		2		13																		
10	35	A	R		3		18																		
10	42	MC	A														37								
10	42	TC	A														45								
10	42	A	A										50		54					31					45
10	46	TC	R												43										
10	46	TC	A									42		47			40								44
11	24	UC	*				14																		
11	24	UC	A				22																		
11	42	A	A														46								
12	19	MC	R									21		38			42				31				34
12	19	TC	R									39		58			50				34				45
12	19	A	R									39		58			50				35				46
12	19	MC	A									29		43			44				32				37
12	19	TC	A									40		58			51				34				46
12	19	A	A									40		58			52				35				46
13	47	TC	R														50								
13	47	A	R									38			63			53				28			50
13	47	MC	A									22			39			46				27			36
13	47	TC	A									41			64			55				29			51
13	47	A	A									41			64			55				29			51

Source: see *Notes on sources of survey data*, p. 37   Frequency: A = all smokers (including occasional)
Product: MC = manufactured cigarettes   R = regular or daily smokers
               TC = total cigarettes (including hand-rolled)   U = unspecified
               UC = cigarettes (type unspecified)   * = refer to *Notes on sources of survey data*, p. 37
               A = all products   All ages: relates to ages reported; as given in original source

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

Year	Source	Product	Frequency	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
04	40	UC	R													35									
05	19	MC	R									25		49		44			11						31
05	19	TC	R									28		50		47			12						32
05	19	A	R									28		50		47			12						32
05	19	MC	U									28		53		47			13						34
05	19	TC	U									32		55		50			14						36
05	19	A	U									32		55		50			14						36
05	41	UC	*			3																			
05	41	UC	U			9																			
05	41	UC	A	13		*		48																	12
05	41	A*	U			14																			
06	19	MC	R									40		39		38			12						30
06	19	TC	R									42		43		39			12						31
06	19	A	R									42		43		39			12						31
06	19	MC	U									51		46		42			15						35
06	19	TC	U									54		50		43			15						37
06	19	A	U									54		50		43			15						37
06	35	A	*		1		11																		
06	35	A	R		2		16																		
06	42	A	A									38				51				18					35
06	43	A	A																						
07	24	UC	*				12																		
07	24	UC	A				21																		
08	42	A	A													37									
09	19	MC	R									31		46		54			13						34
09	19	TC	R									41		50		57			14						38
09	19	MC	A									37		50		56			13						37
09	19	TC	A									41		51		57			14						38
09	19	A	A									42		52		57			15						39
09	44	TC	R									27		34	35	35		26		11		4	4		26
09	45	UC	*													30									
10	35	A	*		1		8																		
10	35	A	R		3		13																		
10	42	MC	A													35									
10	42	TC	A													38									
10	42	A	A									49				50				24					40
10	46	TC	R													33									
10	46	TC	A									27				39			32						34
11	24	UC	*				13																		
11	24	UC	A				21																		
11	42	A	A													31									
12	19	MC	R									20		35		48			15						28
12	19	TC	R									30		42		53			15						33
12	19	A	R									30		42		53			15						33
12	19	MC	A									22		39		48			15						30
12	19	TC	A									30		44		53			15						34
12	19	A	A									30		44		53			15						34
13	47	TC	R													24									
13	47	A	R									15		35		30			4						24
13	47	MC	A									10		27		26			4						19
13	47	TC	A									19		37		32			4						26
13	47	A	A									19		37		32			4						26

Source: see *Notes on sources of survey data*, p. 37   Frequency: A   = all smokers (including occasional)
Product: MC = manufactured cigarettes   R   = regular or daily smokers
               TC = total cigarettes (including hand-rolled)   U   = unspecified
               UC = cigarettes (type unspecified)   *   = refer to *Notes on sources of survey data*, p. 37
               A   = all products   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

Year	Source	Product	Estimated	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
56	6	UC	E									12		11		13		14		13		13		9.7	
60	9	UC	E													19	19	18	18						18
61	10	UC	E													15	15	16	17						16
80	4	UC	E									21													
80	31	UC	E																						
81	3	UC	E														20		22			17			
84	11	UC	E*				10																		
84	30	UC	E									22													
87	18	UC	E				21							27		28				22					25
88	18	TC	E				22							25		26				18					23
88	32	UC													26										
89	18	TC	E				21							22		26				20					23
90	18	TC	E				21							28		25				20					24
90	37	UC	E						22																
91	18	TC	E				25							29		24				20					25
92	18	TC	E				25							28		26				26					27
93	11	UC	E*				10																		
93	24	UC	E				13																		
94	18	TC	E				19							24		24				18					22
94	19	TC	E				19							24		24				18					22
95	19	TC	E				24							25		31				28					27
95	28	UC							19																
96	27	UC	E											26			27	24			18				
98	11	UC	E*				11																		
98	30	UC	E									22													
98	35	UC			1.0		5.0																		
98	36	UC	E*				22					24		24		24		23		22		20		12	23
99	24	UC	E				15																		
99	36	UC	E*				*					24		24		24		23		21		21		13	23
00	36	UC	E*				22					24		24		24		23		22		21		16	23
01	36	UC	E*				23					23		24		24		24		22		21		18	23
02	19	TC	E				21							27		27				26					26
02	36	UC	E*				21					24		24		23		22		22		20		15	23
02	38	UC	E*				11																		
03	24	UC	E				17	19																	
05	19	TC	E				21							25		28				25					26
06	19	TC	E				20							24		26				23					24
07	24	UC	E				16																		
09	19	TC					19							24		27				23					24
09	44	TC	E*				17					20		21		23		22		20		21		16	21
10	42	TC														23									
10	46	MC													21										
10	46	TC													24										
11	24	UC	E				12																		
12	19	TC					15							21		24				21					21
13	47	TC														21									

Source: see *Notes on sources of survey data*, p. 37
Product: MC = manufactured cigarettes
TC = total cigarettes (including hand-rolled)
UC = cigarettes (type unspecified)
A = all products
U = unspecified

Estimated: E = mean estimated from percentage distribution (see also *Consumption category estimation*, Methods p. 11, and Appendix III)
* = refer to *Notes on sources of survey data*, p. 37
All ages: relates to ages reported; as given in original source

Table 5F — Number of cigarettes smoked per smoker per day, females: selected surveys by age

Year	Source	Product	Estimated	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages
56	6	UC	E																						
60	9	UC	E																						
61	10	UC	E																						
80	4	UC	E																						
80	31	UC	E*												15										
81	3	UC	E																						
84	11	UC	E*			7.2																			
84	30	UC	E										13												
87	18	UC	E					13						16		17					9.5				15
88	18	TC	E					13						14		13					12				13
88	32	UC												13											
89	18	TC	E					11						13		14					11				13
90	18	TC	E					13						14		16					11				14
90	37	UC	E																						
91	18	TC	E					13						17		18					16				16
92	18	TC	E					12						17		15					16				15
93	11	UC	E*			7.8																			
93	24	UC	E				8.8																		
94	18	TC	E					13						13		13					11				13
94	19	TC	E					13						13		13					11				13
95	19	TC	E					14						15		18					13				16
95	28	UC																							
96	27	UC	E											17			17		14		11				
98	11	UC	E*			8.7																			
98	30	UC	E										15												
98	35	UC			0.9		4.3																		
98	36	UC	E*					18						18	18	19	19		15			17		9.7	18
99	24	UC	E				12																		
99	36	UC	E*					18						18	18	19	19		17			17		24	18
00	36	UC	E*					18						18	19	18	19		17			14		9.7	18
01	36	UC	E*					18						19	19	19	17		18			14		16	18
02	19	TC	E					14						15		16					19				16
02	36	UC	E*					17						19	18	19	18		18			12		17	18
02	38	UC	E*			8.9																			
03	24	UC	E				12	15																	
05	19	TC	E					16						17		20					15				18
06	19	TC	E					12						15		20					16				16
07	24	UC	E				13																		
09	19	TC						15						18		21					17				19
09	44	TC	E*					15						16	17	19	17		17			15		15	17
10	42	TC														19									
10	46	MC														20									
10	46	TC														21									
11	24	UC	E				9.2																		
12	19	TC						15						15		20					19				18
13	47	TC														17									

Source: see *Notes on sources of survey data*, p. 37

Product:
MC = manufactured cigarettes
TC = total cigarettes (including hand-rolled)
UC = cigarettes (type unspecified)
A = all products
U = unspecified

Estimated: E = mean estimated from percentage distribution (see also *Consumption category estimation*, Methods p. 11, and Appendix III)
* = refer to *Notes on sources of survey data*, p. 37

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

Year	Source	Product	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages	% Total sales
56	6	UC									7.4		8.0		9.3		10		9.8		8.5		3.9		**
60	9	UC													12	10	10	9.8						10	**
61	10	UC													10	8.7	11	10						9.9	**
70	9	UC															11								**
71	10	UC															10								**
80	4	UC									15														**
80	31	UC																							**
81	3	UC																15		13		6.6			**
84	11	UC*				4.9																			**
84	30	UC										12													74%m
87	18	UC*									12		19			18			11					15	96%m
88	18	TC*									14		18			18			7.5					14	95%m
88	32	UC											13												**
89	18	TC*									11		16			17			9.5					13	94%m
90	18	TC*									7.4		20			14			7.7					12	94%T
90	37	UC									14														**
91	18	TC*									11		20			13			8.7					13	104%T
92	18	TC*									9.2		18			16			9.6					13	123%T
93	11	UC*				3.0																			**
93	24	UC				2.0																			**
94	18	TC*									8.8		14			11			5.4					9.9	70%T
94	19	TC*									8.8		14			11			5.5					9.9	70%T
95	19	TC*									11		16			17			9.9					14	100%T
95	28	UC									9.1														**
96	27	UC*										15			13			8.1		4.3					**
98	11	UC*				3.9																			**
98	30	UC											10												76%T
98	35	UC		0.1		0.9																			**
98	36	UC*									7.5		13		14		13		9.2		5.9	2.6	1.1	10	75%T
99	24	UC				3.7																			**
99	36	UC*									*		14		13		13		8.8		5.3	3.4	1.6	10	70%T
00	36	UC*									6.8		13		14		13		8.7		6.1	3.3	1.9	10	68%T
01	36	UC*									6.2		12		13		13		8.6		6.1	3.2	1.7	9.7	63%T
02	19	TC									7.0		17		15			8.0						12	84%T
02	36	UC*									7.1		13		14		12		8.1		5.0	2.3	1.5	9.3	63%T
02	38	UC*				1.4																			**
03	24	UC				3.1		7.9																	**
05	19	TC									6.5		16		16			8.3						12	86%T
06	19	TC									6.3		13		13			7.7						10	76%T
07	24	UC				2.6																			**
09	19	TC									6.8		13		16			7.4						11	87%T
09	44	TC*									4.1		10		10		10		9.2		4.5	2.8	0.8	8.0	60%T
10	42*	TC														10									114%T
10	46	TC													11										95%T
11	24	UC				1.7																			**
12	19	TC									5.8		12		12			7.3						9.4	109%T
13	47	TC												11											102%T

Source: *Notes on sources of survey data*, p. 37
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. 37
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 (m – see Methods p. 12)
** = cannot be calculated
-- = adjusted by original author

Table 6F Number of cigarettes smoked per person per day, females: selected surveys by age; with percentage total sales

Year	Source	Product	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages	% Total sales
56	6	UC																							**
60	9	UC																							**
61	10	UC																							**
70	9	UC																							**
71	10	UC																							**
80	4	UC																							**
80	31	UC*													2.0										**
81	3	UC																							**
84	11	UC*				3.1																			**
84	30	UC										2.5													74%m
87	18	UC*						4.9				7.0			2.8			0.8						3.7	96%m
88	18	TC*						5.0				6.5			3.1			1.1						3.6	95%m
88	32	UC											5.1												**
89	18	TC*						3.8				5.9			3.3			1.3						3.4	94%m
90	18	TC*						4.2				6.5			4.3			0.9						3.7	94%T
90	37	UC																							**
91	18	TC*						5.7				7.4			3.2			1.7						4.2	104%T
92	18	TC*						4.3				8.0			4.0			1.8						4.4	123%T
93	11	UC*				2.2																			**
93	24	UC				1.2																			**
94	18	TC*						4.4				5.0			4.3			1.3						3.5	70%T
94	19	TC*						4.4				4.8			4.5			1.3						3.6	70%T
95	19	TC*						4.9				7.6			5.2			1.1						4.5	100%T
95	28	UC																							**
96	27	UC*											7.8		4.5		1.1		0.3						**
98	11	UC*				3.0																			**
98	30	UC										4.4													76%T
98	35	UC		0.0		0.8																			**
98	36	UC*						3.5				5.0		6.0		3.8		1.4		0.4		0.4	0.1	3.2	75%T
99	24	UC				2.7																			**
99	36	UC*						3.2				5.5		6.2		4.2		1.5		0.6		0.5	0.2	3.3	70%T
00	36	UC*						2.9				5.7		6.5		4.0		1.4		0.4		0.2	0.3	3.3	68%T
01	36	UC*						2.4				5.1		5.9		4.6		1.8		0.8		0.2	0.4	3.2	63%T
02	19	TC						4.9				6.0			5.8			2.8						4.6	84%T
02	36	UC*						2.8				4.8		5.4		3.7		1.4		0.7		0.2	0.3	2.8	63%T
02	38	UC*				1.2																			**
03	24	UC				2.5	6.0																		**
05	19	TC						4.5				8.7			9.4			1.8						5.8	86%T
06	19	TC						4.8				6.5			7.7			2.0						4.9	76%T
07	24	UC				1.5																			**
09	19	TC						6.2				9.3			12			2.3						7.0	87%T
09	44	TC*						3.9				5.6		6.1		6.6		4.5		1.9		0.6	0.6	4.5	60%T
10	42*	TC												7.4											114%T
10	46	TC												7.3											95%T
11	24	UC				1.2																			**
12	19	TC						4.6				6.3			11			2.9						5.9	109%T
13	47	TC												4.0											102%T

Source: *Notes on sources of survey data*, p. 37
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. 37
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, (m – see Methods p. 12)
** = cannot be calculated
-- = adjusted by original author

Table 7M   Number of cigarettes smoked per person per day, sales-adjusted, males: selected surveys[1] by age; with percentage total sales

Year	Source	Product	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages	% Total sales
84	30	UC											16												74%m
87	18	UC*						13				20			19				11					16	96%m
88	18	TC*						15				18			19				7.8					15	95%m
89	18	TC*						12				17			18				10					14	94%m
90	18	TC*						7.9				21			14				8.2					13	94%T
91	18	TC*						10				19			12				8.4					13	104%T
92	18	TC*						7.5				15			13				7.9					11	123%T
94	18	TC*						13				20			16				7.7					14	70%T
94	19	TC*						12				20			16				7.9					14	70%T
95	19	TC*						11				16			17				9.9					14	100%T
98	30	UC											13												76%T
98	36	UC*						10				18	19		17		12		7.9		3.5		1.5	14	75%T
99	36	UC*						*				20	19		18		13		7.6		4.9		2.3	15	70%T
00	36	UC*						10				19	20		20		13		8.9		4.8		2.8	15	68%T
01	36	UC*						9.8				20	21		21		14		9.6		5.1		2.8	15	63%T
02	19	TC						8.4				20			18				9.6					14	84%T
02	36	UC*						11				20	22		19		13		7.9		3.6		2.4	15	63%T
05	19	TC						7.6				19			19				9.7					14	86%T
06	19	TC						8.3				17			18				10					14	76%T
09	19	TC						7.9				15			18				8.5					13	87%T
09	44	TC*						6.8				17	17		17		15		7.6		4.7		1.3	13	60%T
10	42*	TC												9.1											114%T
10	46	TC												11											95%T
12	19	TC						5.3				11			11				6.7					8.6	109%T
13	47	TC												10											102%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. 37
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. 37
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. (m – see Methods p. 12)
-- = adjusted by original author

Table 7F Number of cigarettes smoked per person per day, sales-adjusted, females: selected surveys[1] by age; with percentage total sales

Year	Source	Product	12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	All ages	% Total sales
84	30	UC												3.3											74%m
87	18	UC*							5.2				7.3		2.9				0.8					3.8	96%m
88	18	TC*							5.3				6.8		3.2				1.2					3.8	95%m
89	18	TC*							4.0				6.3		3.5				1.4					3.6	94%m
90	18	TC*							4.4				6.9		4.5				1.0					3.9	94%T
91	18	TC*							5.5				7.1		3.1				1.7					4.1	104%T
92	18	TC*							3.5				6.6		3.3				1.5					3.6	123%T
94	18	TC*							6.4				7.1		6.2				1.8					5.0	70%T
94	19	TC*							6.3				6.8		6.5				1.8					5.1	70%T
95	19	TC*							4.9				7.6		5.2				1.1					4.5	100%T
98	30	UC											5.7												76%T
98	36	UC*							4.7			6.7	8.0		5.0		1.9		0.5			0.6	0.1	4.3	75%T
99	36	UC*							4.6			7.8	8.8		6.0		2.1		0.8			0.7	0.3	4.8	70%T
00	36	UC*							4.3			8.4	9.5		5.9		2.0		0.6			0.3	0.5	4.8	68%T
01	36	UC*							3.8			8.1	9.4		7.2		2.9		1.2			0.4	0.6	5.1	63%T
02	19	TC							5.8				7.2		7.0				3.3					5.5	84%T
02	36	UC*							4.5			7.5	8.5		5.8		2.2		1.1			0.3	0.4	4.5	63%T
05	19	TC							5.2				10		11				2.1					6.8	86%T
06	19	TC							6.4				8.5		10				2.6					6.4	76%T
09	19	TC							7.2				11		14				2.7					8.1	87%T
09	44	TC*							6.6			9.5	10		11		7.5		3.1			1.0	1.0	7.5	60%T
10	42*	TC													6.5										114%T
10	46	TC												7.7											95%T
12	19	TC							4.2				5.7		10				2.7					5.4	109%T
13	47	TC												3.9											102%T

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

Source:	See *Notes on sources of survey data*, p. 37	*	= refer to *Notes on sources of survey data*, p. 37
Product:	MC = manufactured cigarettes	All ages:	relates to ages reported; as given in original source
	TC = total cigarettes (including hand-rolled)	% Total sales:	Adjustment factor used, estimated % of total sales
	UC = cigarettes (type unspecified)		of M = manufactured or T = total cigarette consumption
	A = all products		implied by survey, sexes combined. (m – see Methods
	U = unspecified		p. 12)
			-- = adjusted by original author

| Table 8 | Estimated[1] prevalence of smoking and estimated[1] number of cigarettes per person per day (unadjusted and sales-adjusted): summary of Tables 4, 6 and 7. Males and females aged 15 years and over |

Year	Source[2]	Product[3]	Prevalence[4]						Number of cigarettes							
			Manufactured cigarettes		Total cigarettes[5]		All products[6]		Unadjusted[7]			Sales-adjusted[8]				
									Number/ person/day		Total sales %	Manufactured cigarettes[9] number/ person/day		Total cigarettes[10] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1956	6	UC/11			64				8.1						
1975	1	MC	50	10								(13.3	2.1)		
1981	15	UC/11			41	15									
1983	2	MC	67	28								(13.7	4.6)		
1984	14	U					41	12				(15.7	3.7)		
	30	UC+U					50	17	12.0	2.3	74	16.2	3.2		
1985	16	U					54	13				(16.6	3.2)		
1987	18	UC+A			60	25	61	25	15.2	3.6	96	15.8	3.7		
1988	18	TC+A			60	27	61	27	14.0	3.6	95	14.7	3.8		
	18	TC+A			61	23	62	23							
	34	UC			48	15									
1989	18	TC+A			59	27	60	27	13.2	3.4	94	14.1	3.6		
	18	TC+A			55	29	57	30							
1990	18	MC+TC+A	50	26	50	26	51	26	12.2	3.7	94	(11.8	4.9)	13.0	3.9
1991	18	MC+TC+A	51	26	52	26	52	26	12.8	4.2	104	(11.5	4.8)	12.3	4.0
1992	18	MC+TC+A	50	28	50	28	51	28	13.4	4.3	123	(9.8	4.5)	10.9	3.5
1994	18	MC+TC+A	44	27	45	27	45	27	9.7	3.5	70	(12.6	6.1)	13.9	4.9
	19	MC+TC+A	45	27	45	27	46	27	9.8	3.5	70	(12.6	6.0)	13.9	4.9
1995	19	MC+TC+A	50	28	51	28	51	28	13.5	4.4	100	(12.2	5.4)	13.5	4.4
	29	U					48	32							
1998	30	UC+U					45	24	9.9	3.8	76			13.0	5.0
	36	UC+A			44	18	44	18	10.3	3.3	75			13.7	4.4
	36	A					57	33							
1999	19	U					58	32							
	36	UC+A			44	19	44	19	10.2	3.4	70			14.7	4.9
	36	A					57	34							
2000	36	UC+A			43	19	44	19	10.1	3.4	68			14.8	5.0
	36	A					59	36							
2001	36	UC+A			42	18	42	18	9.7	3.3	63			15.4	5.3
	36	A					59	39							
2002	19	MC+TC+A	45	28	46	29	46	29	12.0	4.7	84	(12.7	6.5)	14.3	5.6
	19	MC+TC+A	48	32	49	33	50	33							
	36	UC+U					42	17	9.6	3.0	63			15.1	4.8
	36	U					51	23							
2004	40	UC			44	32						(13.6	7.7)		

Table 8   *(continued)*

Year	Source[2]	Product[3]	Prevalence[4] Manufactured cigarettes		Total cigarettes[5]		All products[6]		Number of cigarettes Unadjusted[7] Number/person/day		Total sales %	Sales-adjusted[8] Manufactured cigarettes[9] number/person/day		Total cigarettes[10] number/person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
2005	19	MC+TC+A	44	31	47	32	47	32	12.1	5.8	86	(12.8	7.2)	14.1	6.7
	19	*MC+TC+A*	47	34	50	36	50	36							
2006	19	MC+TC+A	40	29	44	30	44	30	10.5	4.9	76	(12.2	7.1)	13.8	6.4
	19	*MC+TC+A*	44	34	48	36	48	36							
	42	**A**					52	34							
2008	42	**A**					47	37							
2009	19	MC+TC	44	34	46	37			11.1	7.0	87	(12.0	7.4)	12.8	8.0
	19	**MC+TC+A**	46	36	46	37	47	38							
	44	TC			38	26			8.0	4.4	60			13.4	7.5
	45	UC/11			44	25								(14.3	6.6)
2010	42	**MC+TC+A**	37	35	44	38	44	38	10.1	7.2	114			8.9	6.4
	46	TC			38	26			8.9	5.6	95			9.4	5.9
	46	**TC**			38	27									
2011	42	**A**					45	31							
2012	19	MC+TC+A	34	28	45	33	45	33	9.5	5.9	109	(6.8	4.5)	8.7	5.4
	19	**MC+TC+A**	37	30	45	33	46	33							
2013/12	47	TC+A			50	24	49	23	10.5	4.0	102			10.3	3.9
	47	**MC+TC+A**	36	19	51	25	51	25				(8.0	3.3)		

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, shown in the extended versions of Tables 4 and 6 in the Excel tables workbook. Method: see *Summary of adult smoking*, Methods p. 13. Exceptionally, calculation is based on the *All ages* value from Table(s) 4 and/or 6 and 7 in those surveys for which some age-specific data are not available (age groups marked as * in Table(s) 4 and/or 6 and 7)

2   See *Notes on sources of survey data*, p. 37.

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*, but see also footnote 11.

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

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

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

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

8   From Table 7, except data in parentheses, which are derived from the prevalence of smoking from Table 4 as described in *Summary of adult smoking*, Methods p. 13. Estimates based on prevalence of smoking (any product or product unspecified) have been included because sales data suggest that smoking was primarily of cigarettes.

9   Prior to 1990, number of cigarettes classified as UC = cigarettes (type unspecified) has been adjusted to manufactured cigarette sales and included in this column. (See also *Estimates of numbers of hand-rolled cigarettes*, p. 36)

10   From 1990 onwards, number of cigarettes classified as UC = cigarettes (type unspecified) has been adjusted to total cigarette sales and included in this column.

11   Non-standard definition of smoking, see *Notes on sources of survey data*, p. 37 for sources 6, 15 and 45.

12   Calculations based on 2012 population.

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

Percentage of Smokers
Manufactured Cigarettes

Percentage of Smokers
Total Cigarettes
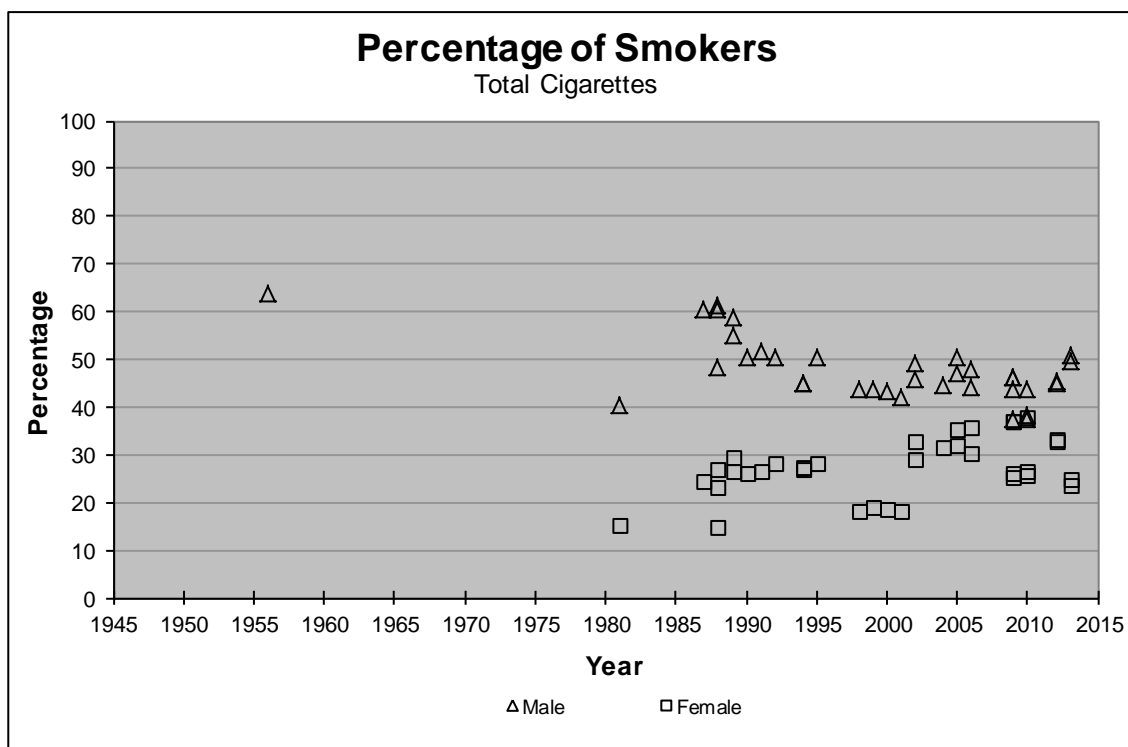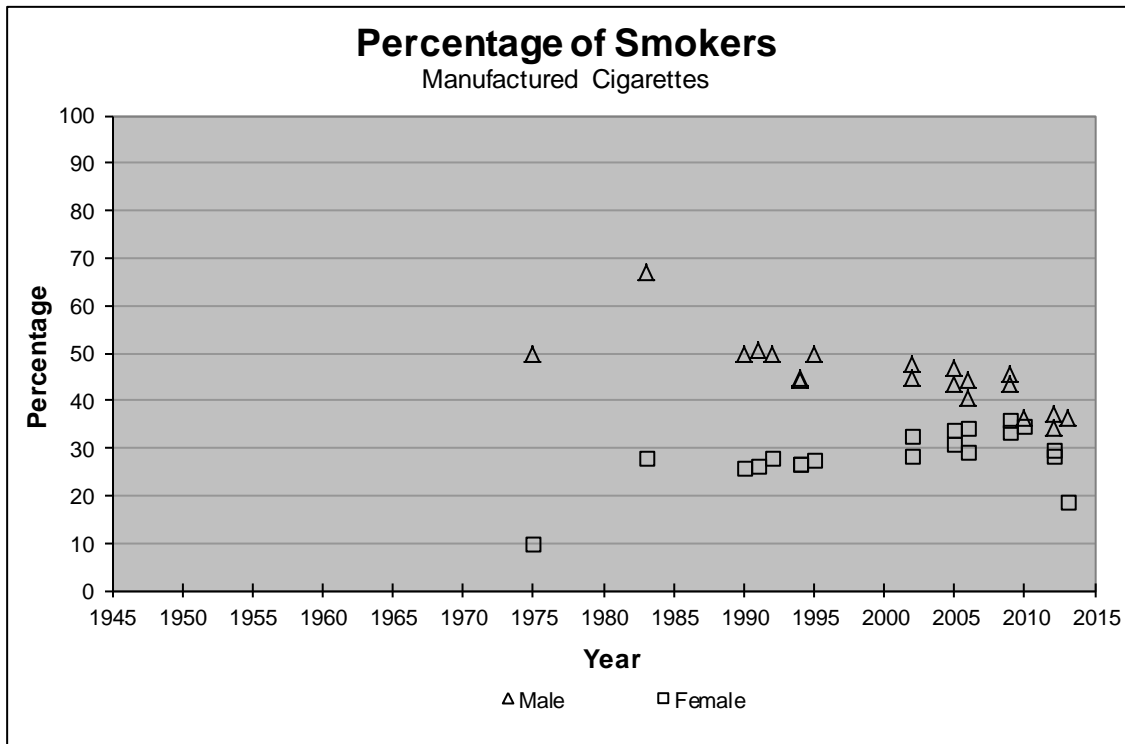
Figure 3 *(continued)*

Percentage of Smokers
All Tobacco Products
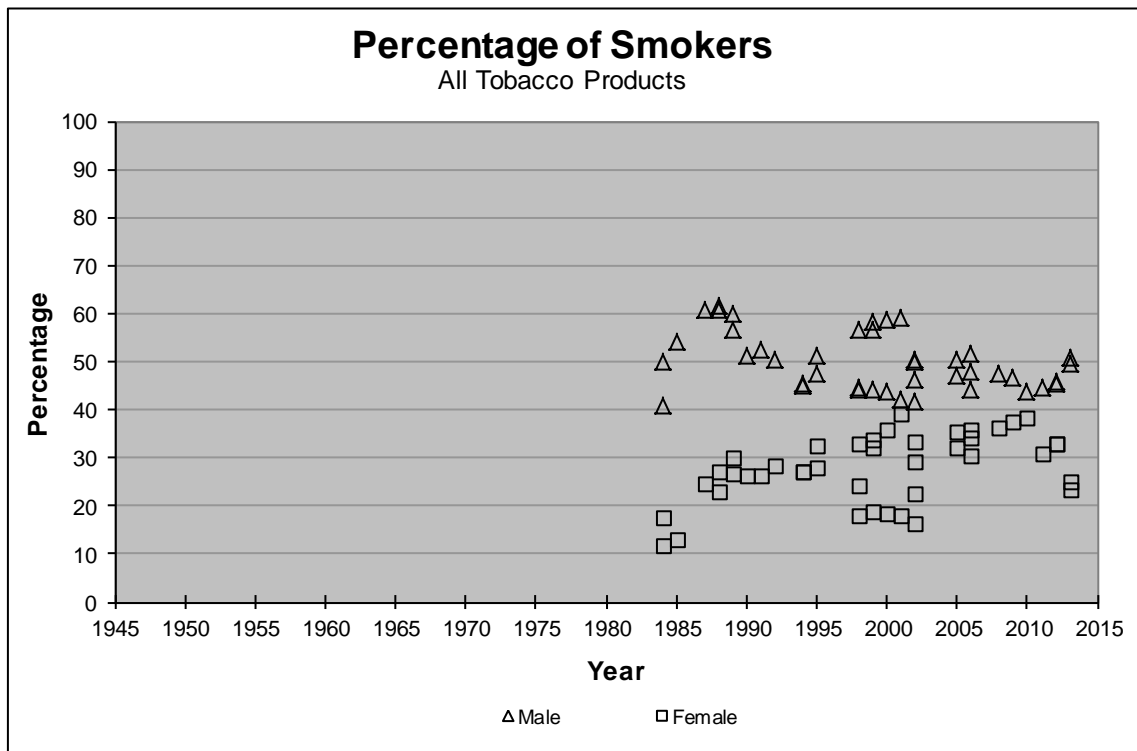
Source: Table 8.
See also customisable version of Figure 3 in the Excel workbook.

Number of Cigarettes Smoked
Manufactured Cigarettes (sales adjusted)

Number of Cigarettes Smoked
Total Cigarettes (sales adjusted)
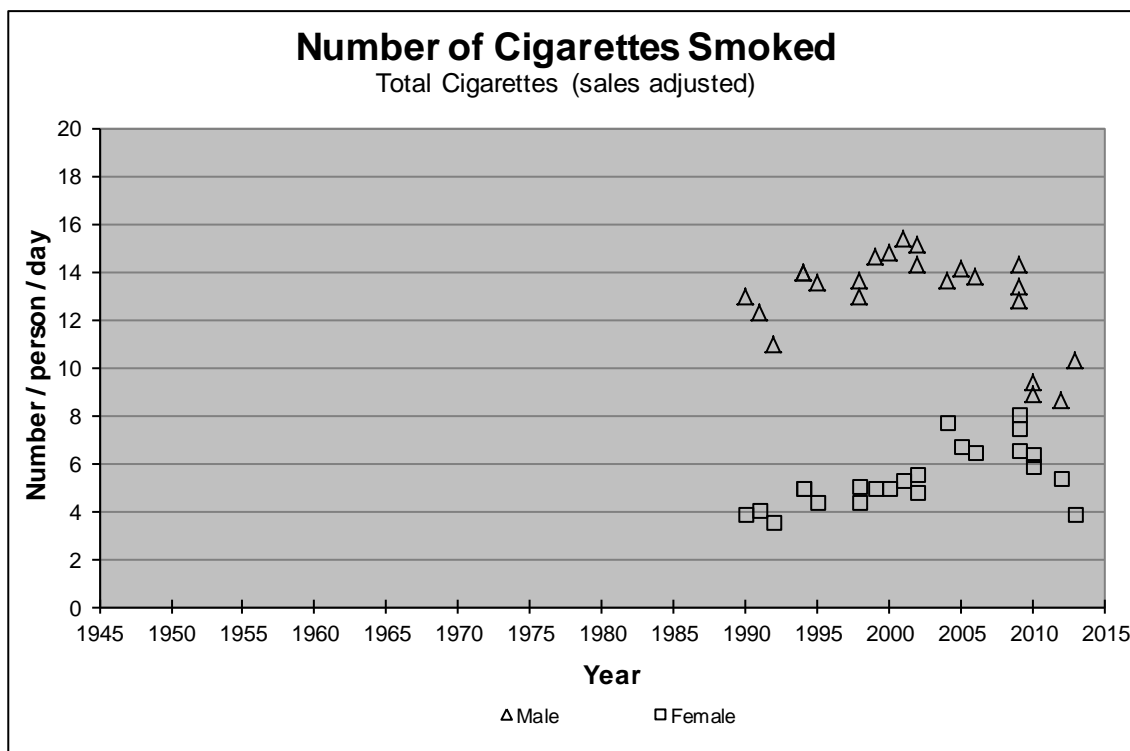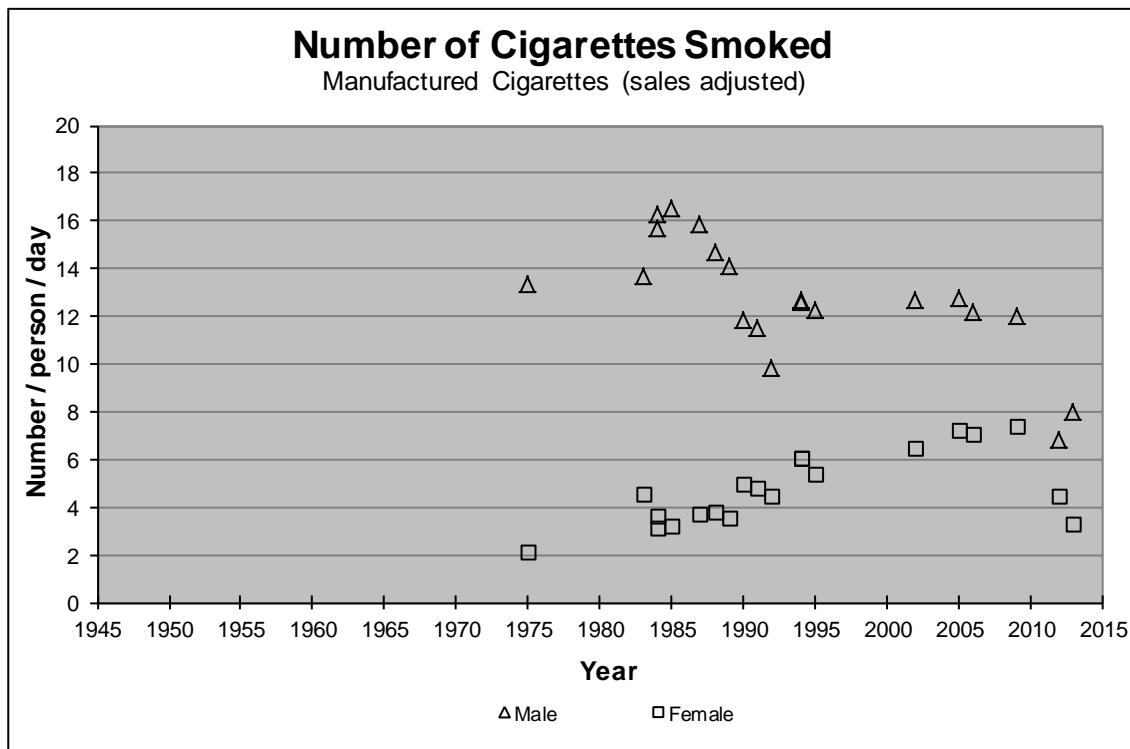
Source: Table 8.

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. 46 under *References*.

Sales data before 1974

RP6 (Lee (1975)), Hutson (1937)
Data by weight, originally given to nearest 100 000 pounds, have been converted to tonnes and given to the nearest 10 tonnes (100 000 lbs = 45.359 tonnes).
Notes as given in RP6:
> Details of the weight of cigarettes consumed and the factor for conversion from weight to numbers were provided by the National Tobacco Board of Greece. Consumption of other manufactured tobacco goods in Greece is negligible.

Data for cigarettes are as given in RP6 (alternative data for cigarettes by Hutson (1937), not shown, being similar). Data for cigars and smoking mixtures are as given by Hutson and the totals shown are calculated using those values. Earlier editions of RP6 (Beese (1968, 1972)) explicitly gave the quantities for those products as zero, whereas the latest edition (Lee (1975)) described them as "negligible". Totals as given in RP6 were identical to the figures for manufactured cigarettes.

Hutson noted that actual consumption was possibly higher than indicated by the official figures, due to locally-grown tobacco being cut for home use without payment of excise duty.

Sales data for 1974 onwards

Cigarettes:
  1974-2012: Hellenic Statistical Authority (2011b), National Statistical Service of Greece (2012a-d, 2013)
Up to 2003, data were given for manufactured cigarettes in both weight and numbers, implying a conversion rate of 1.136 g per cigarette until 1981 and 1 g per cigarette thereafter. From 2004, data were given by weight and converted to millions assuming 1 g per cigarette. Thassitis (1983) quotes the Association of Greek Tobacco Industries as saying that the weight of Greek cigarettes had recently reduced by between 20% and 30%. This would suggest a conversion rate of 0.9 or 0.8 g per cigarette, and would give lower estimates of weight or higher estimates of number than those shown.

The data refer to tax-paid domestic consumption. Up to 1993, the data represent domestically produced cigarettes only. Data on imports are included from 1994. In that year, imports were 9 322 millions, or 32% of total consumption. This is unlikely to have had a major effect except in the immediately prior years, as Thassitis (1983) stated that imports of cigarettes were only 1 122 million in 1981 and 1 590 million in 1982, and Polychronidis (1995) suggested that preference for imported cigarettes among Greek people had arisen in the previous few years only. However it is likely that the apparent dip in reported consumption in the late 1980s to early 1990s is an artefact of the omission of imported cigarettes from the figures in that period.

Data for sales of cigars and cigarillos and pipe and hand-rolled tobacco are available for some years only, as follows.
Cigars and cigarillos:
  1980, 1985-1995, 2000-20011 : Bundesverband der Zigarrenindustrie (accessed Nov 2007, Oct 2013)
  1982: Thassitis (1983)
  1996-1997: Crescenti (1998)
Smoking tobacco:
  1982: Thassitis (1983) : pipe tobacco
  1995: Crescenti (1996) : fine-cut for hand-rolling

2003-2007: KPMG LLP (2011) : smoking tobacco
2008-2012: National Statistical Service of Greece (2012a-d, 2013) : fine-cut.

The majority of data given for cigar consumption was in numbers, and we have converted these to weight assuming 3 g per cigar. This figure was based on comparing the data given by weight for one year by Thassitis (1983) with that given in numbers by Bundesverband der Zigarrenindustrie (accessed Nov 2007) during the same time period. Data given by Crescenti (1998) for 1996 and 1997 was stated to include cigarillo consumption. However, comparison of data given by this author for earlier years showed that it was identical to that given by Bundesverband der Zigarrenindustrie for cigars only, so it has been assumed that cigarillo consumption is negligible.

The data for cigars and pipe tobacco for 1982 from Thassitis (1983) include both domestically produced and imported products.

Data for pipe and hand-rolled tobacco were given by weight, except those from KPMG LLP (2011), which had been converted to numbers of sticks on the basis of 0.75g per stick, and which we have converted back to weight. Data for smoking tobacco for later years from KPMG (2011, 2012), are progressively lower than those shown in Table 1.2 (e.g. 1 500 tonnes in 2009, and 2 138 tonnes in 2011).

Ioannidis and Aravanis (1984) reported that in 1979 a relatively small amount of tobacco was consumed by rural producers in the form of hand rolled cigarettes, and that cigar, cigarillo and pipe smoking represented only 0.28% of total consumption. Regarding the data shown for fine-cut for 1995, Crescenti (1996) commented that this represented an increase over the previous year, the largest annual percentage increase for any EU country.

We have estimated the total tobacco consumption only in those years where data for both cigars and smoking tobacco are available (but ignoring the distinction between pipe and fine-cut tobacco).

Estimates of smuggling and cross-border sales

In 1995, US Department of Agriculture (USDA) reported that the cigarette black market was a major problem, and that this had started 2-3 years previously. The table below summarises estimates for the market share (%) of non-legal sales of cigarettes for Greece. The sources of the estimates, and the basis of the percentages, as originally described, are given below the table.

Source:	1	2	3	4	5	6
1991-2	6-7					
1994		6				
1995			8			
1998				8		
2000-4					<10	
2005						39

Source:	7	8	9	10	11	12	13	14	15
2006	7-9	3.6							
2007		5.5	8						
2008		2.2							
2009		3.0		5.1					
2010		6.3							
2010-11					15				
2011		10.1				7			
2012		13.4		13.2					
2013							15.7	20	20.5

Sources:
1: Tobacco Journal International (1993), cheap untaxed cigarettes, as % of total volume.
2: Joossens *et al* (1994), smuggling, as % of sales.
3: Merriman *et al* (2000), smuggling as % of domestic sales.
4: Joossens and Raw (1998), based on European Confederation of Cigarette Retailers and other sources, contraband, as % of market.
5: Mackay *et al* (2006), smuggled, as % of domestic sales.
6: Shafey *et al* (2009), smuggled, as % of legal sales.
7: Associated Press Newswires (2006), contraband, as % of market.
8: KPMG LLP (2013), counterfeit and contraband, as % of total consumption.
9: Vardavas and Kafatos (2007), contraband market share.

10: eKathimerini (2012b), quoting a survey by AC Nielsen, cigarettes not destined for the Greek market, as % of consumption.

11: JT International Hellas, quoted by eKathimerini (2012a), contraband, as % of legal market.

12: Eriksen *et al* (2012), quoting Euromonitor International, illicit share of total market.

13: eKathimerini (2013b), cigarettes not destined for the Greek market, as % of consumption.

14: Athens News Agency (2013), illegal trade, as % of legal trade.

15: JT International Hellas quoted by eKathimerini (2013a), illegal cigarettes as % of local market.

Estimates of the actual numbers of illegal cigarettes consumed annually are summarised in the table below. These figures are in addition to the consumption figures given in Table 1.2.

	Number of cigarettes (millons)		
Source:	**8**	**13**	**15**
2006	1 220		
2007	1 850		
2008	720		
2009	970		
2010	1 830		
2011	2 700		
2012	3 120	3 100	
2013			4 700

Sources: see previous text table

Joossens *et al* (2014) reported a multinational survey in which 327 current cigarette smokers in Greece were asked in 2010 about their most recently purchased pack. Packs identified as illicit (defined as purchased from an illicit source or at an extremely low price, or lacking the appropriate health warning or tax stamp), comprised 0.7% of manufactured cigarette packs and 2.4% of hand-rolled packs (although the latter figure is based on only 47 packs).

Sales of illicit whites (defined as cigarette brands manufactured outside the EU and/or Free Trade Zones, and distributed in such a way that a large share of their volume is sold at a very low price and consumed in EU countries) were reported to be 1 090 million in 2011 and 1 730 million in 2012, representing 40% and 55% respectively of all illegal cigarettes consumed (KPMG LLP (2013)). Other sources estimated the proportion of illicit whites at 45% (Athens News Agency (2012), eKathimerini (2012a)).

KPMG LLP (2013) also reported that legal non-domestic sales (i.e. purchases by travellers), make up a small proportion of total cigarette consumption, and that this remained fairly stable over recent years, as shown below:

	Number (millions)	**% of total consumption**
2006	260	0.8
2007	450	1.3
2008	640	2.0
2009	640	2.0
2010	260	0.9
2011	320	1.2
2012	250	1.1

A survey in 2010 by PPACTE (Gallus *et al* (2012), sample size 965) asked about the sources of the cigarettes bought by the participant in the previous 30 days, as percentages of the total number bought:

Source	Proportion of cigarettes bought (%)	
	Smokers aged 15-24	**All smokers**
Legal shops	96.4	96.7
Vending machines	0.0	0.0
Internet	0.0	0.0
Other countries/duty free	0.3	0.1
Smuggled (markets, door to door sellers etc)	0.0	0.8
Offered by peers	3.3	1.2

No current smokers reported having bought smuggled cigarettes in the previous 30 days. Of the cigarette packs shown (when the subject was asked for their most recently bought pack) 98.4% had a local tax stamp.

Some Eurobarometer surveys enquired about contact with smuggled cigarettes and cross border purchasing. In 2008, 12.1% of Greek respondents had, in the last 6 months, often seen cigarettes being sold that they thought were smuggled, with a further 13.0% seeing them occasionally (Flash Eurobarometer 253, Gallup Organisation Hungary (2009)). In 2012, 3% reported having purchased tobacco products abroad in the previous year (Eurobarometer 77.1, European Commission (2012)).

Estimates of numbers of hand-rolled cigarettes

2003-2006: KPMG LLP (2012)
2007-2012: KPMG LLP (2013).
We have assumed zero consumption of hand-rolled cigarettes before 1990, estimated consumption in 1995 on the basis of all fine-cut tobacco at 0.75 g per cigarette, and estimated consumption in 1990-94 and 1996-2002 by linear interpolation, based on the following information.
Historically, consumption of hand-rolled cigarettes was negligible (Lee (1975), Ioannidis and Aravanis (1984), Joossens *et al* (1994)). Crescenti (1996) noted that there had been an increase in sales of fine-cut tobacco for hand-rolling between 1994 and 1995.

From 2003-2011 KPMG (2011, 2012) assumed a weight of 0.75g per cigarette, although for estimates published later (2013) for 2007-2012 they assumed 0.73g per make-your-own and 0.6g per roll-your-own cigarettes, these factors being general for the EU and not specific to Greece. Gallus *et al* (2012) found that the median weight of a hand-rolled cigarette in Greece was 0.59 g (inter-quartile range 0.48-0.89 g), based on 37 smokers.

Plain/Filter cigarette sales

1956: Ioannidis and Aravanis (1984)
1961-1980: Maxwell, Jr. (successive years)
1981-1982: Thassitis (1983)
1983-2003: USDA (accessed Jul 2013)
For 1983 onwards the data represent the percentage of production rather than of sales. Since the mid-1990s, imports and exports have been high compared with production. For example, in 2004, imports and exports amounted to 35% and 45% of production respectively (USDA (accessed Jul 2013)), but the proportions of these that are plain or filter cigarettes are not available.

Menthol cigarette sales

In 2010, menthol cigarettes accounted for 0.3% of total cigarette consumption (Oxford Economics (2012)). By 2012, the proportion remained at <1% (KPMG LLP (2013)).

Slim cigarette sales

In 2012, slim cigarettes account for 16% of total cigarette consumption (KPMG LLP (2013)).

Tar and nicotine machine yields of cigarettes

No data on sales-weighted machine yields are available. The Belgian Association for Smoking Prevention (1989) quotes the Drama Tobacco Institute as saying there was a 40% reduction in tar yield in 1983 compared with 1977. They give the share of the market by tar level in 1983 as follows:

Tar range	No of brands	Market share (%)
< 12 mg	7	24
12-15 mg	6	21
> 15 mg	16	55

Greece was granted a temporary derogation in relation to the EC directive on maximum tar yields. This allowed the 12 mg limit on tar yield to be delayed until the end of 2006, with intermediate limits of 20 mg by December 1992, 18 mg by December 1993 and 15 mg by December 2000 (Joossens *et al* (1994)). Another temporary derogation was granted when the limits were further reduced in 2004, and compliance with the new limits of 10 mg for tar and 1 mg for nicotine per cigarette was delayed until January 2007 (ASPECT Consortium (2004)). It was recently reported that contraband cigarettes frequently exceed these limits, by up to 70% for tar and 15% for nicotine yield (Athens News Agency (2013)).

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. 46 under *References*.

**Source
number**

1   **Kalapothaki *et al* (1977)**
   a.   Based on data compiled from seven studies covering various segments of Greek population, where the prevalence of smoking was:

	Urban	Semi-urban	Rural
Males	54	48	41
Females	13	8	2

2   **Todd (1986), quoting Mr B. Thassitis (personal communication)**

3   **Rebelakos *et al* (1985)**
   a.   Patients hospitalized at major accident hospital in Athens from November 1980 to October 1981 (controls in a study of bladder cancer). Sample size (males) 250, (females) 50.
   b.   Smokers marked frequency *: includes those who had given up smoking within previous 5 years and excludes smokers who had smoked for less than 1 year; includes a 'few individuals' smoking products other than manufactured cigarettes. Although we usually only report current smoking, this study has been included because it provides very early age-specific data when little else is available, and when quitting smoking was probably rare.
   c.   Results are not shown for the 50-59 age group for women, as there were only 4 female participants, all never smokers. Results for the older age groups are shown for prevalence (Table 4), but should be regarded with caution due to the small sample sizes.
   c.   Consumption category estimation based on 1-10, 11-20, 21-30, and 31+ cigarettes/smoker/day, shown for males only.

4   **Tsakraklides *et al* (1983)**
   a.   Study of male soldiers from all over Greece. Over-representative of rural areas and high school education. Anonymous questionnaire completed when soldiers gathered for lecture or medical check. Sample size 6 650.
   b.   1% of smokers smoked pipe or cigars.
   c.   Consumption category estimation based on 1-5, 6-10, 11-20, 21-30, 31-40, and 41+ cigarettes/smoker/day.

5   **Keenan (1985)**
   a.   Survey in two urban and two rural high schools. Year not stated.
   b.   Table 4 shows approximate ages corresponding to school grades 9 and 12.
   c.   Smokers marked as frequency *: ever tried smoking. Although we usually only report current smoking, this study has been included because it provides very early age-specific data when little else is available, and when quitting smoking was probably rare.

6   **Kanellakis *et al* (1976)**
   a.   Study covering 1950-1962 (shown as 1956 in Tables 4-8). Patients with cancer other than lung cancer (controls in a retrospective study of lung cancer). Sample size 613.
   b.   Smokers: ever smoked regularly. Although we usually only report current smoking, this study has been included because it provides very early age-specific data when little else is available, and when quitting smoking was probably rare.
   c.   Consumption category estimation based on 1-10, 11-20, 21-35, and 36+ cigarettes/smoker/day.
   d.   Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

7   Kafatos *et al* (1981), Wynder *et al* (1981)

a.   School-based study by the American Health Foundation and the Athens Institute of Child Health, as part of the "Know Your Body" program. All children attending 13 public schools in Athens were included, mainly aged 10-14; only results for ages 12-14 are shown in Table 4. The schools were selected to include all socioeconomic categories. Medical examination and interview, with health habits collected by self-administered questionnaire. Sample size (age 12-14), (boys) 356, (girls) 312. Participation rate 85-95% in different schools.

b.   Smokers marked as frequency *: smoked 1+ cigarettes daily. All smokers: smoked daily or less than daily but more than never (so may include ex smokers).

8   Dontas (1980)

a.   Combined results from three school surveys in Athens, Larissa (industrial town, Central Greece), and Chania (town in agricultural/tourist area, Crete). Year unknown. Sample sizes 6 000 (8% of all schoolchildren), 800 (80% of all schoolchildren), and 700 (85% of all schoolchildren) respectively.

b.   The paper states that 31.8% of children were regular smokers. Hence, we have interpreted 'Of the boys 45.9% smoked compared with 54.1% of the girls' as meaning 'of the smokers, 45.9% were boys and 54.1% girls'. This implies (assuming equal populations) that 29.2% of boys and 34.4% of girls smoked, but the original percentages have been quoted elsewhere (e.g. Masironi and Roy (1982)).

9-10   Keys *et al* (1966), Dontas *et al* (1998)

a.   Seven Countries Study on cardiovascular disease. Results shown for 1960-61 are from the baseline survey (Keys *et al* (1966)). Interview including smoking questions before medical examinations.

	Location	Description	Sample size	Response rate (%)
9	Crete	Farming villages	686	98
10	Corfu	Farming villages	529	95

Results for 1970-71 relate to 488 (Crete) and 287 (Corfu) survivors (Table 6 only, Dontas *et al* (1998)).

b.   Water pipes (hookah) are stated to be smoked occasionally in Crete.

c.   At a further follow-up of 100 Cretan survivors in 1986, 38% were smoking (not shown in Table 4) (Sandker *et al* (1993)).

d.   Consumption category estimation based on 1-9, 10-19, and 20+ cigarettes/smoker/day. Dontas *et al* (1998), based on slightly smaller samples (626 and 509 respectively), gave slightly higher results than those shown in Table 6 for the average number of cigarettes/person/day in 1961, namely 11.6 in Crete and 11.1 in Corfu.

11-12   Kokkevi and Stefanis (1991), Kokkevi *et al* (2000b), Pilali (2004)

a.   Nationwide studies in a representative sample of high schools in 1984, 1993 and 1998 (shown as source **11**). Anonymous questionnaire completed in class, with teachers absent, on licit and illicit drug use. Participation rate among those present was 100%.

	Sample size		Response rate (%)	Absentee rate (%)
	Schools	**Students**	**Schools**	**Students**
1984	96	10 814	100	6
1993	100	10 543	98	8
1998	101	8 557	95	12

b.   The 1984 nationwide study shown as source **11** was repeated in 1988 in Athens only with a shortened questionnaire, and results shown as source **12** refer only to the 18 schools in the repeat survey. Absentee rate (1988) 5%.

	Sample size	
	Males	**Females**
1984	1 065	1 060
1988	1 007	922

c.   Results for selected ages from the 1993 survey are also shown as source **24**, analysed as part of the ESPAD project.

d.   Regular smokers: use tobacco regularly now. All smokers: smoked tobacco in last 30 days.

e.   Consumption category estimation based on up to 5, 6-19 and 20+ cigarettes/smoker/day; includes those who smoked in last month but less than daily (thus tending to underestimate the consumption per regular smoker); calculated using standard distribution (derived from adult daily smoking), and resulting figures should be regarded with caution.

13   Koumantaki *et al* (1989)

    a.   Women hospitalized in Athens with orthopaedic conditions (controls in a study of cancer of the endometrium). Sample size 164, response rate 95%.

    b.   It was reported that most of the smokers smoked 15-20 cigarettes per day.

14   Crofton (1990) quoting Director General of WHO (1988)

    a.   Adults. Year not stated, probably 1981-1986 (shown as 1984 in Table 4).

15   Moulopoulos *et al* (1987)

    a.   Study of coronary risk factors in Athens. Random sample of adults invited to medical examination, 1979-1983 (shown as 1981 in Table 4). Sample size (males) 1 835, (females) 2 244. Response rate 91% during 1979-1981, 87% during 1981-1983.

    b.   Smokers marked as frequency *: smoked 20+ cigarettes per day. Although we usually only report all current smoking, this study has been included because it provides very early age-specific data when little else is available.

    c.   Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

16   Masironi and Rothwell (1988)

    a.   No original source. Age group not stated.

17   Rigatos (1988)

    a.   Pupils in Evros, Northern Greece. No original source. Year not stated (shown as 1987 in Table 4).

    b.   It is also reported that at age 18, 22.4% of their fathers and 0.5% of their mothers had smoked.

18, 19   Rabier *et al* (1989), Reif and Melich (1990, 1991a-b, 1992, 1995, 1998a-b, 2000), Reif and Marlier (1998), Melich (2006), Christensen (2004), Papacostas (2008, 2009, 2012), European Commission: TNS Social and Opinion (2014)

    a.   Eurobarometer Surveys commissioned by the European Commission to monitor public opinion in the European Union. Some Eurobarometer surveys include questions on smoking habits. Sample size approximately 1 000.

    b.   These surveys provide results that are comparable across countries. However, they have been criticised for having small sample sizes and for generating "estimates that are in some cases widely discrepant from more substantive national sources" (Bogdanovica *et al* (2011)).

    c.   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 **18**). 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 **19**). For 1994 itself (Eurobarometer survey 41.0) results were available according to both sample definitions and both are presented.

    d.   Two waves of the survey were carried out in each of 1988 and 1989. Prevalence data from both waves are presented in Table 4. Data on cigarettes per smoker and per person are available only from the first wave in each year.

    e.   Frequency U (in Table 4) represents positive answers to questions such as "Do you smoke cigarettes?" or "You smoke packeted cigarettes". From 2002-2006 an additional question made it possible to identify regular smokers also; our estimates of regular cigarette smoking assume that the proportion smoking regularly applies equally to smokers of each product, which may cause anomalies. From 2009 the questionnaire format clearly asked about regular and occasional smoking and so frequency codes R and A are used.

    f.   In 2012, questions on what product or amount "do/did you smoke" were put to both current and ex smokers, and our estimates of prevalence for products TC and MC (Table 4), and of cigarettes per smoker (Table 5), assume that responses by current smokers relate to their smoking habits at the time, rather than throughout their lives.

    g.   Consumption category estimation based on <5, 5-9, 10-14, 15-19, 20-24, 25-30, 31-34, 35-40 and 41+ cigarettes/smoker/day (1987 only) and <5, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39 and 40+ cigarettes/smoker/day (other years). Exact values for cigarettes/smoker/day are available for 2009 (see also Appendix III).

    h.   Before 2002 the calculation of cigarettes per person was based on prevalence of smoking (daily and non-daily).

20   Sichletidis *et al* (2009) quoting Marselos *et al* (1993)

    a.   Survey in high schools in Athens, Patra and Ioannina in 1989-90 (shown in Table 4 as 1990). Age range not stated.

21 Business Traveller (1989)
a. No original source. Year not stated (shown as 1988 in Table 4). High school students, age not stated.

22 van Reek *et al* (1992), van Reek and Adriaanse (1995)
a. A series of surveys of Young Europeans. About 800 children aged 11-15 years interviewed in each EC country except Luxembourg (where only 250 interviewed). Lowest age group 11-12. Interviews conducted at home, with parents absent.
b. Smokers marked frequency *: smoked daily. Regular smokers: smoked at least once a week.

23 World Health Organization (1997)
a. Described as "combined data for the period 1989-92" (and shown as 1990 in Table 4). No original source stated (possibly based on Eurobarometer data, see sources 18-19).

24 Hibell *et al* (1997, 2000, 2004, 2009, 2012), Andersson *et al* (2007)
a. Nationally representative school-based surveys forming part of ESPAD (European School Survey Project on Alcohol and Other Drugs). The 1993 Greek survey was comparable to the first wave of ESPAD surveys conducted in other countries in 1995, and used a questionnaire that was basically the same as earlier Greek surveys (see source 11). The survey results refer to those born within a target year (see table below), thus age 15-16 at the time of the survey. See also source 11 for results referring to the wider age range surveyed in 1993. In 1993, 80% of 15-16 years-olds were still in school, rising to over 90% from 2003 onwards (not stated for 1999). The school grades surveyed varied from year to year, with at least 93% of 15-16 years olds in the surveyed grades. The 1999 survey was conducted later in the year, such that participants were some 6 months older than from other countries or other years. The sampling frame included mainland Greece, Crete and Evia until 2011 when it was extended to include all islands, increasing the coverage from 94% to 100% of the population. Anonymous questionnaire completed in class, with teachers not present. In 1993, 1999 and 2007, the pupils sealed the questionnaires in individual envelopes, in other years the questionnaires were collected in class envelopes.

Date	Sample size		Participation rate (%)			Target year of birth	Average age
	Males	Females	Schools	Classes	Pupils		
Mar-Apr 1993	1 205	1 412			78	1977	–
Oct 1999	837	1 422	94	94	91	1983	15.8[*]
Mar-Apr 2003	886	1 020	98	97	83	1987	15.8
Feb-Mar 2007	1 433	1 627	89	88	91	1991	15.7
Feb-Apr 2011	2 926	2 982	88	87	90	1995	15.7

* as given by Hibell *et al* (2000), although the 2004 report said that ages as given in the 2000 report were systematically 0.5 years too low.

b. In 2003, some countries including Greece conducted a survey using identical methodology targeting students born in 1985 (thus age 17-18). Approximately 77% of this age group were still in school. Sample size 1 299. Response rate (students) 88%. (Andersson *et al* (2007))
c. Smokers marked as frequency *: smoked 1 or more cigarettes per day in the previous 30 days. All smokers: smoked at least one cigarette in the previous 30 days.
d. Consumption category estimation based on 1-5, 6-10, 11-20, 21+ cigarettes/smoker/day.

25 Athanasiou and Macris (1995)
a. Questionnaire study carried out in a random sample of students and in a group of parents of school- and pre-school children. Student group were described as age 18-25+ and are shown in Table 4 as age 18-24. Age of parental group not stated and shown in Table 4 as 25-49. Year not stated (shown as 1994 in Table 4).

	Sample size	
	Males	Females
Students	475	661
Parents	379	391

b. Regular smokers: smoked 5+ cigarettes per week. All smokers: smoked 1+ cigarettes per week.

26 World Health Organization (1997)
a. WHO study in 1993-1994 (shown in Table 4 as 1994).
b. Regular smoker: smoked weekly.

27   Trichopoulou *et al* (2002), Riboli *et al* (2002), Bamia *et al* (2004)

a.   The Greek component of the EPIC (European Prospective Investigation into Cancer and nutrition) study. Conducted 1994-99 (and shown as 1996 in Tables 4-6). Convenience samples, invited by mail, from the general adult population, from regions all over Greece. As initial recruitment numbers were low, active recruitment was initiated. Personal interviews of the apparently healthy volunteers attending study centres. Upper age limit 82. Sample size 27 862.

b.   Smokers: self-reported to be current smokers or quit less than 1 year ago.

c.   Consumption category estimation based on 1-9, 10-19, 20-29, 30+ cigarettes/smoker/day with the "very few" exclusive cigar and/or pipe smokers included among those smoking 10-19 cigarettes per day.

d.   Estimates of cigarettes per person (Table 6) were calculated from prevalence and consumption data for slightly different age ranges and groupings, and should be regarded with caution: prevalence 25-39, 40-54, 55-64, 65-82 (Trichopoulou *et al* (2002)), and consumption per smoker : 20-44, 45-54, 55-64, 65-86 (Bamia *et al* (2004)).

28   Psathakis *et al* (1997)

a.   Anonymous questionnaire study among male conscripts just after joining the Greek army. Mean age 21. Considered representative of young Greek males overall. Sample size 1 054, response rate 88%. Year of survey not stated (shown as 1995 in Tables 4-6).

29   Tessier *et al* (1999) quoting Prof N. Choulis (personal data)

a.   Year not stated (shown as 1995 in Table 4).

30   Kokkevi *et al* (2000a), Pilali (2004), Strong and Bonita (2003)

a.   Nationwide surveys in 1984 and 1998, of use of addictive substances, carried out by University of Athens. Personal interviews at home. Sample size (1998) 3 759, response rate initially 63%, raised to 80% with substitution.

b.   The survey was replicated in 1993 in Greater Athens only, but no smoking related results were presented.

c.   The age-specific results for prevalence in 1998 (Table 4) are taken from Strong and Bonita (2003) quoting Kokkevi *et al* (2000a), although Kokkevi *et al* in fact give only partial results, others are available from a graph in Pilali (2004), and there are some minor discrepancies between the three sources.

d.   The *All ages* values refer to ages 12-64; age-specific data are not available for the age groups marked *.

e.   Consumption category estimation based on 1-5, 6-20 and 21+ cigarettes/smoker/day.

f.   Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

31   Tzonou *et al* (1984)

a.   Women hospitalized in Athens 1980-1981, with orthopaedic conditions (controls in a study of ovarian cancer). Sample size 250, response rate 100%. Lower age limit not stated (but <34). 60% of the patients were age 55+.

b.   Consumption category estimation based on two categories, less than half a pack and more than half a pack (assume 1-10, 11+ cigarettes)/smoker/day, and resulting figures should be regarded with caution.

32   Kafatos *et al* (1991)

a.   Study of all employees of a bank throughout Crete, considered representative of middle-class Cretans. Interview including smoking habits as part of a comprehensive medical check. Sample size (males) 247, (females) 129. Participation rate 97%.

33   Aravanis *et al* (1988)

a.   Study in rural Crete, in the same area and following the same protocol as the Seven Countries study (see source 9). All men in 3 villages, and a random sample in a rural municipality invited to medical examination. Sample size 401, response rate 100%.

b.   Results presented exclude 69 men with certain diseases.

34   Lindholm *et al* (1992)

a.   Study of coronary risk factors in Spili, a village in Crete. All adult residents (age <80) invited to medical examination. Sample size 445, response rate 82%.

b.   Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

35 Currie *et al* **(2000, 2004, 2008, 2012)**

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

Year	Mean age		Sample size		
	Target age 13	Target age 15	Target age 13	Target age 15	Total[*]
1998	13.6	15.6	1 315	1 322	4 299
2002	13.3	15.3	1 231	1 324	3 807
2006	13.3	15.4	1 187	1 416	3 690
2010	13.7	15.7	1 612	1 648	4 899

* Includes age 11

b. Number of cigarettes per smoker per day (Table 5, 1998 only) is derived from the median number smoked per week.

c. Smokers marked as frequency *: smoked daily. Regular smokers: smoked once a week or more. All smokers: includes those smoking less than once a week.

36 Eurostat (2005, accessed Aug 2007a-b)

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

Year	Number of respondents	Original respondents remaining (%)
1998	9 985	65
1999	9 574	58
2000	9 437	55

(Sample details not available for 2001.)

b. Results for 2002 are taken from Eurostat (accessed Aug 2007b), sample size 8 836, although elsewhere (e.g. Wirtz and Mejer (2002)) it is reported that ECHP finished in 2001.

c. Highest age groups shown are 75-84 and 85+. For 1999, the *All ages* values (Tables 4-7) refer to ages 15+; male data are not available for the age group 15-24 marked *. Results for age 15-24 are noted as being "unreliable or uncertain" for males for other years 1998-2001, and for females for 2000.

d. Consumption category estimation based on two categories, 1-19 and 20+ cigarettes/smoker/day, and resulting figures should be regarded with caution.

37 Blackwell *et al* **(1992)**

a. Study of recruits from all Greek regions except the Ionian islands, at two military training camps (Athens and Avlona). Males only. Age range not stated, median 19.

b. Consumption category estimation based on 1-10, 11-20, 21-30 and >30 cigarettes/smoker/day.

38 Francis *et al* **(2007)**

a. School-based study conducted by Athens University and Attiki Child Psychiatric Hospital, in the 2001-02 academic year (shown in Tables 4-7 as 2002). Nationally representative stratified sample of Greek schools. Self-completed anonymous questionnaire, completed in class by all students present on the day, in the presence of researchers. Sample size (schools) 58, (boys) 1 843, (girls) 1 984. Response rate (schools) 100%, (students) 97%.

b. Table 4 shows approximate ages corresponding to school grades 7 and 12, and data taken from a graph; data in the *All ages* column refer to ages 12-18.

c. Regular smokers: smoked more than 1 cigarette per week for at least 3 months.

d. Consumption category estimation based on <25, 26-149 and >150 cigarettes/smoker/week using standard distribution (derived from adult daily smoking, equivalent to 1-3, 4-21 and 22+ cigarettes/day), and resulting figures should be regarded with caution.

39   **Giannakopoulos** *et al* **(2010)**

a.   Nationwide school-based study in the framework of the "Screening and Promotion for Health-Related Quality of Life (HRQoL) in Children and Adolescents: A European Public Health Perspective" (KIDSCREEN). Schools, and then students from 6 grades of the selected schools, were randomly selected. Questionnaires completed at home. Sample size (analysed) 1 030, response rate 54%.

b.   Smokers: answered "every day", "at least once a week" or "less than once a week" to "how often do you currently smoke cigarettes (or tobacco)".

40   **Milias** *et al* **(2006)**

a.   Nationally representative survey using random multistage sampling, including one participant per household, during autumn 2004. Telephone interviews, conducted by nurses or dieticians, focusing on nutrition and hypercholesterolaemia. Sample size 5 004.

b.   Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

41   **World Health Organisation (2014), Kyrlesi** *et al* **(2007), Warren** *et al* **(2008), Rachiotis** *et al* **(2008)**

a.   Global Youth Tobacco Survey (GYTS). National school-based surveys targeting ages 13-15, conducted in 2004-2005. Two-stage cluster sample, covering all schools (public and private), with schools randomly selected in proportion to number of students enrolled, then classes in grades 7-9 randomly selected. All students present on the day were eligible to participate. Anonymous self-administered questionnaire and standardised data collection procedures. Response rate (schools) 90%, (classes) 100%, (students) 89%, (overall) 79%. Sample size 6 378, of which 5 204 were aged 13-15.

b.   Results restricted to 13-15 year olds are given by Kyrlesi *et al* (2007). Smokers marked as frequency *: smoked daily. Smokers marked as frequency U were "current smokers" not otherwise specified. Prevalence for product A* refers to current users of any tobacco product (i.e. may include smokeless tobacco users). It was also reported that 11.8% of boys and 9.9% of girls use tobacco products other than cigarettes, with 6.0% of boys and 2.4% of girls smoking cigars.

c.   Results for ages 11-17 year olds are given by Rachiotis *et al* (2008). All smokers: smoked in last 30 days. The *All ages* values refer to ages 11-17; age-specific data are not available for the age groups marked *.

42   **Filippidis** *et al* **(2013, 2014)**

a.   Hellas Health Surveys, waves I-IV. Nationally representative surveys using personal interviews at home.

	Wave	Sample size	Effective response rate (%)
2006	I	1 005	51
2008	II	1 490	44
2010	III	1 000	49
2011	IV	1 008	46

b.   The 2010 survey was also reported as being conducted in collaboration with the Hellas Tobacco Survey by Hellenic Action Through Research Against Tobacco (HEART) (Behrakis and Connolly (2011)).

c.   Manufactured cigarette smokers (2010): smoked at least 100 cigarettes in lifetime, smoked at least 1 cigarette in the last 30 days, and smoked manufactured cigarettes. All cigarette smokers (2010): smoked at least 100 cigarettes in lifetime and smoked at least 1 cigarette in the last 30 days. All smokers: smoked daily or occasionally. It is not altogether clear in the source paper which results relate to which definition. For 2006, the prevalence shown as *All smokers* (code A/A, Table 4) for all ages is also given by Filippidis *et al* (2011), but is defined there as referring to daily cigarette smoking.

d.   Cigarette consumption per smoker (2010, marked * against source in Table 5) is stated to be daily consumption calculated for current smokers only, but as both available definitions of cigarette smokers (see note c) include those smoking less than daily, it is not clear whether the CPS estimate is based only on daily smokers. If not, our calculation of cigarettes per person (Tables 6-7) may overestimate.

    e.   Among current smokers in 2010, it was also reported that 18% of males and 9% of females smoked hand-rolled cigarettes, implying that 2% of male and 0.5% of female smokers smoked both manufactured and hand-rolled. <1% of respondents smoked other products. Slim cigarettes were smoked by 4% of male and 27% of female smokers, and "light" cigarettes by 29% of male and 48% of female smokers.

    f.   Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

43   German *et al* (2008)

    a.   Study among male conscripts on day of enlistment into the Greek army, at Sparta Training Centre. Mean age 24. Sample size 472.

    b.   Smokers: any tobacco use.

44   Eurostat (accessed May 2013)

    a.   European Health Interview Survey (EHIS), conducted in Greece in Oct-Dec 2009. Smoking information was collected by self-completions questionnaire. Sample size 6 172, of which 0.7% were proxy interviews. Response rate 96%.

    b.   Highest age groups are 75-84 and 85+.

    c.   The same survey was reported as the National Health Interview Survey, with results available only for both sexes and all ages combined, namely 32% smoked daily and a further 6% smoked occasionally; 29% smoked manufactured cigarettes daily and 3% hand-rolled cigarettes, 0.2% pipes and 0.2% cigars. The average daily consumption was 21 manufactured cigarettes and 12 hand-rolled cigarettes (assumed to be per daily smoker of that product). (Hellenic Statistical Authority (2011a))

    d.   Consumption category estimation based on two categories, 1-19 and 20+ cigarettes/cigarette smoker/day, and resulting figures should be regarded with caution.

45   Skapinakis *et al* (2013)

    a.   Psychiatric Morbidity Survey organized by the Ministry of Health and conducted by the University of Ioannina. September 2009-February 2010. Nationally representative except excluding Crete. Multi-stage sampling, choosing one adult from each selected household. Interviews at home, with participants entering their answers into a laptop, with assistance from the interviewer if required. Sample size 4 894, response rate 54%.

    b.   Smokers marked frequency *: classified themselves as currently moderate or heavy smokers, or smoked more than 2 cigarettes per day in the last month.

    c.   Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

46   Gallus *et al* (2012)

    a.   Surveys by PPACTE in 2010 in 18 European countries. Coordinated by DOXA, the Italian branch of the GALLUP International Association. Face-to-face interviews using computer-assisted personal interviewing. The survey in Greece used simple random sampling. Age range 18-64. Sample size 965, response rate 11%.

    b.   One section of the survey involved asking to see the subject's most recently bought pack of cigarettes or hand-rolling tobacco. Among smokers (sexes combined), the type of pack bought most recently was:

Pack type	Proportion (%)
Cigarettes, 20-pack	75.0
Cigarettes, 10-pack	0.8
Hand-rolling tobacco	11.8
Other	12.4

    c.   Among current cigarette smokers, 85% smoked only factory made cigarettes, 13% smoked only roll-your-own, and 2% smoked both types.

    d.   Use of smokeless tobacco was reported by 0.7% of men and 0.5% of women.

    e.   Cigarettes per smoker relates to all smokers rather than regular smokers.

    f.   Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

47 **Ypoyrgeio Ygeias & Koinonikis Allileggyis (Ministry of Health and Social Security) (2013, 2014)**

a. GATS (Global adult tobacco survey). An international survey carried out in Greece by the National School of Public Heath, Department of Hygiene and Epidemiology of the University of Thessaly, and MRB Hellas. Multistage geographically clustered sample, with one individual randomly selected from each participating household. Results are weighted to be nationally representative of the non-institutionalized population. Sample size (households sampled) 6 600, (completed interviews) 4 359. Response rate 70%.

b. Regular smokers: smoked tobacco daily. Smokers: smoked tobacco daily or less than daily.

c. The percentages using various products were as follows:

	Males	Females
Manufactured cigarettes	35.6	19.1
Hand-rolled cigarettes	22.5	9.2
Waterpipe	2.3	0.4
Other smoked tobacco[*]	4.0	0.7
Smokeless tobacco	0.2	0.2
Electronic cigarettes	1.7	2.1

* Included cigars, cheroots, cigarillos and any other reported smoking tobacco product.

The percentages smoking hand-rolled cigarettes, by age are shown below (corresponding figures for manufactured cigarettes being shown in Table 4)

Age	Males	Females
15-24	30.5	13.3
25-44	33.9	14.4
45-64	14.4	6.9
65+	3.2	0.4

Additional information (not presented in tables)

Voridis *et al* (1974)

In a study conducted from 1966 to 1969, Voridis *et al* reported on a group of non-coronary hospital patients (controls in a study of myocardial infarction). Among 223 men, the percentages who had smoked at least 20 cigarettes per day for 10 years were 70, 69, 68, 58, 81 and 70 at ages 30-39, 40-49 … 80-89, respectively.

Data made available by Philip Morris International (PMI) for 1996-2003, based on the General Consumer Tracking Survey, indicate that around 9% of male regular smokers, and 17% of female regular smokers, used an ultra-low tar brand (1-3 mg/cigarette tar machine yield). See also Table xv of the *Comparisons Between Countries* Chapter.

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§ Original paper not obtained, but information taken as quoted by another author