International Smoking Statistics

Web Edition

A collection of worldwide historical data

USSR
and successor countries

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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.

In this chapter, the sales data have been fully updated only for the EU republics (Estonia, Latvia and Lithuania). The survey data are largely reproduced from the 2nd edition, which covered the years up to 1995, subject to a few amendments for consistency with the Web edition. For the subsequent years, only certain multinational surveys have been added.

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]. No update to Supplement 1 is planned for countries (including USSR and its successor countries) which have only been partially updated for the web edition.

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

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

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

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

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

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

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

Introduction

Countries and years considered

This chapter covers the USSR and its successor republics. Some overall data are included for the former Soviet Union (fSU) combined. The sales data have been fully updated only for the current EU member countries, Estonia, Latvia and Lithuania. The survey data presented are largely reproduced from the 2nd edition of this report (published in 2002 and covering up to the year 1995), with only certain multinational surveys added for the subsequent years.

Sales data

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

Comprehensive sales data for the 1920s and 1930s are available only for Latvia. At that time papyrosi, a traditional type of cigarette with a hollow paper tube only partially filled with tobacco, accounted for about 50% of all tobacco sales, with most of the remaining sales being smoking tobacco. Sales of conventional style cigarettes were negligible. A similar situation prevailed in Estonia and Lithuania (Hutson (1937)).

From 1960, data are available for the USSR as a whole, for cigarettes only. By that time, papyrosi accounted for 75% of cigarettes, the proportion continuing to decline to below 40% by 1980. Filter cigarettes did not come into use until the mid-1960s, and even by 1980 accounted for only 30% of conventional cigarettes. Between 1960 and the early 1970s the consumption of manufactured cigarettes per adult increased from 4 to 6 cigarettes per day. It remained at that level until the mid-1980s, then decreased to 4 cigarettes per day by 1994. Expressed in terms of the weight of tobacco smoked in cigarettes, and taking into account the changes in cigarette type, we estimate that this is equivalent to an increase from 3 to 5 g per day, then a fall to 4 g per day. Although few data are available, consumption of products other than cigarettes is believed to have been low in this period.

From 1988 to around 2000, data are available from the USDA for the individual successor republics for cigarettes only. Initially, consumption was highest in Armenia (at 12 cigarettes per adult per day), and also high in Moldova (9), lowest in Uzbekistan (2), and around 4-6 elsewhere. It fell markedly in Armenia (to 6) and Moldova (to 5), rose in Russia (to 9), with other republics showing smaller changes, mostly remaining in the range 4-6. However assessment of sales since the late 1980s is complicated by large-scale cigarette smuggling.

After the period for which USDA provided information, we restricted attention to the EU member countries of Estonia, Latvia and Lithuania. Smuggling and illegal trade continued to be significant problems in all three countries, and there are discrepancies in estimates of consumption from different sources. Estimates from KPMG for the period 2006-2014, adjusting for cross-borders sales, counterfeit and contraband, suggest that consumption per adult remained around 5 cigarettes per day in Estonia, fell from 7 to 3 in Latvia, and from 6 to 4 in Lithuania. Again, few data are available for consumption of other products, which is believed to have continued at a low level. However, in both Latvia and Lithuania, available data showed increased cigar consumption from 2010.

Survey data

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

At the time of writing the 2nd edition, relatively little survey data existed representative of any of the republics, and none for the USSR as a whole. Much of the adult data presented there was drawn from epidemiological studies and was based in specific regions or cities. It is difficult to draw conclusions about trends over time from these disparate sources. Estimates of the prevalence of smoking among those aged 15 years or over were generally in the range of 40-70% for men and 5-20% for women. However, there were some exceptions. Surveys in the Caucasus region in the early 1960s showed a higher prevalence, 70-80%, among men, as did a survey in industrial areas of Russia (source 36). Surveys in the Central Asian region mostly showed a very low prevalence, 0.5-3%, among women. School-based surveys all showed that more teenage boys than girls smoked.

Comparison of survey and sales data suggested that one recent survey in Russia (source 50) under-stated consumption by 8%. (We also estimated that an earlier survey under-stated by about 20%, but this estimate should be regarded with caution since the survey data related only to Moscow and the sales data to a later year.) Since 1975, the estimated number of cigarettes smoked per person per day (sales-adjusted) was 7-10 for men and 1-3 for women, except in the Central Asian region where the estimated number for women was generally less than 1.

The multinational surveys added in this edition, referring to 1996 onwards, suggest that the prevalence of smoking among men aged 15 years or over reduced from around 50% to 40% in Estonia and Lithuania, and from around 60% to 50% in Latvia. Among women, estimates of the prevalence were mostly in the range 15-25% in Estonia, 15-20% in Latvia and 10-20% in Lithuania. Based on the latest wave of the Eurobarometer survey (sources 98-100) for 2012, the estimated number of cigarettes smoked per person per day (sales-adjusted) was 8 for men and 2.5 for women in Estonia, 5 for men and 1 for women in Latvia and 6 for men and 2 for women in Lithuania. Information for the other republics was very limited, with estimates for the prevalence of regular smoking among men in the range 40-55% for Russia, Ukraine, Georgia and Kazakhstan, and in the range 4-16% for women. However these results should be regarded with caution due to the uncertainty of the sales data and the limited surveys considered.

Table 1.1 Total annual sales of cigarettes, USSR and fSU overall

Year	Manufactured cigarettes	
	tonnes	millions
1960	168 642	248 003
1961	171 449	252 131
1962	159 594	234 697
1963	179 787	264 393
1964	199 941	298 420
1965	224 955	335 754
1966	222 296	331 785
1967	210 353	313 959
1968	226 886	315 119
1969	245 138	340 469
1970	262 938	365 191
1971	304 596	395 579
1972	307 918	399 893
1973	314 992	409 081
1974	337 916	417 180
1975	339 821	419 532
1976	348 191	429 866
1977	353 976	437 008
1978	366 204	430 828
1979	354 166	416 666
1980	358 008	421 186
1981	378 301	434 829
1982	369 760	425 012
1983	382 950	440 172
1984	389 866	448 122
1985	389 847	448 100
1986	392 630	451 299
1987	372 717	428 410
1988	364 056	418 455
1989	347 092	398 956
1990	328 860	378 000
1991	333 856	383 743
1992	314 125	361 063
1993	285 257	327 882
1994	306 719	352 550
1995		396 200
1996		394 132
1997		419 888
1998		435 534
1999		479 650
2000		551 050
2001		569 350
2002		565 372
2003		575 142
2004		562 649

Source: see *Notes on sources of sales data: Consumption data for USSR and fSU, 1960-2004*, p.79.
For data on individual republics not in the EU, see Table 2.5.

Table 1.2 Total annual sales of tobacco products, Estonia

Year	Manufactured cigarettes	Cigars
	millions	millions
1988	1 965	
1989	1 933	
1990	1 912	
1991	2 100	
1992	2 097	
1993	2 097	
1994	2 100	
1995	2 100	
1996	2 200	
1997	2 200	
1998	2 200	
1999	2 200	
2000	1 960	
2001	2 100	
2002	2 250	2
2003	2 090	2
2004	2 250	2
2005	2 350	3
2006	2 160	3
2007	2 230	3
2008	2 120	4
2009	2 110	4
2010	2 000	3
2011	1 900	4
2012	1 940	
2013	1 860	5
2014	1 860	

Source: see *Notes on sources of sales data: Sales and consumption data for Estonia, 1988 onwards*, p.80.

Table 1.3 Total annual consumption of tobacco products, Latvia, 1921-1935

Year	Papyrosi		Cigars[1]	Smoking tobacco	All tobacco products
	tonnes	millions	tonnes	tonnes	tonnes
1921	260	456	6	150	415
1922	359	629	8	244	611
1923	447	785	11	512	971
1924	496	870	10	659	1 164
1925	508	890	13	523	1 044
1926	554	972	13	538	1 104
1927	531	931	13	551	1 095
1928	551	966	15	651	1 217
1929	589	1 033	17	757	1 363
1930	605	1 061	17	606	1 227
1931	570	1 000	14	546	1 130
1932	482	846	10	434	926
1933	500	877	10	441	951
1934	530	929	11	443	984
1935	523	918	12	451	987

1 Including cigarillos, and western type cigarettes, the annual consumption of which amounted to 0.5-1.5 tonnes.
Source: see *Notes on sources of sales data: Consumption data for Latvia, 1921-1935*, p. 79.

Table 1.4 Total annual sales of tobacco products, Latvia, 1988-2014

Year	Manufactured cigarettes		Cigars		Loose tobacco	All tobacco products
	tonnes	millions	tonnes	millions	tonnes	tonnes
1988		3 320				
1989		3 265				
1990		3 224				
1991		3 324				
1992		3 329				
1993		3 329				
1994		3 500				
1995		3 800				
1996		3 900				
1997		2 500				
1998		2 500				
1999		2 500				
2000		2 500	2	1		
2001		2 900				
2002		2 600				
2003		2 700				
2004		3 700	9	3		
2005	4 197	4 197	12	4	19	4 228
2006	4 753	4 753	18	6	20	4 791
2007	3 336	3 336	18	6	24	3 378
2008	3 870	3 870	21	7	25	3 916
2009	2 294	2 294	18	6	34	2 346
2010	1 771	1 771	399	133	38	2 208
2011	1 906	1 906	372	124	44	2 322
2012	1 822	1 822	270	90	46	2 138
2013	1 903	1 903	195	65	47	2 145
2014	1 800	1 800	171	57	41	2 012

Source: see *Notes on sources of sales data: Sales and consumption data for Latvia, 1988 onwards*, p.*82*.

Table 1.5 Total annual sales of tobacco products, Lithuana

Year	Manufactured cigarettes		Cigars		Hand rolling tobacco	All tobacco products
	tonnes	millions	tonnes	millions	tonnes	tonnes
1988		4 545				
1989		4 479				
1990		4 435				
1991		4 882				
1992		4 881				
1993		4 881				
1994		4 900				
1995		5 100				
1996		5 200				
1997		7 200				
1998		7 200				
1999		7 200				
2000		5 400				
2001	5 700	5 700	5	2	25	5 729
2002	4 800	4 800	5	2	25	4 830
2003	3 900	3 900	6	2	26	3 932
2004	3 100	3 100	7	2	28	3 135
2005	3 300	3 300	8	3	27	3 336
2006	5 650	5 650	11	4	28	5 689
2007	6 230	6 230	13	4	29	6 271
2008	5 740	5 740	14	5	29	5 783
2009	4 940	4 940	14	5	27	4 981
2010	3 960	3 960	208	69	28	4 196
2011	3 520	3 520	167	56	28	3 714
2012	3 280	3 280	173	58	28	3 481
2013		3 600				
2014		3 750				

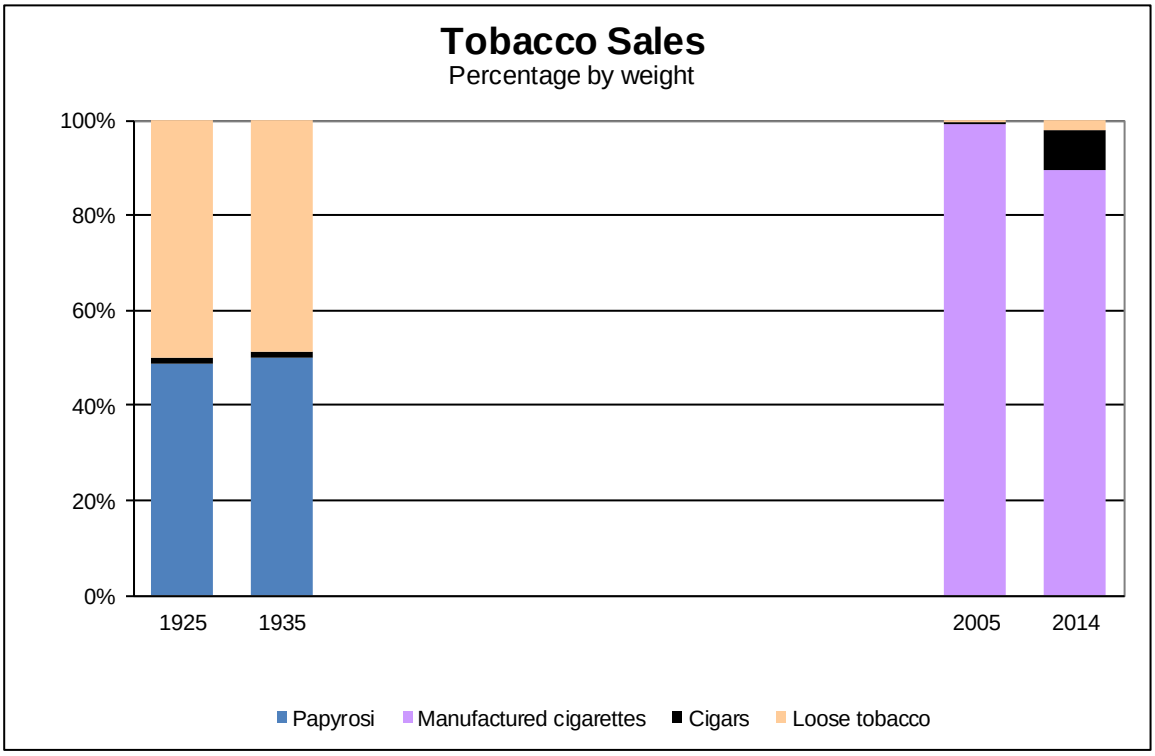
Source: see *Notes on sources of sales data: Sales and consumption data for Lithuania, 1988 onwards*, p.82.

Table 1.6 Percentage of sales of tobacco in different forms (by weight), selected years, Latvia

Year	Papyrosi	Manufactured cigarettes	Cigars[1]	Loose tobacco
	%	%	%	%
1925	48.6		1.2	50.2
1935	50.1		1.1	48.7
2005		99.3	0.3	0.4
2014		89.5	8.5	2.0

1 Includes cigarillos and western type cigarettes, 1925 and 1935.
Source: calculated from Tables 1.3 & 1.4.

Figure 1.1 Percentage of sales of tobacco in different forms (by weight), selected years, Latvia



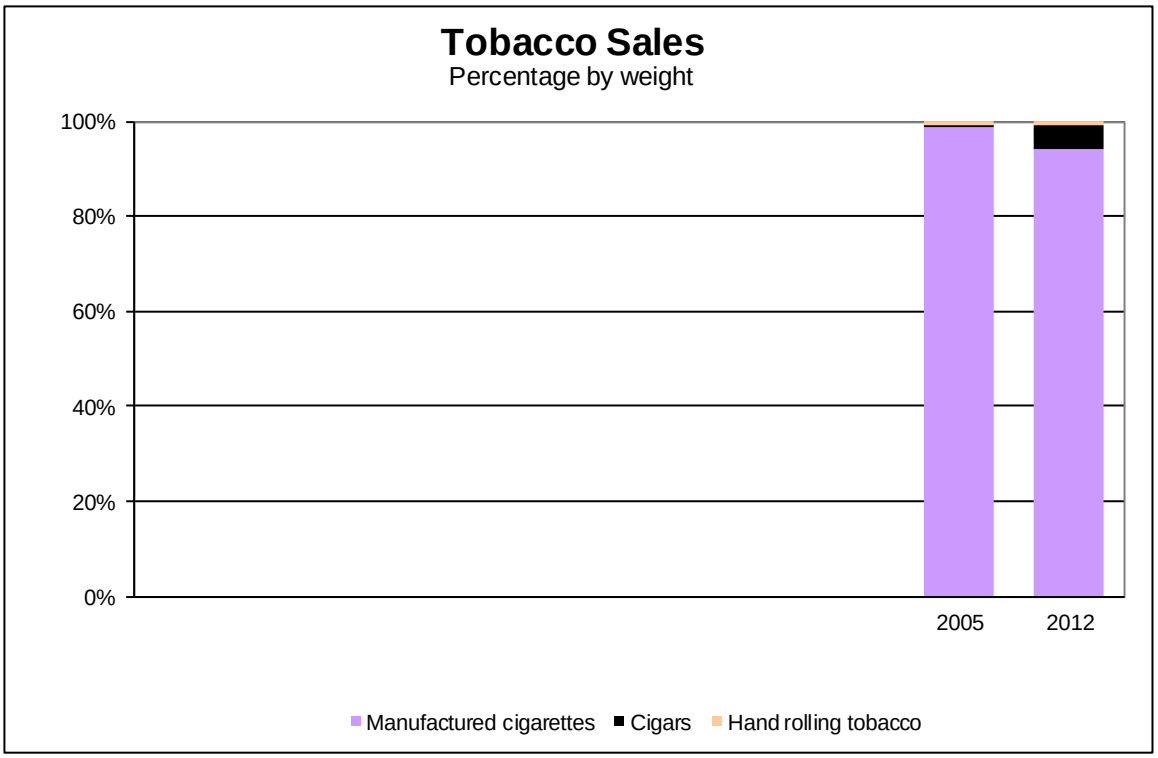
Source: Table 1.6.

Table 1.7 Percentage of sales of tobacco in different forms (by weight), selected years, Lithuania

Year	Manufactured cigarettes	Cigars	Hand rolling tobacco
	%	%	%
2005	98.9	0.3	0.8
2012	94.2	5.0	0.8

Source: calculated from Table 1.5.

Figure 1.2 Percentage of sales of tobacco in different forms (by weight), selected years, Lithuania



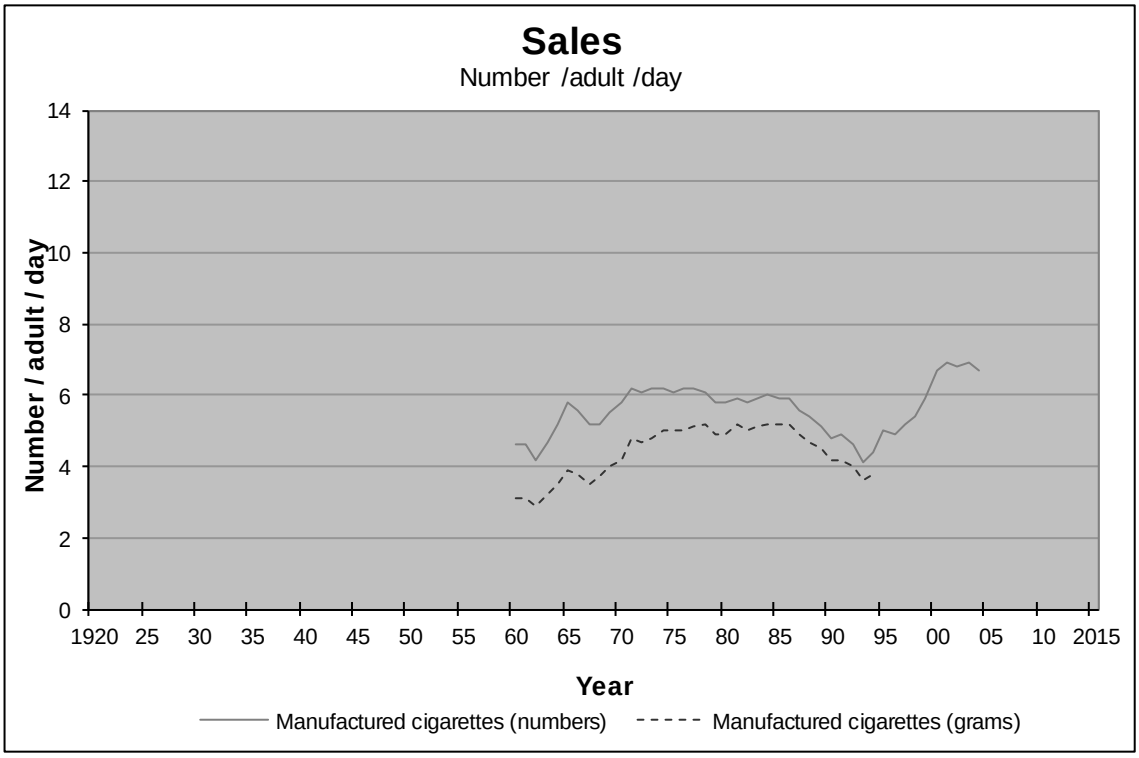
Source: Table 1.7.

Table 2.1 Sales of cigarettes (by number and by weight), USSR and fSU.
Annual total and average per adult (age 15 years and over) per day

Year	Manufactured cigarettes[1]				Total cigarettes		All tobacco products	
	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day	Total annual millions	Number/ adult/day	Total annual tonnes	Grams/ adult/day
1960	248 003	4.6	168 642	3.1				
1961	252 131	4.6	171 449	3.1				
1962	234 697	4.2	159 594	2.9				
1963	264 393	4.7	179 787	3.2				
1964	298 420	5.2	199 941	3.5				
1965	335 754	5.8	224 955	3.9				
1966	331 785	5.6	222 296	3.8				
1967	313 959	5.2	210 353	3.5				
1968	315 119	5.2	226 886	3.7				
1969	340 469	5.5	245 138	4.0				
1970	365 191	5.8	262 938	4.2				
1971	395 579	6.2	304 596	4.8				
1972	399 893	6.1	307 918	4.7				
1973	409 081	6.2	314 992	4.8				
1974	417 180	6.2	337 916	5.0				
1975	419 532	6.1	339 821	5.0				
1976	429 866	6.2	348 191	5.0				
1977	437 008	6.2	353 976	5.1				
1978	430 828	6.1	366 204	5.2				
1979	416 666	5.8	354 166	4.9				
1980	421 186	5.8	358 008	4.9				
1981	434 829	5.9	378 301	5.2				
1982	425 012	5.8	369 760	5.0				
1983	440 172	5.9	382 950	5.1				
1984	448 122	6.0	389 866	5.2				
1985	448 100	5.9	389 847	5.2				
1986	451 299	5.9	392 630	5.2				
1987	428 410	5.6	372 717	4.9				
1988	418 455	5.4	364 056	4.7				
1989	398 956	5.1	347 092	4.5				
1990	378 000	4.8	328 860	4.2				
1991	383 743	4.9	333 856	4.2				
1992	361 063	4.6	314 125	4.0				
1993	327 882	4.1	285 257	3.6				
1994	352 550	4.4	306 719	3.8				
1995	396 200	5.0						
1996	394 132	4.9						
1997	419 888	5.2						
1998	435 534	5.4						
1999	479 650	5.9						
2000	551 050	6.7						
2001	569 350	6.9						
2002	565 372	6.8						
2003	575 142	6.9						
2004	562 649	6.7						

1 Including papyrosi.
Source: Cigarettes, Table 1.2. Population, see *Population*, Methods p. 14.
Columns for total cigarettes including hand-rolled, and for all tobacco products, are shown as standard for all chapters, although for USSR and fSU no estimates are available. The column usually used in other chapters for hand-rolled cigarettes here shows estimates of cigarettes by weight instead. See also *Notes on sources of sales data, Estimates of numbers of hand-rolled cigarettes*, p. 87

Figure 2.1 Sales of manufactured cigarettes[1] (by number and weight), USSR and fSU. Average per adult (aged 15 years and over) per day



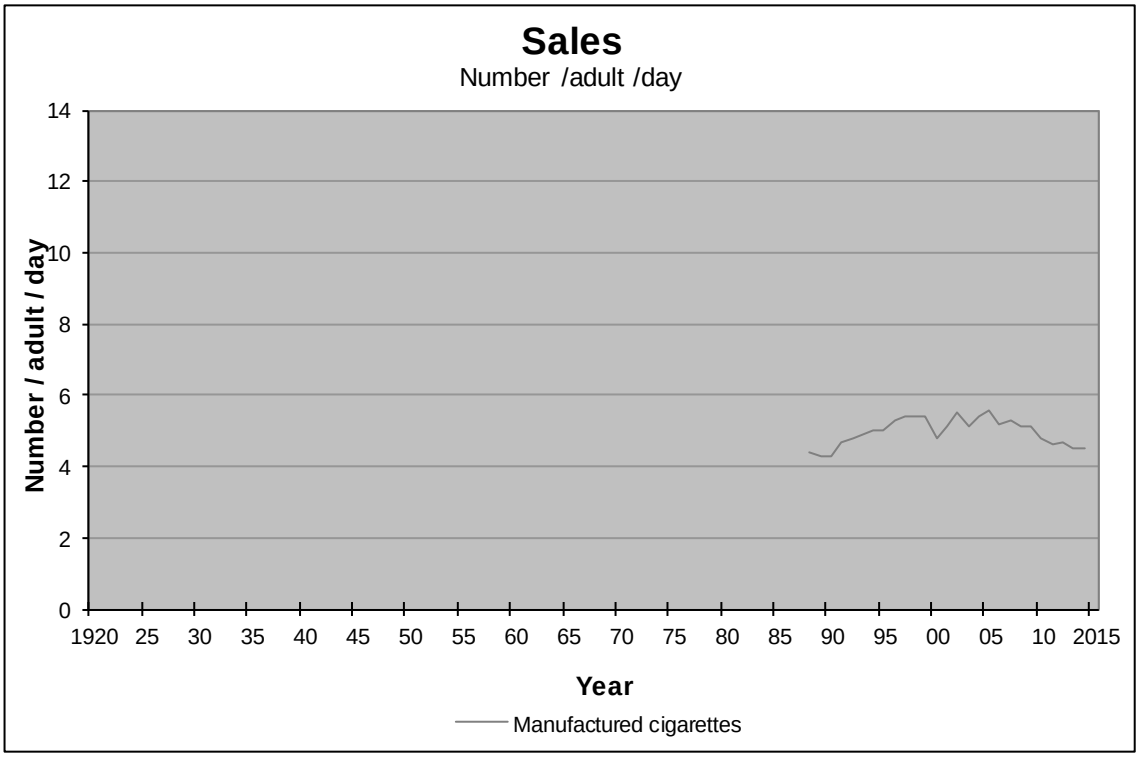
1 Includes papyrosi.
Source: Table 2.1.

Table 2.2 Sales of cigarettes, Estonia.
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
1988	1 965	4.4						
1989	1 933	4.3						
1990	1 912	4.3						
1991	2 100	4.7						
1992	2 097	4.8						
1993	2 097	4.9						
1994	2 100	5.0						
1995	2 100	5.0						
1996	2 200	5.3						
1997	2 200	5.4						
1998	2 200	5.4						
1999	2 200	5.4						
2000	1 960	4.8						
2001	2 100	5.1						
2002	2 250	5.5						
2003	2 090	5.1						
2004	2 250	5.4						
2005	2 350	5.6						
2006	2 160	5.2						
2007	2 230	5.3						
2008	2 120	5.1						
2009	2 110	5.1						
2010	2 000	4.8						
2011	1 900	4.6						
2012	1 940	4.7						
2013/1	1 860	4.5						
2014/1	1 860	4.5						

1 Per adult data based on 2012 population.
Source: Manufactured cigarettes, Table 1.2. Population, see *Population*, Methods p. 14.
Columns for hand-rolled cigarettes, for total cigarettes including hand-rolled, and for all tobacco products are shown as standard for all chapters, although for Estonia no estimates are available.

Figure 2.2 Sales of manufactured cigarettes, Estonia.
Average per adult (aged 15 years and over) per day



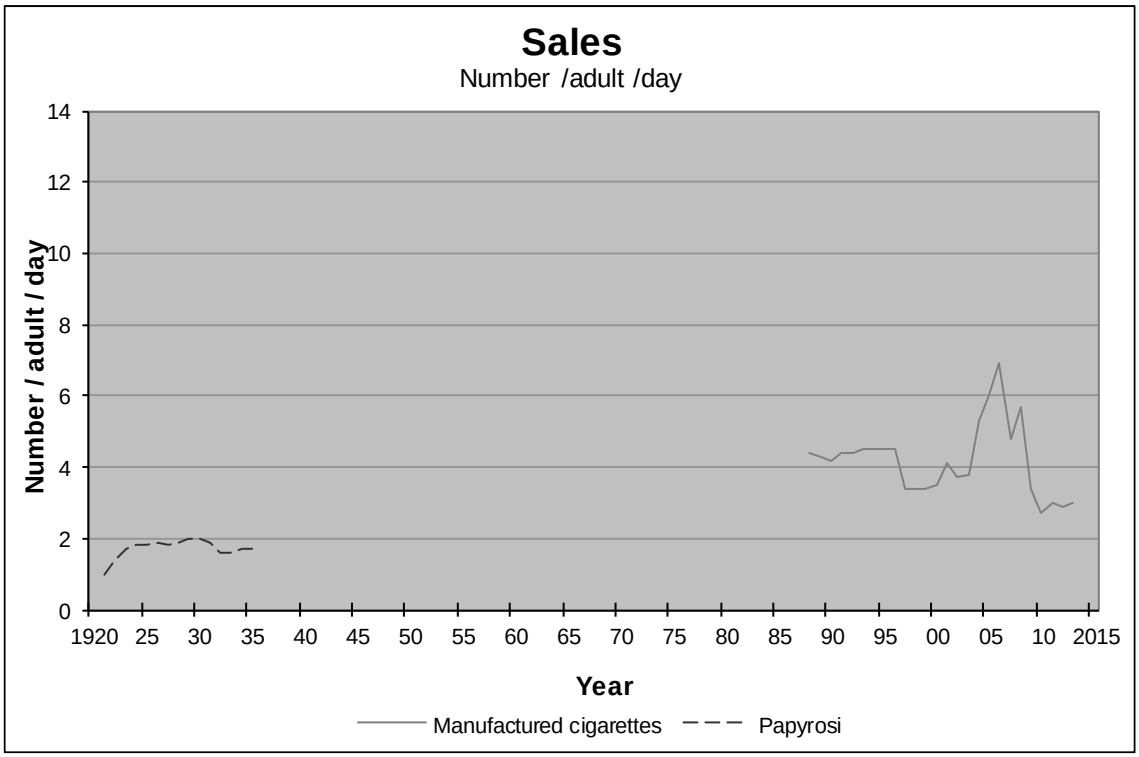
Source: Table 2.2.

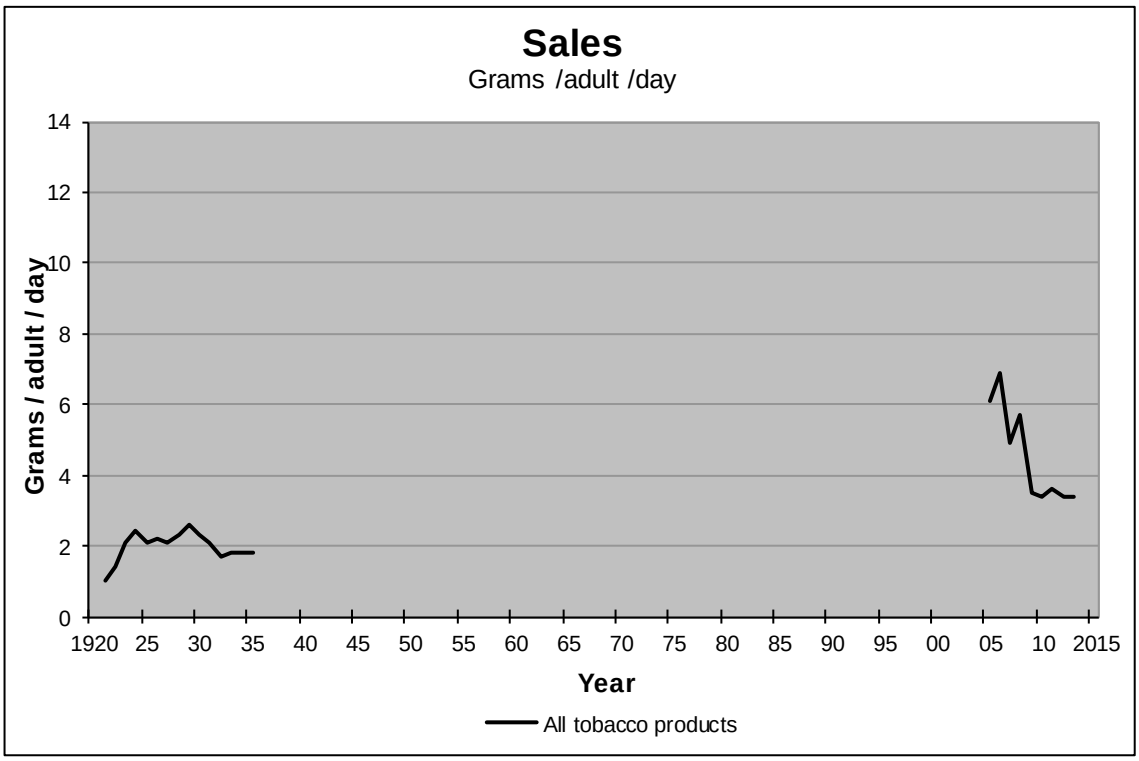
Table 2.3 Sales of papyrosi and cigarettes, and of all tobacco products, Latvia. Annual total and average per adult (age 15 years and over) per day

Year	Manufactured cigarettes		Papyrosi		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
1921			456	1.0			415	1.0
1922			629	1.4			611	1.4
1923			785	1.7			971	2.1
1924			870	1.8			1 164	2.4
1925			890	1.8			1 044	2.1
1926			972	1.9			1 104	2.2
1927			931	1.8			1 095	2.1
1928			966	1.9			1 217	2.3
1929			1 033	2.0			1 363	2.6
1930			1 061	2.0			1 227	2.3
1931			1 000	1.9			1 130	2.1
1932			846	1.6			926	1.7
1933			877	1.6			951	1.8
1934			929	1.7			984	1.8
1935			918	1.7			987	1.8
1988	3 320	4.4						
1989	3 265	4.3						
1990	3 224	4.2						
1991	3 324	4.4						
1992	3 329	4.4						
1993	3 329	4.5						
1994	3 500	4.8						
1995	3 800	5.2						
1996	3 900	5.4						
1997	2 500	3.4						
1998	2 500	3.4						
1999	2 500	3.4						
2000	2 500	3.5						
2001	2 900	4.1						
2002	2 600	3.7						
2003	2 700	3.8						
2004	3 700	5.3						
2005	4 197	6.0					4 228	6.1
2006	4 753	6.9					4 791	6.9
2007	3 336	4.8					3 378	4.9
2008	3 870	5.7					3 916	5.7
2009	2 294	3.4					2 346	3.5
2010	1 771	2.7					2 208	3.4
2011	1 906	3.0					2 322	3.6
2012	1 822	2.9					2 138	3.4
2013/1	1 903	3.0					2 145	3.4
2014/1	1 800	2.8					2 012	3.2

1 Per adult data based on 2012 population.
Source: Papyrosi, Table 1.3. Manufactured cigarettes, Table1.4. Population, see *Population*, Methods p. 14.
A column for total cigarettes including hand-rolled is shown as standard for all chapters, although for Latvia no estimates are available. The column usually used in other chapters for hand-rolled cigarettes here shows data for papyrosi instead. See also *Notes on sources of sales data*, *Estimates of numbers of hand-rolled cigarettes*, p. 87.

Figure 2.3 Sales of (i) papyrosi and manufactured cigarettes and (ii) all tobacco products, Latvia.
Average per adult (aged 15 years and over) per day





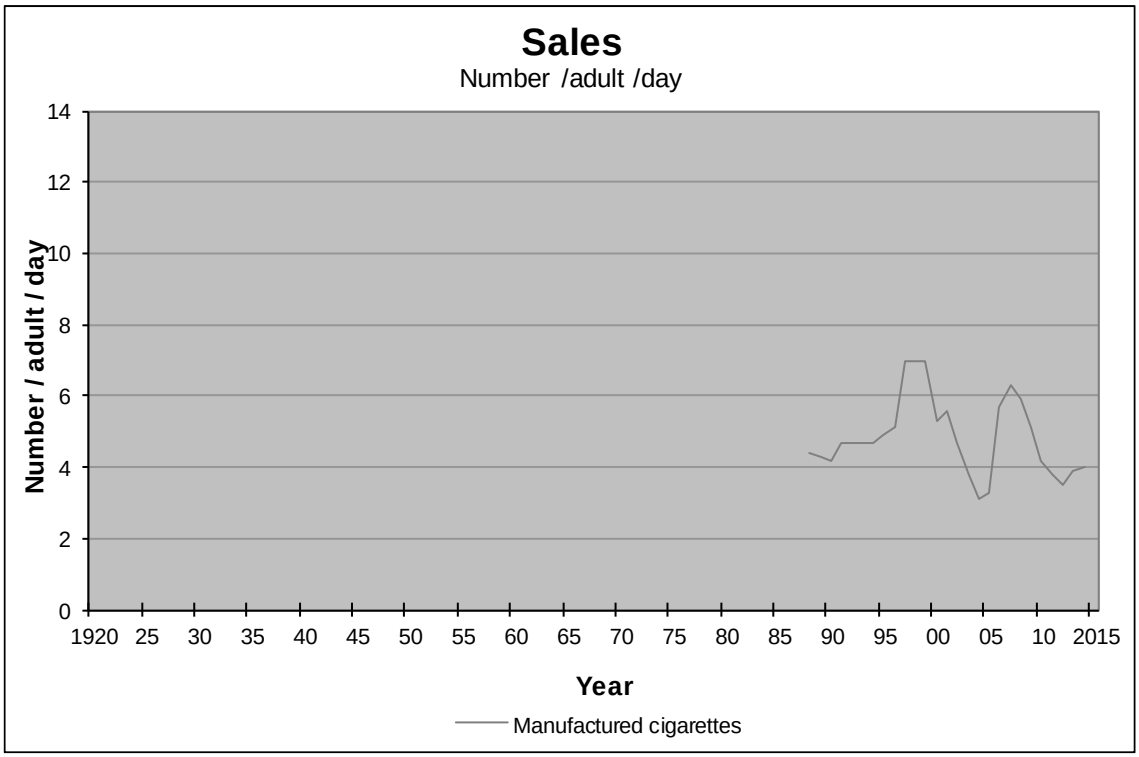
Source: Table 2.3.

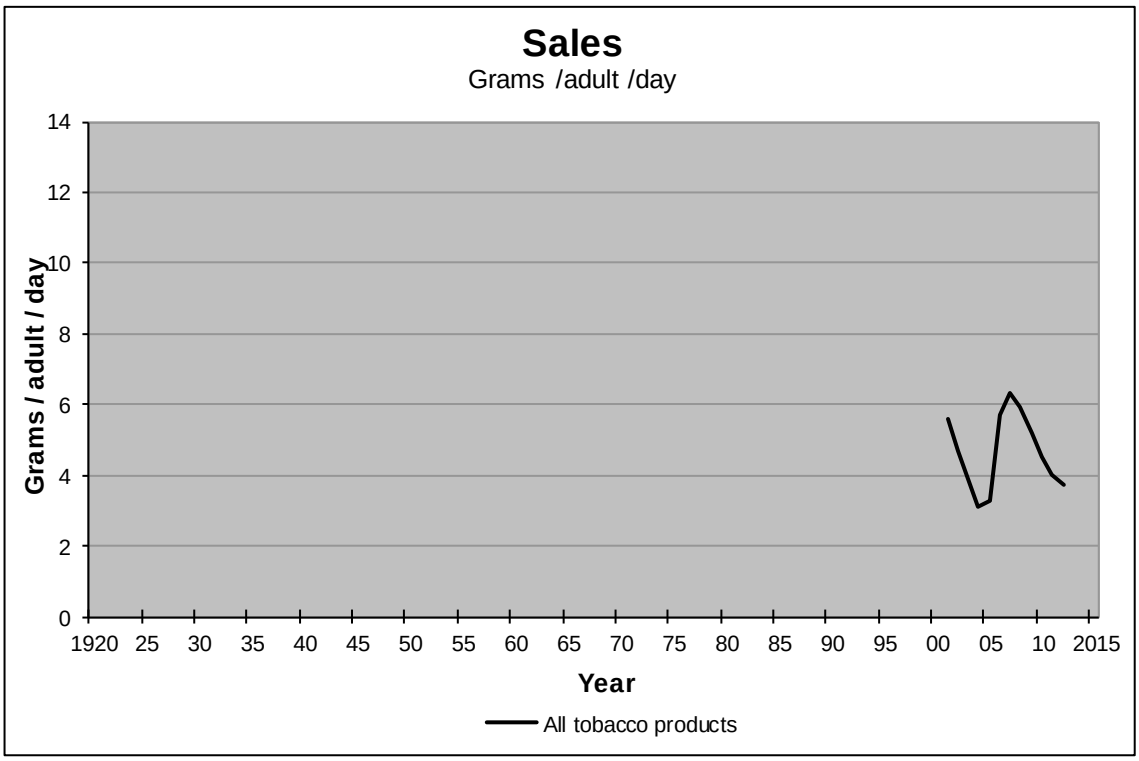
Table 2.4 Sales of cigarettes and of all tobacco products, Lithuania.
Annual total and average per adult (age 15 years and over) per day

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
1988	4 545	4.4						
1989	4 479	4.3						
1990	4 435	4.2						
1991	4 882	4.7						
1992	4 881	4.7						
1993	4 881	4.7						
1994	4 900	4.7						
1995	5 100	4.9						
1996	5 200	5.1						
1997	7 200	7.0						
1998	7 200	7.0						
1999	7 200	7.0						
2000	5 400	5.3						
2001	5 700	5.6					5 729	5.6
2002	4 800	4.7					4 830	4.7
2003	3 900	3.8					3 932	3.9
2004	3 100	3.1					3 135	3.1
2005	3 300	3.3					3 336	3.3
2006	5 650	5.7					5 689	5.7
2007	6 230	6.3					6 271	6.3
2008	5 740	5.9					5 783	5.9
2009	4 940	5.1					4 981	5.2
2010	3 960	4.2					4 196	4.5
2011	3 520	3.8					3 714	4.0
2012/1	3 280	3.5					3 481	3.7
2013/1	3 600	3.9						
2014/1	3 750	4.0						

1 Per adult data based on 2011 population.
Source: Manufactured cigarettes and all tobacco products, Table 1.5. Population, see *Population*, Methods p. 14.
Columns for hand-rolled cigarettes and for total cigarettes including hand-rolled are shown as standard for all chapters, although for Lithuania no estimates are available, see *Notes on sources of sales data*, *Estimates of numbers of hand-rolled cigarettes*, p. 87.

Figure 2.4 Sales of (i) manufactured cigarettes and (ii) all tobacco products, Lithuania.
Average per adult (aged 15 years and over) per day





Source: Table 2.4.

Table 2.5 Sales of manufactured cigarettes, non-EU republics.
Annual total and average per adult (age 15 years and over) per day

Year	Armenia		Azerbaijan		Belarus		Georgia	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day
1988	10 095	12.0	8 785	5.1	12 539	4.4	9 337	6.3
1989	9 731	11.6	8 350	4.9	12 353	4.3	9 226	6.2
1990	10 100	11.9	7 608	4.4	12 323	4.3	9 211	6.1
1991	8 500	9.3	8 997	5.2	13 550	4.7	9 482	6.3
1992	4 627	4.9	6 689	3.8	13 540	4.7	6 250	4.1
1993	5 305	5.5	2 050	1.1	13 540	4.6	8 082	5.6
1994	5 500	5.7	6 000	3.3	14 000	4.8	8 500	6.2
1995	5 500	5.6	6 000	3.3	14 000	4.8	8 500	6.4
1996	5 600	5.6	6 100	3.3	15 000	5.1	8 600	6.6
1997	5 700	5.6	6 200	3.4	15 500	5.2	8 700	6.7
1998	5 800	5.7	6 150	3.2	16 000	5.4	8 800	6.9
1999							8 900	7.0

Year	Kazakhstan		Kyrgyzstan		Moldova		Russia	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day
1988	20 390	5.0	5 091	5.3	9 658	8.5	200 946	4.9
1989	19 272	4.7	4 823	4.9	10 232	8.9	190 274	4.6
1990	16 259	3.9	4 883	4.9	7 582	6.6	196 400	4.7
1991	15 289	3.6	4 884	4.9	7 600	6.6	195 608	4.7
1992	15 289	3.6	5 100	5.0	7 500	6.5	184 200	4.4
1993	20 305	4.7	5 816	5.8	4 900	4.2	184 800	4.4
1994	21 000	4.9	4 000	4.0	4 800	4.1	177 000	4.2
1995	21 500	5.1	4 000	3.9	4 800	4.1	211 000	5.0
1996	15 650	3.8	4 000	3.9	4 800	4.1	207 000	4.9
1997	16 000	3.9	4 050	3.8	4 800	4.9	230 000	5.4
1998	17 000	4.4	4 100	3.8	4 700	4.7	245 000	5.7
1999	17 100	4.4			4 700	4.7	288 300	6.7
2000	17 100	4.4					359 600	8.3
2001							377 900	8.7
2002							393 712	9.0
2003							384 535	8.7
2004							373 915	8.4

Year	Tajikistan		Turkmenistan		Ukraine		Uzbekistan	
	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day	Total annual millions	Number/ adult/day
1988	6 261	6.0	5 067	6.7	92 627	6.3	9 737	2.3
1989	6 180	5.8	4 917	6.4	88 318	6.0	9 918	2.3
1990	5 600	5.1	5 116	6.4	81 074	5.5	8 977	2.0
1991	5 140	4.6	5 480	6.7	84 507	5.7	11 400	2.6
1992	3 450	3.0	5 551	6.6	78 808	5.3	10 700	2.3
1993	6 000	5.3	5 551	6.4	78 808	5.3	18 600	3.9
1994	7 000	6.0	5 650	6.3	80 000	5.3	16 900	3.5
1995	7 200	6.1	5 700	5.8	80 000	5.4	17 000	3.4
1996	7 400	6.3	5 900	5.9	85 000	5.7	17 782	3.5
1997	7 500	6.3	6 000	5.9	86 000	5.8	17 988	3.5
1998	7 400	6.0	6 100	5.8	87 000	5.9	15 984	3.0
1999					87 000	5.9	16 600	3.0
2000					87 000	5.9	16 700	3.0
2001					87 000	5.9		
2002					67 279	4.6		
2003					85 753	5.8		

Source: see *Notes on sources of sales data, Consumption data for USSR and fSU, 1960-2004*, p. 79. Population, see *Population*, Methods p. 14.

Table 3 Manufactured cigarettes: percentage of production as filter cigarettes, (i) excluding papyrosi and (ii) including papyrosi, USSR, 1960-1982 and Latvia 2000-2001

Year	% Filter (excluding papyrosi)	% Filter (including papyrosi)
1960	0.0	0.0
1961	0.0	0.0
1962	0.9	0.2
1963	1.1	0.3
1964	1.2	0.3
1965	4.5	1.3
1966	6.9	2.3
1967	9.5	3.7
1968	16.9	7.5
1969	20.8	9.6
1970	22.0	10.1
1971	23.4	10.9
1972	23.9	11.5
1973	23.5	11.9
1974	26.1	13.9
1975	29.0	16.1
1976	28.4	16.5
1977	27.3	16.5
1978	29.1	18.5
1979	30.8	20.6
1980	30.6	20.9
1981	30.5	21.0
1982	30.3	21.3

	Latvia
Year	% Filter
2000	93.8
2001	96.8

Source: see *Notes on sources of sales data: Plain/Filter cigarette production,* p. 87.
The notes also provide limited information on plain/filter cigarettes in other republics, and there is limited information in the Notes on *Menthol cigarette sales*, p. 88, *Slim cigarette sales*, p. 88, and *Tar and nicotine machine yields of cigarettes*, p. 88.

Table 4M Prevalence of smoking, males: selected surveys by age
(continues on p. 28)

Russia

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
75	27	UC	U					25				60		63		46		39		36			20		44
75	28	U	U				60																		
78	1	UC	R													51	49	48	41						48
79	29	U	U									60		63		48		45							54
81	30	UC	U	10		30																			
81	31	U	U	13	38	18	69		66																54
83	8	UC	R												55		47		37						48
83	8	UC	A												57		49		38						49
83	8	A	A												57		49		37						49
83	29	U	U									62		57		48		45							53
84	32	U	R	6																					
84	32	U	A	15																					
85	7	UC	R												45		37		38						40
85	7	UC	A												49		40		41						44
85	7	A	A												49		40		41						44
85	9	UC	R										65		57		59		44						54
85	9	UC	A										65		58		60		44						55
85	9	A	A										65		58		60		44						55
85	10	UC	R										69		67		66		47						61
85	10	UC	A										69		67		66		47						62
85	10	A	A										69		67		66		47						62
85	33	U	U					46																	
85	34	UC	*	2	3	8	17	14	37																
85	34	UC	R	7	7	12	23	21	44																
85	34	UC	A	14	16	22	35	33	53																
85	35	U	U				53																		
86	29	U	U									60		53		51		39							49
86	36	U	U				79																		
86	37	U	*	12																					
88	7	UC	R												42		41		35						40
88	7	UC	A												46		42		36						42
88	7	A	A												46		42		36						42
88	9	UC	R										67		59		49		40						50
88	9	UC	A										69		60		50		41						52
88	9	A	A										68		60		50		41						52
89	8	UC	R												44		44		31						41
89	8	UC	A												45		45		32						42
89	8	A	A												45		45		32						42
89	10	UC	R										62		62		55		43						55
89	10	UC	A										64		64		55		44						56
89	10	A	A										64		64		55		44						56
89	12	U	U				44																		
89	32	U	*				42																		
89	32	U	A				45																		
90	41	UC	R			17																			
90	41	UC	A			22																			
91	37	U	*	22																					
91	38	U	U																						
91	42	TC	R									64		57		45		48							55

Table 4F Prevalence of smoking, females: selected surveys by age
(continues on p. 29)

Russia

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
75	27	UC	U					7				17		19		8		6		11		6			10
75	28	U	U				9																		
78	1	UC	R																						
79	29	U	U									17		19		9		9							13
81	30	UC	U																						
81	31	U	U	0	4	4	17				8														6
83	8	UC	R												20		8		7						12
83	8	UC	A												22		10		8						14
83	8	A	A												22		10		8						14
83	29	U	U									17		19		10		9							14
84	32	U	R																						
84	32	U	A																						
85	7	UC	R												21		6		11						13
85	7	UC	A												26		7		12						16
85	7	A	A												26		7		12						16
85	9	UC	R										4		3		2		3						3
85	9	UC	A										7		4		2		3						3
85	9	A	A										7		4		2		3						3
85	10	UC	R										4		5		2		4						4
85	10	UC	A										4		6		2		4						4
85	10	A	A										4		6		2		4						4
85	33	U	U					30																	
85	34	UC	*	0	0	1	5	4	12																
85	34	UC	R	0	1	4	8	8	18																
85	34	UC	A	1	4	6	14	18	28																
85	35	U	U				10																		
86	29	U	U									11		15		9		3							9
86	36	U	U				14																		
86	37	U	*			3																			
88	7	UC	R												12		9		4						9
88	7	UC	A												23		11		5						14
88	7	A	A												23		11		5						14
88	9	UC	R										8		5		1		2						3
88	9	UC	A										9		5		1		2						3
88	9	A	A										9		5		1		2						3
89	8	UC	R												21		14		5						14
89	8	UC	A												24		14		5						15
89	8	A	A												24		14		5						16
89	10	UC	R										6		6		1		4						4
89	10	UC	A										7		9		2		4						5
89	10	A	A										7		9		2		4						5
89	12	U	U				10																		
89	32	U	*				13																		
89	32	U	A				19																		
90	41	UC	R			2																			
90	41	UC	A			6																			
91	37	U	*			7																			
91	38	U	U				25																		
91	42	TC	R																						

Russia *(continued)*

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
92	39	U	U				69																		
92	43	U	R										77		61		68		57						65
92	44	U	U			40																			
92	45	U	U				61																		
93	7	UC	R												49		42		31						42
93	7	UC	A												49		42		31						42
93	7	A	A												49		42		31						42
93	8	UC	R												49		54		34						47
93	8	UC	A												49		54		34						47
93	8	A	A												49		54		34						47
93	15	U	R		13		19																		
93	40	U	U				42																		
93	44	U	U			49																			
93	46	UC	R		24																				
93	46	UC	A		39																				
93	47	UC	R									69													
93	48	U	U				67																		
93	49	U	U										65		*										46
94	9	UC	R										71		64		59		47						58
94	9	UC	A										74		66		63		47						60
94	9	A	A										74		66		63		47						60
94	32	U	*				25																		
94	32	U	R				34																		
95	10	UC	R										63		71		61		40						60
95	10	UC	A										69		74		63		43						62
95	10	A	A										69		74		63		43						62
95	34	UC	R	9	18	23	38	46	51	52															20
95	34	UC	A			30																			
95	50	UC	U			19		49		51		64	73		67		63		52		40		18		59
95	50	A	U			19		49		52		65	74		67		63		53		40		19		59
95	51	U	U				44					*			59										
95	52	U	A		24																				
95	53	U	U				66																		
98	15	A	*		7		20																		
98	15	A	R		13		24																		
99	90	UC	*				42																		
99	90	UC	A				48																		
99	101	UC	A		38																				
99	101	A*	A		41																				
02	15	A	*		9		20																		
02	15	A	R		15		27																		
02	102	UC	A		41																				
02	102	A*	A		43																				
03	90	UC	*				37																		
03	90	UC	A				44																		
03	93	U	R										41												
03	93	U	A										56												
04	103	UC	*		12																				
04	103	UC	A		26																				
04	103	A*	A		30																				

Table 4F *(continued from p. 27, continues on p. 39)*
Prevalence of smoking, females

Russia *(continued)*

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
92	39	U	U				8																		
92	43	U	R										20		13		6		3						11
92	44	U	U			25																			
92	45	U	U				17																		
93	7	UC	R												21		14		5						14
93	7	UC	A												21		14		5						14
93	7	A	A												21		14		5						14
93	8	UC	R												21		12		4						14
93	8	UC	A												21		12		4						14
93	8	A	A												21		12		4						14
93	15	U	R		5		10																		
93	40	U	U				24																		
93	44	U	U			38																			
93	46	UC	R		3																				
93	46	UC	A		12																				
93	47	UC	R									6													
93	48	U	U				30																		
93	49	U	U										19		*										12
94	9	UC	R										25		14		5		1						8
94	9	UC	A										32		16		8		1						9
94	9	A	A										32		16		8		1						9
94	32	U	*																						
94	32	U	R																						
95	10	UC	R										20		11		6		0						6
95	10	UC	A										27		15		9		1						9
95	10	A	A										27		16		9		1						9
95	34	UC	R	2	1	12	21	31	32	43															12
95	34	UC	A				18																		
95	50	UC	U			8		7		18		19	17		11		9		2		2		1		9
95	50	A	U			8		7		18		19	17		11		9		2		2		1		9
95	51	U	U				13					*			18										
95	52	U	A		31																				
95	53	U	U																						
98	15	A	*		3		14																		
98	15	A	R		7		22																		
99	90	UC	*				30																		
99	90	UC	A				42																		
99	101	UC	A		29																				
99	101	A*	A		30																				
02	15	A	*		7		12																		
02	15	A	R		10		19																		
02	102	UC	A		25																				
02	102	A*	A		26																				
03	90	UC	*				32																		
03	90	UC	A				44																		
03	93	U	R							7															
03	93	U	A							11															
04	103	UC	*		11																				
04	103	UC	A		24																				
04	103	A*	A		24																				

Russia *(continued/2)*

Year	Source	Product	Frequency	Age Groups																							All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
06	15	A	*		11		22																		
06	15	A	R		15		27																		
07	90	UC	*				31																		
07	90	UC	A				40																		
09	124	MC	R				54																		
09	124	TC	R				55																		
09	124	A	R				55																		
09	124	MC	A				59																		
09	124	TC	A				60																		
09	124	A	A				30					62		68			62				40				60
10	15	A	*		5		15																		
10	15	A	R		8		19																		
11	90	UC	*				23																		
11	90	UC	A				30																		
14	15	A	*		7		13																		
14	15	A	R		9		17																		

Estonia

Year	Source	Product	Frequency	Age Groups																							All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
81	54	U	U	9	12	19	20	28	37																
90	55	U	R							45															
90	56	U	U							52															
91	57	U	*				10																		
91	57	U	A				17																		
91	58	UC	R			19																			
91	58	UC	A			24																			
92	13	U	U												49										
92	59	U	R										56		58		47		37						
93	58	UC	R			28																			
93	58	UC	A			40																			
94	16	U	R		6		22																		
94	60	U	R							52															
95	19	UC	*				26																		
95	19	UC	A				37																		
95	58	UC	R			24																			
95	58	UC	A			32																			
95	61	U	U					31																	
96	118	U	R						47				66		58		54		42		26		14		50
96	118	U	A						49				68		60		55		43		27		*		51

Table 4F *(continued from p.29, continues on p. 33)*
Prevalence of smoking, females

Russia *(continued/2)*

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
06	15	A	*		11		15																		
06	15	A	R		16		21																		
07	90	UC	*				20																		
07	90	UC	A				30																		
09	124	MC	R				16																		
09	124	TC	R				16																		
09	124	A	R				16																		
09	124	MC	A				21																		
09	124	TC	A				21																		
09	124	A	A				18				38			31				18				3			22
10	15	A	*		3		9																		
10	15	A	R		5		15																		
11	90	UC	*				24																		
11	90	UC	A				31																		
14	15	A	*		6		7																		
14	15	A	R		7		10																		

Estonia

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
81	54	U	U	1	1	2	4	6	13																
90	55	U	R							15															
90	56	U	U								28														
91	57	U	*				2																		
91	57	U	A				4																		
91	58	UC	R			4																			
91	58	UC	A			11																			
92	13	U	U												20										
92	59	U	R										30		21		17		7						
93	58	UC	R			14																			
93	58	UC	A			28																			
94	16	U	R		1		6																		
94	60	U	R																						
95	19	UC	*				13																		
95	19	UC	A				22																		
95	58	UC	R			17																			
95	58	UC	A			23																			
95	61	U	U				22																		
96	118	U	R					19					29		33		21		8		4		4		19
96	118	U	A					22					32		34		22		*		5		*		20

Estonia *(continued)*

Year	Source	Product	Frequency	Age Groups																					All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
98	16	A	*		4		17																		
98	16	A	R		7		24																		
99	19	UC	*				30																		
99	19	UC	A				41																		
01	16	A	*		8		23																		
01	16	A	R		13		30																		
02	98	U	U				35						64			59			30						47
02	104	UC	*		12																				
02	104	UC	A		34																				
02	104	A*	A		35																				
03	19	UC	*				32																		
03	19	UC	A				40																		
03	94	U	R							50															
03	94	U	A							56															
05	98	MC	R				23						45			54			26						37
05	98	TC	R				23						46			54			26						38
05	98	A	R				23						46			54			26						38
05	98	MC	U				28						47			54			28						40
05	98	TC	U				28						49			54			28						40
05	98	A	U				28						50			55			28						41
06	16	A	*		6		21																		
06	16	A	R		11		27																		
06	98	MC	R				44						42			45			29						40
06	98	TC	R				44						42			45			29						40
06	98	A	R				44						43			45			29						40
06	98	MC	U				47						46			49			32						43
06	98	TC	U				47						46			49			32						43
06	98	A	U				47						49			50			33						45
07	19	UC	*				20																		
07	19	UC	A				31																		
07	104	UC	A		28																				
07	104	A*	A		34																				
07	121	TC	R				36						44		47		46		37		25		13	*	40
09	98	MC	R				40						47			59			24						42
09	98	TC	R				46						50			60			27						45
09	98	MC	A				46						51			60			28						46
09	98	TC	A				46						50			60			28						46
09	98	A	A				46						52			61			29						47
10	16	A	*		6		16																		
10	16	A	R		10		22																		
11	19	UC	*				18																		
11	19	UC	A				29																		
12	98	MC	R				23						33			39			32						32
12	98	TC	R				23						35			39			32						33
12	98	A	R				23						35			39			33						33
12	98	MC	A				28						39			40			33						35
12	98	TC	A				28						39			40			33						35
12	98	A	A				30						39			40			34						36
14	16	A	*		2		9																		
14	16	A	R		5		13																		

Table 4F *(continued from p. 31, continues on p. 35)*
Prevalence of smoking, females

Estonia *(continued)*

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
98	16	A	*		1		8																		
98	16	A	R		2		12																		
99	19	UC	*				15																		
99	19	UC	A				24																		
01	16	A	*		4		12																		
01	16	A	R		8		18																		
02	98	U	U				14						27			27			5						17
02	104	UC	*		8																				
02	104	UC	A		30																				
02	104	A*	A		30																				
03	19	UC	*				23																		
03	19	UC	A				33																		
03	94	U	R								19														
03	94	U	A								25														
05	98	MC	R				25						27			24			7						19
05	98	TC	R				25						27			24			7						18
05	98	A	R				25						27			24			7						18
05	98	MC	U				27						32			28			8						22
05	98	TC	U				27						32			28			8						22
05	98	A	U				27						32			28			8						22
06	16	A	*		4		12																		
06	16	A	R		7		19																		
06	98	MC	R				15						29			33			8						20
06	98	TC	R				15						29			33			8						20
06	98	A	R				15						29			33			8						20
06	98	MC	U				21						36			35			10						24
06	98	TC	U				21						36			35			10						24
06	98	A	U				21						36			35			10						24
07	19	UC	*				14																		
07	19	UC	A				26																		
07	104	UC	A		26																				
07	104	A*	A		28																				
07	121	TC	R				15						21		23		22		11		5		3	*	15
09	98	MC	R				23						21			21			7						16
09	98	TC	R				27						26			22			8						18
09	98	MC	A				26						26			23			10						19
09	98	TC	A				27						26			23			10						19
09	98	A	A				29						26			24			11						20
10	16	A	*		3		10																		
10	16	A	R		6		16																		
11	19	UC	*				16																		
11	19	UC	A				28																		
12	98	MC	R				15						21			19			12						16
12	98	TC	R				15						21			19			12						17
12	98	A	R				15						21			19			12						16
12	98	MC	A				20						24			22			12						19
12	98	TC	A				20						24			22			13						19
12	98	A	A				20						23			22			13						19
14	16	A	*		1		7																		
14	16	A	R		3		11																		

Latvia

Year	Source	Product	Frequency	Age Groups																					All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
90	17	UC	A		21		31																		
93	17	U	R		13		33																		
93	62	U	R				67																		
95	20	UC	*				26																		
95	20	UC	A				32																		
97	17	A	*		8		27																		
97	17	A	R		15		37																		
99	20	UC	*				39																		
99	20	UC	A				48																		
01	17	A	*		9		22																		
01	17	A	R		17		29																		
02	99	U	U				56						68			53			54						58
02	105	UC	A		38																				
02	105	A*	A		41																				
03	20	UC	*				35																		
03	20	UC	A				46																		
03	95	U	R							56															
03	95	U	A							64															
03	119	U	R				42						57		64		55		46		30				51
03	119	U	A				51						62		70		60		49		33				56
05	99	MC	R				35						54			53			42						47
05	99	TC	R				35						54			53			42						47
05	99	A	R				34						54			53			42						47
05	99	MC	U				46						61			57			46						53
05	99	TC	U				46						61			57			46						53
05	99	A	U				46						61			57			46						53
06	17	A	*		7		23																		
06	17	A	R		11		30																		
06	99	MC	R				36						57			53			38						47
06	99	TC	R				36						57			53			38						47
06	99	A	R				36						57			54			38						47
06	99	MC	U				46						60			58			39						52
06	99	TC	U				46						60			58			39						52
06	99	A	U				47						60			59			40						52
07	20	UC	*				33																		
07	20	UC	A				44																		
07	105	UC	*		17																				
07	105	UC	A		36																				
07	105	A*	A		42																				
08	122	TC	R				34						55		57		55		54		28		9	*	46
09	99	MC	R				36						57			53			37						47
09	99	TC	R				38						60			54			36						48
09	99	MC	A				42						61			55			37						50
09	99	TC	A				41						60			54			37						49
09	99	A	A				43						61			55			37						50
10	17	A	*		7		23																		
10	17	A	R		11		32																		
10	123	TC	R				41																		
10	123	TC	A				32						51				47				26				43

Table 4F *(continued from p. 33, continues on p. 37)*
Prevalence of smoking, females

Latvia

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
90	17	UC	A		8		14																		
93	17	U	R		3		14																		
93	62	U	R				12																		
95	20	UC	*				13																		
95	20	UC	A				18																		
97	17	A	*		3		12																		
97	17	A	R		7		19																		
99	20	UC	*				26																		
99	20	UC	A				34																		
01	17	A	*		3		14																		
01	17	A	R		6		21																		
02	99	U	U				22						28			37			9						23
02	105	UC	A		30																				
02	105	A*	A		33																				
03	20	UC	*				22																		
03	20	UC	A				36																		
03	95	U	R							19															
03	95	U	A							24															
03	119	U	R				18						22		25		20		10		4				17
03	119	U	A				28						31		32		24		12		5				23
05	99	MC	R				17						20			16			9						15
05	99	TC	R				17						20			16			9						15
05	99	A	R				17						20			16			9						15
05	99	MC	U				20						27			20			12						19
05	99	TC	U				20						27			20			12						19
05	99	A	U				20						27			20			12						19
06	17	A	*		6		15																		
06	17	A	R		10		23																		
06	99	MC	R				23						24			12			7						16
06	99	TC	R				23						24			12			7						16
06	99	A	R				23						24			12			7						16
06	99	MC	U				34						27			17			9						21
06	99	TC	U				35						27			17			9						21
06	99	A	U				35						28			17			9						21
07	20	UC	*				25																		
07	20	UC	A				39																		
07	105	UC	*		12																				
07	105	UC	A		30																				
07	105	A*	A		34																				
08	122	TC	R				13						22		19		18		10		4		1	*	13
09	99	MC	R				23						28			19			9						19
09	99	TC	R				29						29			21			10						22
09	99	MC	A				29						29			23			10						22
09	99	TC	A				29						29			23			10						22
09	99	A	A				30						30			24			10						23
10	17	A	*		4		14																		
10	17	A	R		7		22																		
10	123	TC	R				15																		
10	123	TC	A				16						23				16				2				16

Latvia *(continued)*

Year	Source	Product	Frequency	Age Groups																						All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
11	20	UC	*				33																			
11	20	UC	A				45																			
11	105	MC	*			14																				
11	105	UC	A			29																				
11	105	A*	A			39																				
12	99	MC	R				38						59			59			42							51
12	99	TC	R				40						60			60			43							52
12	99	A	R				40						61			58			42							51
12	99	MC	A				41						61			59			43							52
12	99	TC	A				42						62			61			44							53
12	99	A	A				42						62			59			43							53
14	17	A	*		2		12																			
14	17	A	R		3		15																			

Lithuania

Year	Source	Product	Frequency	Age Groups																						All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
73	63	UC	R														48									
78	2	UC	R													47	43	43	38							43
81	64	UC	*				12																			
81	64	UC	R				21																			
81	64	UC	A				26																			
82	64	UC	*				10																			
82	64	UC	R				18																			
82	64	UC	A				24																			
83	65	U	U																							
84	11	UC	R												47		31		35							38
84	11	UC	A												51		33		40							42
85	64	UC	*				6																			
85	64	UC	R				12																			
85	64	UC	A				17																			
85	66	U	U				15																			
87	11	UC	R												42		33		36							37
87	11	UC	A												45		35		38							39
92	11	UC	R												45		34		21							35
92	11	UC	A												51		37		23							39
92	11	A	A												52		37		23							39
92	14	U	U				52																			
93	65	U	U																							
93	67	UC	R												35											
94	18	U	R		3		15																			
95	21	UC	*				22																			
95	21	UC	A				34																			
95	67	UC	R																		16					

Table 4F *(continued from p. 35, continues on p. 39)*
Prevalence of smoking, females

Latvia *(continued)*

Year	Source	Product	Frequency	Age Groups																					All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
11	20	UC	*				22																		
11	20	UC	A				42																		
11	105	MC	*		11																				
11	105	UC	A		34																				
11	105	A*	A		41																				
12	99	MC	R				24						27			22			10						21
12	99	TC	R				24						27			22			10						21
12	99	A	R				24						27			22			10						21
12	99	MC	A				25						29			25			11						22
12	99	TC	A				25						29			25			11						22
12	99	A	A				25						30			25			11						23
14	17	A	*		2		8																		
14	17	A	R		3		13																		

Lithuania

Year	Source	Product	Frequency	Age Groups																					All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
73	63	UC	R																						
78	2	UC	R																						
81	64	UC	*				2																		
81	64	UC	R				5																		
81	64	UC	A				8																		
82	64	UC	*				2																		
82	64	UC	R				4																		
82	64	UC	A				8																		
83	65	U	U										8												
84	11	UC	R												4		4		4						4
84	11	UC	A												5		6		4						5
85	64	UC	*				1																		
85	64	UC	R				3																		
85	64	UC	A				5																		
85	66	U	U				0																		
87	11	UC	R												5		3		3						4
87	11	UC	A												8		3		3						5
92	11	UC	R												8		3		1						4
92	11	UC	A												12		6		2						7
92	11	A	A												12		6		2						7
92	14	U	U														10								
93	65	U	U										18												
93	67	UC	R												5										
94	18	U	R		0		4																		
95	21	UC	*				8																		
95	21	UC	A				18																		
95	67	UC	R																		2				

Lithuania *(continued)*

Year	Source	Product	Frequency	Age Groups																					All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
98	18	A	*		6		15																		
98	18	A	R		10		24																		
99	21	UC	*				41																		
99	21	UC	A				49																		
01	106	UC	A		40																				
01	106	A*	A		40																				
02	18	A	*		6		27																		
02	18	A	R		11		35																		
02	100	U	U				37						66			60			35						52
02	120	U	R									38	50		50		48		28						44
02	120	U	A									59	64		58		57		37						55
03	21	UC	*				36																		
03	21	UC	A				49																		
05	100	MC	R				23						54			59			30						42
05	100	TC	R				23						54			59			30						43
05	100	A	R				23						54			59			30						43
05	100	MC	U				33						61			65			35						50
05	100	TC	U				33						61			65			35						50
05	100	A	U				33						61			65			35						50
05	106	UC	A		34																				
05	106	A*	A		37																				
06	18	A	*		7		21																		
06	18	A	R		10		26																		
06	100	MC	R				29						43			55			30						40
06	100	TC	R				29						43			55			30						40
06	100	A	R				29						43			55			30						40
06	100	MC	U				45						54			65			33						50
06	100	TC	U				45						54			65			33						50
06	100	A	U				45						54			66			34						50
07	21	UC	*				25																		
07	21	UC	A				37																		
09	100	MC	R				21						46			60			26						39
09	100	TC	R				28						51			61			26						42
09	100	MC	A				28						51			61			27						43
09	100	TC	A				28						51			61			27						43
09	100	A	A				29						51			62			27						43
09	106	UC	A		34																				
09	106	A*	A		38																				
10	18	A	*		6		26																		
10	18	A	R		9		34																		
11	21	UC	*				27																		
11	21	UC	A				39																		
12	100	MC	R				28						53			49			28						40
12	100	TC	R				29						53			48			28						40
12	100	A	R				29						52			48			28						40
12	100	MC	A				36						55			52			29						44
12	100	TC	A				36						55			52			29						44
12	100	A	A				38						54			52			29						44
14	18	A	*		6		14																		
14	18	A	R		10		20																		

Lithuania *(continued)*

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
98	18	A	*		1		6																		
98	18	A	R		2		10																		
99	21	UC	*				21																		
99	21	UC	A				30																		
01	106	UC	A			31																			
01	106	A*	A			31																			
02	18	A	*		4		11																		
02	18	A	R		7		18																		
02	100	U	U					16					22			14			4						13
02	120	U	R									15	15		21		12		3						13
02	120	U	A									35	30		36		23		7						26
03	21	UC	*				18																		
03	21	UC	A				33																		
05	100	MC	R					15					19			12			3						11
05	100	TC	R					15					19			12			3						11
05	100	A	R					15					19			12			3						11
05	100	MC	U					20					32			20			4						18
05	100	TC	U					20					32			20			4						18
05	100	A	U					21					32			20			4						18
05	106	UC	A			26																			
05	106	A*	A			28																			
06	18	A	*		3		12																		
06	18	A	R		5		18																		
06	100	MC	R					18					25			18			3						14
06	100	TC	R					18					25			18			3						14
06	100	A	R					18					25			18			3						14
06	100	MC	U					29					31			27			4						20
06	100	TC	U					29					31			27			4						20
06	100	A	U					29					31			27			4						20
07	21	UC	*				14																		
07	21	UC	A				28																		
09	100	MC	R					22					27			14			6						15
09	100	TC	R					26					29			16			6						17
09	100	MC	A					27					31			17			6						18
09	100	TC	A					27					30			17			6						18
09	100	A	A					29					31			18			6						19
09	106	UC	A			27																			
09	106	A*	A			29																			
10	18	A	*		2		13																		
10	18	A	R		5		21																		
11	21	UC	*				19																		
11	21	UC	A				35																		
12	100	MC	R					23					25			23			7						18
12	100	TC	R					24					25			23			7						18
12	100	A	R					24					25			23			7						18
12	100	MC	A					24					27			26			7						19
12	100	TC	A					25					27			26			7						19
12	100	A	A					25					28			27			7						20
14	18	A	*		2		7																		
14	18	A	R		4		12																		

Ukraine, Belarus, Moldova

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
81	3	UC	R													52								
81	4	UC	R													34								
81	68	U	U									54												
90	69	U	U																					
93	68	U	U									49												
95	22	UC	*				38																	
95	22	UC	A				51																	
95	23	U	U				60																	
95	24	U	U				46																	
95	69	U	U																					
99	22	UC	*				36																	
99	22	UC	A				50																	
99	107	UC	A		47																			
99	107	A*	A		46																			
02	87	A	*		9		35																	
02	87	A	R		16		45																	
03	22	UC	*				36																	
03	22	UC	A				49																	
04	109	UC	*		12																			
04	109	UC	A		31																			
04	109	A*	A		32																			
04	110	UC	*		7																			
04	110	UC	A		23																			
04	110	A*	A		25																			
05	108	UC	*		11																			
05	108	UC	A		28																			
05	108	A*	A		30																			
06	87	A	*		7		27																	
06	87	A	R		12		34																	
07	22	UC	*				28																	
07	22	UC	A				37																	
08	110	UC	*		5																			
08	110	UC	A		19																			
08	110	A*	A		21																			
10	87	A	*		5		23																	
10	87	A	R		8		31																	
10	125	A	R				45																	
10	125	MC	A				49																	
10	125	TC	A				50																	
10	125	A	A				50																	
11	22	UC	*				22																	
11	22	UC	A				34																	
11	91	UC	*				13																	
11	91	UC	A				23																	
11	108	MC	*		5																			
11	108	UC	A		19																			
11	108	A*	A		23																			
14	87	A	*		3		11																	
14	87	A	R		4		15																	
14	88	A	*		2		5																	
14	88	A	R		3		9																	

Ukraine, Belarus, Moldova

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
81	3	UC	R																					
81	4	UC	R																					
81	68	U	U									5												
90	69	U	U				5																	
93	68	U	U									11												
95	22	UC	*				14																	
95	22	UC	A				28																	
95	23	U	U				12																	
95	24	U	U				7																	
95	69	U	U				21																	
99	22	UC	*				15																	
99	22	UC	A				29																	
99	107	UC	A		34																			
99	107	A*	A		35																			
02	87	A	*		4		14																	
02	87	A	R		6		23																	
03	22	UC	*				16																	
03	22	UC	A				28																	
04	109	UC	*		7																			
04	109	UC	A		22																			
04	109	A*	A		22																			
04	110	UC	*		2																			
04	110	UC	A		6																			
04	110	A*	A		8																			
05	108	UC	*		6																			
05	108	UC	A		21																			
05	108	A*	A		22																			
06	87	A	*		2		12																	
06	87	A	R		4		17																	
07	22	UC	*				15																	
07	22	UC	A				25																	
08	110	UC	*		1																			
08	110	UC	A		6																			
08	110	A*	A		7																			
10	87	A	*		2		8																	
10	87	A	R		3		13																	
10	125	A	R				9																	
10	125	MC	A				11																	
10	125	TC	A				11																	
10	125	A	A				11																	
11	22	UC	*				13																	
11	22	UC	A				25																	
11	91	UC	*				3																	
11	91	UC	A				8																	
11	108	MC	*		4																			
11	108	UC	A		14																			
11	108	A*	A		16																			
14	87	A	*		1		6																	
14	87	A	R		2		9																	
14	88	A	*		1		5																	
14	88	A	R		1		6																	

Armenia, Azerbaijan, Georgia

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
60	70	UC	U				78																		
60	71	UC	U				79																		
63	72	UC	U				69																		
94	73	U	U			56																			
94	74	U	U			32																			
95	75	U	U													57									
02	113	UC	*		5																				
02	113	UC	A		33																				
02	113	A*	A		34																				
03	96	U	R							47															
03	96	U	A							60															
04	111	UC	*		3																				
04	111	UC	A		10																				
04	111	A*	A		13																				
07	92	UC	*				8																		
07	92	UC	A				17																		
08	113	UC	A		15																				
08	113	A*	A		15																				
09	111	UC	*		2																				
09	111	UC	A		6																				
09	111	A*	A		11																				
10	89	A	*		1		8																		
10	89	A	R		3		11																		
11	112	MC	*		2																				
11	112	A*	A		11																				
14	89	A	*		2		4																		
14	89	A	R		3		5																		

Armenia, Azerbaijan, Georgia

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
60	70	UC	U				7																	
60	71	UC	U				8																	
63	72	UC	U				5																	
94	73	U	U			21																		
94	74	U	U			8																		
95	75	U	U													13								
02	113	UC	*			1																		
02	113	UC	A			12																		
02	113	A*	A			13																		
03	96	U	R									4												
03	96	U	A									6												
04	111	UC	*			0																		
04	111	UC	A			1																		
04	111	A*	A			3																		
07	92	UC	*				0																	
07	92	UC	A				1																	
08	113	UC	A			3																		
08	113	A*	A			3																		
09	111	UC	*			1																		
09	111	UC	A			1																		
09	111	A*	A			4																		
10	89	A	*		0		1																	
10	89	A	R		0		1																	
11	112	MC	*		0																			
11	112	A*	A		2																			
14	89	A	*		0		1																	
14	89	A	R		0		1																	

Table 4M *(continued from p. 42)*
Prevalence of smoking, males

Central Asian republics

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
78	76	U	U													52								
79	77	U	U									72						48						
81	5	UC	R													56								
81	6	UC	R													48								
81	78	U	U													56	51	50	44					51
89	79	UC	A				23					50				*				35		*		40
89	80	UC	A				*					69				*				36		*		50
91	81	U	U				27																	
93	82	U	U				*					60		53		*								49
95	25	U	U				54																	
95	26	U	U				47																	
03	97	U	R									39												
03	97	U	A									52												
03	114	UC	*			2																		
03	114	UC	A			9																		
03	114	A*	A			14																		
04	115	UC	*			1																		
04	115	UC	A			8																		
04	115	A*	A			11																		
04	116	UC	*			0																		
04	116	UC	A			2																		
04	116	A*	A			7																		
08	115	UC	*			2																		
08	115	UC	A			7																		
08	115	A*	A			10																		
08	117	UC	*			1																		
08	117	UC	A			2																		
08	117	A*	A			3																		
09	114	UC	*			3																		
09	114	UC	A			10																		
09	114	A*	A			12																		
14	126	TC	R				36																	
14	126	A	R				37																	
14	126	TC	A				42																	
14	126	A	A				18						53				50				36			42

Multiple/unspecified region

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
77	83	U	U				49																	
81	84	U	U									78	72	72	67	71	67	55						65
81	85	U	U	11			46																	
84	86	U	U				48																	

Source: see *Notes on sources of survey data*, p. 89
Product: MC = manufactured cigarettes; TC = total cigarettes (including hand-rolled); UC = cigarettes (type unspecified); A = all products
Frequency: A = all smokers (including occasional); R = regular or daily smokers; U = unspecified; * = refer to *Notes on sources of survey data*, p. 89
All ages: relates to ages reported; as given in original source

Table 4F *(continued from p.43)*
Prevalence of smoking, females

Central Asian republics

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
78	76	U	U																						
79	77	U	U									15													
81	5	UC	R																						
81	6	UC	R																						
81	78	U	U																						
89	79	UC	A				1					*													1
89	80	UC	A				3																		
91	81	U	U				1																		
93	82	U	U				*					11		15		*									9
95	25	U	U				17																		
95	26	U	U				2																		
03	97	U	R						6																
03	97	U	A						10																
03	114	UC	*		1																				
03	114	UC	A		6																				
03	114	A*	A		9																				
04	115	UC	*		1																				
04	115	UC	A		4																				
04	115	A*	A		5																				
04	116	UC	*		0																				
04	116	UC	A		1																				
04	116	A*	A		3																				
08	115	UC	*		1																				
08	115	UC	A		2																				
08	115	A*	A		4																				
08	117	UC	*		1																				
08	117	UC	A		1																				
08	117	A*	A		2																				
09	114	UC	*		1																				
09	114	UC	A		6																				
09	114	A*	A		8																				
14	126	TC	R				3																		
14	126	A	R				3																		
14	126	TC	A				4																		
14	126	A	A				3						7				3				2				5

Multiple/unspecified region

Year	Source	Product	Frequency	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
77	83	U	U				18																		
81	84	U	U									15	5	5	2	4	8	3							11
81	85	U	U	3			8																		
84	86	U	U				11																		

Source: see *Notes on sources of survey data*, p. 89
Product: MC = manufactured cigarettes; TC = total cigarettes (including hand-rolled); UC = cigarettes (type unspecified); A = all products
Frequency: A = all smokers (including occasional); R = regular or daily smokers; U = unspecified; * = refer to *Notes on sources of survey data*, p. 89
All ages: relates to ages reported; as given in original source

Table 5M Number of cigarettes smoked per smoker per day, males: selected surveys by age
(continues on p. 48)

Russia

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
75	27	UC						9.3				15		16		18		17		17			14		17
83	8	UC													17		18		17						17
85	7	UC													16		16		16						16
85	9	UC											16		18		18		17						18
85	10	UC											15		18		18		14						17
85	34	UC		0.8	2.5	2.6	4.0	4.0	5.3																
88	7	UC													15		17		15						16
88	9	UC											15		18		17		16						17
89	8	UC													15		17		17						16
89	10	UC											14		17		17		15						16
92	43	UC											17												
93	7	UC													15		16		16						16
93	8	UC													15		15		14						15
94	9	UC											15		18		16		14						16
95	10	UC											15		17		16		16						17
95	50	UC				6.8		8.4		12		13	15		16		17		16			14			15
95	52	UC	E		7.6																				
98	15	UC			1.3		2.9																		
99	90	UC	E				12																		
03	90	UC	E				12																		
03	93	UC								17															
07	90	UC	E				11																		
11	90	UC	E				11																		

Estonia

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
93	58	UC				2.6																			
95	19	UC	E				9.5																		
95	58	UC				5.2																			
96	118	UC	E*					14					16		18		20		19		18		16		17
98	16	UC			0.7		2.9																		
99	19	UC	E				12																		
03	19	UC	E				12																		
03	94	UC								18															
05	98	TC	E					13					13			16			14						14
06	98	TC	E					14					13			18			17						15
07	19	UC	E				12																		
07	121	TC	E*					15					17		19		18		18		15		16	*	17
09	98	TC						12					16			16			14						15
11	19	UC	E				10																		
12	98	TC						10					16			18			15						15

Table 5F Number of cigarettes smoked per smoker per day, females: selected surveys by age
(continues on p. 49)

Russia

Year	Source	Product	Estimated	Age Groups																					All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
75	27	UC						6.1				6.1		12		15		10		12		12			11
83	8	UC													9.0		9.1		12						9.7
85	7	UC													8.1		9.6		12						9.6
85	9	UC											3.2		10		15		5.5						11
85	10	UC											8.3		4.8		8.5		11						7.8
85	34	UC		0.4	0.5	0.9	1.9	2.1	2.6																
88	7	UC													9.2		12		11						11
88	9	UC											5.5		4.9		5.0		13						6.9
89	8	UC													6.8		9.3		8.1						8.0
89	10	UC											4.3		5.8		3.0		10						5.9
92	43	UC											9												
93	7	UC													8.9		8.7		9.5						9.0
93	8	UC													5.9		8.5		10						8.0
94	9	UC											6.3		8.0		12		7.0						9.0
95	10	UC											7.5		7.0		8.0								7.5
95	50	UC				6.1		5.8		4.9		6.9	9.0		10		8.4		8.1		9.4				8.5
95	52	UC	E		8.0																				
98	15	UC			0.6		1.4																		
99	90	UC	E				9.3																		
03	90	UC	E				8.3																		
03	93	UC													11										
07	90	UC	E				7.7																		
11	90	UC	E				9.7																		

Estonia

Year	Source	Product	Estimated	Age Groups																					All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
93	58	UC				1.4																			
95	19	UC	E				7.7																		
95	58	UC				3.1																			
96	118	UC	E*				11						11		12		12		12		10		14		12
98	16	UC			0.1		1.4																		
99	19	UC	E				9.8																		
03	19	UC	E				8.0																		
03	94	UC													12										
05	98	TC	E				9.7						9.8				11				12				10
06	98	TC	E				6.7						9.4				10				9.5				9.5
07	19	UC	E				7.4																		
07	121	TC	E*				11						12		13		13		12		14		12	*	12
09	98	TC					8.3						11				9.7				8.9				9.5
11	19	UC	E				7.7																		
12	98	TC					7.7						11				9.6				12				10

Table 5M *(continued from p.46, continues on p. 50)*
Number of cigarettes smoked per smoker per day, males

Latvia

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
95	20	UC	E				8.2																		
97	17	UC			1.0		2.9																		
99	20	UC	E				9.4																		
03	20	UC	E				11																		
03	95	UC										18													
03	119	UC	E*				14						17		18		19		18		17				17
05	99	TC	E				12						14			17			15						15
06	99	TC	E				13						15			17			14						15
07	20	UC	E				13																		
08	122	TC	E*				15						17		19		20		19		17		11	*	18
09	99	TC					11						16			17			14						15
10	123	MC					14																		
10	123	TC					14																		
11	20	UC	E				11																		
12	99	TC					11						14			16			15						14

Lithuania

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
73	63	UC	E														18								
84	11	UC													15		15		14						15
87	11	UC													16		16		14						16
92	11	UC													15		14		15						15
93	67	UC													15										
95	21	UC	E				8.9																		
95	67	UC																			9.0				
98	18	UC			0.7		1.7																		
99	21	UC	E				15																		
02	120	UC	E*									15	15		17		16		15						16
03	21	UC	E				11																		
05	100	TC	E				12						16			16			14						15
06	100	TC	E				10						14			15			14						14
07	21	UC	E				10																		
09	100	TC					11						14			15			16						14
11	21	UC	E				10																		
12	100	TC					9.7						14			15			16						14

Table 5F *(continued from p.47, continues on p. 51)*
Number of cigarettes smoked per smoker per day, females

Latvia

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
95	20	UC	E				6.2																		
97	17	UC			0.4		1.4																		
99	20	UC	E				7.3																		
03	20	UC	E				8.9																		
03	95	UC										12													
03	119	UC	E*				11						11		11		12		13		10				11
05	99	TC	E				13						9.3			10			10						11
06	99	TC	E				8.2						8.4			12			12						9.6
07	20	UC	E				9.5																		
08	122	TC	E*				11						12		12		13		14		13		*	*	12
09	99	TC					6.9						10			8.7			11						9.0
10	123	MC					11																		
10	123	TC					11																		
11	20	UC	E				9.4																		
12	99	TC					9.6						10			9.4			12						10

Lithuania

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
73	63	UC	E																						
84	11	UC													8.1		13		11						10
87	11	UC													6.6		6.9		10						7.6
92	11	UC													6.3		8.9		7.0						7.4
93	67	UC															8.1								
95	21	UC	E				4.8																		
95	67	UC																			9.7				
98	18	UC			0.4		0.6																		
99	21	UC	E				10																		
02	120	UC	E*									*		10		11		12		*					11
03	21	UC	E				7.1																		
05	100	TC	E				8.1							6.8			8.4			9.6					7.7
06	100	TC	E				8.7							7.2			8.4			10					8.0
07	21	UC	E				7.4																		
09	100	TC					6.7							9.6			11			8.3					9.0
11	21	UC	E				7.7																		
12	100	TC					8.1							8.6			11			12					9.9

Table 5M *(continued from p. 48)*
Number of cigarettes smoked per smoker per day, males

Ukraine, Belarus, Moldova

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
90	69	UC																							
95	22	UC	E				9.4																		
95	69	UC																							
99	22	UC	E				11																		
03	22	UC	E				10																		
07	22	UC	E				10																		
10	125	UC					18																		
11	22	UC	E				9.8																		
11	91	UC	E				11																		

Armenia, Azerbaijan, Georgia

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
03	96	UC								18															
07	92	UC	E				10																		

Central Asian republics

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+	
03	97	UC								13															
14	126	UC					15																		

Multiple/unspecified region: no data

Source: see *Notes on sources of survey data*, p. 89
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. 89
All ages: relates to ages reported; as given in original source

Table 5F *(continued from p.49)*
Number of cigarettes smoked per smoker per day, females

Ukraine, Belarus, Moldova

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
90	69	UC					6.2																		
95	22	UC	E				7.0																		
95	69	UC					8.5																		
99	22	UC	E				7.5																		
03	22	UC	E				7.2																		
07	22	UC	E				8.4																		
10	125	UC					12																		
11	22	UC	E				8.1																		
11	91	UC	E				5.2																		

Armenia, Azerbaijan, Georgia

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
03	96	UC								14															
07	92	UC	E																						

Central Asian republics

Year	Source	Product	Estimated	Age Groups																				All ages
				12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
03	97	UC								9.4															
14	126	UC					12																		

Multiple/unspecified region: no data

Source: see *Notes on sources of survey data*, p. 89
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. 89
All ages: relates to ages reported; as given in original source

Table 6M Number of cigarettes smoked per person per day, males: selected surveys by age; with percentage total sales
(continues on p. 54)

Russia

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
75	27	UC					2.3				9.2		10		8.4		6.7		6.1			2.8		7.3	78%M
83	8	UC												9.4		8.6		6.1						8.3	**
85	7	UC												7.2		5.9		6.2						6.5	**
85	9	UC										10		10		10		7.4						9.5	**
85	10	UC										10		12		12		6.7						10	**
85	34	UC	0.1	0.2	0.3	0.9	0.8	2.3																	**
88	7	UC												6.5		7.0		5.3						6.4	**
88	9	UC										10		10		8.5		6.5						8.7	**
89	8	UC												6.7		7.6		5.2						6.7	**
89	10	UC										9.1		10		9.3		6.4						8.9	**
92	43	UC										11													**
93	7	UC												7.5		6.9		4.9						6.6	**
93	8	UC												7.4		8.0		4.8						6.9	**
94	9	UC										11		11		9.8		6.8						9.6	**
95	10	UC										9.8		12		10		6.5						10	**
95	50	UC			1.3		4.1		6.3		8.4	11		11		11		8.2			4.7			8.9	92%M
95	52	UC		1.7																					**
98	15	UC		0.2		0.7																			
99	90	UC				5.0																			
03	90	UC				4.4																			
03	93	UC*							6.7																
07	90	UC				3.3																			
11	90	UC				2.4																			

Estonia

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
93	58	UC			0.7																				**
95	19	UC				2.5																			**
95	58	UC			1.3																				**
96	118	UC*				6.4						11		11		11		8.3		4.6		2.1		8.7	95%m
98	16	UC		0.1		0.7																			**
99	19	UC				3.6																			**
03	19	UC				3.9																			**
03	94	UC*							8.8																99%m
05	98	TC				3.1						6.1			8.6			3.7						5.5	62%m
06	98	TC				6.1						5.6			8.0			4.9						6.1	73%m
07	19	UC				2.5																			**
07	121	TC*				5.3						7.4		9.0		8.5		6.6		3.6		2.1	*	6.8	76%m
09	98	TC				5.6						8.2			9.9			3.8						6.9	80%m
11	19	UC				1.8																			**
12	98	TC				2.4						5.6			7.1			4.9						5.1	70%m

Table 6F Number of cigarettes smoked per person per day, females: selected surveys by age; with percentage total sales
(continues on p. 55)

Russia

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
75	27	UC					0.5				1.0		2.2		1.2		0.7		1.3			0.7		1.1	78%M
83	8	UC												1.8		0.7		0.8						1.1	**
85	7	UC												1.8		0.6		1.3						1.2	**
85	9	UC										0.1		0.3		0.3		0.1						0.3	**
85	10	UC										0.4		0.2		0.2		0.5						0.3	**
85	34	UC	0.0	0.0	0.0	0.2	0.2	0.5																	**
88	7	UC												1.3		1.0		0.5						1.0	**
88	9	UC										0.5		0.2		0.0		0.2						0.2	**
89	8	UC												1.5		1.3		0.4						1.1	**
89	10	UC										0.3		0.4		0.0		0.4						0.3	**
92	43	UC										1.0													**
93	7	UC												1.8		1.2		0.4						1.3	**
93	8	UC												1.3		1.0		0.4						1.0	**
94	9	UC										1.8		1.1		0.6		0.1						0.7	**
95	10	UC										1.6		0.8		0.5		0.0						0.5	**
95	50	UC			0.5		0.4		0.9		1.3	1.5		1.1		0.7		0.2		0.1				0.8	92%M
95	52	UC		2.5																					**
98	15	UC		0.0		0.3																			
99	90	UC				2.8																			
03	90	UC				2.6																			
03	93	UC*										0.8													
07	90	UC				1.5																			
11	90	UC				2.3																			

Estonia

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
93	58	UC			0.2																				**
95	19	UC				1.0																			**
95	58	UC			0.5																				**
96	118	UC*					2.1					3.3		3.8		2.6		1.0		0.4		0.5		2.2	95%m
98	16	UC		0.0		0.2																			**
99	19	UC				1.5																			**
03	19	UC				1.8																			**
03	94	UC*										2.2													99%m
05	98	TC					2.4					2.6			2.6			0.8						1.9	62%m
06	98	TC					1.0					2.8			3.4			0.8						1.9	73%m
07	19	UC				1.0																			**
07	121	TC*					1.6					2.4		2.9		2.8		1.4		0.7		0.3	*	1.8	76%m
09	98	TC					2.3					2.7			2.2			0.7						1.7	80%m
11	19	UC				1.2																			**
12	98	TC					1.2					2.3			1.8			1.5						1.7	70%m

Latvia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
95	20	UC				2.1																		**
97	17	UC		0.2		1.1																		**
99	20	UC				3.7																		**
03	20	UC				4.0																		**
03	95	UC*														10								145%m
03	119	UC*						5.7				9.8		11		10		8.4		4.9				8.6	124%m
05	99	TC						4.1				7.6			9.0			6.4						6.8	65%m
06	99	TC						4.9				8.7			9.0			5.3						7.2	58%m
07	20	UC				4.4																		**
08	122	TC*						5.0				9.5		11		11		10		4.6		1.0	*	8.3	82%m
09	99	TC						4.4				9.7			9.2			5.2						7.4	124%m
10	123	TC														6.0									129%m
11	20	UC				3.8																		**
12	99	TC						4.4				8.5			9.6			6.5						7.4	154%m

Lithuania

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
73	63	UC														8.7								**
84	11	UC												7.0		4.8		4.8						5.6	**
87	11	UC												6.8		5.3		5.2						5.8	**
92	11	UC												6.8		4.7		3.1						5.1	**
93	67	UC														5.2									**
95	21	UC				2.0																			**
95	67	UC																		1.5					**
98	18	UC		0.1		0.4																			**
99	21	UC				6.2																			**
02	120	UC*									5.7	7.7		8.4		7.8		4.1						7.0	74%m
03	21	UC				3.9																			**
05	100	TC						2.8				8.4			9.3			4.3						6.4	102%m
06	100	TC						3.0				5.8			8.2			4.2						5.4	54%m
07	21	UC				2.5																			**
09	100	TC						3.1				7.2			9.1			4.1						6.1	69%m
11	21	UC				2.8																			**
12	100	TC						2.8				7.4			7.3			4.7						5.7	100%m

Table 6F *(continued from p. 53, continues on p. 57)*
Number of cigarettes smoked per person per day, females

Latvia

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
95	20	UC				0.8																			**
97	17	UC		0.0		0.3																			**
99	20	UC				1.9																			**
03	20	UC				2.0																			**
03	95	UC*									2.2														145%m
03	119	UC*				1.9						2.5		2.8		2.4		1.3		0.4				1.9	124%m
05	99	TC				2.1						1.9			1.6			0.9						1.6	65%m
06	99	TC				1.9						2.0			1.5			0.9						1.5	58%m
07	20	UC				2.4																			**
08	122	TC*				1.4						2.6		2.3		2.2		1.4		0.5		*	*	1.6	82%m
09	99	TC				2.0						2.9			1.8			1.1						1.9	124%m
10	123	TC				1.8																			129%m
11	20	UC				2.1																			**
12	99	TC				2.3						2.8			2.1			1.2						2.1	154%m

Lithuania

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
73	63	UC																							**
84	11	UC												0.3		0.5		0.4						0.4	**
87	11	UC												0.4		0.2		0.3						0.3	**
92	11	UC												0.5		0.3		0.1						0.3	**
93	67	UC												0.4											**
95	21	UC				0.4																			**
95	67	UC																		0.2					**
98	18	UC		0.0		0.1																			**
99	21	UC				2.2																			**
02	120	UC*									*	1.6		2.2		1.5		*						1.4	74%m
03	21	UC				1.3																			**
05	100	TC				1.2						1.3			1.0			0.3						0.8	102%m
06	100	TC				1.5						1.8			1.5			0.3						1.1	54%m
07	21	UC				1.0																			**
09	100	TC				1.7						2.8			1.8			0.5						1.6	69%m
11	21	UC				1.5																			**
12	100	TC				2.0						2.1			2.6			0.9						1.8	100%m

Table 6M *(continued from p. 54)*
Number of cigarettes smoked per person per day, males

Ukraine, Belarus, Moldova

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+		
90	69	UC																							**
95	22	UC				3.6																			**
95	69	UC																							**
99	22	UC				3.8																			
03	22	UC				3.7																			
07	22	UC				2.9																			
10	125	UC*				9.0																			
11	22	UC				2.2																			
11	91	UC				1.4																			

Armenia, Azerbaijan, Georgia

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+		
03	96	UC*							8.7																
07	92	UC				0.8																			

Central Asian republics

Year	Source	Product	Age Groups																					All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+		
03	97	UC*							4.9																
14	126	UC*				5.5																			

Multiple/unspecified region: no data

Source: *Notes on sources of survey data*, p. 89
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. 89
All ages: relates to ages reported; as given in original source
% Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined
** = cannot be calculated
-- = adjusted by original author
Not calculated after 1995 except Estonia, Latvia, Lithuania

Table 6F *(continued from p. 55)*
Number of cigarettes smoked per person per day, females

Ukraine, Belarus, Moldova

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
90	69	UC				0.3																			**
95	22	UC				1.0																			**
95	69	UC				1.7																			**
99	22	UC				1.1																			
03	22	UC				1.2																			
07	22	UC				1.3																			
10	125	UC*				1.3																			
11	22	UC				1.1																			
11	91	UC				0.2																			

Armenia, Azerbaijan, Georgia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
03	96	UC*							0.5																
07	92	UC				0.0																			

Central Asian republics

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20 - 24	25 - 29	30 - 34	35 - 39	40 - 44	45 - 49	50 - 54	55 - 59	60 - 64	65 - 69	70 - 74	75 - 79	80+		
03	97	UC*							0.6																
14	126	UC*				0.4																			

Multiple/unspecified region: no data

Source: *Notes on sources of survey data*, p. 89
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. 89
All ages: relates to ages reported; as given in original source
% Total sales: estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined,
** = cannot be calculated
-- = adjusted by original author
Not calculated after 1995 except Estonia, Latvia, Lithuania

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

Russia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
75	27	UC					2.9				12		13		11		8.6		7.8		3.6			9.3	78%M
95	50	UC			1.4		4.5		6.9		9.1	12		12		12		9.0		5.1				9.7	92%M

Estonia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
96	118	UC*				6.8					11		11		11		8.7		4.9		2.2			9.1	95%m
03	94	UC*							8.9																99%m
05	98	TC				4.9					9.9			14			5.9							8.8	62%m
06	98	TC				8.3					7.6			11			6.7							8.3	73%m
07	121	TC*				7.0					9.7		12		11		8.6		4.8		2.8		*	8.9	76%m
09	98	TC				6.9					10			12			4.8							8.6	80%m
12	98	TC				3.4					8.0			10			6.9							7.2	70%m

Latvia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
03	95	UC*							7.0																145%m
03	119	UC*				4.6					7.9		9.1		8.4		6.8		3.9					7.0	124%m
05	99	TC				6.2					12			14			9.8							10	65%m
06	99	TC				8.4					15			16			9.2							12	58%m
08	122	TC*				6.1					12		14		13		13		5.6		1.2		*	10	82%m
09	99	TC				3.5					7.8			7.4			4.2							5.9	124%m
10	123	TC				4.6																			129%m
12	99	TC				2.9					5.5			6.3			4.2							4.8	154%m

Lithuania

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
02	120	UC*									7.7		10		11		11		5.6					9.5	74%m
05	100	TC				2.7					8.2			9.1			4.2							6.2	102%m
06	100	TC				5.5					11			15			7.7							10	54%m
09	100	TC				4.4					10			13			5.9							8.7	69%m
12	100	TC				2.8					7.4			7.3			4.7							5.7	100%m

Other regions: no data

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. 89
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. 89
All ages: relates to ages reported; as given in original source
% Total sales: Adjustment factor used, estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined
-- = adjusted by original author

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

Russia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
75	27	UC					0.6				1.3		2.8		1.6		0.8		1.6		0.9			1.4	78%M
95	50	UC			0.5		0.4		0.9		1.5		1.7		1.2		0.8		0.2		0.1			0.8	92%M

Estonia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
96	118	UC*				2.2					3.4			4.1		2.8		1.1		0.4		0.5		2.3	95%m
03	94	UC*							2.2																99%m
05	98	TC				3.9					4.2				4.2			1.3						3.1	62%m
06	98	TC				1.4					3.8				4.7			1.1						2.6	73%m
07	121	TC*				2.1					3.2		3.8		3.7		1.8		0.9		0.4		*	2.4	76%m
09	98	TC				2.8					3.4				2.7			0.9						2.2	80%m
12	98	TC				1.7					3.3				2.6			2.1						2.4	70%m

Latvia

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
03	95	UC*							1.5																145%m
03	119	UC*				1.6					2.1			2.3		1.9		1.1		0.3				1.6	124%m
05	99	TC				3.3					2.9				2.5			1.4						2.4	65%m
06	99	TC				3.2					3.4				2.6			1.5						2.7	58%m
08	122	TC*				1.7					3.1			2.9		2.7		1.7		0.6		*	*	1.9	82%m
09	99	TC				1.6					2.3				1.4			0.9						1.6	124%m
10	123	TC							1.4																129%m
12	99	TC				1.5					1.8				1.4			0.8						1.4	154%m

Lithuania

Year	Source	Product	Age Groups																				All ages	% Total sales
			12	13	14	15	16	17	18	19	20-24	25-29	30-34	35-39	40-44	45-49	50-54	55-59	60-64	65-69	70-74	75-79	80+	
02	120	UC*									*	2.1		2.9		2.0		*						1.9	74%m
05	100	TC				1.2					1.2				1.0			0.3						0.8	102%m
06	100	TC				2.8					3.2				2.8			0.5						2.1	54%m
09	100	TC				2.5					4.0				2.5			0.8						2.2	69%m
12	100	TC				2.0					2.1				2.6			0.9						1.8	100%m

Other regions: no data

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. 89
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. 89
All ages: relates to ages reported; as given in original source
% Total sales: Adjustment factor used, estimated % of total sales of M = manufactured or T = total cigarette consumption implied by survey, sexes combined
-- = adjusted by original author

Table 8 Estimated[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

Russia

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 number/ person/day		Total cigarettes[9] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1975/10	27	*UC*			47	11			7.5	1.1	78	9.6	1.4		
	28	*U*					60	9				(9.8	1.2)		
1981/10	31	*U*					54	6				(10.2	0.9)		
1985/10	35	*U*					53	10				(9.3	1.4)		
1986	36	*U*					79	14				(9.4	1.3)		
1989	12	*U*					44	10				(8.3	1.5)		
1991	38	*U*						25							
1992	39	*U*					69	8				(8.7	0.8)		
	45	*U*					61	17				(7.6	1.7)		
1993	48	*U*					67	30				(6.8	2.4)		
1995	50	*UC+A*			59	9	59	9	9.1	0.8	92	9.9	0.9		
	53	*U*					66								
2003	93	U					40	8							
	93	**U**					54	12							
2009	124	MC+TC+A	54	16	55	16	55	16							
	124	**MC+TC+A**	59	21	60	21	60	22							

Estonia

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 number/ person/day		Total cigarettes[9] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1990	55	U					44	15				(7.1	1.9)		
1992	13	*U*					49	20				(7.6	2.5)		
1994	60	U					51	24				(7.6	2.8)		
1996	118	UC+U					50	18	8.7	2.1	95	9.1	2.2		
	118	**U**					50	19							
2002	98	*U*					48	17				(9.1	2.5)		
2003	94	UC+U					48	19	8.4	2.2	99	8.5	2.2		
	94	**U**					55	25							
2005	98	MC+TC+A	37	18	38	18	38	18	5.5	1.9	62	8.8	3.1		
	98	*MC+TC+A*	40	21	40	21	41	21							
2006	98	MC+TC+A	40	20	40	20	40	20	6.1	1.9	73	8.3	2.6		
	98	*MC+TC+A*	43	24	43	24	45	24							
2007	121	TC			39	15			6.8	1.8	76	8.9	2.4		
2009	98	MC+TC	42	16	45	18			6.9	1.7	80	8.6	2.2		
	98	**MC+TC+A**	46	19	46	19	47	20							
2012	98	MC+TC+A	33	16	33	16	33	16	5.2	1.7	70	7.5	2.4		
	98	**MC+TC+A**	36	18	36	18	36	19							

Latvia

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 number/ person/day		Total cigarettes[9] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1993	62	U					67	12				(8.4	1.2)		
2002	99	*U*					58	22				(6.0	1.8)		
2003	95	UC+U					54	19	9.7	2.2	145	6.7	1.5		
	95	**U**					62	24							
	119	UC+U					49	15	8.4	1.8	124	6.8	1.5		
	119	**U**					55	20							
2005	99	MC+TC+A	47	14	47	14	46	14	6.9	1.5	65	10.6	2.3		
	99	*MC+TC+A*	53	18	53	18	53	18							
2006	99	MC+TC+A	47	14	47	14	47	14	7.1	1.4	58	12.2	2.5		
	99	*MC+TC+A*	51	19	51	19	52	19							
2008	122	TC			46	13			8.3	1.6	82	10.2	1.9		
2009	99	MC+TC	46	18	47	19			7.3	1.8	124	5.8	1.4		
	99	**MC+TC+A**	49	20	48	20	49	21							
2010	123	TC			39	14			5.8	1.6	129	4.5	1.2		
	123	**TC**			42	14									
2012	99	MC+TC+A	50	19	52	19	51	19	7.5	1.9	154	4.9	1.2		
	99	**MC+TC+A**	52	20	53	20	52	20							

Lithuania

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 number/ person/day		Total cigarettes[9] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1992	14	*U*					52	10				(8.6	1.3)		
2002	100	*U*					51	12				(8.3	1.6)		
	120	UC+U					40	11	5.9	1.4	74	8.0	1.9		
	120	**U**					48	20							
2005	100	MC+TC+A	43	11	43	11	43	11	6.4	0.8	102	6.3	0.8		
	100	*MC+TC+A*	49	17	49	17	49	17							
2006	100	MC+TC+A	40	14	40	14	40	14	5.5	1.1	54	10.1	2.0		
	100	*MC+TC+A*	50	19	50	19	50	20							
2009	100	MC+TC	39	15	42	17			6.1	1.5	69	8.7	2.2		
	100	**MC+TC+A**	43	17	43	17	43	18							
2012/11	100	MC+TC+A	40	17	40	17	40	17	5.7	1.7	100	5.7	1.7		
	100	**MC+TC+A**	43	18	43	19	43	19							

Ukraine, Belarus, Moldova

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 number/ person/day		Total cigarettes[9] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1990	69	UC+*U*						5		0.3					
1995	23	*U*					60	12				(9.8 | 1.6)		
	24	*U*					46	7				(7.8 | 0.9)		
	69	UC+*U*						21		1.7					
2010	125	A					45	9							
	125	**MC+TC+A**	49	11	50	11	50	11							

Armenia, Azerbaijan, Georgia

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 number/ person/day		Total cigarettes[9] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1960	70	*UC*			78	7									
	71	*UC*			79	8									
1963	72	*UC*			69	5									
2003	96	U					46	4							
	96	**U**					58	6							

Central Asian republics

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 number/ person/day		Total cigarettes[9] number/ person/day	
			M	F	M	F	M	F	M	F		M	F	M	F
1989	79	**UC**			40	1						(4.6 | 0.1)		
	80	**UC**			50	3									
1991	81	*U*					27	1				(13.6 | 0.2)		
1993	82	*U*					49	9				(7.6 | 1.0)		
1995	25	*U*					54	17				(5.9 | 1.5)		
	26	*U*					47	2				(7.1 | 0.3)		
2003	97	U					37	6							
	97	**U**					49	9							
2014/11	126	TC+A			36	3	37	3							
	126	**TC+A**			42	4	42	4							

Multiple/unspecified region

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 number/ person/day		Total cigarettes[9] number/ person/day
			M	F	M	F	M	F	M	F		M	F	M F
1977	83	*U*					49	18				(9.7	2.9)	
1981	84	*U*					65	6				(12.0	0.9)	
1984	86	*U*					48	11				(10.8	2.0)	

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 Tables 4, 6 and 7 in those surveys for which some age-specific data are not available (age groups marked as * in Tables 4, 6 and 7

2 See *Notes on sources of survey data*, p. 89.

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

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

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

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

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

8 From Table 7, except data in parentheses, which are derived from the prevalence of smoking from Table 4 as described in *Summary of adult smoking*, Methods p. 13. Apart for Estonia, Latvia and Lithuania, for which the sales data were fully updated, no sales adjustment was conducted for the post-1995 survey data, and these columns are left blank for those years.

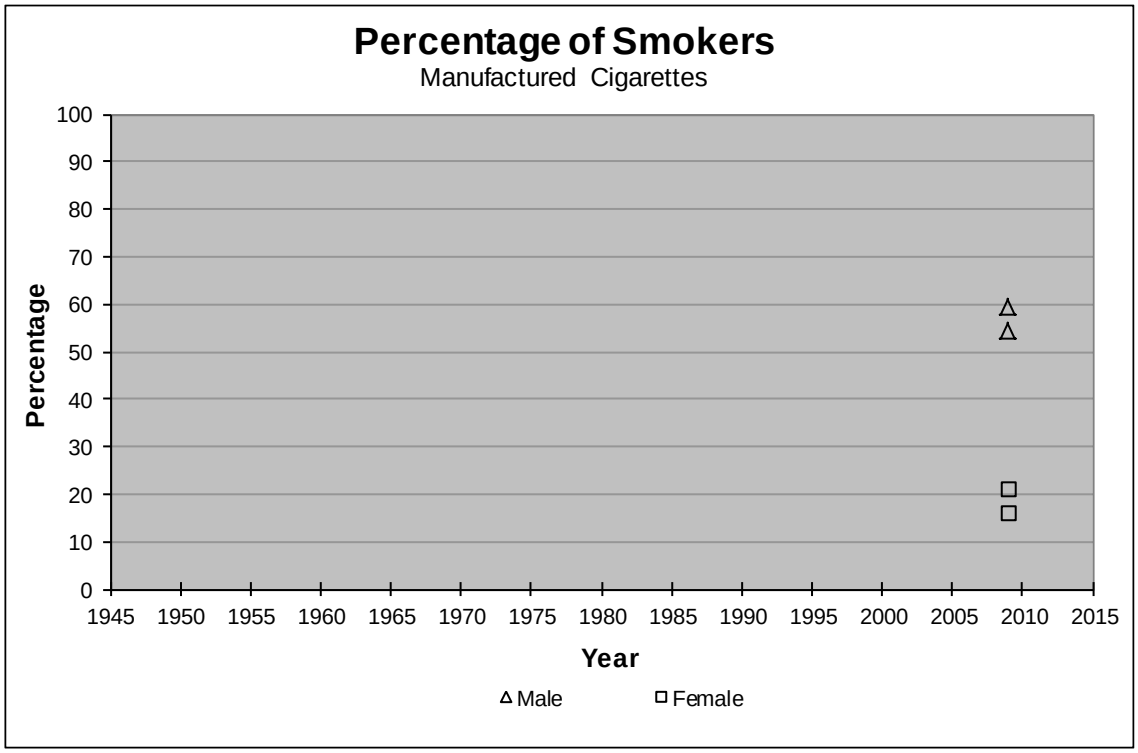
9 As no estimates of hand-rolled cigarettes are available, all sales-adjustment is to manufactured cigarettes.

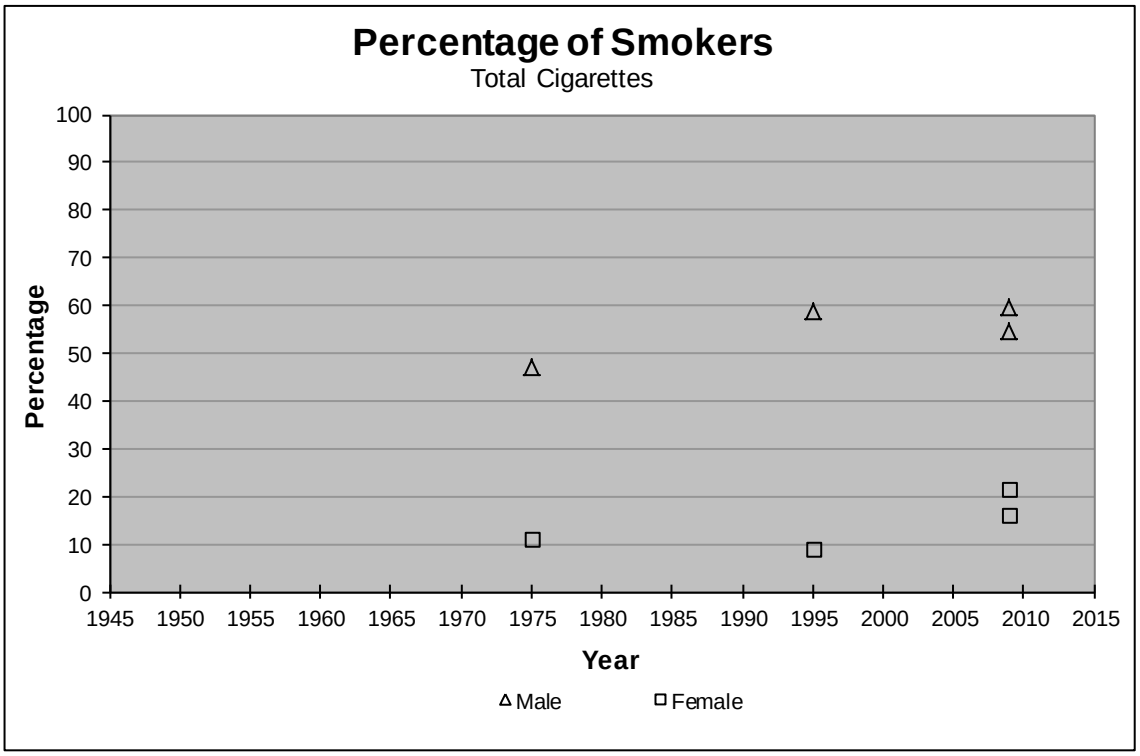
10 Calculations based on sales data for 1988 (also on population data for 1981 in the case of 1975)

11 Calculations based on population.for nearest available year.

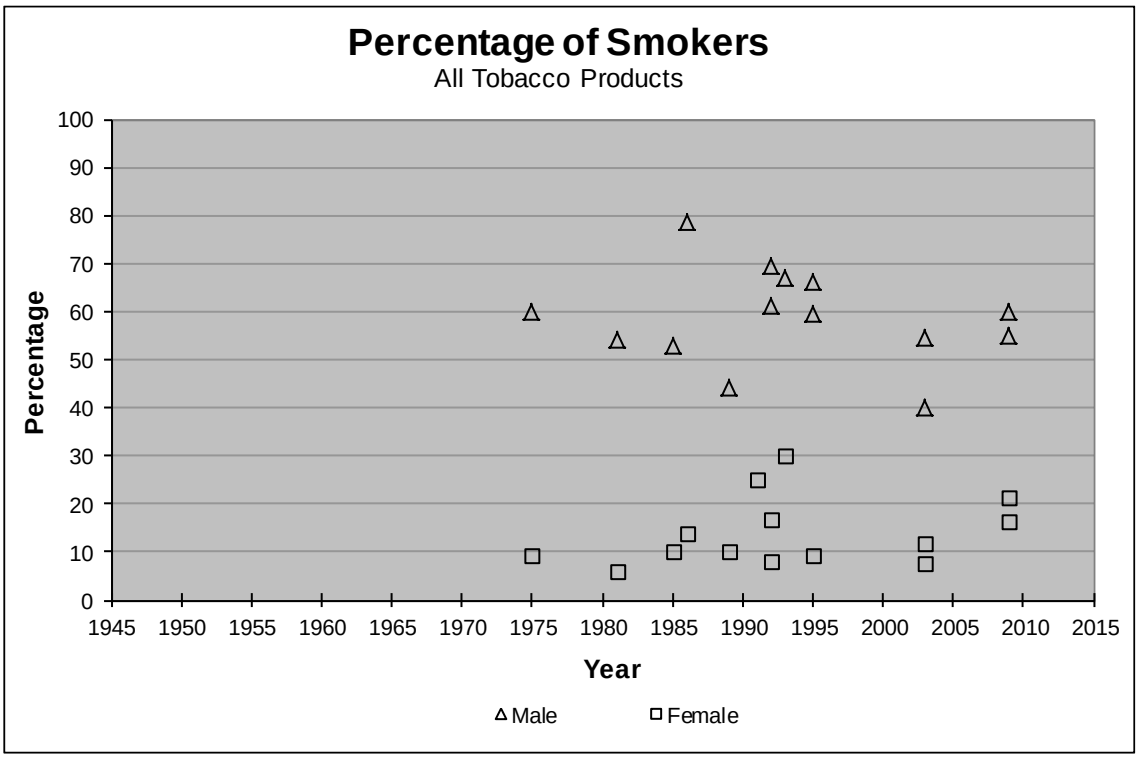
Figure 3 Estimated prevalence of smoking of (i) manufactured cigarettes, (ii) total cigarettes and (iii) all tobacco products; by year of survey.
Males and females aged 15 years and over

Russia

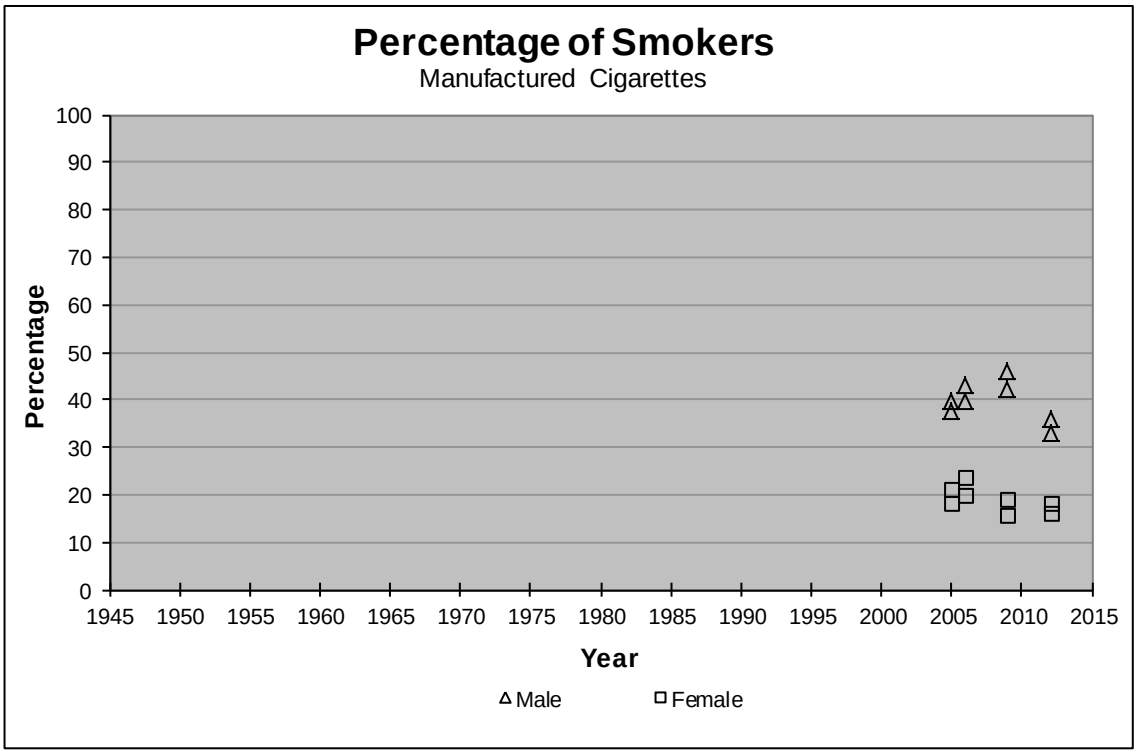




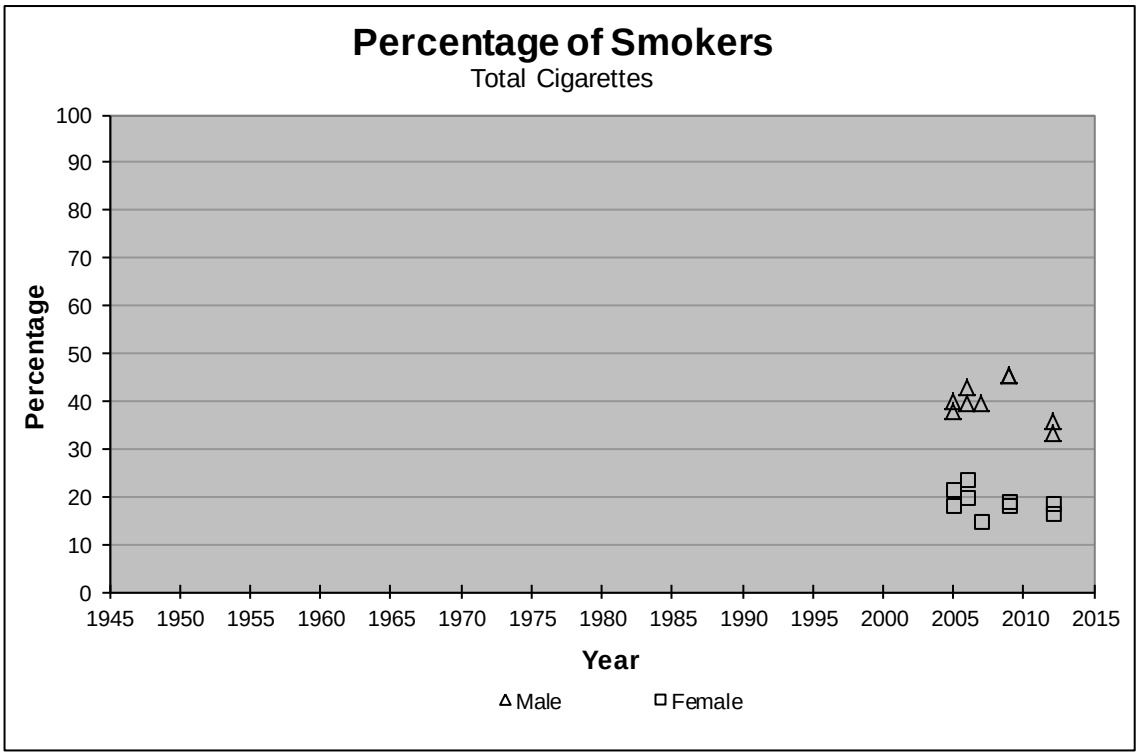
Russia *(continued)*

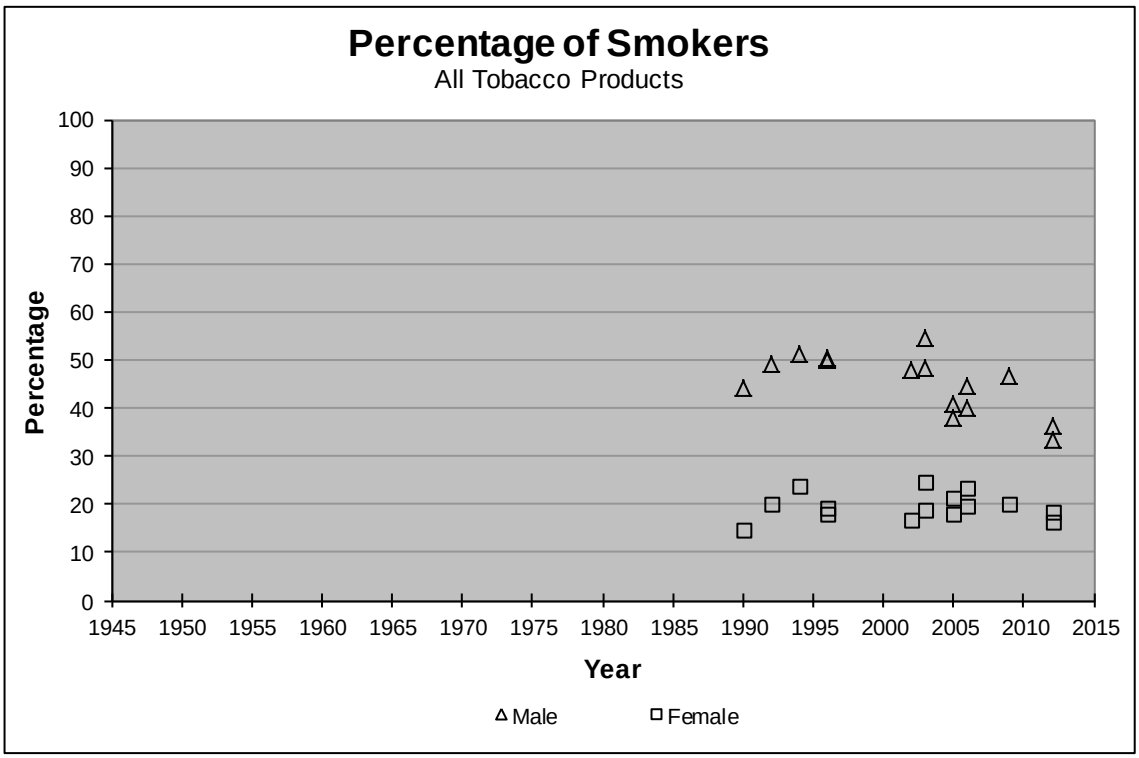


Estonia

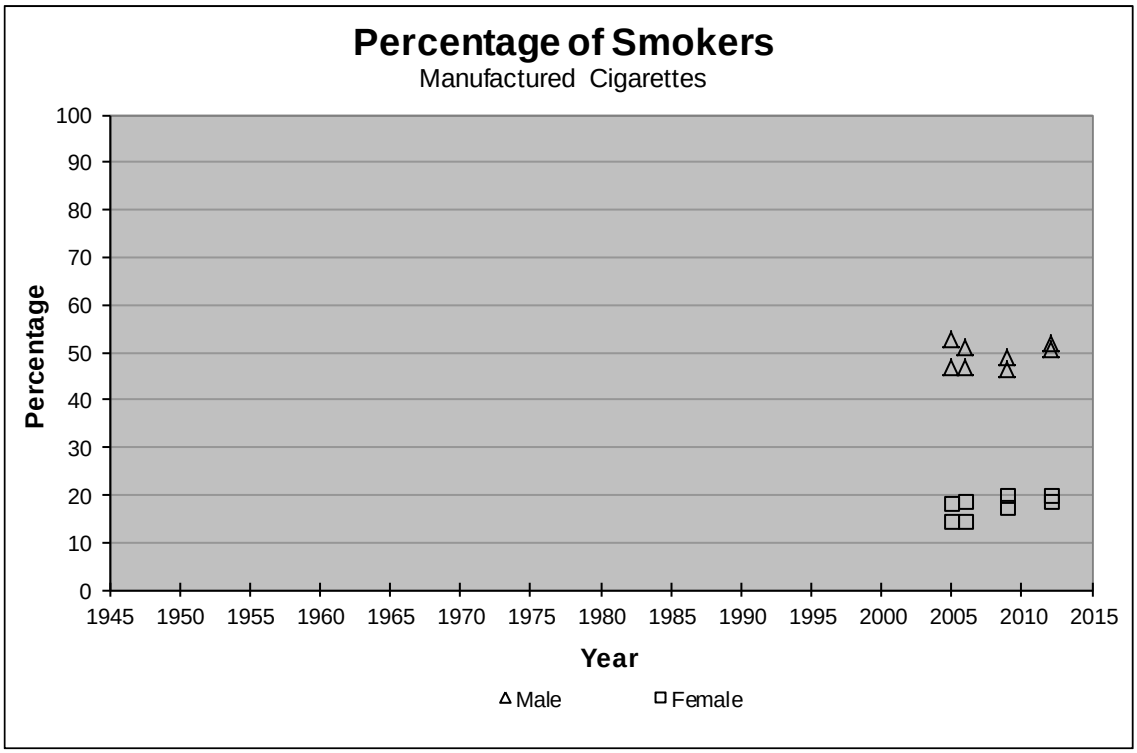


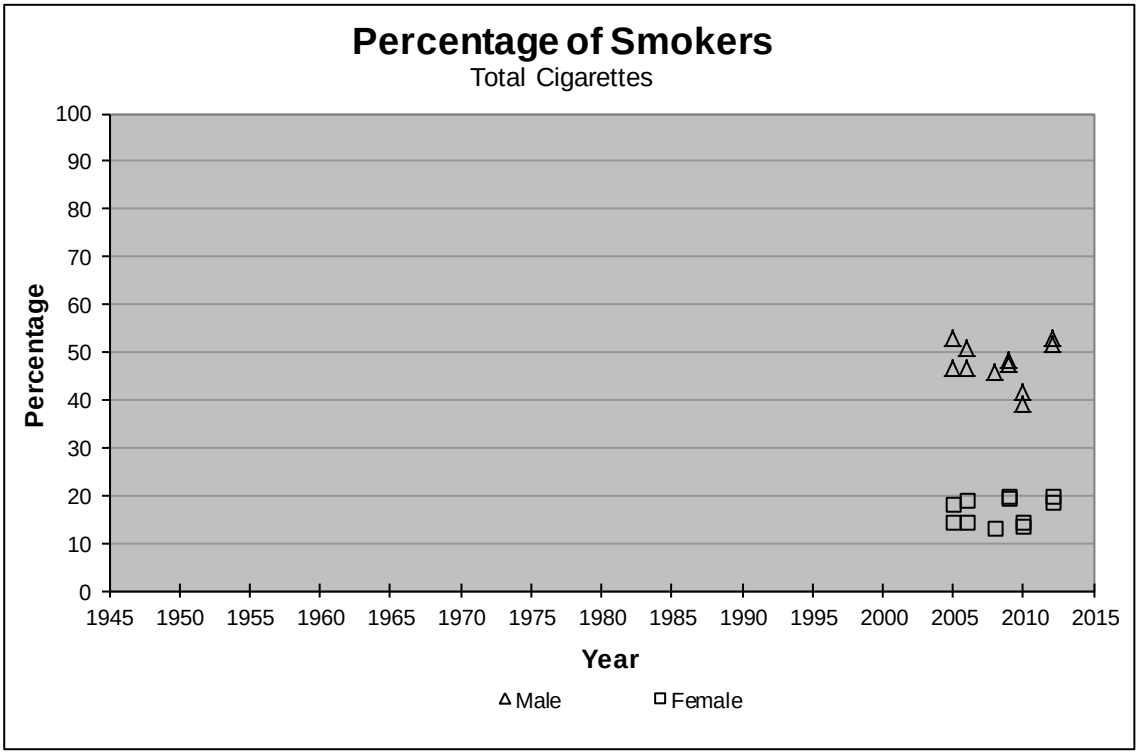
Estonia *(continued)*



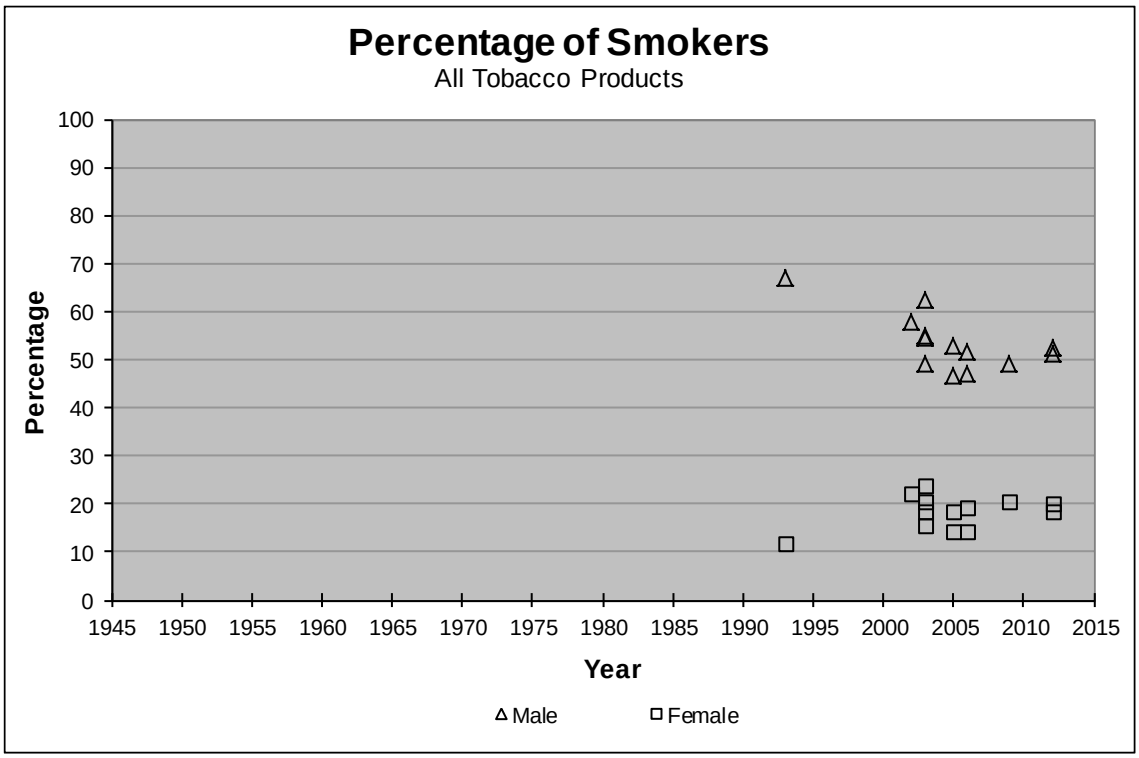


Latvia

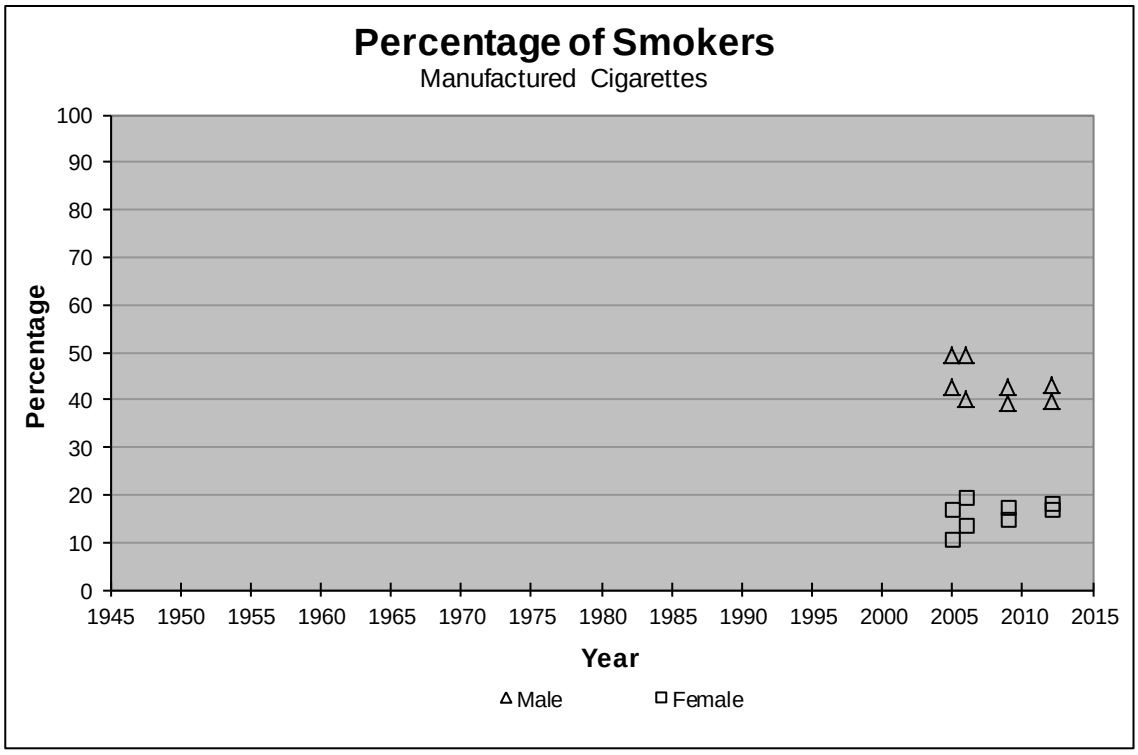

Percentage of Smokers
Manufactured Cigarettes
Percentage
100
90
80
70
60
50
40
30
20
10
0
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
Year
Male
Female


Percentage of Smokers
Total Cigarettes
Percentage
100
90
80
70
60
50
40
30
20
10
0
1945 1950 1955 1960 1965 1970 1975 1980 1985 1990 1995 2000 2005 2010 2015
Year
Male
Female

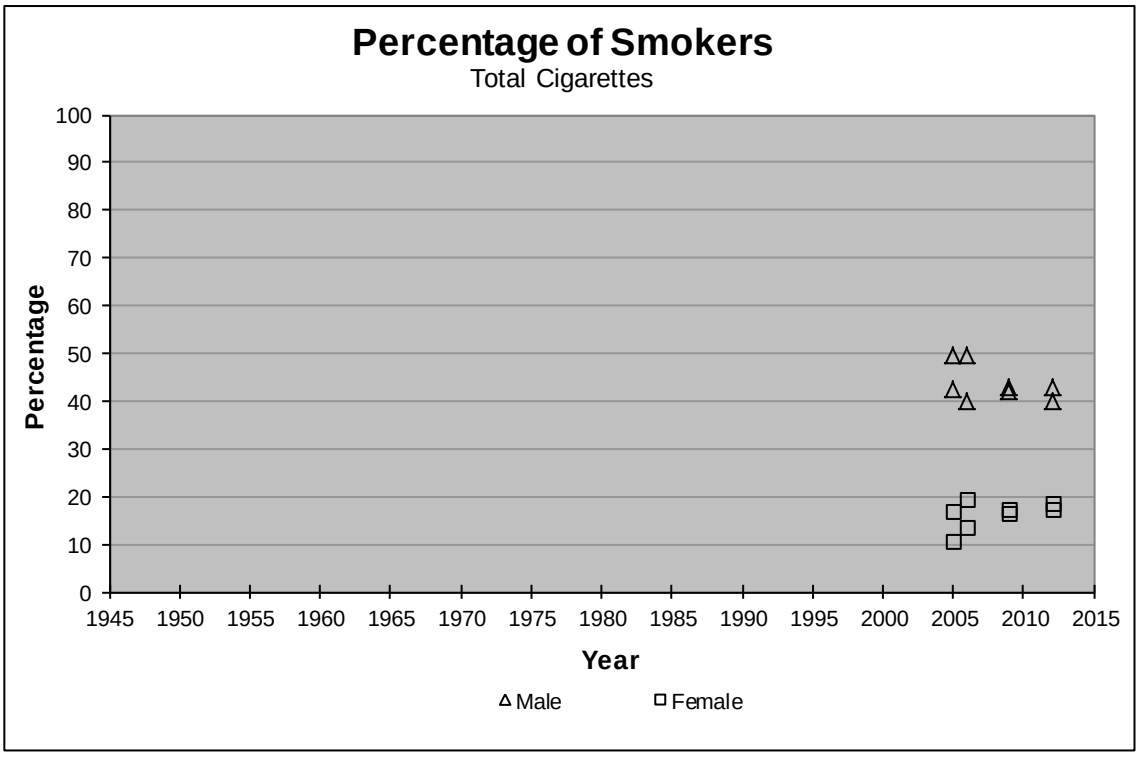
Latvia *(continued)*

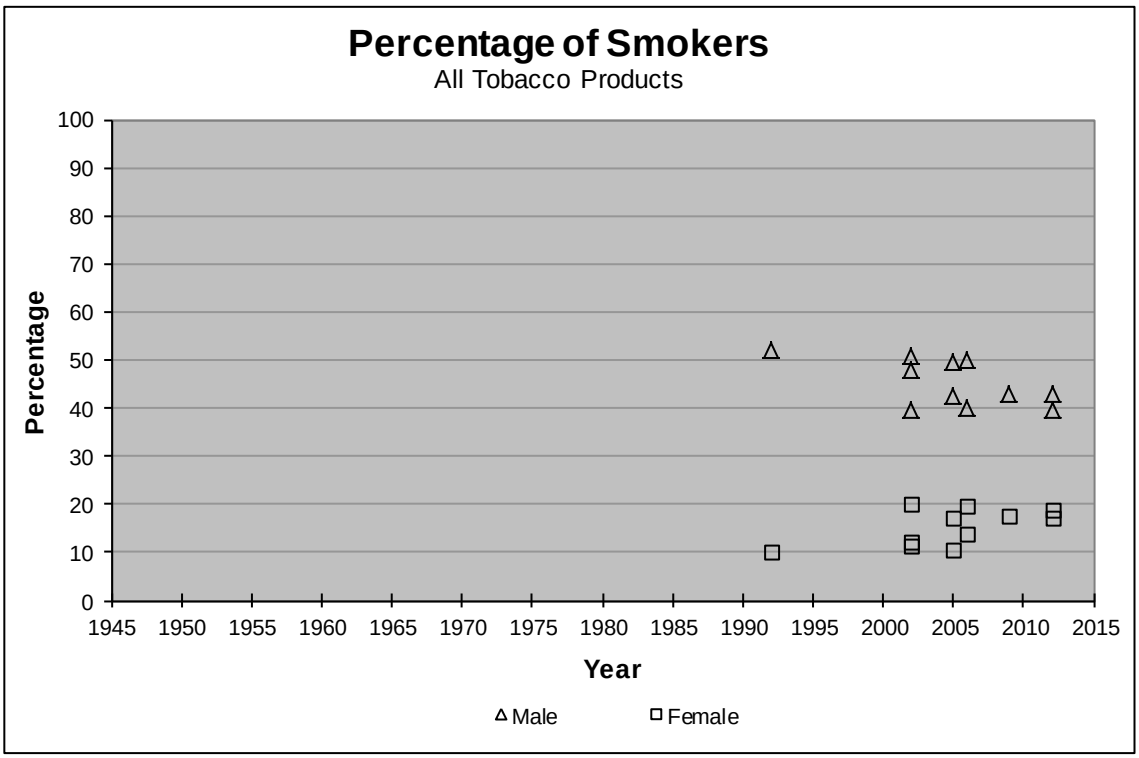


Lithuania

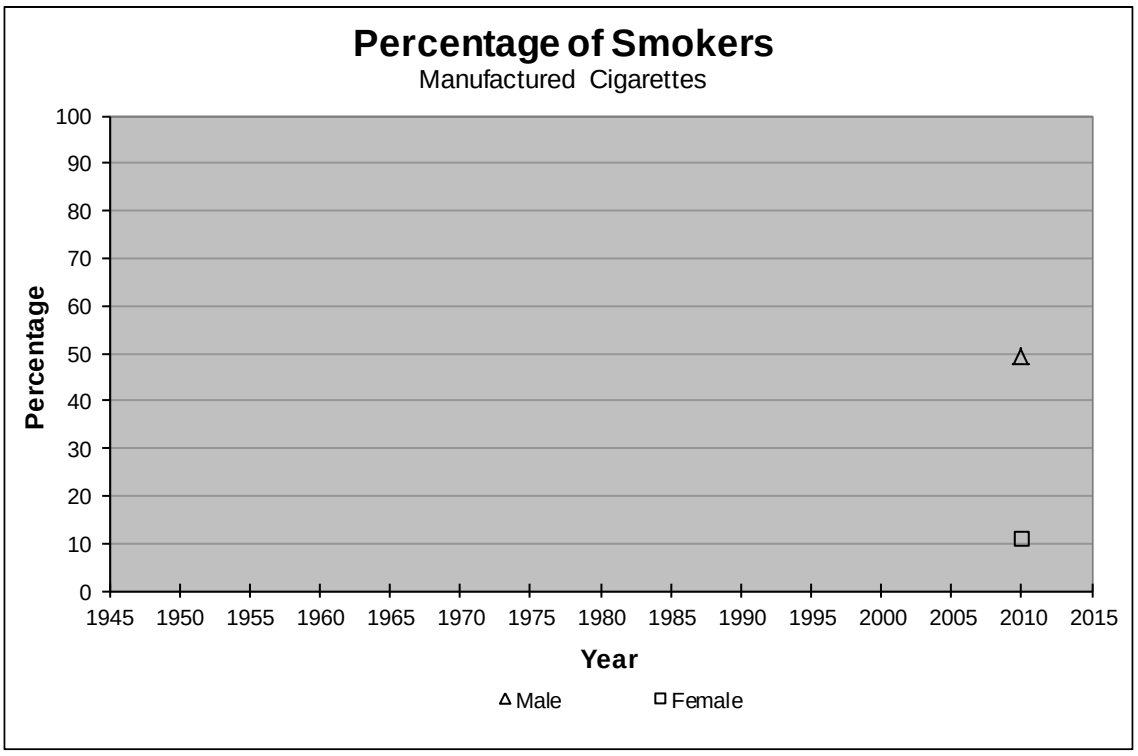


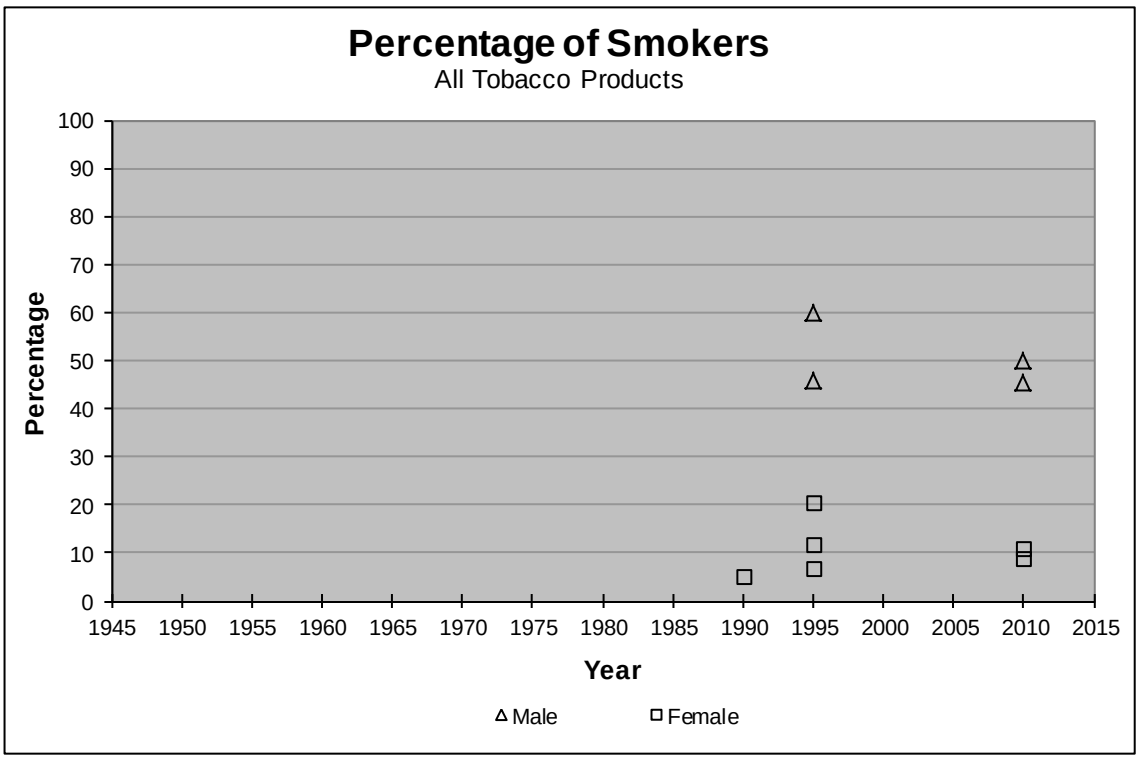
Lithuania *(continued)*



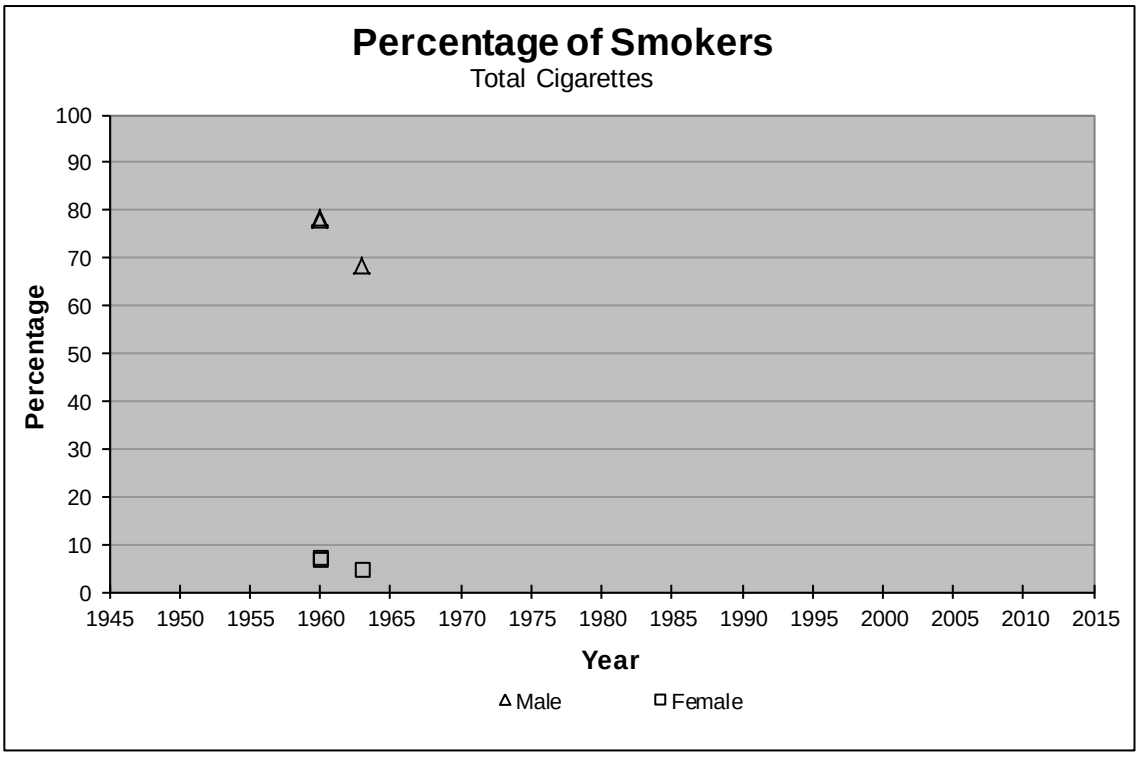


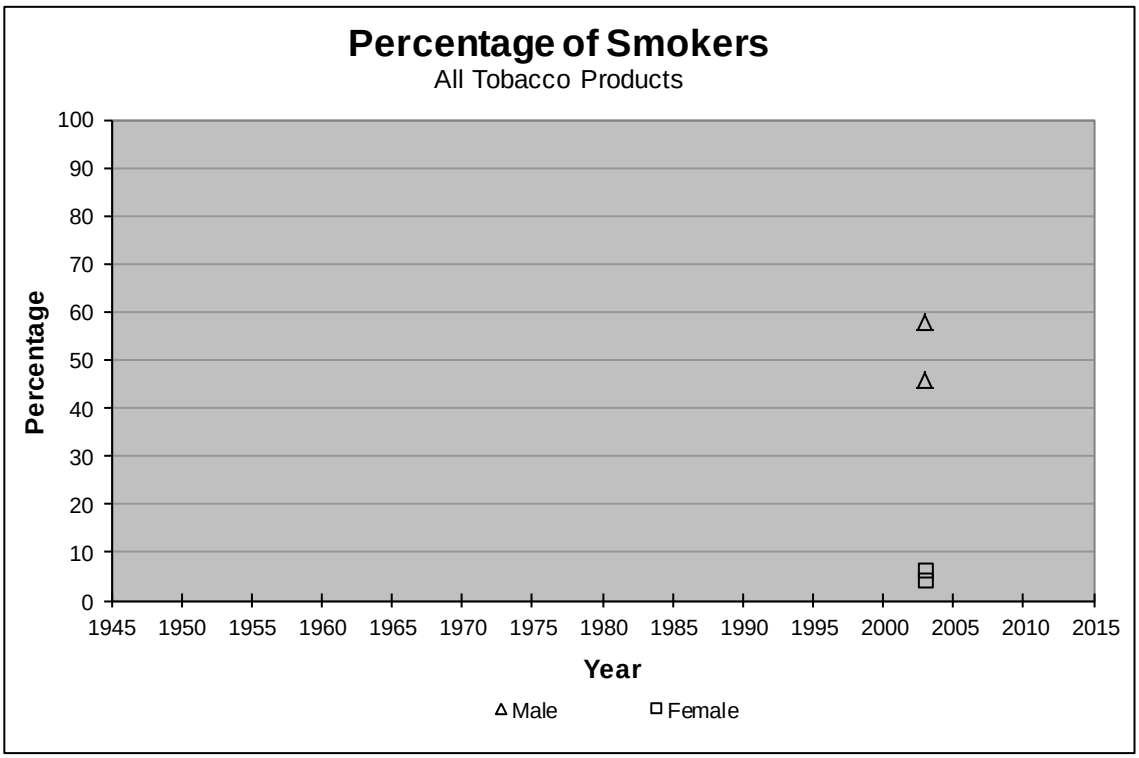
Ukraine, Belarus, Moldova
(Part ii not presented due to close similarity with part i)



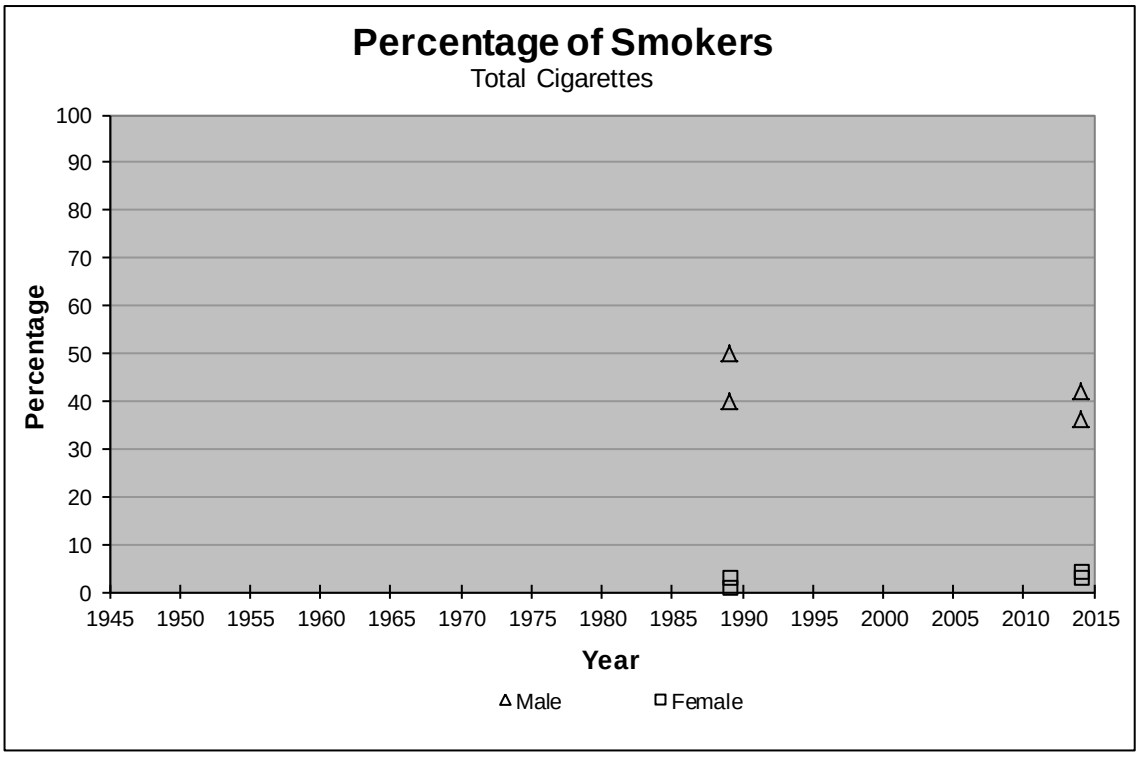


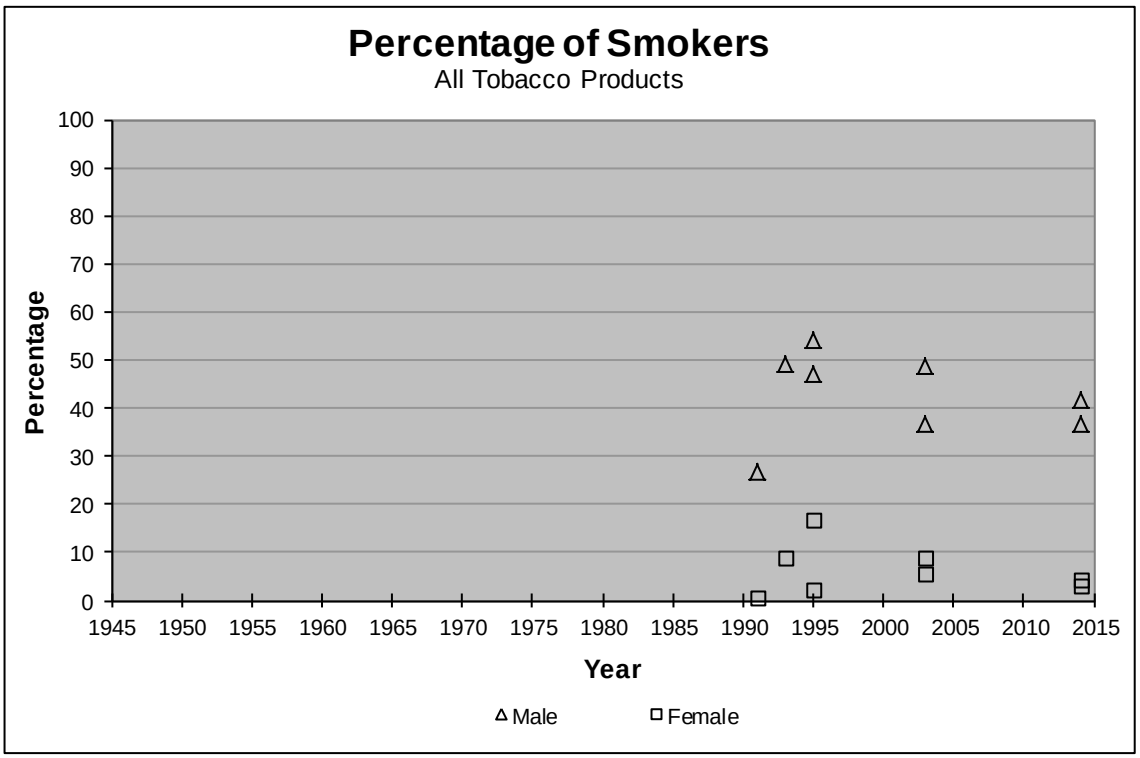
Armenia, Azerbaijan, Georgia



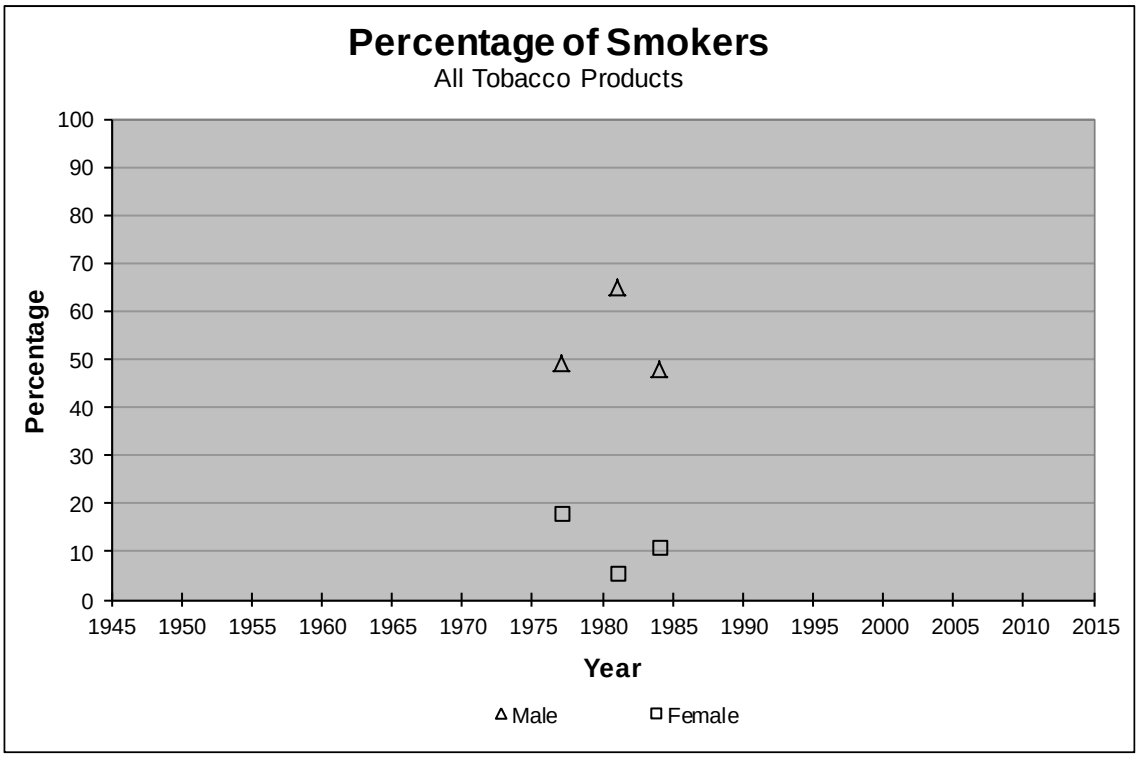


Central Asian republics





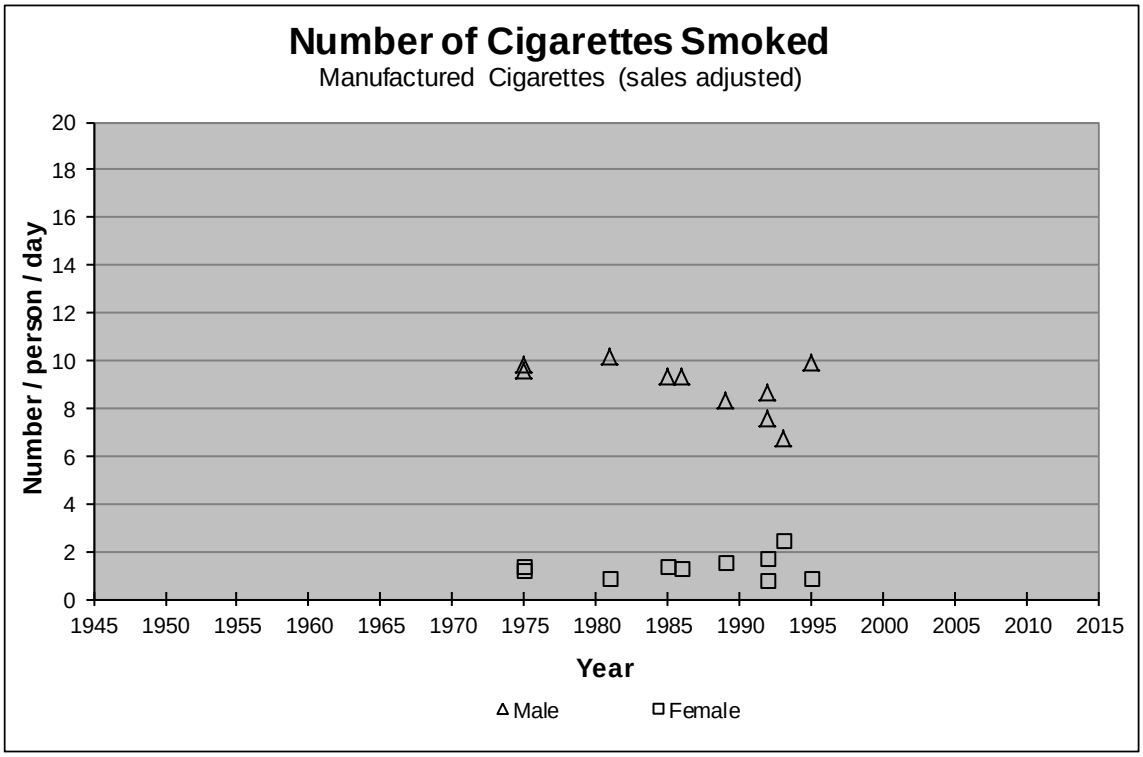
Multiple/unspecified region



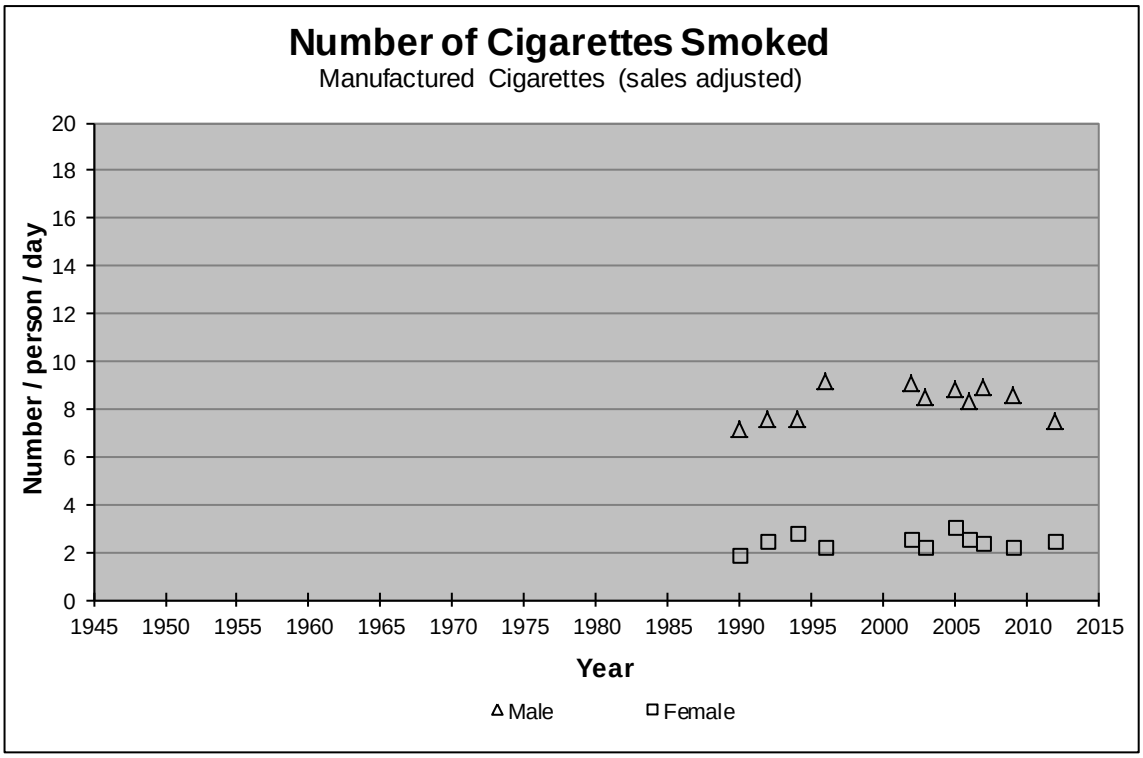
Source: Table 8.
See also customisable version of Figure 3 in the Excel workbook.

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

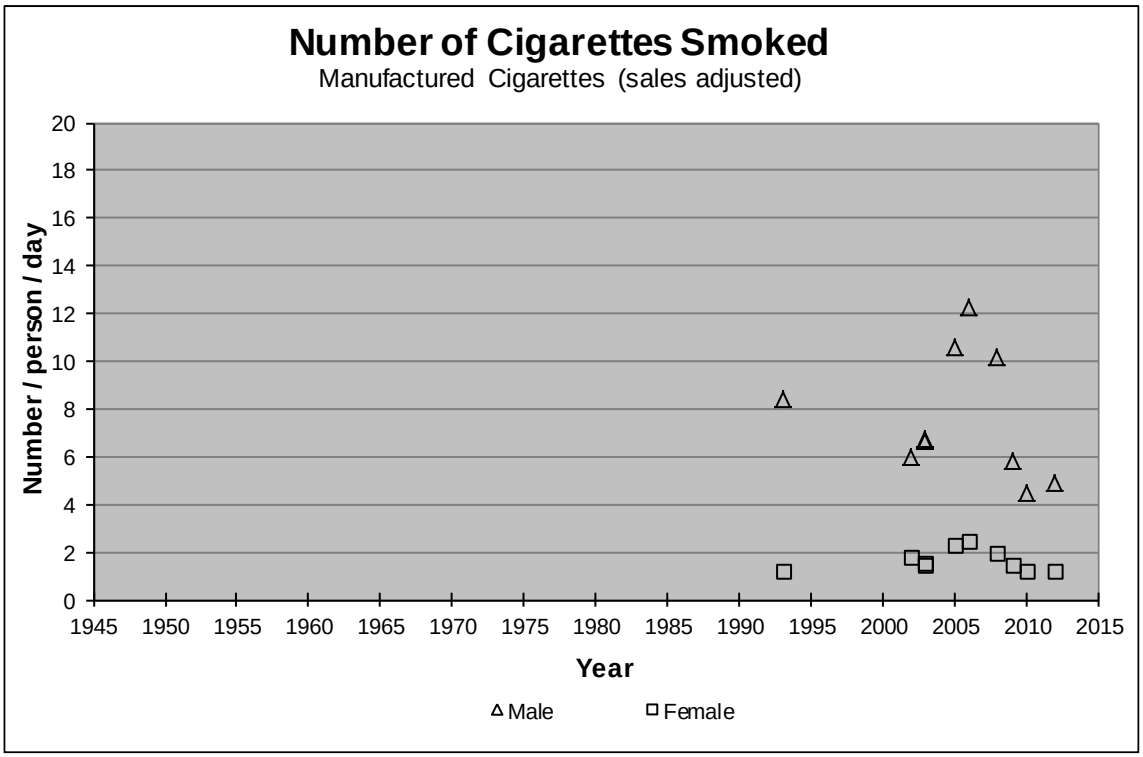
Russia



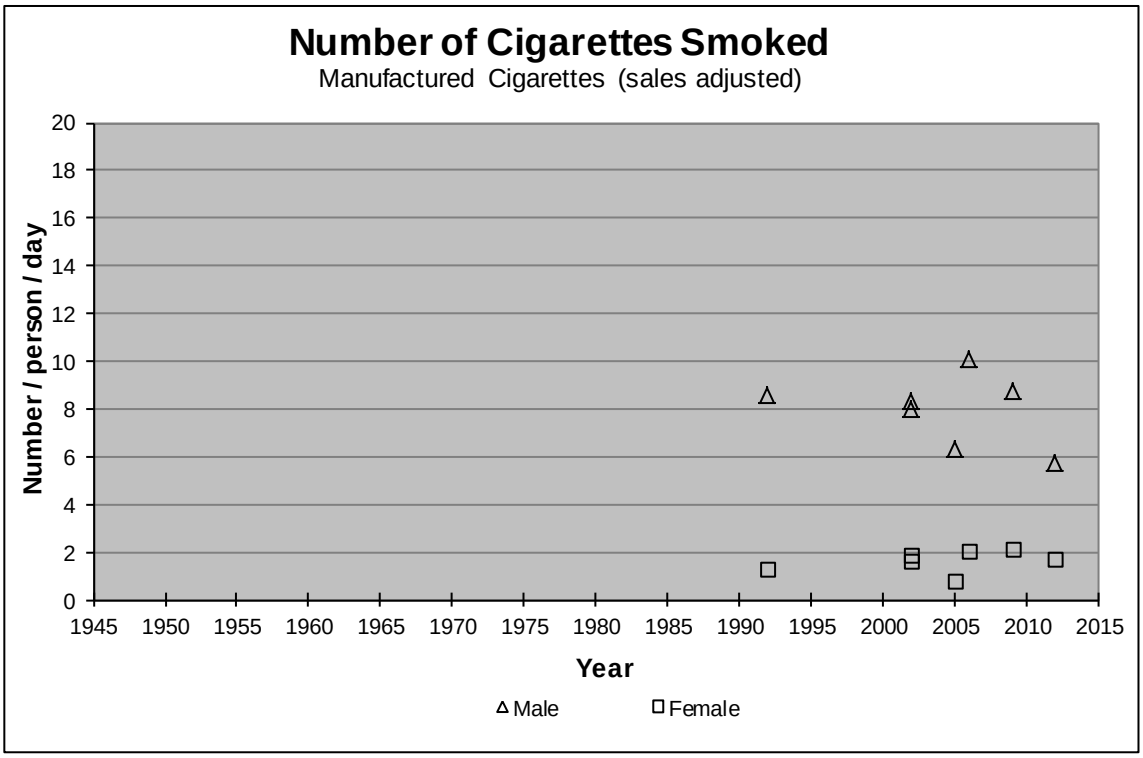
Estonia



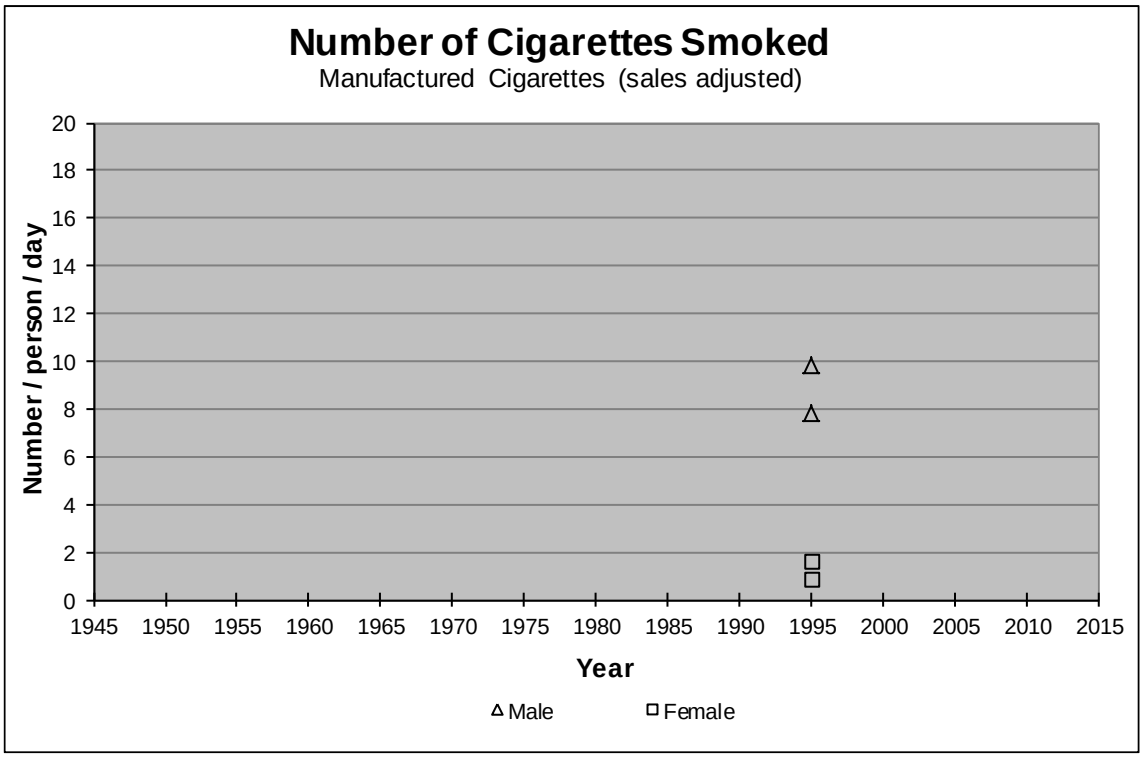
Latvia



Lithuania

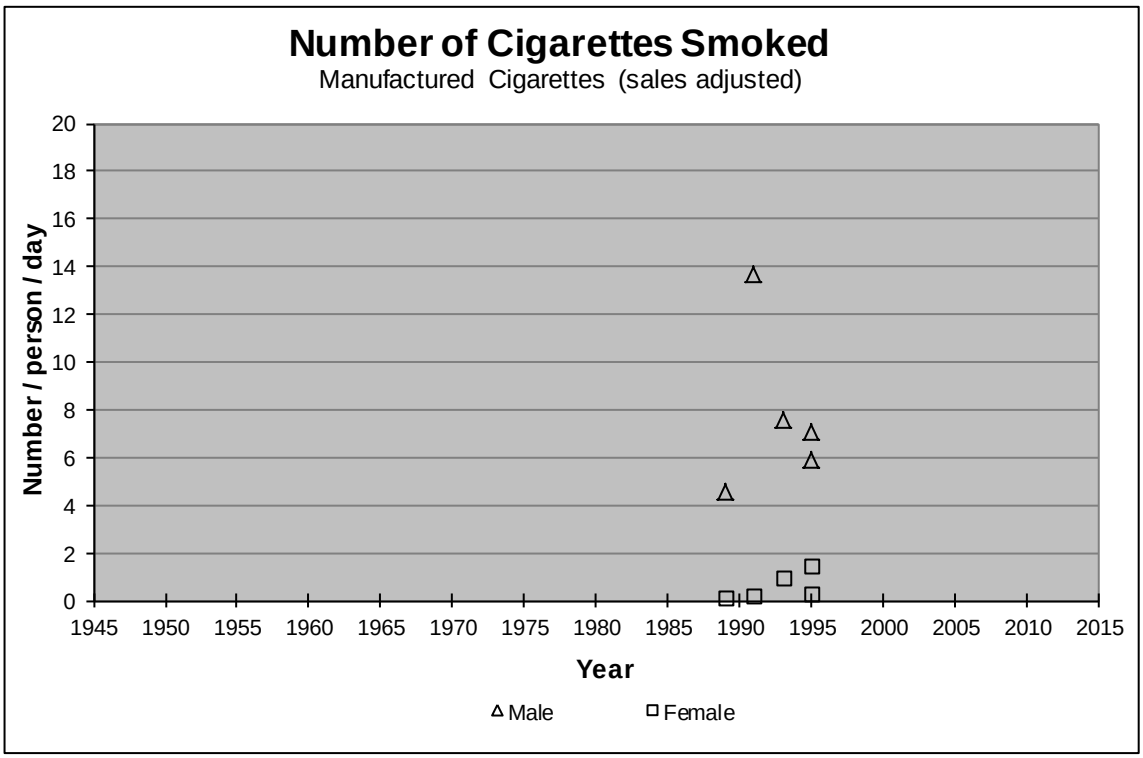


Ukraine, Belarus, Moldova

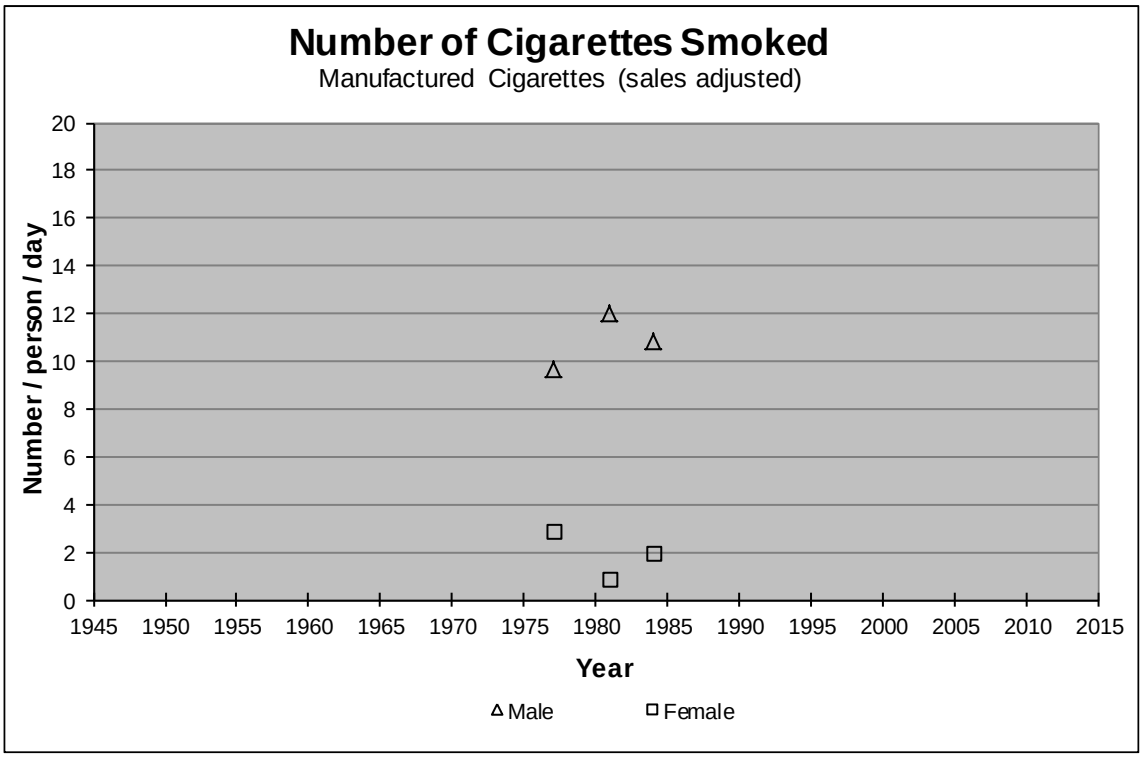


Armenia, Azerbaijan, Georgia: no data

Central Asian republics



Multiple/unspecified region



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. 102 under *References*.

This chapter covers the USSR and its successor republics. Some overall data are included for the former Soviet Union (fSU) combined. The sales data have been fully updated only for the current EU member countries, Estonia, Latvia and Lithuania.

Traditional Russian cigarettes are known as *papyrosi*. They were described by Cooper (1982) as a hollow paper tube filled one-third with tobacco.

Consumption in Russia before 1920

An extensive description of tobacco usage in pre-20th century Russia is given by Romaniello and Starks (2011). Pipes were the predominant form of tobacco consumption from its introduction in the 17th century. Snuff also became fashionable in the 18th century, including by noble women, but quickly went out of fashion thereafter. Cigars became popular in the 1820s. Russian cigarettes, known as papyrosi, appeared in the 1830s, and were initially hand-rolled paper tubes packed with Turkish or Maryland tobacco, later machine produced. By the 1890s, pipe smoking was disappearing and papyrosi became the leading form, rising from 10% of production in 1897 to 19% in 1900 and 46% in 1913, with much of the loose tobacco used in self-rolled cigarettes. During much of the 19th century, tobacco consumption was associated with educated upper and middle class people, and was slow to become established in rural areas.

Consumption data for Latvia, 1921-1935

Hutson (1937)
See Table 1.3.

Data, originally given to the nearest 1 000 pounds, have been converted to tonnes and given to the nearest tonne (1 000 lbs = 0.45359 tonnes). Consumption of conventional cigarettes is combined with the category of cigars. We used a conversion factor of 0.57 g per papyrosa to convert from tonnes to numbers; as this factor is based on much later information (US Department of Agriculture (USDA) (1978)), these should be regarded with caution.

Consumption data for Estonia and Lithuania, 1920s-30s

For both countries, Hutson (1937) provided annual data (not shown) on imports of leaf tobacco, but commented only briefly on quantities of finished products. In Estonia, production was 1 000 million papyrosi and 200 tonnes of smoking tobacco per year. For Lithuania, annual consumption was about 900 tonnes. Papyrosi were the main cigarette type, but conventional cigarettes with light tobacco were also used. Home-grown tobacco was also used in pipes, while cigar consumption was “unimportant”.

Consumption data for USSR and fSU, 1960-2004

USDA Economic Research Service (1996), USDA (2005) (except see the following text sections for sources for the EU republics for recent years.)
See Table 1.1 for overall, and see Tables 1.2, 1.4, 1.5 and 2.5 for individual republics. (Data for the individual non-EU republics are not included in Table 1 to avoid repetition, as only cigarette data by number are available, as shown in Table 2.5.)

The data refer to domestic consumption, calculated by the USDA as production plus imports minus exports. Data for cigarettes were given as numbers, and we converted them to weight as described below.

Overall data after the break-up of the union represents a total of the data for the individual states of the fSU, as calculated by the USDA up to 1994, and summed (by us) from the individual states thereafter. For the period 1988-1994, the total as calculated from individual states (not shown) is 5-10% higher than that shown in Table 1.1. For the most recent years, data (for cigarette consumption, and also for other measures not shown) are typically duplicates of an earlier year, e.g. for Armenia data for 1999-2004 are each wholly the same as for 1998. These duplicated data have been omitted from Table 2.5, but are used in the summation for the overall total for Table 1.1.

Values for cigarettes are the total of western type cigarettes and papyrosi. The weights of tobacco were estimated as 0.57 g per papyrosa, 1.13 g per non-filter cigarette and 0.91 g per filter cigarette (USDA (1978)). The approximate percentage of total cigarettes represented by papyrosi was as follows (USDA (1978)):

Year range	Papyrosi (%)
1959-1963	75
1964-1967	72
1968-1970	64
1971-1973	54
1974-1977	44
1978-1980	36

Using these percentages, assuming 30% papyrosi for subsequent years, and assuming an average weight of 1 g per western type cigarette and 0.57 g per papyrosa, we derived the following estimates of the average weight of a cigarette, for conversion from numbers of cigarettes to weights up to 1994:

Year range	Average weight of a cigarette, g
1959-1963	0.68
1964-1967	0.69
1968-1970	0.72
1971-1973	0.77
1974-1977	0.81
1978-1980	0.85
1981-1994	0.87

Zaridze *et al* (1986) reported that there were considerable differences in the types of smoking materials produced (and probably consumed) in different areas. In 1982, western type cigarettes, as a proportion of cigarette and papyrosa production combined, represented 54% in Kazakhstan, 57% in Russia, 78% in Armenia, 91% in Georgia, 99% in Azerbaijan, and 100% in Tajikistan, Estonia and Lithuania. Cooper (1985) noted that papyrosi were then “almost out of use”.

Around the time of the breakup of the union, consumption in some republics reduced sharply due to production shortages and lack of money among the population. According to Horne (1993), demand for cigarettes in Russia in 1993 was much higher than the volume available, potentially being twice that available. The average person could not afford international brands. Consumption in Azerbaijan was said to have declined due to deep recession and sharp declines in consumer purchasing power. Only Moldova exported any cigarettes during 1988-1993 (USDA Foreign Agricultural Service (1993)).

No data on products other than cigarettes are available, except for limited data on makhorka for Russia. Makhorka is dark tobacco, mainly for rolling. Consumption fell from 3 100 tonnes in 1988 to 364 tonnes in 1993 (European (1994)). This drop in demand was attributed partly to a lack of rolling papers. Using the same assumptions for the weight of cigarettes as in the previous section, hand-rolled cigarettes of makhorka represented 1.7% of cigarette consumption by weight in 1988, and 0.2% in 1993.

We have not calculated total tobacco consumption due to the lack of comprehensive data.

Sales and consumption data for Estonia, 1988 onwards

Cigarettes:

1988-1999: USDA Economic Research Service (1996), USDA (2005)
2000-2005: KPMG (2012)
2006-2014: KPMG (2014, 2015)

Cigars: Bundesverband der Zigarrenindustrie (2007, 2013)
See Table 1.2

All data were given in numbers. The cigarette data for 1988-1999 relate to consumption. For 2000-2005, the data relate to legal domestic sales, and as such include outflows (e.g. cross-border purchases) from the country. For 2006 onwards, the data are estimated total consumption, i.e. adjusting for cross-border purchases, and including estimated counterfeit and contraband.
An alternative consumption estimate attributed to ERC of 1 413 million cigarettes in 2012 is considerably lower than that shown in Table 1.2 (Economist (2013), originally given on a per capita basis).

Taal *et al* (2004) also estimated cigarette consumption on the basis of several behavioural surveys (effectively the reverse of the process that we use for sales adjustment). They noted considerable purchases by Finns travelling to Estonia due to substantial price differences. They also noted that bootlegging between Estonia and Russia occurred, mainly in the north-east of Estonia, and reported a market research surveys in which smokers showed their cigarette packs from which the presence of Estonian or Russian tax labels was recorded. Combining all these sources, Taal *et al* gave the estimates shown in the text-table below. However, as we have shown for many countries, under-statement in surveys is common, and Taal *et al*'s estimates may therefore understate local consumption and overstate cross-border sales and illegal consumption. (See also *Estimates of smuggling*, p. 83)

	Cigarettes (millions)					Purchases by foreign visitors as % of legal sales
	Legal sales	Local legal consumption	Purchases by foreign visitors	Illegal consumption	Total local consumption	
1995	2 774	1 439	1 335	480	1 918	48
1996	2 548	1 355	1 193	382	1 737	47
1997	3 023	1 446	1 577	255	1 701	52
1998	2 490	1 270	1 220	298	1 568	49
1999	2 011	1 187	824	417	1 604	41

Data were also available from Statistics Estonia (2015), giving imports and exports of cigars, cheroots, cigarillos and cigarettes combined, by weight. As there is now no cigarette production in Estonia (Villa (2015)), we estimated consumption as imports minus exports as follows:

	Cigars, cheroots, cigarillos and cigarettes (tonnes)		
Year	Imports	Exports	Estimated consumption
2004	3 051	74	2 977
2005	3 225	49	3 176
2006	3 426	25	3 401
2007	3 544	13	3 531
2008	1 547	11	1 536
2009	2 350	98	2 252
2010	1 276	175	1 101
2011	1 882	224	1 658
2012	1 877	250	1 627
2013	1 777	117	1 660
2014	1 792	113	1 679

KPMG (2011) stated that a robust source of legal sales of smoking tobacco in Estonia was not available, but that such sales made up less than 5% of total sales of tobacco products in 2008.

As no data are available for other products, we have not calculated total tobacco consumption.

Sales and consumption data for Latvia, 1988 onwards

1988-1996: USDA (2005)
1997-2004 (cigarettes): KPMG (2012)
2000 (cigars): Latvian News Agency (2001)
2004 (cigars): Bundesverband der Zigarrenindustrie (2007)
2005-2014: State Revenue Service (2015)
See Table 1.4.

All cigarette data were given as numbers. For 1988-1996 they refer to consumption, calculated (by USDA) as production plus imports minus exports. For the years 1997-2004 the figures are for legal domestic sales, and as such include outflows (e.g. cross-border purchases) from the country. However estimates from USDA (2005) of domestic consumption for this period (not shown, continuing the series used from 1988-1996) are considerably higher. For 2005 onwards, the figures are for estimated total consumption, including estimated counterfeit and contraband.

Alternative data on cigarettes are available from KPMG (2012, 2014) and these are given below for comparison. For 2005 they refer to legal domestic sales (continuing the series as described above for 1997-2004), and thereafter to total cigarette consumption:

Year	Cigarettes (millions)
2005	4 000
2006	4 150
2007	4 220
2008	3 670
2009	2 920
2010	2 750
2011	2 630
2012	2 380
2013	2 360

An alternative consumption estimate attributed to ERC of 1 487 million cigarettes in 2012 is considerably lower than that shown in the Table 1.4 or as given by KPMG (Economist (2013), originally given on a per capita basis).

Data for cigars were given in numbers, and refer to sales in 2000 and 2004, and to consumption thereafter. Alternative data for 2005-2011 from Bundesverband der Zigarrenindustrie (2013) were similar.

We used arbitrary factors of 1g per cigarette and 3g per cigar for conversion to weight, as no information on cigarette or cigar weights is available.

Sales and consumption data for Lithuania, 1988 onwards

Cigarettes:
1988-1996: USDA (2005)
1997-2005: KPMG (2012)
2006-2014: KPMG (2014, 2015)
Cigars: Bundesverband der Zigarrenindustrie (2007, 2013)
Rolling tobacco: Calderoni *et al* (2014)
See Table 1.5.

All cigarette data were given in numbers. For 1988-1996 they refer to consumption, calculated (by USDA) as production plus imports minus exports. For 1997-2005, the figures are for legal domestic sales, and as such include outflows (e.g. cross-border sales) from the country. For later years, they refer to total estimated consumption, including estimated counterfeit and contraband. Alternative data from various sources are given below for comparison:

Year	Cigarette consumption (millions)		Legal cigarette sales (millions)	
	World Health Organization (2013)	ERC quoted by Economist (2013)	Statistics Lithuania (2015)	Calderoni *et al* (2014)
1995	6 536			
1996	7 202			
1997	8 978			
1998	7 857			
1999	6 414			
2000	4 498		4 673	
2001			4 605	4 583
2002			4 446	4 522
2003			3 990	4 192
2004			3 897	3 280
2005			4 004	3 617
2006			4 080	4 000
2007			4 151	4 700
2008			4 025	5 077
2009			2 686	3 889
2010			2 450	2 485
2011			2 771	2 791
2012		1 948	2 712	2 702
2013			2 799	
2014			2 930	

Data for cigars were given in numbers and refer to sales. Alternative data from Calderoni *et al* (2014) are similar to those shown in Table 1.5. Calderoni *et al* reported that the expansion of the cigar market from 2006-2011 was influenced by a preferential excise duty rate for cigars. In particular, a marked increase in cigar sales coincided with the introduction to the market of an economy cigarillo brand in 2009. The excise rate for cigars was raised in 2011.

Data for hand rolling tobacco refer to sales. No data are available for pipe tobacco, and it has been ignored in the calculation of all tobacco products. Calderoni *et al* (2014) reported that in 2012, hand rolling and pipe tobacco together comprised 1.0% of total sales.

We used arbitrary factors of 1g per cigarette and 3g per cigar for conversion to weight, as no information on cigarette or cigar weights was available.

Estimates of smuggling and cross-border sales

Cigarette smuggling became a significant problem in the 1990s in fSU countries. According to the Russian State Customs Committee, in 1996-1997 up to 80% of imported cigarettes on the Russian market were of contraband provenance (BBC Monitoring International Reports (2000)). The federal tax police service estimated that in 1999 illegal turnover of cigarettes varied between 20% and 40%, depending on region (Novecon (2000)). In Kyrgyzstan in 1997, illegal imports were said to account for 90% of total cigarette imports (Business World (1997)).

In **Estonia** tax banderoles were introduced in 1995 to address smuggling. Overall, an estimated 600-800 million illegal cigarettes were sold in Estonia in 2009 (Baltic Business Daily (2010a), ERR News (2010)). By 2012, this estimate had reduced slightly to 570-730 million cigarettes and by 2014 it was down to 430 million illegal cigarettes (Baltic Daily (2013a), Baltic Times (2015)).The table below summarizes estimates of the market share (%) of non-legal sales of cigarettes as a proportion of total cigarette sales for Estonia. The sources of the estimates, and the basis of the percentages, are described below the table.

Estonia	Source													
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**13**	**14**
1995	16	25	80											
1996		22												
1997		15												
1998		19		"a third"	"a fifth"									
1999		26			25	33								
2000						30								
2001						28	25-49.9							
2003								22-25						
2005									22-24					
2006							26.7			19.2	25.7			
2007										10.7	13.1			
2008										7.0	8.5			
2009				25-30						21.8	26.6	24		
2010							36.2			16.7	19.4		23.4	
2011										17.5	17.1 (Q2), 21.4 (Q3), 19.7 (Q4)			19
2012								25-29		19.7	25.3 (Q2), 25.0 (Q4)			
2013										18.6	24.0 (Q2), 20.7 (Q4)			
2014								19-22		18.5	20.6 (Q2), 18.8 (Q4)			
2015											17.4 (Q2), 12.6 (Q4)			

Sources:

1. Merriman *et al* (2000) quoting World Tobacco File (1994). Smuggling, as % of sales.
2. Taal *et al* (2004). Illegal consumption as % of total local consumption (see *Sales and consumption data for Estonia, 1988 onwards*, p. 80 for description of the method).
3. Glogan (1995). Smuggling and black market, as % of cigarettes sold.
4. Baltic Business Daily (2010a). Illegal cigarettes, as % of total consumption excluding tourists. Refers to the late 1990s.
5. Baltic News Service (2000). Black market, as % of market.
6. ETA Economic Bulletin (2002) quoting Estonian Market Research Institute. Market share of illegal tobacco products.
7. Mackay *et al* (2006), Shafey *et al* (2009), Eriksen *et al* (2012) quoting ERC (2004, 2007, 2010). Data shown as 2001 refer to 2000-2004, and Estonia was shown as in a category of 25-49.9% but no detail given. Smuggled/illicit cigarettes as % of total sales.
8. Baltic Times (2003, 2015), Baltic Daily (2013a) quoting the Institute of Economic Research. Illegally sold cigarettes (2003 and 2012) or contraband (2014), as % of market.
9. Baltic Business Weekly (2005) quoting Tobaccoland Eesti. Illegal tobacco market share.
10. KPMG (2014, 2015). The share of total cigarette consumption that is counterfeit or contraband, based on KPMG's EU Flow Model, manufacturers' data and Synovate/Ipsosnon-domestic (legal) research.
11. KPMG (2014), Baltic Daily (2012, 2013c, 2014a, 2014b, 2014d), Baltic Business Daily (2013, 2015b), Baltic Course (2015b), Esmerk Baltic News (2016). Share of packs bearing foreign revenue stamps, based on Nielsen 'empty packs' survey (EPS) which is conducted 2-3 times a year in towns and cities. The highest rates were reported for towns in the northeast, with around 50% in 2013 and around 40% in 2014. "Q" = quarter.
12. Baltic Business Daily (2009a) quoting the Estonian Finance Ministry. Contraband tobacco share, based on TNS Emor survey and studies by the Institute of Market Research.
13. Gilmore *et al* (2014) quoting Euromonitor International (2013a). Illicit cigarette trade volume as % of total volume. Gilmore *et al* noted that concerns have been raised by Skafida *et al* (2014) and Blecher *et al* (2015) about the quality of Euromonitor data on illicit trade.
14. Baltic Daily (2013b) quoting Tax and Customs Board. Illegal cigarettes, as % of market.

The table below summarizes estimates of the market share (%) of non-legal sales of cigarettes as a proportion of total cigarette sales for **Latvia**. The sources of the estimates, and the basis of the percentages, are described below the table.

Latvia	Source									
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**
1995	39									
2000-04		10-24.9								
2005		20.0								
2006			6.5	12.7 (Q2)						
2007			4.1	5.0 (Q2)	7					
2008			5.1	10.3 (Q2), 5.8 (Q4)	14	15				
2009			25.8	19.9 (Q2), 33.2 (Q4)			20	30		
2010			37.0	43.1 (Q2), 36.5 (Q4)				40	50	53.8
2011			31.6	35.3 (Q2), 33.4 (Q4)						
2012			30.7	32.1 (Q2), 35.3 (Q4)						
2013			28.8	30.3 (Q2), 29.9 (Q4)						
2014				29.3 (Q2), 28.9 (Q4)						
2015				24.8 (Q4)						

Sources:

1. Merriman *et al* (2000) quoting *World Tobacco File (1997).* Smuggling, as % of sales.
2. Mackay *et al* (2006), Shafey *et al* (2009) quoting ERC (2004, 2007). For 2000-2004 Latvia was shown as in a category of 10-24.9% but no detail given. For 2005, the result refers to % of legal sales.
3. KPMG (2014, 2015). The share of total cigarette consumption that is counterfeit or contraband, based on KPMG's EU Flow Model, manufacturers' data and Synovate/Ipsos non-domestic (legal) research.
4. KPMG (2014, 2015), Esmerk Baltic News (2015), Baltic Course (2015a), Baltic News Service (2016). Contraband cigarettes, based on an 'empty packs' survey by an independent agency. The survey was conducted in 2 waves per year (Q2=April, Q4=Sep-Oct), collecting 4 900 packs in each wave from the largest 25 towns and cities. It was commented that the timing of the surveys may miss seasonal variations due to tourism and emigrants visiting home.
5. British American Tobacco Nordic (2008). Duty not paid cigarettes, based on surveys in which adults (age 18-64, sample size 2 002 in 2008) were interviewed at home, and exchanged their current cigarette pack for a small incentive. In 2008 the highest incidence was found in Latgale, where they accounted for 48% of consumption, up from 25% the previous year. In Riga, the proportion was 29%.
6. Baltic Business Daily (2009b). Cigarettes uncleared by customs, as % of total cigarette market, based on a survey carried out by BAT Latvia in spring 2008.
7. Baltic Business News (2009) quoting the National Association of Tobacco Goods Producers. Cigarettes uncleared by customs.
8. Baltic Business Daily (2010b) quoting Philip Morris Latvia. Illegal cigarettes as % of consumption. The figure for 2009 refers to November; in the eastern town of Livani and the western town of Kuldiga the proportion was as high as 70-80%. The figure for 2010 is an estimate for January.
9. Baltic Business Daily (2010c) quoting BAT Latvia. Contraband as % of cigarette market.
10. Gilmore *et al* (2014) quoting Euromonitor International (2013a). Illicit cigarette trade volume as % of total volume. Gilmore *et al* noted that concerns have been raised by Skafida *et al* (2014) and Blecher *et al* (2015) about the quality of Euromonitor data on illicit trade.

According to Agence France Presse (2005), in 2004 around 2 billion cigarettes were smuggled into **Lithuania**. By 2014, this had reduced to 1.06 billion units (Esmerk Baltic News (2015)). The table below summarizes estimates of the market share (%) of non-legal sales of cigarettes as a proportion of total cigarette sales for Lithuanian. The sources of the estimates, and the basis of the percentages, are described below the table.

Lithuania	Source							
Year	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
1995	30							
2001		10-24.9	20.5					
2002			21.6					
2003			26.8					
2004			41.2					
2005			34.4	40				
2006		25.5	27.3		40.8	42.6 (Q3)		
2007			20.3		25.7	32.5 (Q2)		
2008			17.8		15.5	9.3 (Q2), 48.1 (Q4)		
2009			28.5		22.5	12.6 (Q2), 21.3 (Q4)	25	
2010			47.1		40.7	41.5 (Q2), 43.0 (Q4)		42
2011			39.9		31.3	34.6 (Q2), 30.8 (Q4)		32.8
2012			41.2		27.5	29.3 (Q2), 35.4 (Q4)		32.5
2013					27.1	29.6 (Q2), 28.2 (Q4)		28.9
2014					28.3	28.4 (Q4)		29.1
2015						19.6 (Q4)		19.7

Sources:

1. Merriman *et al* (2000) quoting *World Tobacco File (1997)*. Smuggling, as % of sales.
2. Mackay *et al* (2006), Shafey *et al* (2009) quoting ERC (2004, 2007). Data shown as 2001 refer to 2000-2004, and Lithuania was shown as in a category of 10-24.9% but no detail given. Smuggled/illicit cigarettes as % of total sales.
3. Calderoni *et al* (2014) quoting Euromonitor International. Illicit market as % of total market. Estimates are based on industry press releases, press materials, interviews with manufacturers and retailers, and local market sources. Gilmore *et al* (2014) noted that concerns have been raised by Skafida *et al* (2014) and Blecher *et al* (2015) about the quality of Euromonitor data on illicit trade.
4. Lithuanian News Agency (2005) quoting Customs Department. Smuggled cigarettes as % of market.
5. KPMG (2014, 2015). The share of total cigarette consumption that is counterfeit or contraband, based on KPMG's EU Flow Model, manufacturers' data and Synovate/Ipsos non-domestic (legal) research.
6. KPMG (2014, 2015), Baltic News Service (2015). Non-domestic cigarettes, based on an 'empty packs' survey by an independent agency. The survey was conducted in 2 waves per year (Q2=April, Q4=Sep-Oct), collecting at least 11 000 packs per year from the largest 20 towns and cities. It was commented that the timing of the surveys may miss seasonal variations due to tourism and emigrants visiting home.
7. Eriksen *et al* (2012) quoting National Tobacco Manufacturers Association. Illicit share of total cigarette market.
8. Baltic Business Daily (2015a). Cigarettes intended for markets other than Lithuania, based on discarded cigarette packs, from a survey that started in 2010. It is unclear whether this source is in fact the same as the KPMG source above.

Estimates of the consumption of "illicit whites" (defined as brands manufactured legally, usually outside the EU, and smuggled into another market where they have limited or no legal distribution and are sold without payment of tax) in Estonia, Latvia and Lithuania for several years were provided by KPMG (2014, 2015), as follows:

	Illicit white cigarette consumption (millions)		
Year	**Estonia**	**Latvia**	**Lithuania**
2007	10	90	10
2008	0	50	30
2009	70	200	150
2010	50	270	580
2011	80	360	660
2012	120	400	670
2013	190	500	760
2014	210	530	870

A survey reported in 2001 showed that 41% of all smokers in Estonia consumed illegal cigarettes to some extent, with 16% of smokers using them all the time, 13% doing so from time to time, and 12% seldom doing so (Estonian News Agency (ETA) (2001)). A survey conducted a year later

reported that only 36% of smokers used illegal tobacco products (ETA Economic Bulletin (2002)), and in 2013, the figure was 21% (5% all the time, 5% occasionally and 11% seldom) (Baltic Daily (2014c)).

In Lithuania, Cnossen reported in 2006 that more than half of all smokers occasionally bought smuggled cigarettes, while one third bought illicit cigarettes on a regular basis.

Some Eurobarometer surveys enquired about contact with smuggled cigarettes and cross-border purchasing. In 2008, 5.5% of Estonian respondents had, in the previous 6 months, often seen cigarettes being sold that they thought were smuggled, with a further 8.2% seeing them occasionally. The corresponding figures for Latvian respondents were 7.7% and 14.5% respectively, and for Lithuanian respondents they were 17.3% and 19.0% respectively (Gallup Organisation Hungary (2009)). In 2012, 13% of Estonians, 10% of Latvians and 7% of Lithuanians reported having purchased tobacco products abroad in the previous year (European Commission (2012)).

Latvia participated in a multinational survey in 2010 by PPACTE, reported by Gallus *et al* (2012) and Joossens *et al* (2014). The Latvian sample was 1 061, of whom 297 were current smokers who reported the sources of cigarettes bought in the previous 30 days (as percentages of the total number bought), summarized as follows:

Source	Proportion of cigarettes bought (%)	
	Smokers aged 15-24	All smokers
Legal shops	60.3	63.0
Vending machines	0.0	0.0
Internet	0.0	0.0
Other countries/duty free	4.6	3.2
Smuggled (markets, door-to-door sellers etc)	24.5	25.9
Offered by peers	10.5	7.8

38.0% of current smokers reported having bought smuggled cigarettes (more than 1% of their total purchasing) in the previous 30 days. Participants were asked to show their most recently bought pack. 66.9% had a local tax stamp. 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 37.8% of manufactured cigarette packs.

According to Baltic Daily (2013a), in 2013, 34% of smokers in northeastern Estonia primarily bought illegal cigarettes, compared to 21% in central Estonia, 6% in the north and 3% in the south of the country.

In 2014, the proportion of smokers in Lithuania buying smuggled cigarettes was estimated at 35-50% (Calderoni *et al* (2014)).

KPMG (2014) estimate that legal non-domestic sales, i.e. cross-border and duty-free sales, made up around 1.5-6.4% of total sales in Estonia, 1-2.8% of total sales in Latvia and 1.4-4.9% of total sales in Lithuania during 2006-2013.

Estimates of numbers of hand-rolled cigarettes

No estimates of hand-rolled cigarette consumption have been included in the Tables. However, based on sales of makhorka (see above) and assuming 1 g per cigarette, consumption was 0.06 cigarettes per adult per day in Russia in 1988, and reduced still further in later years. Sales data for rolling tobacco in Lithuania and all smoking tobacco in Latvia in the 2000s suggest that consumption there was similarly low.

Plain/Filter cigarette production

USSR overall:
1960-1980: USDA (1978)
1981-1982: Zaridze *et al* (1986)
Zaridze *et al* (1986) also presented data for 1963-1980, which were quite similar to those shown from USDA (1978).
Latvia: Baltic News Service (2001).
The data for 2001 are for a partial year only.
See Table 3

Production as a measure became less representative of consumption in later years when importation of western brands increased. Production data for the individual republics are given in USDA (2005) for 1988 until the early 2000s, but are difficult to interpret: for most republics they show 100% filter (or 0% filter for Belarus), but it is unclear whether this merely indicates missing data. They are in any case unlikely to reflect consumption in the specific location due to trade between the republics. For Ukraine (shown as 100% filter production by USDA) consumption as filter cigarettes was reported in 1994 to be only 3-5% of cigarettes, with use restricted to "a small cosmopolitan group" (European (1994)). In Azerbaijan, production was unofficially reported to have been around 40% filter in the early 1990s, but wholly non-filter in mid-1996 due to lack of filter material (USDA (1996)). Non-filter cigarettes were banned in Azerbaijan in 2002 (Turan Information Agency (2007)). In Latvia, it was reported in 2009 that only 0.3% of smokers of legal cigarettes chose non-filter, compared with 11% of smokers of illegal cigarettes (Baltic Business Daily (2009c)). No other consumption data are available.

Menthol cigarette sales

In 2010, menthol cigarettes made up 9.7% of the market in Estonia, 1.9% of the market in Latvia and 5.9% of the market in Lithuania (Oxford Economics (2012)). In 2012, this had reduced to 6% in Estonia, 1% in Latvia and 4% in Lithuania according to KPMG (2013), although according to Calderoni *et al* (2014), menthol cigarettes made up 6.4% of the legal market in Lithuania in 2012.

Slim cigarette sales

In 2012, slim cigarettes accounted for 16% of total cigarette sales in Estonia and Latvia, and 21% in Lithuania according to KPMG (2013). Elsewhere, it was reported that in the same year, superslim cigarettes accounted for 10.1% of retail volume sales in Lithuania, while slim cigarettes took another 1.5% of market share (Calderoni *et al* (2014) quoting Euromonitor International (2013b)).

Tar and nicotine machine yields of cigarettes

No data on sales-weighted machine yields of tar or nicotine are available.

For the USSR in 1983, the range of tar in commercial cigarettes was reported as 21-31 mg/cigarette (median 25), and of nicotine as 1.3-1.9 mg/cigarette (median 1.6), although the methods and number of brands tested were not stated (International Agency for Research on Cancer (1986) quoting Laboratory of the Government Chemist (1984)).

Zaridze *et al* (1986) reported two analyses, although their dates were not stated. The first analysis considered 45 brands, of which 41 were from the USSR and 4 from Bulgaria; there were 2 brands of papyrosi, 11 of non-filter cigarettes and 32 of filter cigarettes. Tar ranged from 19-31 mg/cigarette, with 10% of brands below 20 mg and 3% 30 mg or more. Nicotine ranged from 1.0-2.1 mg/cigarette, with 36% below 1.5 mg and 3% 20 mg or more. The second analysis considered 39 brands from the USSR, including 21 filter brands and 18 non-filter brands, and results were reported as averages for 7 'classes' of cigarette, with 4-5 brands per class. Average tar levels were in the range 19-29 mg/cigarette, and all but 4 brands were stated to contain 19mg/cigarette or more. Class average nicotine levels were 1.0-1.8 mg/cigarette.

World Health Organization (1997) reported that, according to "unofficial investigations" in 1990, the most popular brand in Estonia had a yield around 20 mg tar and 1.1 mg nicotine, while the highest brand had a yield of 27 mg tar and 1.5 mg nicotine. They reported equivalent figures for Latvia in 1993 as 18 mg tar and 1.1 mg nicotine for the most popular brand, and 24 mg tar and 1.4 mg nicotine for the highest brand.

In 1993, average tar yield was reported to be 24 mg per cigarette in Estonia, based on an analysis of the four most commonly sold brands; 18 mg per cigarette in Latvia, based on analysis of the best-selling brand; 22 mg per cigarette in Lithuania, based on the five best-selling brands, and 22 mg/ cigarette based on 45 brands in Russia. These analyses were conducted by the Russian Institute of Carcinogenesis (RIC) according to ISO standards (Zatoński and Przewoïniak (2010)).

Franceschi and Naett (1995) stated that in Moldova cigarettes were considered high quality when they did not have more than 25 mg tar and 1.3 mg nicotine; and that the average cigarette in Lithuania had 30 mg tar.

According to annual data from Philip Morris International (2004) for 2000-2003, the market share of "ultra-light" cigarettes (1-3 mg tar) was 4-7% in Estonia, 2-5% in Latvia and Lithuania, up to

2% in Russia and <1% in Kazakhstan. (See also Table xiv in *Comparisons between countries* chapter.)

In 1997, Harkin *et al* (1997) reported that in Uzbekistan the tar yield per cigarette was limited to 12 mg, and the nicotine yield to 1.0 mg. For Lithuania, they noted that unfiltered cigarettes could contain up to 30 mg, but that a limit of 20 mg was due to be introduced in 1998, reducing to 15 mg from 2000 and 12 mg from 2007. Harkin *et al* also noted that there was no legislative limit in Belarus or Latvia (where the ranges were 18-24 mg/cigarette of tar and 1.1-1.4 of nicotine), and that in Ukraine, limits arise from industrial quality standards rather than legislation. In Russia, they noted that tar and nicotine content were "quite high" with limits of 15mg for tar and 1.0 mg for nicotine under discussion, whereas World Health Organization (1997) reported that limits had been set in 1995, for tar of 15 mg for imports, 20 mg for domestic filtered and 24 mg for domestic filterless cigarettes, and of 1.3 mg nicotine for all cigarettes.

Since joining the EU in 2004, Estonia, Latvia and Lithuania have implemented the Tobacco Product Regulation Directive 2001/37/EC, limiting the yield per cigarette of tar to 10 mg, of nicotine to 1 mg and of CO to 10 mg.

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. 102 under *References*.

As mentioned in the introduction, the survey data in this chapter are largely reproduced from the 2nd (print) edition, which covered the years up to 1995, subject to a few amendments for consistency with the Web edition, most notably using more recently published material for sources 7-11 (MONICA). For the subsequent years, only certain multinational surveys have been added (both extending the years and adding countries for sources 15-18 and 87-89 (HBSC) and 19-22 and 90-92 (ESPAD), and adding new sources 93-126). No searches for country-specific sources or surveys were undertaken. In this edition, Tables 4-8 are each presented with separate subsections for the republics, following the order used in the 2nd edition: Russia. Estonia, Latvia, Lithuania, the western republics (Ukraine, Belarus and Moldova), the Caucasus republics (Armenia, Azerbaijan and Georgia) and the central Asian republics (Kazakhstan, Kyrgystan, Turkmenistan, Tajikistan and Uzbekistan), with a final subsection for surveys conducted in multiple or unspecified republics. The notes for countries within multinational surveys are presented (below) in the same order.

Source number

1-6 Burenkov and Glasunov (1982)

a. Records of the programme for the multifactorial prophylaxis of ischemic heart disease of the All-Union Cardiological Scientific Centre. Year unknown.
1 Moscow, Russia; **2 Kaunas, Lithuania**; **3 Minsk, Belorussia**; **4 Kharkov, Ukraine**; **5 Tashkent, Uzbekistan**; **6 Frunze, Kirgizia**.

b. The Moscow and Kaunas studies were also reported by Oleinikov *et al* (1983), Zaridze *et al* (1986). Random samples of the non-institutionalized male population.

		Sample size	Response rate (%)
1	Moscow	3 966	66
2	Kaunas	5 482	69

7-11 Tolonen *et al* (2000), Kuulasmaa *et al* (1998), Wolf *et al* (1998), Molarius *et al* (1999)

a. Surveys using self-administered questionnaires in two regions of **Russia** and one of **Lithuania**, each carried out in three phases, forming part of WHO MONICA Project:

	Region	Phase	Participation rate (%)		Sample used*		Date
			Males	Females	Males	Females	
7	Moscow (intervention)	1	66	74	553	622	Feb 1984-Dec 1985
8	Moscow (control)	1	83	73	774	641	Feb 1984-Feb 1986
9	Novosibirsk (intervention)	1	71	74	797	818	May 1985-Dec 1985
10	Novosibirsk (control)	1	73	70	758	774	Nov 1985-Jan 1986
11	Kaunas	1	69	69	728	735	Feb 1983-Jan 1985
7	Moscow (intervention)	2	71	74	597	613	Feb 1988-Jan 1989
8	Moscow (control)	2	76	71	621	581	Mar 1988-Oct 1989
9	Novosibirsk (intervention)	2	71	76	840	853	May 1988-Dec 1988
10	Novosibirsk (control)	2	74	71	876	805	Dec 1988-Apr 1989
11	Kaunas	2	70	68	894	868	Dec 1986-Jun 1987
7	Moscow (intervention)	3	66	85	538	858	Jan 1992-Mar 1995
8	Moscow (control)	3	69	63	557	527	Mar 1992-Mar 1995
9	Novosibirsk (intervention)	3	72	73	819	863	May 1994-Feb 1995
10	Novosibirsk (control)	3	70	70	769	778	Jan 1995-Jun 1995
11	Kaunas	3	75	76	611	628	Feb 1992-May 1993

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

b. The *All ages* column (Tables 4-7) relates only to age 35-64 and is standardized to the world population.

c. Regular cigarette smokers: smoked cigarettes daily. All smokers: smoked cigarettes daily or occasionally, or smoked 1 g pipe tobacco or 1 cigar per week.

d. Molarius *et al* (1999) observed that no occasional smokers were reported in the 3rd phase for the Moscow centres (hence cigarette smoking prevalence shown in Table 4, sources **7** and **8,** are identical for frequency codes R and A) although the questionnaire did allow for this, and some had been reported in the earlier phases. Pipe and cigar smoking were not enquired about in phases 1-2 in the Kaunas centre (source **11**).

e. For phase 1, there are minor discrepancies between the data shown in Table 4 and equivalent data taken from World Health Organization (1989) used in earlier editions of this report.

12-14 Piha *et al* (1993) quoting WHO (no details of reference)

a. No original sources. Age group not stated. Some results may be based on regional studies, with small sample sizes and variable definitions of smoking.
12 Russia; **13 Estonia**; **14 Lithuania**.

b. It was also reported that the prevalence of smoking in Latvia was 35% for sexes combined.

15-18 and 87-89

King and Coles (1992), King *et al* (1996), Currie *et al* (2000, 2004, 2008, 2012), Inchley *et al* (2016)

Note: Source numbers 15-18 are as in the 2nd edition. Source numbers 87-89 are newly added for the web edition.

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
15 Russia	1993†	13.1	15.0	1 294	1 354
	1998	13.6	15.6	1 367	1 322
	2002	13.6	15.6	2 940	2 575
	2006	13.5	15.6	2 718	2 755
	2010	13.3	15.4	1 275	1 847
	2014	13.5	15.4	1 749	1 445
16 Estonia	1994	13.3	15.3	1 167	1 179
	1998	13.5	15.4	832	587
	2001	13.3	15.3	1 424	1 267
	2006	13.8	15.8	1 469	1 587
	2010	13.8	15.8	1 410	1 398
	2014	13.8	15.8	1 428	1 269
17 Latvia	1990*	-	-	1 053	963
	1993	13.7	15.7	1 248	1 263
	1997	13.9	15.8	1 199	1 265
	2001	13.6	15.5	1 169	1 117
	2006	13.8	15.8	1 466	1 330
	2009-2010	13.6	15.6	1 397	1 375
	2014	13.6	15.6	1 955	1 726
18 Lithuania	1994	13.3	15.2	1 886	1 759
	1998	13.5	15.3	1 512	1 435
	2002	13.7	15.6	1 873	1 905
	2006	13.6	15.7	1 907	1 861
	2010	13.7	15.7	1 720	1 792
	2014	13.7	15.6	2 017	1 698
87 Ukraine	2002	13.9	16.0	1 297	1 601
	2006	13.6	15.7	1 749	1 829
	2010	13.7	15.7	1 862	1 897
	2014	13.5	15.6	1 384	1 694
88 Moldova	2014	13.6	15.5	1 549	1 556
89 Armenia	2010	13.5	15.5	1 029	915
	2013-2014	13.3	15.3	1 163	1 044

* Not included in the international report for that wave (King and Coles (1992)), results taken from Kalnins *et al* (1995).
† Regional survey (St Petersburg region).

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.

19-22 and 90-92

Hibell *et al* (1997, 2000, 2004, 2009, 2012)

Note: Source numbers 19-22 are as in the 2nd edition. Source numbers 90-92 are newly added for the web edition.

a. School-based surveys forming part of ESPAD (European School Survey Project on Alcohol and Other Drugs). The standard procedure is to identify school grade(s) which include pupils born within a target year and thus age 15-16 at the time of the survey. The grades were usually secondary grades 9-10 (including gymnasium grades 1-2) and 1st grade of vocational schools. Nationally representative samples of schools and classes were made. All pupils present on the day in the selected classes participated but only those born within the target year are included in the analysis. Survey administration was either by teachers or research assistants. Anonymous questionnaire were completed and sealed in an envelope by the pupil, in class. The percentages **o**f 15-16 year-olds still in school and the percentages who are in the surveyed grade(s) are generally >85%.

Survey administration and exceptions to the procedures were as follows:
90 Russia: The surveys were conducted in the Moscow region only except in 2007 when the whole country was included. Administered by research assistants with teachers commonly present but not taking an active part.
19 Estonia: Grades 8-10 in 2003-2007, and grades 8-9 in 2011. In 2003-2007, 80-85% of 15-16 year-olds were in the surveyed grades. In 1995-1999, only pupils with the target year of birth participated, and the survey was administered by teachers. In 2003-2011, all pupils in the sampled grades participated and administration was by research assistants.
20 Latvia: Addition of grade 8 from 2003, also grade 7 in 2007 only, and omitting vocational schools from 2007. The survey was administered by teachers in 1995, teachers or research assistants in 1999, and thereafter by research assistants with teachers present but not taking an active part. A high level of non-participating classes, particularly from rural areas, and of discarded questionnaires was noted in the 1995 wave, and the results were not considered comparable with other countries or waves.
21 Lithuania: Grades 8-10 in 2003-2007, and grade 9 only in 2011 when only 80% of the target were in the selected grade. The survey was administered by teachers (although they were discouraged from walking round the classroom) in 1995-2003, by research assistants with teachers present in 2007 and in Vilnius in 2011, and by non-teaching school staff elsewhere in 2011. In 1995, all students in grade 10 participated, but only those with the target year of birth in the other grades. In 1999, only target-year students participated. In 2003, in classes where more than half of students were of target-year all participated while in other classes only target-year student did.
22 Ukraine: Only 70% of 15-16 year-olds were still in school in 1995, rising to 99% in 2011. Administered by research assistants with teachers usually absent. In 1995, generally only those in the target year of birth participated. The low response rate in 1999 was attributed to an influenza outbreak.
91 Moldova: Data collection was limited to schools west of the Dniester River. Grades 8-9. Questionnaires were sealed with sticky tape as individual envelopes could not be provided.
92 Armenia: Grade 9, with 82% of target age in the selected grade. All questionnaires from the class were sealed in a shared envelope.

	Date	Sample size		Participation rate (%)			Target year of birth	Average age
		Males	Females	Schools	Classes	Pupils		
90 Russia	Mar 1999	1 412	1 525	99	95	84	1983	15.3*
19 Estonia	Mar-Apr1995	1 438	1 680	–	94	83	1979	–
	Apr-May 1999	1 446	1 808	99	88	93	1983	15.3*
	Mar 2003	1 246	1 217	92	80	86	1987	15.7
	Mar 2007	1 186	1 186	91	90	79	1991	15.7
	Feb-Mar 2011	1 208	1 252	96	95	82	1995	15.7
20 Latvia	May 1995	- 2 179 -		97	49	–	1979	–
	Mar-May 1999	988	1 296	99	90	84	1983	15.3*
	Mar-May 2003	1 372	1 469	–	97	84	1987	15.8
	Apr-May 2007	1 119	1 156	92	93	83	1991	15.8
	Apr-May 2011	1 334	1 288	96	95	85	1995	15.8
21 Lithuania	Mar1995	1 502	1 694	–	100	89	1979	–
	Mar 1999	2 609	2 430	100	100	92	1983	15.2*
	Mar-Apr 2003	2 517	2 519	100	100	88	1987	15.7
	Apr-May 2007	1 172	1 239	99	99	86	1991	15.8
	May 2011	1 237	1 239	99	99	89	1995	15.9
22 Ukraine	Mar-Apr 1995	3 332	3 861	–	99	93	1979	–
	Apr 1999	1 427	1 567	97	–	81	1983	15.3*
	May 2003	1 918	2 255	98	98	83	1987	15.9
	May 2007	1 110	1 337	98	98	82	1991	15.9
	Apr-May 2011	1 025	1 185	99	99	83	1995	15.8
91 Moldova	May 2011	1 033	1 129	100	100	83	1995	15.9
	Mar-Apr 2003	800	1 045	92	92	80	1987	15.7
	Apr-May 2007	1 983	1 956	96	–	80	1991	15.8
	Apr-May 2011	855	902	77	77	80	1995	15.8
92 Armenia	Apr-May 2007	1 713	2 342	99	99	79	1991	15.8

* 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.

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.

23-26 Ioffina *et al* (1999) quoting Seenev (1996)
a. Years not stated. Age groups not stated (adult).
23 Ukraine; **24 Moldavia**; **25 Kazakhstan**; **26 Tashkent, Uzbekistan**.

27 Oleinikov *et al* (1981)
a. Postal questionnaire in Moscow. Response rate for households 60%. Sample size (households) 966, (males) 1 236, (females) 1 440.
b. Year given by Zaridze *et al* (1986).
c. Assumed extensions to age distribution for percentage smokers and for cigarettes/person/day are shown in the extended versions of Tables 4 and 6 respectively in the Excel tables workbook.

28 Loransky (1977)
a. Survey by Central Institute for Scientific Research in Health Education of the USSR Ministry of Health. Results presented are for Moscow. Age group not stated.
b. Results for other regions not available, but were described as showing that smoking varied by region, and that the prevalence of smoking among women was 3.5 to 11 times lower than among men.

29 Chazova *et al* (1989)
a. Study carried out within the framework of the Study on Multifactorial Prevention of CHD in a district of Moscow. Representative sample.

30 Burenkov and Glasunov (1982)
a. Study by All-Union Cardiological Scientific Centre, in a district of Moscow. Year not stated.
b. Smoking was undefined, but other surveys conducted by the same organisation among adults (sources 1-6) used a definition of at least 1 cigarette per day.

31 Shevtshuk and Tarasova (1983)
a. Survey in Lipetsk, Russia. Sample size (males) 813, (females) 716.
b. Results shown in Table 4 are for schoolchildren in grades 7-10, and adults. The following prevalence results for students are also given:

	Males	Females
Primary technical college	56	5.2
Secondary technical college	56	5.9
University	51	5.0

32 Denisova (2000)
a. Survey in Novosibirsk (western Siberia, Russia), with interview and physical examination. Sample studied in 1984-1985 at age 10-14; (males) 660, (females) 658. Same children studied again in 1989-1990 at age 15-17; (males) 317, (females) 345. A new sample was studied in 1994; (males) 319, (females) 300.
b. Smokers marked as frequency *: smoked daily. Regular smokers: smoked weekly. All smokers: (1984-1985 and 1989-1990) not further defined.

33 Geizerova and Masironi (1988)
a. Moscow. No original source.

34 Prokhorov *et al* (1988), Chazova *et al* (1989), Prokhorov and Alexandrov (1992), Alexandrov *et al* (2000)
a. Study in secondary schools in Cheremushkinskii district of Moscow. Nine schools selected randomly, none refusing to participate. Approximate ages corresponding to school grades 5-10/11.
b. Results presented for 1985 are from anonymous self-completion questionnaires administered in class under supervision of a researcher. Sample size 5 584. Results (not presented here) using 'expert assessment' (see also source **64**) were very similar.
c. Results for 1995 are based on 'expert assessment'. Sample size (student experts) 220, (total) 3 062.

d. Smokers marked as frequency *: smoked at least 1 cigarette per day. Regular smokers: smoked at least 1 cigarette per week. All smokers: includes occasional smokers who had smoked at least 1 cigarette in the last 3 months.

35 World Health Organization (1997) quoting Ministry of Health

a. Based on surveys conducted in the Russian Federation, predominantly in the large cities such as Moscow or St Petersburg. Age group not stated.

36-40 Hurt (1995) quoting Prokhorov (1993), Tchachenko and Riazantsev (1993)

a. Various studies in Russia:
36 Industrial areas. Age group not stated,
37 Location not stated. Age 11-16. Smokers marked as frequency *: smoked daily,
38 St Petersburg. Age group not stated,
39 Siberia. Age group not stated,
40 Moscow.

41 Hearn *et al* (1991)

a. Survey conducted in 4 Moscow schools using a standardized questionnaire. Age range not stated, but average age 14.5 years. Year not stated. Sample size (males) 251, (females) 244. Response rate 96%.
b. Regular smokers: smoked at least a partial pack of cigarettes a week. All smokers: smoked at least a few cigarettes per month.

42 Elgarov *et al* (1992)

a. Random sample of the non-organized population of the region of Nalchik (southern Russia). Year not stated. Sample size (males) 2 562, response rate 70%.
b. Results presented are combined from blue and white collar workers—prevalence was higher among blue collar workers at all ages.

43 Puska *et al* (1993)

a. Representative survey in Pitkäranta, Republic of Karelia (in the northwestern part of Russia) into prevalence of cardiovascular risk factors. Self-completion questionnaire completed at examination centre. Sample size (males) 500, (females) 500. Response rate (males) 77%, (females) 92%.
b. Smokers: smoked regularly for at least a year and had smoked in the last month.

44 World Health Organization (1997)

a. Moscow adolescents. No original source.

45 Izvestiia (1993)

a. Russia. No original source. Year not stated.

46 Elgarov and Elgarova (1994)

a. Survey of schoolchildren in Nalchik (southern Russia). Approximate ages corresponding to school grades 8-10. Year not stated. Sample size (males) 2 613, (females) 1 985, response rate 86%.
b. Regular smokers: smoked 1 or more cigarette per week. All smokers: not further defined.

47 Trubacheva *et al* (1994)

a. Study of coronary atherosclerosis risk factors in two small towns in Western Siberia, Russia. Year not stated. Sample size (males) 6 260, (females) 4 576.
b. Results presented here are average of the two towns. Smoking prevalence was lower in the second town which had a migrant population.

48 World Health Organization (1996)

a. Russia. No original source.
b. Smoking prevalence, not further defined.

49 Bilitchenko and Kharlova (1996)

a. Moscow. No original source.
b. Smokers, not further defined.
c. The *All ages* values in Table 4 refer to ages 25-65; age-specific data are not available for the age groups marked *.

50 Carolina Population Center (1998) and personal communication

a. Russian Longitudinal Monitoring Survey, round 6. Nationally representative survey, targeting 4 000 households. Personal interviews with all adult household members. Children's questionnaires were answered by an adult. Response rate (households) 80%, (adults) 97%.

b. Only 17 men and 2 women were recorded as being smokers other than cigarette smokers.

51 Levshin *et al* (1997, 2000)

a. Survey of the general population in Moscow during 1995-1997. Total sample size 3 000 (including samples of physicians and teachers, results not presented here).

b. Age-specific data are not available for the age groups marked *.

52 Torabi and Crowe (2000)

a. Survey in urban and rural schools in the district of St Petersburg, Russia. Approximate age group corresponding to 7th-9th grades. Year not stated. Sample size 1 118.

b. Smokers: had smoked in last 30 days.

c. It is also reported that 3.7% of the students had ever used smokeless tobacco.

d. Consumption category estimation based on 1-5, 6-10, 11-20, 21+ cigarettes/smoker/day. The total over these categories is virtually the same as the prevalence given for smokers in last month.

53 Volkova *et al* (2000)

a. Survey in the Ural region of Russia. No original source. Year and age not stated.

b. It was also reported that the prevalence of smoking among women was 8-12%.

54 Raudsepp *et al* (1988)

a. Estonia. Study of pupils at 4th-11th grades. Results presented here are for approximate ages corresponding to 6th-11th grades, sample size (males) 5 365, (females) 6 623.

55 Aareleid *et al* (1994) quoting Lipand *et al* (1992)

a. Health behaviour survey in Estonia.

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

56 World Health Organization (1997)

a. Estonia. No original source.

57 World Health Organization (1997)

a. Estonia. Survey in schoolchildren. No original source.

b. Smokers marked as frequency *: smoked daily. All smokers: smoked daily or occasionally.

58 Nurk *et al* (1999) and personal communication

a. Cross-sectional surveys at 17 secondary schools in Tallinn, Estonia. Conducted by the CINDI (Countrywide Integrated Noncommunicable Diseases Intervention Programme) Children's Programme team from the Estonian Institute of Cardiology. Confidential questionnaire completed in class with teachers absent. Estonian and Russian students attend separate schools and completed the questionnaire in their mother tongue. Age corresponding to school grade 9.

Year	Sample size		% Estonian
	Males	Females	
1991-1992	609	595	56
1993-1994	509	529	49
1995-1996	450	493	54

b. Regular smokers: smoked once a week. All smokers: smoked in last 3 months.

c. Consumption per smoker based on average number smoked per week by regular smokers.

59 Puska (1995) quoting Lipand *et al* (1993)

a. National postal survey on health behaviour in Estonia. Sample size (males) 451, (females) 497. Response rate (males) 60%, (females) 66%.

60 World Health Organization (1997)

a. Estonia. Nationwide survey. No original source.

b. A further 7.9% of adults (sexes combined) were occasional smokers.

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

61 Pärna (1999)

a. Study in randomly selected schools in Tallinn, Estonia, including 10 Estonian- and 7 Russian-speaking schools. Anonymous questionnaires completed in class. Approximate ages corresponding to school grades 8, 10 and 12.Sample size (Estonian) 1 269, (Russian) 901.

62 World Health Organization (1997)

a. Latvia. No original source.
b. Regular smokers: have smoked for at least a year.

63 Bosma *et al* (1994)

a. Kaunas-Rotterdam Intervention Study (KRIS), Lithuania. Baseline cardiovascular screening survey representing various socio-economic strata of the Kaunas male urban population. Sample size 2 452, response rate 69%.
b. Consumption category estimation based on 1-9, 10-19, 20+ cigarettes/smoker/day.

64 Goshtautas *et al* (1988)

a. Survey of schoolchildren in Kaunas, Lithuania, using the method of 'expert assessment', where two student leaders from each class reported the smoking prevalence of their classmates. Age range corresponds to school grades 4-11 (approximately ages 9-19).

	Sample size	
	Males	**Females**
1981	13 436	14 656
1982	13 521	14 766
1985	13 890	15 608

b. The Moscow part of this study also used self-assessment, which is reported as source **34**.
c. Smokers marked as frequency *: smoked at least 1 cigarette per day. Regular smokers: smoked at least 1 cigarette per week. All smokers: included occasional smokers who smoked at least 1 cigarette per month.

65 World Health Organization (1997)

a. Lithuania. No original source.

66 Geizerova and Masironi (1988)

a. Lithuanian-SSR. No original source.
b. Prevalence among girls is given as 'low' in a table, but as 'none' in text.

67 Domarkiene *et al* (1999)

a. Surveys in Kaunas, Lithuania, carried out according to the WHO-MONICA protocol.

Year	**Age**	**Sample size**	
		Males	**Females**
1993	35-64	611	628
1995	65-80	476	327

b. Regular smokers: smoked 1+ cigarettes per day.

68 Gorbas *et al* (1994)

a. Two epidemiological surveys carried out in Ukraine at an interval of 12 years, but years not stated (1981 and 1993 assumed). Representative of the non-organized population. Sample sizes 2 191, 1 901.

69 Kvasha *et al* (1997)

a. Epidemiological study, representative of the female population of Ukraine. Sample size 2 259.
b. Year not stated, but results are presented in terms of changes over 5 years.
c. 99% of smoking women are reported to be urban citizens.

70-72 Zaridze *et al* (1986) quoting Orlovski (1977)

	Location	**Year**	**Sample size**	
			Males	**Females**
70	Armenia	1960	792	893
71	Georgia	1960	544	694
72	Azerbaidjan	1963	695	1 384

73 World Health Organization (1997)
a. Youth in Yerevan, Armenia. No original source.

74 World Health Organization (1997), Davidiants (1997)
a. Epidemiological study of schoolchildren using a random sample in Yerevan, Armenia. Youngest age included is 10. Sample size 245.

75 Grim *et al* (1997)
a. 2-stage cluster sample in Tbilisi, Georgia, carried out in 5 days. Year not stated. Sample size 300.

76 World Health Organization (1997)
a. Kyrgystan. No original source.
b. Tobacco users.

77 World Health Organization (1997)
a. Bishkek, Kyrgystan. No original source.
b. It is also reported that approximately 50-60% of boys and 2-4% of girls aged 14-16 use tobacco. Smoking by women may be under-reported for cultural reasons.

78 Makhmudov and Adilova (1988)
a. Control group from a smoking control study in Tashkent, Uzbekistan. Year not stated. Sample size (males only) 1 590.
b. Results presented as source **5** correspond to the active intervention part of this study, sample size 1 982.

79-80 World Health Organization (1997)
a. Uzbekistan. No original source. Results shown as source **79** relate to Uzbek population, source **80** to other nationalities.
b. Overall age group not stated, 15+ assumed; age-specific data are not available for the age groups marked *.
c. Smokers: smoked 1+ cigarettes per week.

81 World Health Organization (1997)
a. Survey in 1990-1992 in Dashkhovuz, Turkmenistan. No original source. Age group not stated (adults).

82 World Health Organization (1997)
a. Quoting a report published in 1994 (no details). Uzbekistan. Year not stated.
b. Overall age group not stated, 15+ assumed; age-specific data are not available for the age groups marked *.

83 Adriaanse *et al* (1986)
a. USSR regional sample, but location not stated. Age not stated.

84 Loransky *et al* (1983)
a. Quoting Research Institute of Sanitary Education (USSR Ministry of Health). Survey in 8 towns (Zelinograd (Moscow), Kiev, Erevan, Lipetsk, Ufa, Daugavlpils, Stavropol, Tula). Total sample size (males) 688, (females) 999, sample in each town varies from 87-284.
b. Only combined results for all towns are presented here, but prevalence varied from 51% to 78% for men, and from 2% to 24% for women. Age-specific results taken from graph.
c. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

85 Loransky *et al* (1983)
a. Survey in 11 towns (Moscow, Zelinograd, Dmitrov, Lipetsk, Ufa, Daugavpils, Essentuki, Chabarovsk, Sukhumi, Vilnius, Kaunas). Approximate ages corresponding to school grades 7 and 10.Sample size overall (males) 1 424, (females) 1 395 in grades 4-10.

86 Crofton (1990) quoting Director General of WHO (1988)
a. USSR. Year not stated, probably 1981-1986. Age not stated (adults).

87-89 HBSC. See sources 15-18 above.

90-92 ESPAD. See sources 19-22 above.

93-97 World Health Organization (2012)

a. World Health Survey. Multinational survey initiated by the World Health Organization using standard survey procedures and instruments, conducted in 2002-2003. Target population comprises all people age 18+ living in the country (i.e. including guest workers, immigrants and refugees). Nationally representative except for the Russian survey which was regionally based. Households selected using a random stratified sampling procedure, then one individual per household selected. See also Table xi in the *Comparisons between countries* chapter.

	Sample size	Response rate (%)	
		households	individuals
93 Russia (region)	4 425	100	100
94 Estonia	1 101	87	99
95 Latvia	856	100	94
96 Georgia	2 749	92	99
97 Kazakhstan	4 498	100	100

b. Regular smokers: smoked daily. All smokers: smoked daily or not daily.

c. Calculation of cigarettes per person based on percentage smokers of all products, and number of cigarettes per cigarette smoker, so may overestimate.

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.

98-100 Mohedano-Brethes and Soufflot de Magny (2005), 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.

98 Estonia
99 Latvia
100 Lithuania

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. In 2002 (Candidate Country Eurobarometer), the sample consisted of citizens of the country, and thereafter 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.

d. Frequency U (in Table 4) represents positive answers to questions such as "Do you smoke cigarettes?" or "You smoke packeted cigarettes". From 2005-2006 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.

e. 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.

f. Consumption category estimation based on <5, 5-9, 10-14, 15-19, 20-24, 25-29, 30-34, 35-39 and 40+ cigarettes/smoker/day. Exact values for cigarettes/smoker/day are available for 2009 (see also Appendix III) and 2012.

101-117 Centers for Disease Control and Prevention (CDC) (2016b), Global Youth Tobacco Survey Collaborating Group (2003), Warren *et al* (2008)

a. Global Youth Tobacco Survey (GYTS). National (except where indicated otherwise in the table below) school-based surveys targeting ages 13-15, using standardised data collection procedures. We show results restricted to 13-15 year olds where available, although it is not always clear from the original sources whether the whole sample or only ages 13-15 are included.

		Response rate (%)				Sample size (age 13-15)
		Schools	Classes	Students	Overall	
101 Russia (Moscow)	1999	99	-	86	85	3 157
102 Russia (Sarov)	2002	100	100	97	97	1 121
103 Russia	2004	98	100	88	86	10 956
104 Estonia	2002	96	100	82	78	4 307
	2007	92	95	78	68	2 330
105 Latvia	2002	100	-	84	-	2 150
	2007	98	100	83	81	2 476
	2011					
106 Lithuania	2001	100	-	82	82	1 993
	2005	100	100	83	83	1 646
	2009	80	100	82	65	1 237
107 Ukraine (Kiev)	1999	100	-	81	81	4 156
108 Ukraine	2005	86	100	84	72	6 579
	2011	-	-	-	92	3 550
109 Belarus	2004	100	100	87	87	3 909
110 Moldova	2004	100	100	89	89	3 977
	2008	100	100	84	84	3 501
111 Armenia	2004	100	100	85	85	1 300
	2009	100	100	80	78	2 610
112 Azerbaijan	2011	-	-	-	73	2 018
113 Georgia	2002	100	100	85	85	3 410
	2008	100	100	82	82	891
114 Kazakhstan	2003	100	100	89	89	9 871
	2009	92	100	87	80	8 051
115 Kyrgyzstan	2004	100	100	99	99	3 434
	2008	100	100	93	93	3 004
116 Tajikistan	2004	100	100	97	97	5 121
117 Uzbekistan (Tashkent)	2008	100	100	95	95	1 375

b. Smokers marked as frequency *: smoked daily. All cigarette smokers: smoked on at least one day in the last 30 days. Prevalence for product A* refers to current users of any tobacco product (i.e. may include smokeless tobacco users).

c. Among current cigarette smokers, the % smoking hand-rolled or manufactured cigarettes were reported as follows:

		Hand-rolled		Manufactured	
		Males	Females	Males	Females
104 Estonia	2002	10.9	6.7	94.4	93.8
113 Georgia	2003	6.2	7.5	93.7	93.7

The prevalence (%) of usage of tobacco products other than cigarettes was as follows:

		Any product other than cigarettes		Cigars		Other	
		Males	Females	Males	Females	Males	Females
101 Russia (Moscow)	1999	15.4	6.1				
102 Russia (Sarov)	2002	15.7	4.5				
103 Russia	2004	18.1	11.1	14.1	10.0		
104 Estonia	2002	18.4	13.6	15.8	12.9	Pipe: 3.4	1.3
						Smokeless: 3.3	1.4
	2007			17.8	13.3		
105 Latvia	2002	15.8	7.3				
	2007	42.0	33.6	19.8	10.1		
	2011			11.6	7.8	Shisha: 20.9	21.9
106 Lithuania	2001	9.3	4.9				
	2005	13.2	5.7				
	2009	14.4	6.5				
107 Ukraine (Kiev)	1999	9.9	5.6				
108 Ukraine	2005	15.2	10.5	13.4	9.5		
	2011			8.0	6.3		
109 Belarus	2004	15.2	10.4	13.5	9.8		
110 Moldova	2004	12.8	4.2	9.1	3.7		
111 Armenia	2004	10.0	1.9	9.7	0.8		
	2008	8.3	3.7				
113 Georgia	2002	9.6	3.7	8.1	3.4		
114 Kazakhstan	2003	9.3	4.2	8.2	5.0		
	2009	6.3	5.2				
115 Kyrgyzstan	2004	7.6	2.9	5.4	2.8		
	2008	7.3	3.8				
116 Tajikstan	2004	8.0	3.4	5.9	2.5		
117 Uzbekistan (Tashkent)	2008	0.3	0.8				

118-120 Eurostat (2007)

a. Surveys collated by Eurostat as the 2004 round of data collection on Health Interview Surveys.
118 Estonia: Health Interview Survey. National survey, not stated whether includes residents of institutional premises. Target sample 6 019 persons age 15-79. Response rate 84%. Achieved sample 16 690.
119 Latvia: Health Survey. National survey, excluding residents of institutional premises. Target sample 10 000 persons age 15-74. Response rate 75%. Achieved sample 7 500.
120 Lithuania: Health Behaviour Monitoring. National survey, excluding residents of institutional premises. Target sample 3 000 persons age 20-64. Response rate 73%. Achieved sample 2 195.

b. The *All ages* values refer to ages 15-79 for Estonia, 15-74 for Latvia and 20-64 for Lithuania; age-specific data are not available for the age groups marked *. The highest age groups shown are 75-84 and 85+.

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

d. Calculation of cigarettes per person based on percentage smokers (product unspecified), and number of cigarettes per cigarette smoker, so may overestimate.

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

121-122 Eurostat (2013)

a. European Health Interview Surveys, coordinated by EUROSTAT, Wave 1. Smoking behaviour was obtained through self-completion questionnaires. Lithuania did not participate.
121 Estonia: Conducted in Oct 2006-autumn 2007. Individuals living in private households and in institutional settings. Sample size 6 434, response rate 60%, no proxy respondents.
122 Latvia: Conducted in Sep-Dec 2008. Individuals living in private households. Sample size 6 458, response rate 72%, 3% proxy respondents.

b. The *All ages* values refer to ages 15-86 for Estonia, and 15+ for Latvia; age-specific data are not available for the age groups marked *. The highest age groups shown are 75-84 and 85+.
c. Regular cigarette smoker: smoked manufactured or hand-rolled cigarettes daily.
d. Consumption category estimation based on two categories, 1-19 and 20+ cigarettes/smoker/day, and resulting figures should be regarded with caution.
e. Assumed extensions to age distribution for percentage smokers are shown in the extended version of Table 4 in the Excel tables workbook.

123 Gallus *et al* (2012, 2014)

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 **Latvia** used stratified random sampling. Age range 15-74. Sample size 1 061, response rate 45%.
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	92.0
Cigarettes, 10-pack	4.5
Hand-rolling tobacco	1.8
Other	1.4

c. Among current cigarette smokers, 97% smoked only factory made cigarettes, 1% smoked only roll-your-own, and 2% smoked both types.
d. Use of smokeless tobacco was reported by 0.6% of men and 0.9% 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.

124-126 Centers for Disease Control and Prevention (CDC) (2016a)

a. Global Adult Tobacco Survey (GATS). Part of an international program under the WHO Framework Convention on Tobacco Control (FCTC), using standard protocol. Multi-stage household surveys, with one person age 15+ selected from each household. Results are weighted to be nationally representative of the non-institutionalised population.

			Response rate (%)			Sample size (individuals)
			Household	Individual	Overall	
124	**Russia**	2009	99	99	98	11 406
125	**Ukraine**	2010	80	95	76	8 173
126	**Kazakhstan**	2014	–	–	97	4 425

b. Regular smokers: smoked daily. All smokers: smoked daily or less than daily. For Russia, total cigarette (TC) included papyrosi as well as manufactured and hand-rolled cigarettes.
c. The prevalence (%) of waterpipe (nargile, calean) and smokeless tobacco use was reported as follows:

		Waterpipe		Smokeless	
		Males	Females	Males	Females
Russia	daily	0.8	0.3	0.3	0.0
	current	–	–	1.0	0.2
Ukraine	current	3.2	1.1	0.5	0.0
Kazakhstan	current	–	–	2.8	0.0

d. Consumption per smoker (Table 5, Ukraine and Kazakhstan) refers to consumption per daily cigarette smoker. Calculation of cigarettes per person (Table 6) based on prevalence of daily (Kazakhstan) or daily and non-daily (Ukraine) total cigarette smoking (manufactured and hand-rolled) and number of cigarettes (type unspecified) per daily smoker, so may overestimate.

Additional sources (not presented in tables)

Denisova (2000) reported a survey in Chukota (far north of Russia), conducted in 1990 under expedition conditions in coastal and tundra settlements. Representative sample, age 15-17. Sample size (males) 165, (females) 157. The prevalence of smoking (weekly) among girls was 23% among natives and 13% among non-natives. Among boys, both native and non-native, it was 40-41%.

Zaridze *et al* (1986) quoting Orlovski (1977) reported a study in 1957 in the Buryat ASSR (in the east of USSR). Sample size (ethnic Buryat) 541, (other) 903. 81% of Buryat women and 10% of other women were cigarette smokers.

For Armenia, A. Bazarjian, director of the Armenian National Institute of Health Care's anti-smoking program, (year not stated, quoted by Snark News Agency (2000)) reported that 50-56% of teenage boys and 20-25% of girls smoked regularly. The majority smoked 15-20 cigarettes per day.

For Estonia, Volozh *et al* (1995) reported that in a number of epidemiological risk factor surveys by the Division of Preventive Cardiology of the Estonian Institute of Cardiology, carried out over 14 years and involving 12 000 examinees, 50-54% of men and 17-20% of women were regular smokers.

In Georgia, according to World Health Organization (1997), smoking was rare among women before about 1980. In the mid-1990s, the prevalence of smoking among young people (age 17-30) was 40-50% for males, and about 40% for females.

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