**OECD Health Statistics 2018
Definitions, Sources and Methods**

**Tobacco consumption in grams per capita (age 15+)**

Annual consumption of tobacco items (e.g. cigarettes, cigars) in grams per person aged 15 years old or more.

**Note:** The methodology to convert tobacco items into grams may differ across countries. Typically a cigarette weighs approximately 1 gram of which the tobacco content can vary between 65-100% depending on the type of cigarette; a cigar weighs approximately 2 grams and contains a similar proportion of tobacco as a cigarette.

**Sources and Methods**

**Australia**

**Sources:**

**Methodology:**
- Data are based on the volume of tobacco cleared through excise and customs.
- Coding changes from duty paid on weight to duty paid on number of sticks of cigarettes occurred in 1999-2000.
- One cigarette stick is assumed to contain 0.8 grams of tobacco.


**Austria**

**Source:** Statistics Austria, Statistisches Handbuch, Tables 2.12 and 23.19 (several issues).

**Note:** No recent data on tobacco consumption in grams per capita are available.

**Further information:** http://www.statistik.at/web_en/.

**Belgium**

**Source:** Centre de Recherche et d’Information des Organisations de Consommateurs. Data are no longer available.

**Further information:** http://www.crioc.be/.

**Canada**

**Source:** Statistics Canada, Production and Disposition of Tobacco Products, Survey, monthly.
- 2004-2005: CANSIM Table 303-0062.

**Coverage:** Population aged 15 years old and over.

**Methodology:**
- Calculation derived from four main variables: total domestic cigarette sales multiplied by 0.76 grams of tobacco per cigarette; total domestic cigar sales times (rough estimate) of 4 grams of tobacco per cigar; total grams of domestic sales of fine cut tobacco; total grams of domestic sales of pipe tobacco and other tobacco. These four
variables were added together and then divided by the population aged 15 years old and over, in that particular year, to arrive at the value of tobacco consumption per capita age 15 years old and over from 1968 to 2005.

The Canadian tobacco sales of pipe and fine cut manufactured tobacco were reported in kilograms, while the definition requested grams per person 15 years of age and over. This may increase the measurement error due to rounding. The suppression of some data to meet confidentiality requirements (e.g. pipe tobacco sales since 1991, cigar sales since 2001) is likely to produce some degree of under-estimation.

- Instead of the per capita tobacco consumption by Canadians, the data report per capita sales in Canada of domestically manufactured tobacco products; imported tobacco products are excluded.

- Because tobacco sales in Canada are now composed of a considerably larger proportion of imported tobacco products, starting in 2006 these data are no longer an adequate substitute for a measurement of tobacco consumption by Canadians.


### Chile

**Source:** Ministry of Health (MINSAL), Epidemiology Department, National Health Survey (“Encuesta Nacional de Salud”).

**Coverage:**
- National (public and private sector).
- ENS 2016-2017: national. Includes the population aged 15 years old and over.
- ENS 2009-2010: national. Includes the population aged 15 years old and over.
- ENS 2003: national. Includes the population aged 17 years old and over.

- Question used in ENS for assessing the number of cigarettes per smoker per day (in Spanish): “Responde solo si “Actualmente ud fuma cigarrillos? = Si, uno o más cigarrillos al día. TA4. Como promedio, ¿Cuántos cigarrillos fumó al día durante los últimos 30 días?” (Translation: only current smokers should respond. On average, How many cigarettes did you smoke per day, for the last 30 days?).


### Czech Republic

**Source:** Czech Statistical Office. Calculation per capita aged 15 years old and over by the Institute of Health Information and Statistics of the Czech Republic.

**Methodology:**
- Consumption reflects only cigarettes, including home produced cigarettes; cigars and particular types of tobacco (pipe, chewing, snuff, etc.) are not included.
- Data include estimate of consumption of home-rolled cigarettes.
- One cigarette is considered equivalent to 1 gram of tobacco.
- In 1997, there was an announcement of raising the price of cigarettes for 1998.
- Total consumption is derived from data on industrial production, imports and exports of cigarettes.


### Denmark

**Sources:**

**Methodology:**
1970-1995: Cigarettes were assumed to weigh 0.65 grams of tobacco per cigarette, and cigars, cigarillos and cheroots were assumed to weigh 2 grams per item.

⚠️ Break in time series in 1996 due to a change in source.

Further information: [http://www.statistikbanken.dk](http://www.statistikbanken.dk) and [http://sundhedsdatastyrelsen.dk/da](http://sundhedsdatastyrelsen.dk/da).

### Estonia

Data not available.
Finland

Sources:
Until 2009: Statistics Finland.

Methodology:
- Rates for each year are the annual wholesale trade purchases and imports before the year 1994.
  1 The Finnish Customs did not release information on pipe and cigarette tobacco in 2003–2007 and 2009 due to the Secrecy Act (so-called dominance rule, according to which statistical information on products can only be imported by less than three companies). The total consumption has been estimated by using the data from the previous year (the proportion of pipe and cigarette tobacco represents 22% of total consumption in 2003-2007 and 14% in 2009). In 2008 and 2010-2014, the exact data have been released.
- The first anti-smoking legislation was given in 1976, which explains the decline from 1975 to 1976.

France

Sources:
Tobacco data: Observatoire français des drogues et des toxicomanies (OFDT).
Population data: Institut national de la statistique et des études économiques (Insee).
Coverage: Metropolitan France (excluding Corsica).

Methodology:
- Data refer to all types of tobacco.
- Data do not include tobacco purchased outside of France nor on the black market, but provide a good estimate of tobacco sales in mainland France.
- Daily tobacco consumption in grams per adult aged 15 years old and over per day. This number was multiplied by the number of days per year.
- 2010, 2011 and 2012: Data are estimates and have been calculated as follows: [Tons of tobacco sold x 1000000 (in order to obtain grams)] / (population aged 15 years old and over), using OFDT data (Observatoire français des drogues et des toxicomanies), available at Insee, Ventes totales de tabac, http://www.insee.fr/fr/themes/tableau.asp?reg_id=0&ref_id=NATTEF06236.
- Since the 1991 Evin Law, the price of tobacco has increased several times and purchases at constant prices have dropped by 3.4% per year on average. Strong price increases have led to a drop of nearly 30% of purchases in the volume of tobacco in France between 2002 and 2004. However, this trend was accompanied by additional purchases in neighbouring countries (about 6% of all tobacco purchases in France in 2004). In 2005, price and volume of tobacco purchases have stabilised. By devoting 1.7% of their budget on tobacco in 2004, French people are below the average for the EU-25 (2.0%): prices are higher in France, but consumption is lower (Source: Insee Première No 1110, 01/12/2006, http://www.insee.fr/fr/themes/document.asp?ref_id=ip1110).

Break in time series in 1990: Data prior to 1990 refer to cigarettes and cigars only.


Germany


Methodology: Consumption of tobacco in grams per capita (15 years and more) recalculated on the basis of 1 gram per cigarette and 2 grams per cigar/cigarillo. Consumption of pipe and fine cut tobacco is also included.

Break in time series in 1991:
- Starting from 2011, the population numbers are based on the Federal Census 2011 (census data as of 27 November 2015).
On the basis of the 2011 census, the population figures were recalculated for methodological purposes for the reporting years 1991 to 2010. The results of this recalculation only serve to adjust statistical time series and results; however, they do not represent an official revision of the previous population figures before the census. Therefore, for the years from 1991 onwards, differences to previous publications of population-related numbers are possible. The population numbers prior to 1991 are taken from the Update of the Population based on earlier censuses (Former Federal Republic of Germany 1987, German Democratic Republic 1990). Until 1990, Federal Republic of Germany; from 1991, Germany after reunification.

Further information: [http://www.destatis.de](http://www.destatis.de) and [http://www.gbe-bund.de](http://www.gbe-bund.de).

**Greece**

**Sources:**
- 2009-2015: Data derived from the Greek Household Budget Survey conducted yearly by the Hellenic Statistical Authority.

**Methodology:**
- 2009-2015: 1 cigarette or 1 cigar contains 1 gram of tobacco.
- 1983-2008:
  - Data are based on sales of tobacco.
  - Number of cigarettes consumed only.
  - The weight of 1000 cigarettes equals to 1000 grams (in accordance to EU specifications).

**Further information:**
- For more information on the Household Budget Survey (HBS), see [http://www.statistics.gr/el/statistics/](http://www.statistics.gr/el/statistics/)-/publication/SFA05/-.  

**Hungary**

**Source:** Hungarian Central Statistical Office (KSH), Statistical Yearbook of Hungary.

**Methodology:** Data are calculated on the basis of production and external trade statistics.

**Further information:** [http://www.ksh.hu](http://www.ksh.hu).

**Iceland**

**Source:** Statistics Iceland.

**Methodology:**
- Based on sales figures from State Wine, Spirit and Tobacco Authority.
- From 1965 onwards: a cigarette equals 1 gram, and a cigar equals 2.0 grams.
- 1960-1964: a cigarette equals 1 gram, and a cigar equals 2.5 grams.

**Further information:** [http://www.statice.is/](http://www.statice.is/).

**Ireland**

**Source:** Central Statistics Office. Revenue Commissioners Annual Statistical Report.

**Methodology:**
- Assumed 1 cigarette is 1 gram. All other tobacco types (including cigars) are given by weight of tobacco.
- Tobacco refers to cigarettes, cigars (tobacco content), Fine Cut tobacco and other smoking tobacco.
- Figures are based on excise duty data on tobacco products retained for home use.


**Israel**
Coverage: Cigarettes and role-your-own (RYO) tobacco.
Methodology:
- The data are based on the official government publication on taxation, which presents data on all aspects of tax collection in Israel.
- The estimate for annual cigarette consumption is based on sales tax charged on cigarette packs and on roll-your-own (RYO) tobacco for cigarettes.
- The annual consumption of cigarettes was multiplied by 0.7 grams of tobacco per cigarette, and then divided by the average population aged 15 years old and over, to arrive at the value of tobacco consumption per capita.
- One cigarette is counted as 0.7 grams of tobacco.
- These estimates exclude consumption of cigarettes purchased at duty free stores.

Deviation from OECD definition: Data only include cigarettes and role-your-own (RYO) tobacco.

Note: The statistical data for Israel are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy

Coverage: Population aged 15 years old and over.
Methodology: Till the year 1979 data were available by quantity of goods consumed and expressed in grams, litres and units. After a methodological revision in the year 1979 the survey observes the monthly household expenditure and does not provide data in terms of quantity. Data are thus not available after 1979.
Further information: http://en.istat.it/.

Japan

Sources:
1985 onwards: Japan Tobacco Inc. (Tobacco Institute of Japan) and Statistics Japan, Labour Force Survey.

Korea

Sources:
Methodology:
- Data are provided by the Korea Tobacco Association, Ministry of Health and Welfare and Korea Customs Service, and calculated by the Korea Institute for Health and Social Affairs.
- Data are calculated on the assumption that a cigarette contains 1 gram of tobacco.

Latvia

Data not available.

Luxembourg

Data not available. Data on smoking habits are collected by a national foundation on its own initiative. They determine the questions asked. Currently, the question asked is “Are you currently: non-smoker / ex-daily smoker / ex-occasional smoker / daily smoker / occasional smoker?”

Mexico
Data not available.

**Netherlands**

**Sources:**
From 2002, up to 2009: *Statistics Netherlands*. Consumption of food, drinks and tobacco. Data are based on fiscal data (banderollen), which are no longer available.
Up to 2001: *Vademecum Gezondheidsstatistiek Nederland* (several issues).

**Methodology:**
- Grams are calculated by assuming a weight of 2 grams for a cigar and 1 gram for a cigarette.
- 2007-2009 estimates: The consumption of tobacco via cigars has been estimated; the average number of cigars bought (and supposedly smoked) has been estimated as the same as in 2006.


**New Zealand**

**Sources:**
2010-2017: *Annual Tobacco Returns*.
Up to 2009: *Statistics New Zealand*.

**Coverage:**
- Sales data for cigarettes and loose tobacco in NZ (from 2010 onwards: covering all tobacco-producing companies; before 2010: only covering the three largest companies, i.e. about 97% of the market), from tobacco returns provided by the tobacco companies.
From 2010 onwards:
- Tobacco consumption per capita from 2010 and beyond is derived from the Annual Tobacco Returns of all the tobacco-producing companies in NZ (Annual Tobacco Returns are filed by manufacturers and importers according to section 35 of the Smoke-free Environments Act 1990).
- Data from 2014 to 2017 exclude duty-free sales, which were always relatively small – about 3% in 2012 with about half the sales to travellers from overseas. New Zealand duty-free sales dropped by 56% in 2012-2014 after Australia reduced the amount of duty-free tobacco a traveller could take into Australia. On 1 November 2014, New Zealand adopted a similar legislation, e.g. the number of manufactured cigarettes a traveller can bring into New Zealand duty-reduced from 200 (a carton) to 50 cigarettes. Because travellers can no longer bring significant amounts of tobacco into New Zealand, duty-free sales are expected to fall further. Much of this reduction is expected to transfer to sales of tobacco on the domestic market.
- Until 2014, data have included both domestic and duty free sales except for one company where duty free sales are excluded.
Up to 2009: The amount of cigarettes and tobacco available for consumption was obtained up to 2009 from Statistics New Zealand External Trade Statistics and New Zealand Customs Service. The data series “Cigarettes and tobacco available for consumption” was discontinued by Statistics New Zealand in September 2010 for reasons of confidentiality of published statistical information; therefore data are not available from 2010 onwards from this source.

**Methodology:**
- Data on tobacco products refer to products cleared for local consumption on which duty has been paid.
- Grammes of tobacco were calculated by multiplying the volume of tobacco in metric tonnes by 1000000 grams and adding to the volume of cigarettes assuming each cigarette contains 1 gram of tobacco.

The statistics are a measurement of the amounts of tobacco released to the market, and therefore available for consumption. The statistics do not necessarily apply to actual consumption. Information is not available to measure the change in the level of stocks that may be held pending sale, and therefore not yet consumed.
- Tobacco consumption data relate to the year ending in December.
- Statistics New Zealand data for the estimated resident population aged 15 years old and over for the mean year ending on 31 December were used for the denominators of the calculations.

**Break in time series in 2010** due to a change in data source and methodology.
Norway

Source: Directorate of Customs and Excise / Norwegian Directorate of Health. Department for Tobacco Control

Methodology:
- Sales statistics based on data from the Directorate of Customs and Excise for all kinds of tobacco: cigarettes, roll-your-own, smokeless tobacco, cigars. All amounts are originally given in grams, except cigarettes (pieces). The figures are based on sales data from importer to retailer during the period from July until June. Unregistered sales are not included.
- One cigarette is counted as 1 gram, but the real figure is probably lower.


Poland

Source: Statistics Poland.
2001: Multi-dimensional Living Conditions Questionnaire Survey.


Methodology: Consumption of cigarettes only. One cigarette=1 gram.


Portugal

Source: Ministry of Health, Departamento de Estudos e Planeamento da Saúde.

Note: Data are not available since 1982.

Slovak Republic

Data not available.

Slovenia

Data not available from NIJZ databases.

Spain


Methodology:
- Data elaborated by the Directorate General of Public Health, Quality and Innovation based on information provided by the Commissioner for the Tobacco Market (sales of cigarettes, cigars, fine cut tobacco, pipe tobacco) and population figures from the National Statistics Institute (INE).
- The conversion rate is 1 gram of tobacco per cigarette and 2 grams of tobacco per cigar. Total grams of fine cut tobacco and pipe tobacco are also included in the calculation.

Coverage:
- Population aged 15 years old and over.
- Data from the Iberian Peninsula and the Balearic Islands are included; data from the Canary Islands, Ceuta and Melilla are excluded, due to the different taxation rules in these regions.

Break in time series in 2016: Due to adjustments in the calculation of the population, the 2016 data may not be fully comparable to the previous figures. Source of population data: National Institute of Statistics, see http://www.ine.es/dynt3/inebase/index.htm?padre=1894&capsel=1894.

Further information: http://www.msssi.es.
Sweden

**Sources:**

**Methodology:** Up to 1996, the surveys were conducted as personal interviews with a random sample from the population (including the institutionalised) aged 16-84 years old. From 12000 to 13000 people were interviewed over a two-year period.

⚠️ **Break in time series in 1997:** Break in 1997 due to a change in source and methodology.

**Note:** Data are not available anymore after 2004.

**Further information:** [http://www.scb.se](http://www.scb.se) and [http://www.statveca.com](http://www.statveca.com).

Switzerland

**Sources:** *Federal Statistical Office*, Neuchâtel.
From 2009 onwards: Data from Federal Department of Finance, Federal Customs Administration.
Up to 1982: Health Statistics Section, unpublished data.

**Methodology:**
- Calculated by the number of cigarettes sold in Switzerland (figures from the *Communauté de l’industrie suisse de la cigarette*), divided by the population aged 15 years old and over (one cigarette equals 1 gram).
- From 2009 onwards, figures are on registered sales of cigarettes.
- From 2002, data include imported cigarettes (in 2002: +2%), and is calculated with the mid-year population (in 2002: minus 0.5%). Data from Association Swiss Cigarette.

Turkey

**Sources:**
2016-2017: *Republic of Turkey Ministry of Food, Agriculture and Livestock*.
1960-2006: *Tobacco, Tobacco Products and Alcoholic Drinks Market Regulation Board* (Turkish state monopoly).

**Methodology:** From 2008 onwards, tobacco content in a cigarette is calculated based on Tobacco and Alcohol Market Regulatory Authority estimations. For previous years, the last available data on tobacco content belonging to 2008 are used.

⚠️ **Break in time series** in 1987 following a structural reorganisation of the Tobacco, Tobacco Products and Alcoholic Drinks Market Regulation Board.

United Kingdom

**Source:** *NHS Digital* using data from *HM Revenue and Customs and Excise* (previously HM Customs and Excise).
2010: Table 3 - Quantities released for consumption.
2008 and 2009: Table 1 - Quantities released for consumption.
2007: Table 2 - Tobacco - Historic Quantities Released for Consumption.

**Methodology:**
- Data are based on sales and are calculated from financial year data from HM Revenue and Customs (HMRC) ‘smoothed cigarette clearances’ (1 cigarette equals1 gram). Totals of cigars, hand-rolling tobacco and ‘other smoking and chewing tobacco’ (in kg) published in HMRC Tobacco Bulletin.
- 2007-2011 data revised due to revision in population estimates published since last year by ONS.

⚠️ **Break in time series in 1977:** Data from 1960 to 1976 are for manufactured and hand-rolled cigarette consumption only and are not compatible with data from 1977, which cover all types of tobacco including both cigarettes and chewing tobacco.

United States

Sources:

Coverage: US per capita estimates are based on population aged 18 years old and over.

Methodology:
- 1960-1999: US estimates are based only on cigarette consumption per capita. These estimates exclude the following tobacco products: cigars, smokeless tobacco, pipe, chewing tobacco, and dry snuff. Estimates are based on unstemmed processing weight. Estimates include overseas sales-shipment to U.S. military bases.
- Consumption estimates were based on all combustible tobacco. All combustible tobacco includes cigarettes, small cigars, and large cigars, and per-cigarette equivalents for pipe tobacco and roll-your-own tobacco based on the conversion rate in the Master Settlement Agreement: 0.00325 oz. (0.9g) of tobacco equals one cigarette.
- CDC measure of cigarette and combustible tobacco consumption only accounts for product taxed for legal sale in the U.S. and does not account for illicit cigarette sales, such as those smuggled into our out the country, or for untaxed cigarettes that are produced or sold on American Indian sovereign islands.
- CDC estimates differed against the US Department of Agriculture (i.e. 2000-2006) by a median of only 0.15% and a mean of 0.76%.
- Adult per capita was estimated by dividing total consumption by the number of person aged 18 years old and over in the United States each year using data from the U.S. Census Bureau.

✈️ Break in time series in 2000: Data from 1960-1999 come from the US Department of Agriculture. Data from 2000-2011 come from the Office on Smoking and Health Promotion, National Center for Chronic Disease Prevention and Health Promotion.

Further information:
- MMWR website: https://www.cdc.gov/mmwr/volumes/65/wr/mm6548a1.htm.