

OECD Health Statistics 2025

Definitions, Sources and Methods

Use of vaping products

Vaping population: e-cigarettes use

Vapers, percentage of adults (total, females and males aged 15+) and young adults (total, females and males aged 15-24 years old), who are regular users.

Regular users are defined as using vaping devices at least monthly, i.e. daily, weekly or monthly.

The data collection focuses on the use of electronic cigarettes and should exclude heated tobacco products.

““Electronic cigarettes” or “e-cigarettes” are handheld electronic devices that try to create the feeling of tobacco smoking. It works by heating a liquid to generate an aerosol, commonly called a “vapor” that the user inhales. Using e-cigarettes is sometimes called vaping. The liquid in the ecigarette, called e-liquid, is usually made of nicotine, propylene glycol, glycerine, and flavorings. Not all e-liquids contain nicotine. [...] Heated tobacco products (HTP) are considered as “tobacco smoking”, but not as “electronic smoking”.”
Source: Eurostat EHIS 2019 (3rd wave).

Notes:

- ⓘ Caution should be used when interpreting the data, due to small sample sizes in surveys leading to great variations from one year to another for some countries.
- Age groups may also differ from one country to another.
- Any deviation from the OECD definition is indicated with a D in the OECD Data Explorer dataset and in the information available below.

Vapour devices are distinguished from traditional combustible tobacco products by their production of vapour through a process of heating rather than the burning associated with the consumption of cigarettes, cigars, cigarillos or smoking tobacco. In their current form, vapour devices usually include electronic circuitry and a power source supplying energy to the heating mechanism (Source: Euromonitor International).

All Electronic Nicotine Delivery Systems and Electronic Non-Nicotine Delivery Systems (ENDS/ENNDS) heat a solution (e-liquid) to create an aerosol which frequently contains flavourants, usually dissolved into Propylene Glycol or/and Glycerin. All ENDS (but not ENNDS) contain nicotine. Although generally considered a single product class, these products constitute a diverse group with potentially significant differences in the production of toxicants and delivery of nicotine. There are several coexisting types of devices on the market: first-generation or so-called cigalikes, second-generation tank systems and even larger third-generation or personal vaporizers. Others classify these devices into closed and open systems depending mainly on the degree of control that users have over the e-liquid used and the voltage and resistance applied to heating the e-liquid and ventilation features (Source: WHO).

Vapour products include the following types of products:

- **Closed Vaping Systems:** Closed system e-cigarettes use ready-made refills, which screw directly on to the e-cigarette's battery.
- **Open Vaping Systems:** In an open system, the liquid that is vapourised can be refilled manually by the user. There is also a removable mouthpiece.

Sources and Methods

Australia

Source: Unpublished **Australian Institute of Health and Welfare** analysis of National Drug Strategy Household Survey data.

Methodology:

- 2022 results use data collected in 2022 and 2023, see <https://www.aihw.gov.au/reports/illicit-use-of-drugs/national-drug-strategy-household-survey/contents/technical-notes> for more information on collection periods for National Drug Strategy Household Survey data collection periods for each year.
- The total population includes a small number of people who identified as 'Other' sex. Therefore the total population numbers do not add up to the total number of males and females added together.
- At least monthly: currently use electronic cigarettes daily, weekly or monthly.
- Definition used in the NDSHS: Electronic cigarettes or e-cigarettes are personal vaporising devices where users inhale vapour rather than smoke. The vapours usually contain flavourings and may contain nicotine as well.
- ❗ Estimate for females aged 15-24 in 2019 has a relative standard error of 25% to 50% and should be used with caution.
- ❗ Estimates for males and females aged 15-24 in 2016 have a relative standard error of 25% to 50% and should be used with caution.
- Frequency of e-cigarette use was asked for the first time in 2016. The NDSHS is conducted every 3 years.

Coverage:

- Population aged 15 years and over. All states and territories across Australia.
- Data are weighted estimates, weighted to the appropriate Australian population.
- Data available from 2016 onwards.

Further information: <https://www.aihw.gov.au/about-our-data/our-data-collections/national-drug-strategy-household-survey>.

Austria

Source: **Statistics Austria**, Austrian Health Interview Survey 2019.

Coverage: Population in private households aged 15 years and more.

Methodology:

2019: Do you currently use electronic cigarettes or similar electronic devices (e.g. e-shisha, e-pipe)?

1. Yes, vaping daily.
2. Yes, vaping occasionally.
3. No, but used to vape.
4. Have never vaped.

Belgium

Source: Scientific Institute of Public Health **Sciensano**, Health Interview Survey 2018.

Coverage: Population aged 15 years old and over.

Methods: Survey in the general population. Sample size: around 9000 people aged 15 years old and over.

❗ **Deviation from the definition:** Regular use is defined as using vaping devices at least weekly, i.e. daily and weekly.

Canada

Sources:

From 2020 onwards: **Canadian Community Health Survey – Annual Component (CCHS)**.

2019: **Canadian Tobacco and Nicotine Survey (CTNS): 2019 detailed tables**. See Table 5. Past-30-day use of individual tobacco products and vaping, by age group and gender, 2019 at <https://www.canada.ca/en/health-canada/services/canadian-tobacco-nicotine-survey/2019-summary/2019-detailed-tables.html>.

2015 and 2017: **Canadian Tobacco, Alcohol and Drugs Survey (CTADS) 2015 and 2017**, at the present time uses e-cigarettes (Every day, Occasionally or Not at all).

Coverage:

2023: Population aged 18+ (or 18-24 instead of 15-24 years old).

2020-2022: The target population for the CCHS is all persons 12 years of age and over living in Canada with the following two exceptions: 1) residents of the Yukon, Northwest Territories and Nunavut; and 2) full-time residents of institutions. Data were collected from respondents by telephone interviewers for 2020 and 2021. Non-responses were removed from the calculations.

2019:

- A past-30-day smoker has smoked one or more cigarettes in the past 30 days. This includes current smokers as well as some former, and never smokers who have smoked a cigarette in the past 30 days.
- Vaping e-liquid with nicotine and/or without nicotine (i.e. just flavouring). Includes used of e-cigarettes, vape mods, vaporisers and vape pens. Cannabis vapes are excluded.
- The target population for the CTADS is all persons 15 years of age and over living in Canada with the following two exceptions: 1) residents of the Yukon, Northwest Territories and Nunavut; and 2) full-time residents of institutions. Data are collected directly from respondents. Non-responses were removed from the calculations.
- The sample sizes are 15,154 for CTADS 2015 and 16,349 for CTADS 2017.

Methodology: The 2022 cycle of CCHS was the first of a redesigned questionnaire, which was collected using an online self-report application, with some interviewer collection (about 40% of the completed cases). At the time of release of the CCHS 2022 data, there has not been a mode effect study to examine the changes from complete interviewer collection in 2021 to the mix with predominant self-reporting in 2022.

Users are advised to use caution when interpreting changes from the 2021 to 2022 cycle.

🔴 Deviations from the definition:

- The corresponding question from **CCHS 2020 and 2021** that was used to produce the data is: “- In the past 30 days, how often did you use an e-cigarette or vaping device? “. The responses “Daily” and “Less than once a day but at least once a week” and “Less than once a week but at least once in the past month” were combined as an approximation of the concept “regular use”.
- This question differs from the previous data points that used the CTADS question “At the present time, do you use an e-cigarette (also known as an electronic cigarette) every day, occasionally or not at all?” with responses of “Every day” and “Occasionally” combined to report for this indicator. The decision to use the CCHS response of “Less than once a week, but at least once in the past month” is so that the exclusion is common – those who said “not at all” would be consistent between the two versions of the question.
- The corresponding question from **CTADS 2015 and CTADS 2017** that was used to produce the data is: “At the present time, do you use an e-cigarette (also known as an electronic cigarette) every day, occasionally or not at all? “. The responses “Every day” and “Occasionally” were combined as an approximation of the concept “regular use”.
- There were also a small number of cases included from respondents who answered “not at all” to this question but answered “Yes” to the question “During the past 30 days did you use an e-cigarette every day?” The assumption is that the respondent should have also answered “Every day” to using an e-cigarette at the present time.

Estimation: Data on vaping in Canada (e-cigarettes) from CTADS 2015 and 2017. The CVs range from 4% to 12%, meaning that the quality level of all estimates provided can be considered acceptable.

🔴 Break in time series in 2023: Data refer to the population aged 18+ (instead of 15+ for previous years). Data for the 2023 reference year come from the CCHS but are now limited in coverage to the population aged 18+. The underlying survey program CCHS underwent a target population change beginning with the 2023 reference year, with coverage of youths aged 12 to 17 being removed. This change was implemented because of the launch of the annual Canadian Health Survey on Children and Youth (<https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=5233>), which will cover the youth aged 12 to 17 with a richer sample size and content more appropriately designed to cover the health characteristics, behaviors, and outcomes for this population.

🔴 Break in time series in 2020 due to the change in question text and data source.

🔴 Break in time series in 2019: Data are only available from 2015 and 2017 for the concept “frequency of present use of e-cigarettes”. Other questions that were asked in CTADS related to e-cigarette use are as follows:

- CTADS – 2013, 2015 and 2017 - ever used e-cigarettes (Y/N).
- CTADS – 2013, 2015 and 2017 - used e-cigarettes in the past 30 days (Y/N).
- CTADS – 2017 - used e-cigarettes every day during past 30 days (Y/N).

Further information:

- Further methodological information on CCHS, including the questionnaires, can be found at <https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=3226>.
- Further methodological information on CTADS, including the questionnaires, can be found at <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&SDDS=4440>.

Chile

Source: General Population National Drug survey, Servicio nacional para la prevención y rehabilitación del consumo de drogas y alcohol SENDA, Ministerio del Interior (National prevention and rehabilitation service for substance abuse, Ministry of Interior).

📌 Coverage: National, data include the population aged 12 to 64 years old.

Methodology: The question in the survey has a filter and reads as follows:

“Have you ever used electronic cigarettes in your lifetime? 1. Yes / 2. No.”

For people who have used electronic cigarettes the question is:

“When was the last time you used electronic cigarettes?”

1. The last 30 days / 2. More than a month ago, but less than a year / 3. More than a year ago.”

Regular users are people who answer (1) in the first question and (1) in the second question, and the denominator is all the people who responded (1) or (2) in the first question.

- The indicator had to be rerun and differs from official data, in order to obtain the appropriate age groups.
- This question has been asked since 2014. The General Population National Drug survey is carried out every 2 years.

📌 Note: The National Prevention and Rehabilitation Service for Substance Abuse (SENDA) does not recommend the use of these data since they do not meet the technical criteria to extrapolate information due to sample size and variation coefficient (<https://www.linguee.es/ingles-espanol/traduccion/variation+coefficient.html>).

Further information: <https://www.senda.gob.cl/wp-content/uploads/2020/01/ENPEG-2018-21-01-20.pdf>.

Colombia

Source: National Study of the consumption of psychoactive substances SPA in Colombia 2008-2019, Final Report.

📌 Coverage: Age groups differ: ages 12 to 65 years old instead of 15+.

Costa Rica

Source: IAFA, Alcohol and Pharmacodependence Institute of Costa Rica.

Coverage: National household survey.

Methodology:

- In the past 12 months, respondents who have used an e-cigarette at least once (regular use of e-cigarettes).
- Data for survey years are estimates from corresponding surveys; for years between survey years, linear interpolations were made; for years after the last survey year, extrapolations were made with same growing rate as interpolations.

Czechia

Source: National Institute of Public Health, *The Use of Tobacco in the Czech Republic 2017, The Use of Tobacco and Alcohol in the Czech Republic (2018, 2019), National survey of tobacco and alcohol use in the Czech Republic (NAUTA) (2020, 2021 and 2022); National survey on tobacco and alcohol use in the Czech Republic 2023 (NAUTA).*

Coverage: Population aged 15 years old and over. Data were obtained from about 1800 persons (1784 in 2022, 1788 in 2021 and 1769 respondents in the 2020 study; 1812 in the 2023 study).

📌 The data may be subject to random fluctuations, due to the small number of respondents to the survey.

Methodology:

- Current users of electronic cigarettes (daily and occasional but at least once a month).

- In 2019 to 2023, the survey question was: “How often do you currently use an electronic cigarette?”; with answer categories: daily / less than daily, but at least once a week / less than a week, but at least once a month / less than monthly / not at all.

- Until 2018, the survey question was: “How many days have you used an electronic cigarette from the past 30 days?”; with answer categories: 0 days / 1-2 days / 3-5 days / 6-9 days / 10-19 days / 20-19 days / All 30 days.

Further information: National survey on tobacco and alcohol use in the Czech Republic 2023 (NAUTA), see

<https://szu.gov.cz/odborna-centra-a-pracoviste/centrum-podpory-verejneho-zdravi/prevence-zavislosti/studie/nauta/>.

Denmark

Sources:

2024: The results are based on a self-reported questionnaire “Danish Smoking Habits 2024”. The survey is founded by The **Danish Health Authority**.


2023: The “**§SMOKE**” study is carried out by the National Institute of Public Health, University of Southern Denmark (Syddansk Universitet), in collaboration with the Danish Cancer Society (Kræftens Bekæmpelse), the Danish Heart Foundation (Hjerteforeningen) and the Danish Lung Association (Lungeforeningen).

2022: The results are based on a self-reported questionnaire “Danish Smoking Habits 2022”. The survey is founded by **The Danish Health Authority**.


2017 and 2021: **The Danish National Health Survey 2017 and 2021, The Danish Health Authority, National Institute of Public Health Survey “Smoke - A study of tobacco, behaviour and rules”.**

Coverage:


2024: 10541 Danish citizens aged 15-79 years answered the survey between the 2nd of September 2024 to the 28th of November 2024.

 2023: Numbers indicated for young adults (totals, male and female 15-24 years old) are based on the survey “**§SMOKE**” which include a random sample of 9262 adults aged 15-29 living in Denmark from the total population of 1137456 at the fourth quarter 2023 of young adults aged 15-29 in Denmark.

2022: Random sample of adults in the age group 15-79-years-old. 11865 persons are included in the survey conducted between September and December in 2022.

 2021: Numbers indicated for young adults (totals, male and female) are based on the survey “**Smoke**” which include a random sample of 10750 adults aged 15-29 living in Denmark.

2017 and 2021: Random sample of adults (aged 16 years old and over) living in Denmark. There were 172930 persons included in the survey in 2021, 174826 in 2017.


 **Deviation from the definition:** 15-year-olds were not included in the Danish National Health survey.


2024: The age group is 15-29 for the indicator on daily smokers instead of the age group 15-24.

2023: For the vaping population only included the age group 15-29-year-olds. Hereby people aged above 29 were not included in the National Danish Health survey.

2022: For the question about use of vapes for young adults, the age group included young adults aged 15-29.

2021: Young adults (totals) only include ages 18-24. Young adults (males and females) deviate by including people aged 15-29.

 **Breaks in time series in 2022, 2023 and 2024** due to changes of sources and variations in the sample size.

 **Break in time series in 2021 for the definition of regular users** due to a change in methodology: in 2021, regular users are defined as individuals who use e-cigarettes at least monthly i.e. daily, weekly or monthly; in 2017, regular users are defined as individuals who use e-cigarettes at least once a week.

Further information:

2024: <https://www.sst.dk/da/udgivelser/2025/Danskernes-rygevaner-2024> (in Danish).

2023: https://www.sdu.dk/da/sif/rapporter/2024/roeg_rapport_5_tobak_regler_adfaerd.

2022: https://www.sdu.dk/da/sif/rapporter/2023/danskernes_rygevaner.

Estonia

Source: Survey of **Health Behaviour among Estonian Adult Population**. Questions about the frequency of use of e-cigarettes have been included since 2012.

Deviation from the definition: The survey covers the population aged 16-64 years old.

Further information:

- See "Tabel 5-9.A." available at Reile, R, Veideman, T. (2021). Eesti täiskasvanud rahvastiku tervisekäitumise uuring 2020. Available at https://www.tai.ee/sites/default/files/2021-04/TKU2020_kogumik.pdf.

- See "Tabel 3-56, Tabel 3-57" in Reile R, Veideman T. (2023). Eesti täiskasvanud rahvastiku tervisekäitumise uuring 2022. Available at https://www.tai.ee/sites/default/files/2023-04/taiskasvanud_rahvastiku_terviskaitumise_uuring2022.pdf.

Finland

Source: **Finnish Institute for Health and Welfare (THL)**.

2022: "Healthy Finland Survey", Jonna Ikonen.

2020: "National FinSote Survey", Mikko Valtanen.

2019: "National FinSote Survey/European Health Interview Survey wave 3", Jonna Ikonen.

2018: "National FinSote Survey", Suvi Parikka.

2016-2017: Regional Health and Wellbeing study.

Coverage:

- 2020 and 2022: Population aged 20 to 64 years old.

- 2019: Population aged 15 to 64 years old.

- 2016-2018: Population aged 20 to 64 years old.

Methodology:

2022:

- A random sample of 61600 of the population aged 20 years or older. The average response rate was 46%. When reviewed by age group, the response rate was 37% for people aged 20–64.

- Question: Do you currently use e-cigarettes with nicotine? (yes, daily; yes, occasionally; not at all; I have never used).

2020:

- A random sample of 35200 of the population aged 20 to 64 years old. The average response rate was 36%.

- Question: Do you currently use nicotine-containing electronic cigarettes? (Yes, daily; Occasionally; Not at all currently; I have never used electronic cigarettes).

2019:

- A random sample of 15000 of the population aged 15 years or older.

- Question: Do you currently use nicotine-containing electronic cigarettes? (Yes, daily; Occasionally; Not at all currently; I have never used electronic cigarettes).

2018:

- A random sample of 10 000 of the population aged 20 years or older.

- Question: Do you currently use nicotine-containing electronic cigarettes? (Yes, daily; Occasionally; Not at all currently; I have never used electronic cigarettes).

2017:

- A random sample of 5 000 of the population aged 20 years or older.

- Question: Do you currently use electronic cigarettes? (Yes, daily; Occasionally; Not at all currently; I have never used electronic cigarettes).

2016:

- A random sample of 5 000 of the population aged 20 years or older.

- Question: Do you use / Have you used electronic cigarettes that includes / included the following substances [Nicotine] (I use daily; I use occasionally; I have used but quit using; I have tried once or twice; Not at all.

Further information:

- Healthy Finland Survey: <http://www.thl.fi/healthyfinland>.

- National FinSote Study: <https://thl.fi/en/web/thlfi-en/research-and-expertwork/population-studies/national-finhealth-study>.

- Regional Health and Wellbeing study (in Finnish): <https://thl.fi/fi/tutkimus-ja-kehittaminen/tutkimukset-ja-hankkeet/aikuisten-terveys-hyvinvointi-ja-palvelututkimus-ath>.

France

Source: Santé publique France, Baromètre santé, several editions (2014 onwards).

Coverage: France métropolitaine. Regular users are defined as daily users.

❶ Age groups differ as follows:

2018, 2020, and 2021: Population aged 18 to 75 years old.

2017 and 2019: Population aged 18 to 85 years old.

2014 and 2016: Population aged 15-75 years old.

Further information: <https://www.santepubliquefrance.fr/etudes-et-enquetes/barometres-de-sante-publique-france>.

Germany

Source: Eurostat EHIS 2019 survey, Indicator "Use of electronic cigarettes or similar electronic devices by sex, age and educational attainment level (hlth_ehis_sk6e)".

Coverage: Population living in private households, aged 15 years old and over.

Deviation from definition:

- The given answers in EHIS do not allow an identification of the monthly use of e-cigarettes.

Question: Do you currently use electronic cigarettes or similar devices (e.g. e-shisha, e-pipe)?

Answers: Yes, daily vaping / Yes, occasionally vaping / No, but former vaping / Never vaping.

❶ Regular users reported in the data include survey respondents who reported vaping daily and occasionally.

Greece

Source: Health Survey conducted by the Hellenic Statistical Authority - ELSTAT, 2019.

Coverage: Total population aged 15 years old and over. The sample size was 8125 persons in 2019.

Methodology:

- The survey question was "Do you smoke electronic cigarettes or similar electronic devices?"

- Figures refer to the population aged 15 years old and over vaping daily.

Further information: <https://www.statistics.gr/el/statistics/-/publication/SHE22/>.

Hungary

Source:

2019: Hungarian Central Statistical Office (KSH), EHIS 2019 (ELEF2019 in Hungarian).

2014: Hungarian Central Statistical Office (KSH), EHIS 2014 (ELEF2014 in Hungarian).

Coverage: Population aged 15+.

❶ **Deviation from the definition:**

- In EHIS 2019, information was collected on daily and occasional use of e-cigarette products respectively, however, data on at least monthly usage could not be calculated. It means that data refer to the population aged 15+ who are users of closed and open vaping system.

- According to EHIS 2014, the question of the use of e-cigarette products (only closed and open vaping system was related to the current usage of these products, hence data do not represent the percentage of the population aged 15+ who are regular users.

Further information: <http://www.ksh.hu/elef/index.html> (in Hungarian).

Iceland

Source: Directorate of Health: A population-based sample survey.

Coverage: Residents of Iceland aged 18+.

❶ **Deviation from the definition:** Lower age limit 18 years old.

Methodology:

- A population-based sample survey conducted several times during the year (surveillance). Quota sampling is carried out until replies have been obtained from at least 4000 people, 18 years and older, during the year.

🔴 Regular users are defined as those individuals reporting daily use of e-cigarettes.

Estimation: No estimation, submitted data are based on self-reported use.

Further information: The Directorate of Health, see <https://www.landlaeknir.is>.

Ireland

Source: **Annual Healthy Ireland Survey**, commissioned by the **Department of Health** as part of the Healthy Ireland initiative.

Coverage: Each wave involves a sample of approximately 7,500 individuals representative of the population aged 15 and older.

🔴 **Deviation from the definition:** The data reported refer to all current users i.e. the proportion who responded "I have tried e-cigarettes and still use them" both daily and occasionally.

- The data include responses to survey options 3 ("I have tried e-cigarettes and still use them daily") and 4 ("I have tried e-cigarettes and still use them occasionally"), i.e. for 2024, 8% of regular e-cigarette users, comprised of a split across both options of 5% daily users and 3% occasional users.

Methodology:

- The Healthy Ireland Survey is an interviewer-administered survey with interviews conducted on a face-to-face basis (pre-2020) and over the phone (from 2021 onwards) with individuals aged 15 and over. This survey uses a multi-stage probability sampling process.

- Detailed information on response rate and methodology for the 2024 Survey is available at <https://assets.gov.ie/313378/4ea7ec06-47e4-40b6-b8a9-c92984d9022e.pdf>.

- The Healthy Ireland Survey was not undertaken in 2020 due to COVID-19.

Further information: The results of the first Healthy Ireland Survey were published in 2015 and all reports are available at <https://www.gov.ie/en/collection/231c02-healthy-ireland-survey-wave/>.

Israel

Source:

2023-2024: **Israel Center for Disease Control (ICDC), Ministry of Health. National KAP 2023-2024 surveys** (Knowledge, Attitudes and Practices) conducted by the **Israel Center for Disease Control (ICDC)** and the Department of Health Education and Promotion, **Ministry of Health**.

2019: **Israel Center for Disease Control (ICDC), Ministry of Health. The fourth Israel National Health Interview Survey INHIS-4, 2018-2020.**

2017: **Israel Center for Disease Control (ICDC), Ministry of Health. National KAP survey** (Knowledge, Attitudes and Practices) conducted periodically since 2002 by the **Israel Center for Disease Control (ICDC)** and the Department of Health Education and Promotion, **Ministry of Health**.

Coverage:

2023-2024: The National KAP 2023-2024 Surveys (Knowledge, Attitudes and Practices) are based on nationally-representative population samples of the non-institutionalised civilian population aged 21 and above.

2019: The INHIS-4 (Israel National Health Interview Survey) survey is based on a nationally-representative population sample of the non-institutionalised civilian population aged 21 and above.

2017: The National KAP Survey (Knowledge, Attitudes and Practices) is based on a nationally-representative population sample of the non-institutionalised civilian population aged 21 and above.

Methodology:

2023-2024: The KAP 2023-2024 surveys, population-based telephone surveys, were carried out on samples of respectively 2,807 and 3,001 Israelis aged 21 years and over. The KAP 2023 survey was conducted from September 28, 2022, to October 7, 2023 (before the 2023-2024 war), while the KAP 2024 survey took place from October 7, 2023, to September 3, 2024 (during the 2023-2024 war). There was no statistically significant difference in the calculated percentage of the indicator between the two surveys across the entire sample.

2019: The INHIS-4 survey is the fourth in a series of population-based National Health Interview Surveys. Previous surveys were conducted in 2003-2004 (INHIS-1), 2007-2010 (INHIS-2) and 2013-2015 (INHIS-

3). The INHIS-4, a population-based telephone survey, was carried out on a sample of 4,135 Israelis aged 21 years and over.

2017: The KAP 2017 survey, a population-based telephone survey, was carried out on a sample of 6,207 Israelis aged 21 years and over.

- Vapers are defined as those who report using electronic cigarettes.

❗ Deviation from the definition:

1. The age group differs: Data are based on ages 21 and over. Therefore, the information needed on users aged 15-24 years old could not be calculated due to deviation from coverage definition.

2. The survey question was phrased: Do you currently use electronic cigarettes? (Yes, every day/Yes, occasionally/No). Regular users were defined as those who use electronic cigarettes either daily or occasionally.

Further information:

- INHIS-4: https://www.gov.il/BlobFolder/reports/inhis-4-2019/he/files_publications_units_ICDC_INHIS-4-2019.pdf (partially in English).

- KAP 2017: https://www.gov.il/BlobFolder/reports/kap-2017/he/files_publications_units_ICDC_KAP2017.pdf (partially in English).

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

Source: ISTAT, Istituto Nazionale di Statistica (National Institute of Statistics): Aspects of daily living (Multipurpose survey), 2014 onwards.

Coverage:

- Population aged 15 years old and over.

- The sample size is large enough (about 38.500 individuals aged 15 year and over in each survey) The users' prevalence is very low in the population, so the sampling errors could be high.

❗ Deviation from the definition: Data provided for all users of electronic cigarettes, without distinguishing for regular users. The indicator comes from this question: "Do you use e-cigarette, even if only occasionally?"

Further information: Microdata can be downloaded at <https://www.istat.it/en/analysis-and-products/microdata-files>, including free download for "public use file".

Japan

Data not available.

Korea

Sources: Ministry of Health and Welfare, Korea Disease Control and Prevention Agency, Report on the National Health and Examination Nutrition Survey.

Coverage:

- Population aged 19 years old and over.

- The data collection focuses on the use of electronic cigarettes, excluding heated tobacco products.

Methodology:

- The 9th Korea National Health and Nutrition Examination Survey (2022–2023) included 192 enumeration districts and 4,800 households annually. The total sample size was 6,265 individuals in 2022 and 6,929 in 2023. The sample size of the 8th National Health and Examination Nutrition Survey (2019-2021) is 4800 households each year.

- Since 2019 onwards, survey questions for those aged 19 years old and over are as follows: 1. Liquid e-cigarettes: "Have you ever used liquid e-cigarettes containing nicotine?" If the answer is "Yes", the respondent is then asked: "Have you ever used liquid e-cigarettes containing nicotine in the last month?"

Further information: <https://knhanes.cdc.go.kr/knhanes/eng/index.do>.

Latvia

Source: Eurostat EHIS 2019 survey.

🔴 Coverage: Due to the small number of respondents in some age groups, the categories of answers “Daily vaping” and “occasional vaping” have been merged.

Lithuania

Source: State Data Agency (Statistics Lithuania), Health Interview Survey 2019.

Methodology: Regular users are defined as using vaping devices daily.

Luxembourg

Source: Luxembourg Foundation Cancer Survey conducted by TNS ILReS s.a. Market Research.

Methodology:

- Survey based on a random sample of resident population aged 16 years old and over, and aged between 16-24.

Questions asked: Do you currently use electronic cigarettes or similar devices (e.g. e-shisha, e-pipe)? Yes, daily vaping / Yes, once or twice per week / Yes, once or twice per month. All three categories of replies are taken into account.

- Number of persons interviewed in each survey: 2024: 3036; 2023: 3397.

Mexico

Data not available.

Netherlands

Source: Statistics Netherlands, Health Interview Survey.

Coverage:

- National representative sample.

✂️ Breaks in time series in 2021 and 2019, due to changes in the answer options:

- In 2021, the answer options changed to ‘Yes, every day’, ‘Yes, but not every day’, ‘No, but I did use it in the past’ and ‘No, never’. **🔴** Due to the change in answer options in 2021 there is, strictly speaking, a break in series between 2020 and 2021, which is probably very small however.

- There was a redesign of the survey answers in 2019, the answer options were ‘Yes, every day’, ‘Yes, regularly but not every day’, ‘I had used it a few times’ and ‘No’.

- In 2016, a question about e-cigarettes was added to the Health Interview Survey: ‘Do you ever use an electronic cigarette or e-cigarette? Other names for this are e-smoker, shisha pen or FlavorVape.’ From 2016 up until 2018, the answer options were ‘yes’ or ‘no’.

🔴 Data from 2019 onwards are thus not comparable to data for the period 2016-2018, due to these new answer categories.

Methodology:

From 2021 onwards:

- Numerator: Total number aged 15 years old and over with answer category ‘Yes, every day’ or ‘Yes, but not every day’ to the question: ‘Do you ever use an electronic cigarette or e-cigarette? Other names for this are e-smoker, shisha pen or FlavorVape’.

- Denominator: Total number aged 15 years old and over with answer category ‘Yes, every day’ or ‘Yes, but not every day’, ‘No, but I did use it in the past’ and ‘No, never’ to the question: ‘Do you ever use an electronic cigarette or e-cigarette? Other names for this are e-smoker, shisha pen or FlavorVape’. The denominator excludes those who answered ‘Don’t know’ or ‘Refusal’.

2019-2020:

- Numerator: Total number aged 15 years old and over with answer category ‘Yes, every day’ or ‘Yes, regularly but not every day’ to the question: ‘Do you ever use an electronic cigarette or e-cigarette? Other names for this are e-smoker, shisha pen or FlavorVape’.

- Denominator: Total number aged 15 years old and over with answer category ‘Yes, every day’ or ‘Yes, regularly but not every day’, ‘I had used it a few times’ and ‘no’ to the question: ‘Do you ever use an

electronic cigarette or e-cigarette? Other names for this are e-smoker, shisha pen or FlavorVape'. The denominator excludes those who answered 'Don't know' of 'Refusal'.

2016-2018:

- Numerator: Total number aged 15 years old and over having reported to smoke/use an electronic cigarette, even occasionally.
- Denominator: Total number aged 15 years old and over answering the survey question. The denominator excludes those who answered 'Don't know' of 'Refusal'.

❗ Deviation from the definition:

- Persons aged 15 years old and over having reported to smoke/use an electronic cigarette (e.g. an e-cigarette, shisha-pen or FlavorVape) even occasionally are included.

Further information:

- Data on the use of e-cigarettes:

<https://opendata.cbs.nl/statline/#/CBS/en/dataset/83021ENG/table?dl=3417D>.

New Zealand

Sources: Ministry of Health. New Zealand Health Survey 2012-2013 (Tobacco module), 2015-2016, 2017-2018, 2018-2019, 2019-2020, 2020-2021, 2021-2022, 2022-23 and 2023-24.

Coverage:

- See the indicator on "Perceived health status (<http://stats.oecd.org/wbos/fileview2.aspx?IDFile=3627d99d-fb9f-40e1-98a0-20f19c80ac5f>)" for details on the New Zealand Health Surveys' periods and sample sizes.
- As part of the regular process of the continuous New Zealand Health Survey, data are periodically revised where improvements are identified. As a result, data from 2011-12 onwards may be revised.

New Zealand Health Survey 2012/13 (Tobacco module):

- 13009 adults.

Deviation from the definition:

New Zealand Health Survey 2015-16 to 2023-24:

- All respondents are asked:

2015/16

"Have you ever tried an electronic cigarette, even just a puff or 'vape'?" This question had an attached explanatory note: An electronic cigarette, also known as an e-cigarette, is a battery-operated device that looks like a cigarette. It does not contain tobacco, but releases flavours and mist as people inhale from it.

2017/18 – 2022/23

"Have you ever tried an electronic cigarette, even just a puff or 'vape'?" This question had an attached explanatory note: Electronic cigarettes or vaping devices, also known as e-cigs, vapes or personal vaporizers, are battery-powered devices that heat a liquid to release vapour as people inhale from them. The vapour may contain nicotine and may be flavoured.

2023/24

"Now I'll ask you about vaping devices and electronic cigarettes. I'll be using the term 'vaping devices' to cover both. If you vape cannabis on its own, please don't include this, because we will ask about cannabis later. Have you ever tried using a vaping device, even just once?" This question had an attached explanatory note: Vaping devices or electronic cigarettes, also known as vapes or e-cigarettes, are battery-powered devices that heat a liquid to release vapour as people inhale from them. The liquid/juice may contain nicotine and may be flavoured.

- All respondents who answered "Yes" to the above were then asked: "How often do you now use electronic cigarettes / vaping devices?" The available options were:

1. I don't use them now
1. At least once a day
1. At least once a week
1. At least once a month
1. Less often than once a month
1. K - Don't know
1. R - Refused

i Anyone who vapes at least once a month is classified as a ‘**regular user**’. This combines categories 2, 3 and 4 above.

New Zealand Health Survey 2012/13 (Tobacco module):

All respondents were asked: “How often do you now smoke?”. Those who answered “At least once a day”, “At least once a week”, “At least once a month”, or “Less often than once a month” were then asked: “Which of these products do you currently smoke? Please say all that apply.” Notes attached: [Multiple responses possible] **i** E-cigarette is an electronic cigarette that simulates smoking by producing a mist people inhale

- 1 Tailor made cigarettes, that is manufactured cigarettes in a packet
- 2 Roll your owns, using loose tobacco [go to why smoke roll your owns TOB2.02]
- 3 Pipes
- 4 Cigars
- 5 E-cigarettes containing nicotine
- .K Don’t know
- .R Refused

People who answered E-cigarettes containing nicotine” were included in our statistics for vaping.

Estimation: New Zealand Health Survey 2012/13 (Tobacco module). The proportion of people who answered in the secondary question that they smoked e-cigarettes containing nicotine is reported. These were listed as “At least monthly” in this submission.

i **Break in time series in 2016:** The question structure in 2012/13 was quite different to 2015/16 onwards. In 2012/13, respondents were not directly asked about e-cigarette use/vaping, like they were from 2015/16 onwards. Rather, **only** those who smoked were asked about smoking products used (‘Which of these products do you currently smoke?’), with one of the response options being ‘E-cigarettes containing nicotine’. This approach underestimated the prevalence of vaping, because it did not capture people who vaped but did not smoke. In addition, the 2012/13 question explicitly asked about vaping products containing nicotine, while the question used from 2015/16 includes all vaping products, regardless of whether they contain nicotine.

Further information: <https://www.health.govt.nz/publications/tobacco-use-201213-new-zealand-health-survey> and <https://www.health.govt.nz/statistics-research/surveys/new-zealand-health-survey>.

Norway

Source: **Norwegian Directorate of Health**, survey data collected by Statistics Norway.

Coverage: Adult population aged 16-79 years old, with a total survey size of approximately 8000 persons. Young adults cover those aged 16-24 years old.

Methodology: Data based on the “Travel Survey” collected four times during the year. From 2024, data are collected only once a year through “The survey on tobacco and substance use in Norway” (in the Spring). The survey questions are as follows:

Q: Do you use e-cigarettes daily, sometimes, or never?

- 1: Daily
- 2: Sometimes
- 3: Never

- Regular use is defined as both “daily” (1) and “sometimes” (2).

i **Deviation from the definition:** Age ranges from 16-79 years old instead of 15+.

Estimation: Survey, weighted.

Further information: <https://www.fhi.no/en/el/smoking-tobacco/> and <https://www.helsedirektoratet.no/forebygging-diagnose-og-behandling/forebygging-og-levevaner/tobakk/e-sigaretter-elektroniske-sigaretter-og-regelverk> (Norwegian only).

Poland

Data not available.

Portugal

Sources:

2019:

Adult population: EHIS/National Health Survey, **Statistics Portugal; Ministry of Health** (age group: Total).

15-24 years old: **EHIS/National Health Survey, Eurostat** (Use of electronic cigarettes or similar electronic devices by sex, age and educational attainment level [HLTH_EHIS_SK6E]) (age group: 15-24 years).

2014: **2014 National Health Survey, Statistics Portugal; Ministry of Health, National Health Institute – Doutor Ricardo Jorge; National Institute of Statistics.**

Coverage:

- Resident population aged 15 and over.

- 2019: The sample size was 22 191 households, with 14 617 responding (65.9% participation rate).

- 2014: The sample size was 22 538 households, with 18 204 responding (80.8% participation rate).

ⓘ Deviation from the definition: Vapers, percentage of adults (total, females and males aged 15+) and young adults (total, females and males aged 15-24 years old), who use vaping devices daily or occasionally.

Slovak Republic

Source: Statistical Office of the Slovak Republic, European Health Interview Survey (EHIS) 2019.

Slovenia

Source: National Institute of Public Health, Nacionalna raziskava o zdravju in zdravstvenem varstvu 2019 (Questionnaire of the European Health Interview Survey, EHIS, 3rd round).

Coverage: Population living in private households (persons living in institutions are excluded), age 15+.

Methodology: Daily or occasional users of electronic cigarettes or similar electronic devices (e.g. e-shisha, e-pipe) are considered as users of vaping products (derived from EHIS question SK6: Do you currently use electronic cigarettes or similar electronic devices (e.g. e-shisha, e-pipe)? 1. Yes, daily, 2. Yes, occasionally, 3. No, but used in the past, 4. Never have used).

Further information: <https://ec.europa.eu/eurostat/web/products-manuals-and-guidelines/-/KS-02-18-240>.

Spain

Source: Ministerio de Sanidad (Ministry of Health). Delegación del Gobierno para el Plan Nacional sobre Drogas (Government Delegation for the National Drugs Plan). Observatorio Español de las Drogas y las Adicciones (OEDA). *Encuesta sobre Alcohol y otras Drogas en España* (EDADES – Survey on alcohol and other drugs in Spain), several editions.

Methodology:

- Regular users are considered those consuming electronic cigarettes at least once in the last 30 days.

- Question used for vaping devices: Have you use electronic cigarettes (vaping) in the last 30 days?

Nicotine and non-nicotine devices are considered, and type is asked on a following question (If you have used electronic cigarettes, what type of refill have you used? With nicotine, without nicotine or both).

- Survey of the general population aged 15-64 years old residing in households, carried out in the household.

- Sample size for the 2024 edition: 26,878 persons. Sample dates for the 2024 edition: 12nd February to 21st June.

- Sample size for the 2022 edition: 26,344 persons. Sample dates for the 2022 edition: 15th February to 3rd June.

- Sample size for the 2020 edition: 17,899 persons.

- Sample size for the 2018 edition: 21,249 persons.

ⓘ Deviation from the definition: National population aged 15 to 64 years old.

Further information: For reference, see EDADES surveys at

https://pnsd.sanidad.gob.es/profesionales/sistemasInformacion/sistemaInformacion/encuestas_EDADES.htm.

Sweden

Source: Public Health Agency of Sweden, Sweden's National Public Health Survey: "Health on equal terms".

📌 Coverage:

- From 2018 to 2020, the random sample was 40,000 individuals aged 16-84 years old.
- In year 2021, two separate survey samples were conducted, one random sample of 40,000 individuals pertaining to the ages 16-84 years, while the second random sample of 10 000 pertained to the 85-years and older.
- From 2022 and onwards, the random sample is 45,000 individuals aged at least 16 years old.
- Data for young adults cover the 16-29-year-olds.

Methodology:

- The layout of questions on e-cigarettes was restructured in the 2020 survey questionnaire. The questions are divided into two parts: a main question and a follow-up question. In the first main question, frequency of use is asked, and in the follow-up-question, use with or without nicotine is asked only to who indicated use of e-cigarettes at least sometimes in the main question. Those changes to the structure of questions might affect comparability over time.
- The question on e-cigarettes was first asked in 2018. Data are available from 2004 onwards from the National Public Health Survey. The questions in the National Public Health Survey cover physical and mental health, dental health, living habits, financial conditions, work and occupation, work environment, safety and social relationships.
- Data are available on products defined in Sweden in the Survey as electronic cigarettes or other electronic smoking products, with or without nicotine (for example e-cigarettes, e-cigarillo, e-cigar). Heat-not-burn products containing tobacco are a new type of tobacco products (with expected limited product access or use in 2018): data are currently not available for the use of these products.
- The data do not contain specific information on users of e-hookah (with or without tobacco or nicotine) which might be considered vaping products depending on the definition of vaping products.
- In the definition reported in Sweden, it is possible to separate whether the person uses nicotine or not in their e-cigarette usage.
- Different survey weights are used for data pertaining to 2021 compared to previous years. This might have a minor impact on the estimated values for the age group 16-29-year-olds.

Note: From 2016, the survey is conducted every other year, which means data are not available for 2017, 2019, and 2023. In 2021, an additional survey was conducted due to the COVID-19 pandemic.

📌 Deviations from the definition:

Vaping population: The reported vaping population includes aggregated figures for users of electronic cigarettes or other electronic smoking devices with nicotine (data are available for with or without nicotine separately), heat-not-burn products are not included.

Regular user: The reported data consist of data representing both occasionally and every day vapers (National Public Health Survey).

Further information: <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/>, <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/about-us/>, <https://www.folkhalsomyndigheten.se/folkhalsorapportering-statistik/om-vara-datainsamlingar/nationella-folkhalsoenkaten/> and <https://www.folkhalsomyndigheten.se/the-public-health-agency-of-sweden/public-health-reporting/>.

Switzerland

Source: Federal Statistical Office, Neuchâtel, Swiss Health Surveys 2017 and 2022.

Coverage: Population aged 15 years old and over living in Switzerland (including foreigners living in Switzerland for more than 3 months).

Methodology:

The questions are different in 2017 and 2022.

- The questions included in the 2017 survey are as follows:

Do you smoke, even occasionally? YES / NO. When YES, then

What do you smoke? Cigarettes / cigars / cigarillos / pipe / shisha / e-cigarette with nicotine / e-cigarette without nicotine / heated tobacco products / No answer

Then for each of the selected answers (here data are reported only for the question related to e-cigarettes):

How often do you use e-cigarettes with nicotine? Every day / At least once a week / At least once a month / Less than once a month / No answer

How often do you use e-cigarettes without nicotine? Every day / At least once a week / At least once a month / Less than once a month / No answer

- The questions included in the 2022 survey are as follows:

Do you use e-cigarette? Yes / No / No answer

With nicotine, without nicotine, or both? With nicotine / without nicotine / both / No answer

How often do you use e-cigarettes with nicotine? Every day / At least once a week / At least once a month / Less than once a month / No answer

How often do you use e-cigarettes without nicotine? Every day / At least once a week / At least once a month / Less than once a month / No answer

❗ Deviations from the definition in 2017: Some people smoking e-cigarettes may not be included.

Türkiye

Data not available.

United Kingdom

Source: The Office for National Statistics, *Opinions and Lifestyle Survey, E-cigarette use in Great Britain*. **Coverage:** Great Britain comprising England, Scotland and Wales. Northern Ireland is not included.

❗ Estimation: Great Britain wide official survey estimates.

❗ Deviation from the definition: The survey includes individuals aged 16 and older.

- Regular users are defined as those currently using an electronic cigarette or similar vaping device.

- Additionally, the survey questions were revised in March 2020:

- Survey Questions prior to 2020: Respondents were asked if they currently used e-cigarettes, a vaping device, both, or neither. If the answer was "neither", respondents were asked if they had ever regularly used or tried an e-cigarette or vaping device, with options to indicate regular use, just trying it, or never using it.

- Survey Questions from March 2020 onwards: The question was simplified to ask if respondents currently use electronic cigarettes or similar vaping devices, with options to indicate daily use, occasional use, past use, or never having used such devices.

- **Comparability:** The figures prior to 2020 are based on those who indicated they currently used an e-cigarette or vaping device. To ensure comparability from 2020 onwards, current users are defined as those who currently use e-cigarettes or vaping devices daily or occasionally.

Methodology:

- Detailed information on the Opinions and Lifestyle Survey QMI is available at Opinions and Lifestyle Survey QMI.

- Detailed information on Adult Smoking Habits in the UK Methodology is available at Adult Smoking Habits in the UK Methodology.

United States

Source: Centers for Disease Control and Prevention/National Center for Health Statistics/U. S. Department of Health and Human Services. National Health Interview Survey (NHIS).

Coverage: Nationally representative sample of the U.S. civilian non-institutionalised population aged 18 years old and over.

❗ Deviation from the definition: The percentage of adults does not include the population aged 15-17 years old, but includes the population aged 18 years old and over.

Estimation:

- This report was based on two NHIS survey questions: 1) Electronic cigarettes (e-cigarettes) and other electronic vaping products include electronic hookahs (JUULS), vape pens, e-cigars, and others. These products are battery-powered and usually contain nicotine and flavours such as fruit, mint, or candy. Have you ever used an e-cigarette or other electronic vaping product, even just one time, in your entire life? 2) Do you now use e-cigarettes or other electronic vaping products every day, some days, or not at all? -

Regular users were defined as those who ever used an e-cigarette even one time and now use e-cigarettes every day or some days.

- Estimates were weighted to represent the U.S. civilian non-institutionalised population for each time period.

Notes:

- Due to the COVID-19 pandemic, the NHIS data collection switched to a telephone-only mode beginning March 19, 2020. Personal visits resumed in all areas in September 2020, but cases were still attempted by telephone first. These changes resulted in lower response rates and differences in respondent characteristics for April–December 2020. Differences observed in estimates between 2020 and earlier years may be impacted by these changes.

- In 2019, the NHIS questionnaire was redesigned to better meet the needs of data users. Due to changes in weighting and design methodology, direct comparisons between estimates for 2019 and earlier years should be made with caution, as the impact of these changes has not been fully evaluated at this time.

Further information: NHIS website, <https://www.cdc.gov/nchs>.

NON-OECD ECONOMIES

Argentina

Data not available.

Bulgaria

Source: National Statistical Institute, European Health Interview Survey (EHIS wave 3).

Coverage: All persons aged 15 and over living in non-institutionalised households are covered.

Methodology:

Question used is SK6: Do you currently use electronic cigarettes or similar electronic devices (e.g. e-shisha, e-pipe)?

1. Yes, daily vaping
2. Yes, occasionally vaping
3. No, but former vaping
4. Never vaping

Percentage of adults (aged 15+) who vape daily.

For the purposes of dissemination of aggregated data the following rules are applied:

- An estimate should not be published if it is based on fewer than 20 sample observations or if the non-response for the item concerned exceeds 50% - marked with (..).
- An estimate should be published with a flag "low reliability" if it is based on 20 to 49 sample observations or if non-response for the item concerned exceeds 20% and is lower or equal to 50% - marked with (u).
- An estimate shall be published in the normal way when based on 50 or more sample observations and the item's non-response does not exceed 20%.

Further information: 2021 data are available only.

Croatia

Source: European Health Interview Survey, EHIS 2019.

Coverage: Population aged 15 or over.

Methodology:

- Distribution of the population according to the use of electronic cigarettes or similar electronic devices.
- The modalities in the EHIS questionnaire are: Daily vaping / Occasional vaping / Former vaping / Never vaping. Reported is the percentage of adults who are vaping daily.
- The question that was used in the survey was in line with the common EHIS 3 methodology: "Do you currently use electronic cigarettes or similar electronic devices (e.g. e-shisha, e-pipe)?" Heated tobacco products were not mentioned in the question.

- No data prior to 2019 as this was a new variable introduced in the 3rd wave of EHIS.

Further information: Publications (in Croatian) containing EHIS 2019 results are available on the website of the Croatian Institute of Public Health, see “Basic Indicators & Life Habits.”

Peru

Data not available.

Romania

Source: Eurostat database for EHIS, based on national microdata sent for wave 1 (2008), wave 2 (2014), and wave 3 (2019). The next survey will take place in 2025 during September-November, according to the EU regulation.

Coverage: Persons aged 15 years old and over or persons aged 15-24 years old.

Methodology:

- Wave 3 EHIS methodology: use of electronic cigarettes or similar electronic devices (e.g. e-shisha, e-pipe) daily or occasionally.

- Data for 2019 based on Commission Regulation (EU) 2018/255 implementing Regulation (EC) No 1338/2008 of the European Parliament and of the Council as regards statistics based on the European Health Interview Survey (EHIS).

Further information: The EHIS methodology is published by Eurostat at https://ec.europa.eu/eurostat/cache/metadata/en/hlth_det_esms.htm.

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<https://www.oecd.org/en/data/datasets/oecd-health-statistics.html>