

OECD Health Statistics 2025

Definitions, Sources and Methods

Associate professional nursing graduates

Number of students who have obtained a recognised qualification as an associate professional nurse in a given year (see definition for "associate professional nurses").

Exclusion

- Graduates from a professional nurse programme

Sources and Methods

Australia

Source of data:

- **Australian Department of Education**. Award course completions (unpublished data).
- **National Centre for Vocational Education Research**, unpublished data.

Coverage: The data represents awarded course completions for Certificate IV, Diploma or Advanced Diploma in Nursing (Enrolled/Division 2 nursing).

Austria

Source of data: **Statistics Austria**, School Statistics.

Reference period: Examination year (1st January to 31st December).

Coverage: Included are (non-academic) nursing associate professional graduates (ISCO 3221). Two years of study are required to qualify as a nursing associate professional. The training curriculum for nursing associate professionals does not meet the educational requirements for nurses (as defined by Directive 2005/36/EC).

Deviation from the definition:

Estimation method: Since the non-academic degrees are only available at time t+3, the number of these graduates is extrapolated along the development of pupil numbers.

Break in time series:

Note: Training as an associate professional nurse was introduced in Austria in September 2016 and lasts two years.

Belgium

Data not available.

Canada

Source of data:

- 2007-2015 data: Health Workforce Database, **Canadian Institute for Health Information**.
- The database includes information from: Canadian Nurses Association, Association of New Brunswick Licensed Practical Nurses, Ministère de l'Éducation et de l'Enseignement supérieur du Québec, Registration Board and Association of Prince Edward Island, College of Licensed Practical Nurses of Nova Scotia, Saskatchewan Association of Licensed Practical Nurses.
- The 2016 and 2017 data is from The National Student and Faculty Survey of Canadian Schools of Nursing conducted by the **Canadian Association of Schools of Nursing**. The number of schools

participating in the survey may vary each year as will the response rate. For more details, contact hhr@cihi.ca.

Coverage: Includes LPN graduates.

- 2014 data is unavailable.

- Data is unavailable after 2017.

Chile

This category does not exist in Chile.

Colombia

Data not available.

Costa Rica

Data not available.

Czechia

Source of data: **Ministry of education, youth, and sports.**

Reference period:

Coverage:

- Graduates in practical nurse educational programmes from upper secondary paramedical schools.

Deviation from the definition:

Estimation method:

Break in time series:

Denmark

Data not available

Estonia

Data not available

Finland

Data not available

France

Source of data: **Ministère des Solidarités et de la Santé - Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques (DREES).** Sous-Direction de l'Observation de la Santé et de l'Assurance maladie, Bureau des Professions de santé. **Enquête "Ecoles de formation aux professions de la santé."** For further information: https://data.drees.solidarites-sante.gouv.fr/explore/dataset/491_la-formation-aux-professions-de-sante/information/.

Reference period:

Coverage:

Deviation from the definition:

Estimation method:

Break in time series:

Germany

Data category does not exist in Germany.

Greece

Source of data: **Hellenic Statistical Authority (EL.STAT.). Survey on Tertiary Education (Universities and Technological Institutions)** <https://www.statistics.gr/en/statistics/-/publication/SED33/>

Reference period: 31st December.

Coverage:

- The data on associate professional nurses graduates include graduates from the vocational senior high schools since 2007 and the vocational training institutes since 2011.

Deviation from the definition: Data collected for the academic year t/t+1 including students that graduated in year t+1 but the whole time series are classified in year t.

Estimation method:

Break in time series:

- Until 2011, there are no data for the vocational training institutes as they were under construction and not in full function.

- The drop in the number of associate nurses graduates in 2014-15 was due to no entries of students in preceding years because of the temporary abolishment of the relative specialization of assistant nurses in higher vocational education. Also concerning the ISCED 4 graduates from 2014/15 an extra semester of apprenticeship has been added, therefore, the students that would graduate in 2014/15 did not (some graduated the following year while others graduated later due to the inability to find a place for their apprenticeship).

Note: In 2020, the data on the associate professional nursing graduates have been revised upwards since 2011. That is because the previous data did not include the graduates from the post-secondary non tertiary education (ISC4). Therefore, the revised data include both graduates of the upper secondary level (ISC3) and the post-secondary non tertiary level (ISC4). Also, it should be noted that at this level, associate nursing and associate midwifery graduates are counted together because of the common specialization.

Hungary

Source of data:

- Up to 2012: **Hungarian Central Statistical Office** (KSH in Hungarian) www.ksh.hu on the basis of the data collection of the Ministry of Human Resources.

- From 2013 until 2014: **Office of Health Care Authorisation and Administrative Procedures** (EEKH in Hungarian) www.eekh.hu. Basic register.

- From 2015 to 2016, **Health Registration and Training Center** (ENKK in Hungarian) www.enkk.hu. Basic register.

- From 2017, **National Healthcare Service Center** (ÁEEK in Hungarian) www.enkk.hu. Basic register.

Reference period: 31st December.

Coverage:

- Up to 2012: Data are provided for graduates in secondary vocational school.

- Up to 2013: Nurses, by the year of registration in the Basic Register excluding graduates from professional nurse programme.

- Data on the professions of optometrists, dental technicians, pharmacy assistants, orthopaedic mechanics, medicinal gymnastics, medicinal massage therapists, sports massage therapists and infant and child attendants are not included.

- from reference year 2021, ambulance nurses are not included.

Break in time series:

- 2017: The system of the Hungarian vocational training had been transformed in 2010 and, as a part of it, the access to the nursing profession became a multi-stage process. In order to enter the professional nurse training, graduates have to obtain a practice nurse qualification, which falls under the category of associate nurse. As a result, these professionals can appear in the series of multiple years, at first under the category of the associate nurses and later - after an additional one-year-long training - in the category of professional nurses. Practising nurse training was phased out in the fall of 2022.

- From reference year 2017: With regards to the training requirements laid down in Directive 2005/36/EC, nursing graduates were regrouped:

- Professional nursing graduates: only nurses which have an education in compliance with the EC Directive on professional qualifications (e.g.. minimum 3 years for a general nurse) and

- Nursing graduates who do not meet the requirements of the Directive 2005/36/EC were moved to the Associate professional nurse category.
- Ambulance nursing graduates are excluded from the group of Nursing graduates.

Note: Between 2021 and 2022, the total number of associate professional nursing graduates decreased by 52%. The transformation of the vocational training system from the 2020/2021 academic year may play a role in the decrease. As a result of the transformation, some training courses (e.g. practical nurse, practical infant and child nurse) had been discontinued, causing a gradual decrease in the number of graduates. Also, there are certain trainings (e.g.: infant and child nurse), which were cancelled and then returned to the training palette.

Iceland

Source of data: **Statistics Iceland**, Register of graduations.

Reference period: The calendar year.

Coverage:

- Includes associate professional nursing graduates who have six semesters of education (towards becoming an associate professional nurse) in secondary school (non-university) and 16 weeks of practical training in health institutions.

- As of 2006, graduates from a new so-called “associate nurse bridge” programme are also included. This programme is for health assistants with at least five years working experience as caring assistants and 4 semesters of education towards becoming an associate professional nurse in secondary school (non-university). In 2008, 107 (2007:8; 2006:3) graduated from this programme, and 115 from the general programme for associate professional nursing. In 2009, nine graduated from the “associate nurse bridge” programme and 94 from the general programme.

- Graduates from the professional nurse programme are excluded.

Deviation from the definition:

Estimation method:

Break in time series:

Ireland

Data not available since all nurses must comply with the country’s nursing educational level.

Israel

Source of data: The data are based on the Nurses License Registry maintained by the Nursing Division and the Health Information Division in the **Ministry of Health**, for which the demographic information is periodically updated from the Population Registry at the Ministry of Interior.

Coverage: Data are for new licensed associate professional nurses who graduated in Israel.

- At the end of the 2000s, the policy of the Ministry of Health changed to reduce the number of associate professional nurses by not training new ones and re-training old ones as registered nurses. However, the training programme for associate professional nurses has re-opened, and since 2016 there are few new graduates. From 2023 this training programme closed again and therefore there are no new graduates.

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

In the Italian regulatory system, the category “Associate professional nurses” does not exist.

Japan

Source of data: **Ministry of Health, Labour and Welfare**, Survey on enrolment and graduates from nursing schools.

Note: The number of students enrolling in training schools is decreasing due to the declining birth rate. In addition, the number of training schools for associate professionals is decreasing every year.

Korea

Source of data:

- High schools for associate nurses: **Ministry of Education**, unpublished data.
- Educational institutions for associate nurses: **Registration data from local government**.

Latvia

Source of data:

- Until 2022 - **Central Statistical Bureau (CSB)**.
- From 2023 - National information system for education, owner and manager **Ministry of Education and Science of Latvia**.

Lithuania

All nurses are treated as professional nurses in Lithuania.

Luxembourg

Data not available.

Mexico

Data not available.

Netherlands

Coverage:

- All graduated registered nurses are professional nurses; we do not have associate professional nurses in the Netherlands.

New Zealand

Source of data: **Nursing Council of New Zealand**, Annual Reports.

Reference period: Year ending 31st March, e.g. 2019 data refer to all candidates from 1st April 2018 to 31st March 2019.

Coverage:

- Figures are for numbers of graduates of accredited Diploma in Enrolled Nursing (31st May 2010 onwards - Nursing Assistants prior to this) who sat the state final examination. (The purpose of the examination ensures that all graduates entering the New Zealand Register of Nursing have achieved certain standards of knowledge and competency).
- Figures provided for 'Associate Professional Nursing Graduates' are for registered enrolled nurses or nurses assistants nurse candidates for state examinations.
- Figures for NZ midwifery graduates are excluded.
- Enrolled nurses in New Zealand are regulated and their programme is 18 months. These figures are reported under 'Associate Professional Nursing Graduates'. The programme for nurse assistants (previously enrolled nurses) was re-established in 2003.
- The scope of practice for enrolled nurses and nurse assistants changed on 31st May 2010. The new enrolled nurse scope of practice enables enrolled nurses to make a broader contribution to health services and give greater support to registered nurses.

Norway

Data not available.

Poland

Data not available.

Portugal

The category “Associate professional nurse” does not exist in Portugal.

Slovak Republic

Data not available.

Slovenia

Source of data: National Institute of Public Health, Slovenia, Health Statistics Yearbook.
Reference period: 31st December.

Spain

The category 'associate professional nurses' does not exist in Spain.

Sweden

Data not available.

Switzerland

Source of data: **Federal Statistical Office (FSO)**, Neuchâtel; Vocational Education and Training Statistics; yearly census.

Reference period: Annual census.

Coverage: Full coverage based on population data (full-survey).

Türkiye

Data not available

United Kingdom

Data not available. (Registration of Associate Professional nurses by the NMC was only approved by the NMC Council on 25th January 2017 so figures for Associate Professional nursing graduates are not held by the NMC at present but will be available in the future.)

United States

Source of data:

- 2001-2011: **Health Resources and Services Administration (HRSA)**. National Center for Health Workforce Analysis. The U.S. Nursing Workforce: Trends in Supply and Education, 2001-2011. See at: <http://www.hrsa.gov/index.html> and

<http://bhpr.hrsa.gov/healthworkforce/reports/nursingworkforce/nursingworkforcefullreport.pdf>.

- 1997-2000; 2012-2019: **National Council of State Boards of Nursing (NCSBN)**. Nurse License Volume and NCLEX® Examination Statistics. Chicago. See at: <https://www.ncsbn.org/1237.htm>. Credit: “Portions copyrighted by the National Council of State Boards of Nursing, Inc. All rights reserved.”

Coverage:

- National estimates. Excludes U.S. territories.

- In the U.S., associate professional nurses are designated as licensed practical/vocational nurses (LPN).
 - Data exclude unlicensed professionals such as certified nurse assistants (CAN's). CAN's includes orderlies, psychiatric aides, medical assistants, and certified nurse's assistances/aides.
 - Recognized qualification to practice as LPN in the U.S. is given to individuals who successfully graduated and passed the National Council Licensure Examination for Practical Nurses (NCLEX-PN). The data represent the number of NCLEX-PN passers, first-timers, and repeats.
 - Data exclude internationally educated candidates passing the examination.
- Break in time series: No breaks in time series.

NON-OECD ECONOMIES

Bulgaria

Data not available

Croatia

Source of data: Ministry of Science and Education of the Republic of Croatia.

Reference period: From the year 2008, data are provided by the Ministry of Science, Education and Sports. Data refers not on calendar, but on academic years. For example, registered data for the year 2008, refers to the 2007/2008 academic year (01.10.2007 – 30.09.2008).

Cyprus

From 2007 onwards: No such graduates, since all graduates refer to professional nursing programs.
Up to 2006: Such graduates existed but no data is available.

Romania

Source of data: National Institute of Statistics, Activity of Education Units (Statistical data on tertiary education) – annual survey performed by NIS.

Reference period: academic year.

Coverage:

Deviation from the definition:

Estimation method:

Break in time series: 1996 (Since 1996 including private sector).

Explanation:

The data series for "associate professional nursing graduates" is oscillating. The explanations are the following:

- in 1991 and 1992 the graduates refer only to high school education (only medical high school graduates became nurses),
- in 1993 and 1992 only the students in the last two years of medical care education were present in the medical high schools because these institutions were projected to be abolished (dissolved) but in parallel, post-secondary schools were established with respective graduates. Thus, for these two years, 1993 and 1994 there are secondary and post-secondary graduates with nurse certificate.
- from 1995 there are only post-secondary graduates.
- since 1996 including private sector.

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