

Eurostat – Health care staff

Nursing and caring professionals

Updated: September 2021

In Eurobase, the nursing and caring professionals are disseminated as follows:

Name of the category in Eurobase	Description
1. Midwives	ISCO-08 codes 2222 and 3222
2. Nursing professionals	ISCO-08 code 2221
3. Nursing professionals and midwives	Total number of qualified nurses and midwives (1+2) (ISCO codes 2222, 3222 and 2221)
4. Associate professional nurses	ISCO-08 code 3221
5. Nurses	Total number of nurses (professional and associate professional nurses) (2+4) (ISCO codes 2221 and 3221)
6. Nurses and midwives	Total number of nursing professionals (1+2+4) (ISCO codes 2222, 3222, 2221 and 3221)
7. Health care assistants and home-based personal care workers	ISCO-08 codes 5321 and 5322
8. Nurses, midwives, health care assistants and home-based personal care workers	Total number of nursing and caring professionals (1+2+4+7) (ISCO codes 2222, 3222, 2221, 3221, 5321 and 5322)

Definitions

Practising midwives	<p>Practising midwives provide services directly to patients.</p> <p><u>Inclusion</u></p> <ul style="list-style-type: none">- Midwifery professionals (ISCO-08 code: 2222) and midwifery associate professionals (ISCO-08 code: 3222)- Persons who have completed their studies/education in midwifery and who are licensed to practice- Salaried and self-employed midwives delivering services irrespectively of the place of service provision- Nurses (or nurse midwives) who are working most of the time as midwives- Foreign midwives licensed to practice and actively practising in the country <p><u>Exclusion</u></p> <ul style="list-style-type: none">- Students who have not yet graduated- Midwives working in administration, management, research and in other posts excluding direct contact with patients- Unemployed midwives and retired midwives- Midwives working abroad <p>Note: The number should be at the end of the calendar year.</p>
Professionally active midwives	<p>Professionally active midwives include practising and other (non-practising) midwives for whom their education is a prerequisite for the execution of the job.</p> <p><u>Inclusion</u></p> <ul style="list-style-type: none">- Midwifery professionals (ISCO-08 code: 2222) and midwifery associate professionals (ISCO-08 code: 3222)- Midwives providing services directly to patients- Midwives working in administration, management, research and in other posts excluding direct contact with patients <p><u>Exclusion</u></p> <ul style="list-style-type: none">- Midwives who hold a post / job under which midwifery education is not required- Unemployed midwives and retired midwives- Midwives working abroad
Midwives licensed to practice	<p>Midwives licensed to practice have acquired the requisite education and qualifications to be registered and/or legally licensed to practice midwifery. They include both practising and other (non-practising) midwives.</p> <p><u>Inclusion</u></p> <ul style="list-style-type: none">- Midwifery professionals (ISCO-08 code: 2222) and midwifery associate professionals (ISCO-08 code: 3222)- Midwives who provide services directly to patients- Midwives for whom their midwifery education is a prerequisite for the execution of the job- Midwives for whom their midwifery education is NOT a prerequisite for the execution of the job- Midwives licensed to practice but who due to various reasons are not economically active (e.g. unemployed or retired)- Midwives working abroad

Practising nurses	<p>Practising nurses provide services directly to patients.</p> <p><u>Inclusion</u></p> <ul style="list-style-type: none"> - Professional nurses (see definition below) - Associate professional nurses (see definition below) - Foreign nurses licensed to practice and actively practising in the country <p><u>Exclusion</u></p> <ul style="list-style-type: none"> - Students who have not yet graduated - Nursing aids/assistants and personal care workers who do not have any recognised qualification/certification in nursing - Midwives (unless they work most of the time as nurses) - Nurses working in administration, management, research and in other posts that exclude direct contact with patients - Unemployed nurses and retired nurses no longer practising - Nurses working abroad <p>Note: The number should be at the end of the calendar year.</p>
Professionally active nurses	<p>Professionally active nurses include practising nurses and other nurses for whom their education is a prerequisite for the execution of the job.</p> <p><u>Inclusion</u></p> <ul style="list-style-type: none"> - Professional nurses (see definition below) - Associate professional nurses (see definition below) - Nurses providing services directly to patients - Nurses working in administration, management, research and in other posts excluding direct contact with patients <p><u>Exclusion</u></p> <ul style="list-style-type: none"> - Nurses who hold a post / job under which nursing education is not required - Unemployed nurses and retired nurses - Nurses working abroad <p>Note: The number should be at the end of the calendar year.</p>
Nurses licensed to practice	<p>A nurse licensed to practice has completed a programme of nursing education and is qualified and authorised in his/her country to practice nursing. They include practising and other (non-practising) nurses.</p> <p><u>Inclusion</u></p> <ul style="list-style-type: none"> - Professional nurses (see definition below) - Associate professional nurses (see definition below) - Nurses who provide services directly to patients - Nurses for whom their nursing education is a prerequisite for the execution of the job - Nurses for whom their nursing education is NOT a prerequisite for the execution of the job - Nurses licensed to practice but who due to various reasons are not economically active (e.g. unemployed or retired) - Nurses working abroad <p><u>Exclusion</u></p> <ul style="list-style-type: none"> - Health care assistants and personal care workers (nursing aids), who do not have any recognised qualification/certification in nursing <p>Note: The number should be at the end of the calendar year.</p>

Professional nurses (ISCO-08 code: 2221)	<p>Nursing professionals assume responsibility for the planning and management of the care of patients, including the supervision of other health care workers, working autonomously or in teams with medical doctors and others in the practical application of preventive and curative measures.</p> <p>Inclusion</p> <ul style="list-style-type: none"> - General care nurse - Specialist nurse - Clinical nurse - District nurse - Nurse anaesthetist - Nurse educator - Nurse practitioner - Public health nurse - Specialist nurse <p>Exclusion</p> <ul style="list-style-type: none"> - Midwife (unless they work most of the time as nurses) - Paramedical practitioner - University lecturer - Vocational education teacher - Associate professional nurse - Associate professional midwife - Nursing aide - Medical assistant (ISCO-08 code: 3256) <p>Note: Feldschers should be reported under this category of professional nurses, in those countries where this occupation exists.</p> <p>Note: The number should be at the end of the calendar year.</p>
Associate professional nurses (ISCO-08 code: 3221)	<p>Nursing associate professionals generally work under the supervision of, and in support of implementation of health care, treatment and referrals plans established by medical, nursing and other health professionals.</p> <p>Inclusion</p> <ul style="list-style-type: none"> - Assistant nurse - Enrolled nurse - Practical nurse <p>Exclusion</p> <ul style="list-style-type: none"> - Professional nurse - Clinical nurse consultant - Specialist nurse - Midwife (unless they work most of the time as nurses) - Associate professional midwife - Nursing aide - Medical assistant (ISCO-08 code: 3256) <p>Note: The number should be at the end of the calendar year.</p>

<p>Practising caring personnel (personal care workers)</p> <p><i>This category includes both Health care assistants in institutions (ISCO-08 5321) and Home-based personal care workers (ISCO-08 5322).</i></p>	<p>Health care assistants (ISCO-08 code: 5321) provide direct personal care and assistance with activities of daily living to patients and residents in a variety of health care settings such as hospitals, clinics, and residential nursing care facilities. They generally work in implementation of established care plans and practices, and under the direct supervision of medical, nursing or other health professionals or associate professionals.</p> <p>Inclusion</p> <ul style="list-style-type: none"> - Nursing aide (clinic or hospital) - Patient care assistant - Psychiatric aide - Foreign health care assistants practising in the country <p>Exclusion</p> <ul style="list-style-type: none"> - Nurse (professional and associate professional). <p>Home-based personal care workers (ISCO-08 code: 5322) provide routine personal care and assistance with activities of daily living to persons who are in need of such care due to effects of ageing, illness, injury, or other physical or mental condition in private homes and other independent residential settings.</p> <p>Inclusion</p> <ul style="list-style-type: none"> - Home care aide - Nursing aide (home) - Personal care provider - Foreign personal care workers practising in the country <p>Exclusion</p> <ul style="list-style-type: none"> - Nurse (professional and associate professional) - Social worker <p>Note: The number should be at the end of the calendar year.</p>
<p>Professionally active caring personnel (personal care workers)</p>	<p>Professionally active caring personnel include practising caring personnel and other caring personnel for whom their education is a prerequisite for the execution of the job.</p> <p>Inclusion</p> <ul style="list-style-type: none"> - Caring personnel providing services directly to patients - Caring personnel working in administration, management, research and in other posts that exclude direct contact with patients <p>Exclusion</p> <ul style="list-style-type: none"> - Unemployed caring personnel and retired caring personnel - Caring personnel working abroad <p>Note: The number should be at the end of the calendar year.</p>
<p>Nursing professionals at regional level</p> <p>This data collection was discontinued in 2017 (reference year 2015)</p>	<p>Practising midwives and nurses at regional (NUTS2) level according to the place (region) where the health care service is provided.</p>

In the context of comparing health care services across Member States, Eurostat gives preference to the concept 'practising', as it best describes the availability of health care resources. The detailed definitions are available in [CIRCABC](#).

The data refer to 31st of December (unless otherwise indicated).

Country specific notes

[Belgium](#), [Bulgaria](#), [Czechia](#), [Denmark](#), [Germany](#), [Estonia](#), [Ireland](#), [Greece](#), [Spain](#), [France](#), [Croatia](#), [Italy](#), [Cyprus](#), [Latvia](#), [Lithuania](#), [Luxembourg](#), [Hungary](#), [Malta](#), [Netherlands](#), [Austria](#), [Poland](#), [Portugal](#), [Romania](#), [Slovenia](#), [Slovakia](#), [Finland](#), [Sweden](#), [Iceland](#), [Liechtenstein](#), [Norway](#), [Switzerland](#), [Montenegro](#), [North Macedonia](#), [Albania](#), [Serbia](#), [Turkey](#), [United Kingdom](#)

Belgium

Practising midwives

Source of data: Data is coming from the **PlanKad Midwives** (Vroedvrouwen op de arbeidsmarkt, 2004-2014). Linked data of FPS Health, RIZIV/INAMI and Datawarehouse under the supervision of the cell "Planning and offer of healthcare professions" of the FPS Health, Food chain safety and Environment.

Estimation method:

- Data from 2004 to 2014 have been linked and analyzed. The results consist of actual numbers based on the number of midwives extracted from the federal register (Kadaster) of the FPS Health.
- A methodology has been used to define and identify "practising" midwives (active in health care sector).

Professionally active midwives

Source of data: Data is coming from the **PlanKad Midwives** (Vroedvrouwen op de arbeidsmarkt, 2004-2014). Linked data of FPS Health, RIZIV/INAMI and Datawarehouse under the supervision of the cell "Planning and offer of healthcare professions" of the FPS Health, Food chain safety and Environment.

Estimation method:

- Data from 2004 to 2014 have been linked and analyzed. The results consist of actual numbers based on the number of midwives extracted from the federal register (Kadaster) of the FPS Health.
- The professionally active midwives are categorized as active midwives within or outside the health care sector.

Midwives licensed to practice

Source of data: 2004-2016 data selected from the Federal database of health care professionals.

- 2004-2014: selection using the PlanKad Midwives (Vroedvrouwen op de arbeidsmarkt, 2004-2014). Linked data of FPS Health, RIZIV/INAMI and Datawarehouse under the supervision of the cell "Planning and offer of healthcare professions" of the FPS Health, Food chain safety and Environment.

Coverage:

- 2004-2014: This number represents all persons who have obtained a diploma as Midwife.
- From 2015 onwards: This number contains all midwives whose latest diploma is that of Midwife.

Break in time series: 2015.

Practising nurses

Source of data: Data come from **PlanCad infirmier** (SPF Santé Publique, INAMI and Datawarehouse *Marché du travail et Protection sociale*), under the supervision of **SPF Santé Publique**.

Estimation method:

- The 2004-2008 data and 2010-2015 data have been estimated by using the 2009 share of practising nurses among all professionally active nurses.
- In 2016, data come from PlanCad infirmier 2016 and are real distribution and no more estimation.

Professionally active nurses

Source of data: **Service Public Fédéral Santé publique, sécurité de la chaîne alimentaire et environnement** (Federal Public Service (FPS) Health, Food Chain Safety and Environment), DG2 -

Soins de santé primaire et gestion de crises (Directorate-General for Primary Health Care and Crisis Management). The Cellule "Planification des professionnels de santé" ("Planning of Health Professionals" unit) based the data on the cross-referencing of different administrative databases and registers from various sources (FPS Health, register; INAMI; Datawarehouse social protection). Estimation method: The 2010-2015 data have been estimated by using the average share for the period 2004-2009 of professionally active nurses among all nurses licensed to practice. Break in time series: 2016. The data for 2016 come from new publication "Infirmiers sur le marché du travail, 2016".

Nurses licensed to practice

Source of data: **Service Public Fédéral Santé publique, sécurité de la chaîne alimentaire et environnement** (Federal Public Service (FPS) Health, Food Chain Safety and Environment), DG2 - Soins de santé primaire et gestion de crises (Directorate-General for Primary Health Care and Crisis Management). Cellule Planification des professionnels de santé ("Planning of Health Professionals" unit). Base de données fédérale des professionnels de soins de santé (Federal database of health care professionals).

Reference period: 31st December.

Coverage: Data cover all nurses licensed to practice.

Professional nurses (ISCO-08 code: 2221)

Data not available.

Associate professional nurses (ISCO-08 code: 3221)

Data not available.

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Source of data: **SPF Santé publique, sécurité de la chaîne alimentaire et de l'environnement**, DG2 Soins de Santé primaires et gestion de Crises - **FOD Volksgezondheid, Veiligheid van de Voedselketen en Leefmilieu** DG2 Basisgezondheidszorg en Crisisbeheer. Base de données fédérale des professionnels de soins de santé - Federale databank van de beoefenaars van de gezondheidszorgberoepen. Administrative database.

Further information: www.health.fgov.be.

Reference period: 31st December.

Deviation from the definition: Data refer to caring personnel licensed to practice (a new health care profession since 2007 licensed by the ministry of health).

Break in time series: 2018. As of 2018, a new rule is applied for caring personnel: people with a title of nurse are removed from statistics on caring personnel. The number of caring personnel including those with a title of nurse would be 139 047 in 2018 (113 788 excluding those with a title of nurse).

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Data not available.

Bulgaria

Practising midwives

Source of data: **National Statistical Institute**, Exhaustive annual survey.

Reference period: 31st December.

Coverage: All midwives (head counts) (ISCO-08 code: 2222) who worked on a basic labour contract in outpatient and inpatient establishments, as well as those who practice in other health establishments - centres for emergency medical care, centres for transfusion haematology, homes for medical and social care for children, Hygiene-epidemiological inspections and others.

On 01.07.2000 Bulgaria started its Healthcare Reform, as a consequence, a new institution in the outpatient care was build - the General Practitioner (GP) and the financing of curative medical care by the National Health Insurance Fund came into force. Specialists working in individual and group practices for specialized medical care, who have not signed contracts with the National Health Insurance Fund, are not covered in the exhaustive annual survey carried out by the BNSI (*Bulgarian National Statistical Institute*), midwives appointed by these physicians are not covered either.

Break in time series: 2000.

Professionally active midwives

Source of data: **Bulgarian Association of Health Professionals in Nursing**, Register.

Reference period: 31st December.

Coverage: According to the national legislation all midwives (ISCO-08 code: 2222) who are professionally active in Bulgaria have to be included in the Register at the Bulgarian Association of Health Professionals in Nursing.

Break in time series: 2014 – due to insufficient information.

Midwives licensed to practice

Data not available.

Practising nurses

Source of data: **National Statistical Institute**, Exhaustive annual survey.

Reference period: 31st December.

Coverage: All nurses (head counts) who worked on a basic labour contract in outpatient and inpatient establishments, as well as those who practice in other health establishments - centres for emergency medical care, centres for transfusion haematology, homes for medical and social care for children, Hygiene-epidemiological inspections and others.

On 01.07.2000 Bulgaria started Healthcare Reform: a new institution in the outpatient care was build - the General Practitioner (GP), financing of curative medical care by the National Health Insurance Fund came into force. Specialists working in individual and group practices for specialized medical care, who have not signed contracts with the National Health Insurance Fund, are not covered in the exhaustive annual survey carried out by the BNSI, and neither nurses appointed by these physicians.

Break in time series: 2000.

Professionally active nurses

Data not available.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: National Statistical Institute, Exhaustive annual survey.

Reference period: 31st December.

Coverage: All nurses (head counts) (ISCO-08 code: 2221) who worked on a basic labour contract in outpatient and inpatient establishments, as well as those who practice in other health establishments - centres for emergency medical care, centres for transfusion haematology, homes for medical and social care for children, Hygiene-epidemiological inspections and others.

Associate professional nurses (ISCO-08 code: 3221)

The category Associate professional nurse does not exist in Bulgaria. Whole time series has been set to 0.

Practising caring personnel (personal care workers)

Source of data: National Statistical Institute, Exhaustive annual survey.

Reference period: 31st December.

Coverage: All Health care assistants (head counts) (ISCO-08 code: 5329) who worked on a basic labour contract in outpatient and inpatient establishments, as well as those who practice in other health establishments - centres for emergency medical care, centres for transfusion haematology, homes for medical and social care for children, Hygiene-epidemiological inspections and others. Professional activities carried out by health care assistant are legally regulated in Ordinance № 1 of the Ministry of Health from 2011 (SG. 15 of 2011) for professional activities that nurses, midwives, associated medical specialists and healthcare assistants can make by appointment or alone.

Estimation method: Data on medical specialists refer to the speciality that is practiced.

According to the National Classification of Occupations and Duties, consistent with the International Standard Classification of Occupations (ISCO-08), the code 5321 includes hospital attendants (caring personnel) and persons responsible for hygiene. Persons included in this group do not have any medical education, knowledge or training. The tasks they perform are as follows: assisting patients with personal and therapeutic care needs such as personal hygiene, dressing; positioning, lifting and turning patients and transporting them in wheelchairs or on movable beds; maintaining patients' environmental hygiene standards, such as cleaning patient rooms and changing bed-linen. All these persons are included in the group "Other staff employed in hospitals" - non health professionals working on a basic labour contract in inpatient health establishments.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: National Statistical Institute, Exhaustive annual survey.

Reference period: 31st December.

Coverage: All nurses and midwives (head counts) as of 31.12. who worked on a basic labour contract in outpatient and inpatient establishments, as well as those who practice in other health establishments - centres for emergency medical care, centres for transfusion haematology, homes for medical and social care for children, Hygiene-epidemiological inspections and others.

Practising qualified nurses and midwives who worked in health establishments attached to other offices are not included in the distribution by statistical regions. That is why the national total is bigger.

2014 data are revised due to technical error

Czechia

Practising midwives

Source of data: **Institute of Health Information and Statistics of the Czech Republic**; National Health Information System (Annual report on health personnel).

Reference period: 31st December.

Coverage:

- Until 1999, women's nurses working in other central organs not included. Since the year 2000, data cover women's nurses in all health services.
 - Since 2004, data collected on basis of new legislation on non-medical professions (until 2003: women's nurses, since 2004: midwives).
 - Double counting of midwives working in more than one health establishment.
 - Data relate to midwives working in health establishments. Those working in social care sector are not included.
 - In 2014, complete data are not available. Estimate is calculated from available data for 2014 and data from 2013.
 - A new type of statistical survey and improvement of reporting units started in 2016.
- Break in time series: 2000, 2004 and 2016.

Professionally active midwives

Data not available.

Midwives licensed to practice

Source of data: **National Centre of Nursing and Other Health Professions**; Register of health care workers competent to pursue a health care profession without professional supervision.

Reference period: 31st December.

Coverage:

- Data refer to midwives competent to pursue a health care profession without professional supervision (number of registered persons with valid registration).
- Data comprise non-practising midwives and midwives working outside health care system also, unlike to data on practising midwives.
- As of 1.9.2017, the certificates are not issued and the validity of previously issued certificates is not extended.
- Data from 2017 are not available yet (data from a new register are still validated for completeness and accuracy).

Break in time series: 2016. In 2016, length of registration was changed by actual law. Hence the number of registrations also changed.

Practising nurses

Source of data: **Institute of Health Information and Statistics of the Czech Republic**; National Health Information System (Annual report on health personnel).

Reference period: 31st December.

Coverage:

- Until 1999, nurses working in other central organs not included. Since the year 2000, data cover nurses in total health services.

- Since 2004 data collected on basis of new legislation on non-medical professions.
 - Double counting of nurses working in more than one health establishment.
 - Data relate to nurses working in health establishments. Those working in social care sector are not included.
 - In 2014, complete data are not available. Estimate is calculated from available data for 2014 and data from 2013.
 - Till 2016, data comprise general and pediatric nurses. Since 2017, data also include practical nurses.
- Break in time series: 2000, 2004 and 2017.
- 2017: Due to change in legislation, new category of practical nurse (formerly called medical assistant) is considered and reported as associate professional nurse.

Professionally active nurses

Data not available.

Nurses licensed to practice

Source of data: **National Centre of Nursing and Other Health Professions;** Register of health care workers competent to pursue a health care profession without professional supervision. Since 2017, the certificate was canceled.

Reference period: 31st December.

Coverage:

- Data refer to nurses competent to pursue a health care profession without professional supervision (number of registered persons with valid registration).
- Data comprise non-practising nurses and nurses working outside health care system also, unlike data on practising nurses.
- As of 1.9.2017, the certificates are not issued and the validity of previously issued certificates is not extended.
- Data from 2017 are not available yet (data from a new register are still validated for completeness and accuracy).

Break in time series: 2016. In 2016, length of registration was changed by actual law. Hence the number of registrations also changed.

Professional nurses (ISCO-08 code: 2221)

Source of data: Institute of Health Information and Statistics of the Czech Republic. National Health Information System (Annual report on health personnel).

Reference period: 31st December.

Coverage:

- Data comprise general and pediatric nurses.
- Data relate to nurses working in health establishments. Those working in social care sector are not included.
- Double counting of nurses working in more than one health establishment.

Break in time series: Since 2004 data collected on basis of new legislation on non-medical professions.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: Institute of Health Information and Statistics of the Czech Republic. National Health Information System (Annual report on health personnel).

Reference period: 31st December.

Coverage:

- Since 2017, data refer to practical nurses. (Due to change in legislation, new category of practical nurse (formerly called medical assistant) is considered and reported as associate professional nurse as of 2017).
- Data relate to nurses working in health establishments. Those working in social care sector are not included.
- Double counting of nurses working in more than one health establishment.

Practising caring personnel (personal care workers)

Source of data: **Institute of Health Information and Statistics of the Czech Republic**; National Health Information System (Annual report on health personnel).

Reference period: 31st December.

Coverage:

- Providers: caring personnel working in health and social establishments. Those working in social care sector are not included.
- Professions: medical assistants (till 2016), auxiliary nurses, hospital porters.
- Type of contract: Employees on payroll and employers (contractual workers are not included).
- Double counting of caring personnel working in more than one health establishment.
- In 2014, complete data are not available. Estimate is calculated from available data for 2014 and data from 2013.

Break in time series:

- 2017 (amendment of legislation): The profession of medical assistant (working under direct supervision and considered as caring personnel) was replaced by the profession of practical nurse (who were given more autonomy and are considered as associate professional nurse).

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Institute of Health Information and Statistics of the Czech Republic. National Health Information System (Annual report on health personnel).

Reference period: 31st December.

Coverage:

- Concept used: Practising general nurses and midwives.
- Double counting of workers working in more than one health establishment.
- Since 2004 data collected on basis of new legislation on non-medical professions.
- Data relates to nursing professionals working in health establishments. Those working in social establishments are not included.
- In 2014, complete data are not available. Estimate is calculated from available data for 2014 and data from 2013.

Denmark

Practising midwives

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.

Reference period: 31st December.

Coverage: Midwives whose status in the Central Personnel Register is active, i.e. in the country (not dead or abroad); connected to HP1, HP2 or HP3 as either a) employed, b) employed, being on leave

or c) employed, receiving sickness benefit.

Note: The decrease in practising midwives in 1995 is due to the uncertainty in the numbers in different industries. Approximately 75 midwives were misplaced in 'practising' industries in 1994. In 1993 and 1995, those midwives were placed in public administration industries. There is therefore not a real decrease in 1995, because the number in 1994 is overestimated.

Professionally active midwives

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Midwives licensed to practice

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Practising nurses

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Professionally active nurses

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Nurses licensed to practice

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Professional nurses (ISCO-08 code: 2221)

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Practising caring personnel (personal care workers)

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.
Reference period: 31st December.

Coverage: Staff whose status in the Central Personnel Register is active, i.e. in the country (not dead or abroad); connected to HP1, HP2 or HP3 as either a) employed, b) employed, being on leave or c) employed, receiving sickness benefit.

Professionally active caring personnel (personal care workers)

Source of data: **The Danish Health Authority**, Labour Register for Health Personnel.

Reference period: 31st December.

Coverage: Staff whose status in the Central Personnel Register is active, i.e. in the country (not dead or abroad); connected to HP1, HP2 or HP3 as either a) employed, b) employed, being on leave or c) employed, receiving sickness benefit.

Nursing professionals at regional level:

Data collection discontinued in 2017 (reference year 2015)

Source of data: The Danish Health Authority, Labour Register for Health Personnel

Reference period: 31st December.

Germany

Practising midwives

Source of data: **Federal Statistical Office**, Health Labour Accounts 2018; special calculation by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data (head-counts rounded to the nearest thousand) contain the number of midwives actively practising in public and private hospitals, primary health care and other health facilities including self-employed. They provide services directly to patients.
- Excluded are midwives working in administration, research and in other posts excluding direct contact with patients, midwives working abroad, unemployed and retired midwives and students who have not yet graduated.
- From 2000 onwards, data from Health Labour Accounts have been completely revised. Therefore comparable data before 2000 is not available.

Professionally active midwives

Source of data: **Federal Statistical Office**, Health Labour Accounts 2018; special calculation by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data (head-counts rounded to the nearest thousand) contain the number of midwives actively practising in public and private hospitals, primary health care and other health facilities including self-employed. Also included are midwives working in administration, management, research and in other posts excluding direct contact with patients.
- Excluded are midwives working abroad, unemployed and retired midwives and students who have not yet graduated.
- From 2000 onwards, data from Health Labour Accounts have been completely revised. Therefore comparable data before 2000 is not available.

Midwives licensed to practice

Data not available.

Practising nurses

Source of data: **Federal Statistical Office**, Health Labour Accounts 2018; special calculation by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data include professional nurses with a 3-year education and associate professional nurses with a 1-year education (nurses, paediatric nurses and nurses for the elderly).
- Data (head-counts rounded to the nearest thousand) contain the number of nurses actively practising in public or private hospitals, primary health care and other health facilities including self-employed. They provide services directly to patients.
- Excluded are midwives, nurses working in administration, research and in other posts excluding direct contact with patients, nurses working abroad, unemployed and retired nurses and students who have not yet graduated.
- From 2000 onwards data from Health Labour Accounts have been completely revised. Therefore comparable data before 2000 are not available.

Professionally active nurses

Source of data: **Federal Statistical Office**, Health Labour Accounts 2018; special calculation by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data include professional nurses with a 3-year education and associate professional nurses with a 1-year education (nurses, paediatric nurses and nurses for the elderly).
- Data (head-counts rounded to the nearest thousand) contain the number of nurses actively practising in public or private hospitals, primary health care and other health facilities including self-employed. Also included are nurses working in administration, management, research and in other posts excluding direct contact with patients.
- Excluded are midwives, nurses working abroad, unemployed and retired nurses and students who have not yet graduated.
- From 2000 onwards data from Health Labour Accounts have been completely revised. Therefore comparable data before 2000 are not available.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Federal Statistical Office**, Health Labour Accounts 2018; special calculation by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data include professional nurses with a 3-year education (nurses, paediatric nurses and nurses for the elderly).
- Excluded are associate professional nurses with a 1-year education and midwives.
- From 2000 onwards data from Health Labour Accounts have been completely revised. Therefore comparable data before 2000 are not available. Data are rounded to the nearest thousand.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **Federal Statistical Office**, Health Labour Accounts 2018; special calculation by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data include associate professional nurses with a 1-year education (auxiliary nurses and auxiliary nurses for the elderly).
- Excluded are professional nurses with a 3-year education, emergency medical assistants and midwives.
- From 2000 onwards data from Health Labour Accounts have been completely revised. Therefore comparable data before 2000 are not available. Data are rounded to the nearest thousand.

Practising caring personnel (personal care workers)

Source of data: **Federal Statistical Office**, Nursing care statistics 2017; Statistisches Bundesamt 2018, Pflegestatistik 2017, Pflege im Rahmen der Pflegestatistik - Deutschlandergebnisse, table 2.5, 3.7 and internal evaluations by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: Data are collected every other year as of 15th December.

Coverage:

- Data include practising caring personnel in the Long-Term Care sector. In this context, "Long-term care" is defined by the long-term care insurance act - Social Code XI (SGB XI).
- Data comprise practising caring personnel in outpatient care facilities and in nursing and residential care facilities in all sectors (public, not-for profit and private) who are providing LTC services (basic and nursing care, attendance, housekeeping and nursing care service management).
- Included are persons with the following qualifications (note: if the person employed has more than one training qualification, nursing care statistics asks for highest professional qualification): State-approved family care staff, state-approved village (assistant) nursing staff, trained housekeeper for the elderly or other housekeeping qualification, other nursing profession or other vocational qualification, employees without completed vocational qualification or still in training.
- Excluded are nurses (professional and associate professional) and social worker. Also excluded are caring personnel working in other posts that exclude direct contact with patients.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Federal Statistical Office, Health Labour Accounts 2017; special calculation by the Federal Statistical Office, <http://www.destatis.de> or <http://www.gbe-bund.de>.

Reference period: 31st December.

Coverage:

- Data include midwives and nurses (professional nurses with a 3-year education and associate professional nurses with a 1-year education).
- Data (head-counts) contain the number of midwives and nurses actively practising in public or private hospitals, primary health care and other health facilities including self-employed. They provide services directly to patients.
- Excluded are midwives and nurses working in administration, research and in other posts excluding direct contact with patients, midwives and nurses working abroad, unemployed and retired midwives and nurses and students who have not yet graduated.
- From 2000 onwards data from Health Care Personnel have been completely revised. Therefore

comparable data before 2000 are not available.
- Regional data is not available

Estonia

Practising midwives

Source of data:

- Annual reports, **National Institute for Health Development**, Department of Health Statistics.
https://statistika.tai.ee/pxweb/en/Andmebaas/Andmebaas_04THressursid_05Tootajad/?tablelist=true.

- 1980-2004 data published by **Statistics Estonia**

(https://andmed.stat.ee/en/stat/Lepetatud_tabelid_Sotsiaalelu.%20Arhiiv_Tervis.%20%20Arhiiv_tervishoiuasutused/TH05).

Reference period:

- 1980-2012: 31st of December.

- Since 2013: November.

Coverage:

- Presents practising midwives who provide services directly to patients.
- Medical staff working in military, research or other areas are not included.

Break in time series: 1991, 2005 and 2013.

- Until 1990, in addition to health personnel employed in the system of the Ministry of Health, the data include the personnel who worked in the health care institutions of the Estonian Railway, Estonian Airway and those belonging to the closed establishments of the Soviet Union.

- The total number of midwives from the year 1991 includes only the data of the Ministry of Health and the Estonian Railway.

- Until 2004, the number of practising midwives was based on their last or main educational qualifications.

- From 2005, the head count edistribution is made according to their main occupational activity.

- The data collection methodology was changed in 2013. Aggregated data collection was replaced with data collection on a personal basis. From 2013, the predominant (main) area of practice is based on an occupation with the highest workload.

Note: The data series for "**Practising midwives**" 2013-2015 was updated in 2018 after data revision.

Professionally active midwives

Data not available.

Midwives licensed to practice

Source of data: Registry of licensed health care personnel, **Health Care Board**.

Reference period: January of the following year.

Coverage:

- The number of licensed midwives refers to overall potential, not persons by the last obtained specialty.

Practising nurses

Source of data:

- Annual reports, **National Institute for Health Development**, Department of Health Statistics.

https://statistika.tai.ee/pxweb/en/Andmebaas/Andmebaas_04THressursid_05Tootajad/?tablelist=true.

- 1980-2003 nurses and assistant doctors, data published by **Statistics Estonia** (https://andmed.stat.ee/en/stat/Lepetatud_tabelid_Sotsiaalelu.%20Arhiiv_Tervis.%20%20Arhiiv_tervishoiuasutused/TH05).

Reference period:

- 1980-2012: 31st of December.
- Since 2013: November.

Coverage:

- Presents practising nurses who provide services directly to patients.

Break in time series: 1992, 2005, 2012 and 2013.

- The types of institutions included have changed over the period in question. Until 1991 data correspond more to professionally active nurses (practising + working in health sector).
- Since 1992, medical staff working in military, research or other areas have not been included.
- Until 2004, the source was an annual report on practising health care personnel based on their educational last or main qualification.
- From 2005, the head count distribution is made according to their main occupational activity.
- From 2012, the number of practising nurses does not include radiology nurses. Radiology nurses (by job specification - same as radiology technicians) are classified in the category of other health service providers.

Note: The decrease after 1991 was the result of the first reorganisation wave of health care system of the independent country. A large-scale legislative reform took place in the early 1990s. In 1991 the provider licensing system was enhanced, which was an important precondition for decreasing hospital network capacity to enable more efficient use of resources and to ensure quality. In 1994, after a detailed review of all providers, substandard providers were closed.

- The data collection methodology was changed in 2013. Aggregated data collection was replaced with data collection on a personal basis. From 2013, the predominant (main) area of practice is based on an occupation with the highest workload.

Note: The data series for "Practising nurses" 2013-2015 was updated in 2018 after data revision.

Professionally active nurses

Data not available.

Nurses licensed to practice

Source of data: Registry of Health Care Professionals, **Health Care Board**.

Reference period: January of the following year.

Coverage:

- The number of licensed nurses refers to overall potential, not persons by the last obtained specialty.

Professional nurses (ISCO-08 code: 2221)

Source of data:

- Annual reports, **National Institute for Health Development**, Department of Health Statistics.

https://statistika.tai.ee/pxweb/en/Andmebaas/Andmebaas_04THressursid_05Tootajad/?tablelist=true.

- 1980-2003 nurses and assistant doctors, data published by **Statistics Estonia**

(https://andmed.stat.ee/en/stat/Lepetatud_tabelid_Sotsiaalelu.%20Arhiiv_Tervis.%20%20Arhiiv_tervishoiuasutused/TH05).

Reference period:

- 1980-2012: 31st of December.

- Since 2013: November.

Coverage:

- Presents practising nurses who provide services directly to patients.

Break in time series (for practising professional nurses): 1992, 2005, 2012 and 2013.

- The types of institutions included have been changed over the period in question. Until 1991 the data correspond more to professionally active nurses (practising + working in health sector).

- Since 1992, medical staff working in military, research or other areas have not been included.

- Until 2004, the source was an annual report on practising health care personnel based on their last or main educational qualification.

- From 2005, the head count distribution is made according to their main branch occupational activity.

- From 2012, the number of practising nurses does not include radiology nurses. Radiology nurses (by job specification - same as radiology technicians) are classified in the category of other health service providers.

Note: The decrease after 1991 was the result of the first reorganisation wave of health care system of the independent country. A large-scale legislative reform took place in the early 1990s. In 1991 the provider licensing system was enhanced, which was an important precondition for decreasing hospital network capacity to enable more efficient use of resources and to ensure quality. In 1994, after a detailed review of all providers, substandard providers were closed.

- The data collection methodology was changed in 2013. Aggregated data collection was replaced with data collection on a personal basis. From 2013, the predominant (main) area of practice is based on an occupation with the highest workload.

Note: The data series for "Professional nurses" 2013-2015 was updated in 2018 after data revision.

Associate professional nurses (ISCO-08 code: 3221)

The category "associate professional nurses" does not exist in Estonia.

Practising caring personnel (personal care workers)

Source of data: Annual reports, **National Institute for Health Development**, Department of Health Statistics.

Reference period:

- 1980-2012: 31st of December.

- Since 2013: November.

Coverage:

- Data on caring personnel includes persons working in health care institutions only. Personal care workers employed by the social welfare institutions are not included.

Home-based services are provided by the home-nurses included under the category "Practising nurses". Other home-based personal care services are arranged by the social welfare system. In social welfare system the personal carers at home are formally appointed by the local government (and get also small caregiver's benefit), many of these formal caregivers are family members.

Break in time series: 2005, 2008 and 2013.

- Until 2004, data refer to practising caring personnel with special education only.

- From 2005, the head count distribution is made according to their main occupational activity, and all personal care workers (caring nurses and assistant nurses) are included regardless of formal education status.

- Until 2007, several hospitals presented caring nurses with special education only; from 2008 all caring nurses have been included.

- The data collection methodology was changed in 2013. Aggregated data collection was replaced with data collection on a personal basis. From 2013, the predominant (main) area of practice is based on an occupation with the highest workload.

Note: The data series for “Practising caring personnel” 2013-2015 was updated in 2018 after data revision.

Professionally active caring personnel (personal care workers)

Data not available.

Ireland

Practising midwives

Data not available. (Data are not provided for midwives as virtually all registered midwives also hold registered nursing qualifications).

Professionally active midwives

Source of data: **Health Service Executive.**

Reference period: Data refer to end of 2011 (Jan 2012 for 2 maternity units).

Coverage:

- Data cover both the public and private sectors as well as self-employed community midwives.
- Data include midwives working in administration and management and exclude student midwives.

Deviation from the definition: Data refer to Full-Time Equivalents.

Midwives licensed to practice

Source of data: **An Bord Altranais** (Nursing Board).

Reference period: 31st December.

Coverage:

- Information provided is the total number of active registered midwives on the Board's register on 31st December each year. A midwife on the register has completed a programme of midwifery education and is qualified and authorized to practice midwifery in Ireland. This does not necessarily mean that each midwife is active in the field of midwifery.

Deviation from the definition:

- Data include nurses. It is not possible to distinguish between nurses and midwives as virtually all registered midwives also hold registered nursing qualifications.

Practising nurses

Data not available.

Professionally active nurses

Source of data:

- From 2016: The Labour Force Survey (LFS), Central Statistics Office (CSO).
- 2012-2015: **CSO Quarterly National Household Survey** (QNHS) data, CSO.
- Pre 2012: **FÁS / Skills and Labour Market Research Unit** (SLMRU) analysis of CSO Quarterly National Household Survey (QNHS) data (labour force survey).

<http://www.skillsireland.ie/publication/egfsnSearch.jsp> - National Skills Bulletin.

Reference period: Data are expressed as the annual average (average of four quarters).

Coverage:

- Data include midwives. It is not possible to distinguish between nurses and midwives as virtually all registered midwives also hold registered nursing qualifications.
- Data include those working in both the public and private sectors.

Deviation from the definition: Data include midwives.

Break in time series:

- 2007: In 2016 results for occupations coded to the new SOC2010 classification have now been recoded for historical quarters back to Q1 2007 to provide a longer and consistent time series for users'. A new sample based on the 2011 Census of Population was selected for the LFS.

For further information on the LFS, please see 'Background notes':

<http://www.cso.ie/en/releasesandpublications/er/qnhs/quarterlynationalhouseholdsurveyquarter2017/>

- Until 2009, the QNHS was conducted on seasonal quarters (first quarter starting in December). Since 2009, the QNHS has been conducted on a calendar quarter basis. Also, since 2009 an updated EU Classification of industrial sectors (NACE rev 2) was used.

Source of data:

- From 2007: The Labour Force Survey (LFS), Central Statistics Office (CSO) Ireland
The introduction of the LFS in 2017 constituted a break in series for the labour force estimates published by the CSO. In an effort to mitigate the effect of the introduction of the LFS on the coherence of the historic data series, a back casting exercise was carried out to link the Quarterly National Household Survey (QNHS) and the LFS.

However, because of changes to the questionnaire, the interview mode, the introduction of a new sample, data processing changes and other methodological enhancements there are changes in the levels of some series from Q3 2017 onwards. Consequently, the series before and after the introduction of the new survey may not be directly comparable and users should therefore note this when examining annual and quarterly changes.

Please refer to the following information notes for further details:

<http://www.cso.ie/en/releasesandpublications/in/lfs/informationnotice-labourforcesurveyquarter32017/>

<http://www.cso.ie/en/releasesandpublications/in/lfs/informationnotice-labourforcesurveyquarter12018/>

Reference period: Data are expressed as the annual average (average of four quarters).

Coverage:

- Data include midwives. It is not possible to distinguish between nurses and midwives as virtually all registered midwives also hold registered nursing qualifications.

- Data include those working in both the public and private sectors.

- Please see details from the LFS interview below in relation to the required definition.

Did you do any paid work in the seven days ending Sunday, even if it was just for one hour?

If yes,

What is your occupation in that job?

What did you mainly do in the business/organisation?

Deviation from the definition: Data include midwives.

From 2007 - UK SOC2010 classification – (223) Nursing and Midwifery Professionals

Prior to 2007 - UK SOC1990 classification.

Estimation method

The LFS is a sample survey.

Households are asked to take part in the survey for five consecutive quarters and are then replaced by other households in the same block. Thus, one fifth of the households in the survey are replaced

each quarter and the QNHS/LFS sample involves an overlap of 80% between consecutive quarters and 20% between the same quarter in consecutive years. **It is important to note that there is no overlap in sample between the QNHS and the LFS.**

The survey results are weighted to agree with population estimates broken down by age, sex and region (**the regions have changed from Q1 2018 – see below**) and are also, calibrated to nationality control totals. The LFS results also contain a non-response adjustment to make the results from the achieved sample representative of the target sample and the population. The population estimates for April of each year are published in a separate release.

Data may be subject to future revision.

Data may be subject to sampling or other survey errors, which are greater in respect of smaller values or estimates of change

Break in time series:

The introduction of the LFS in 2017 constituted a break in series for the labour force estimates published by the CSO. (See Source of data above).

From 2007 - UK SOC2010

Prior to 2007 - UK SOC1990 classification.

For further information on the LFS, please see 'Background notes' of the latest release at the link below:

<https://www.cso.ie/en/releasesandpublications/er/lfs/labourforcesurveylfsquarter32019/>

Nurses licensed to practice

Source of data: **An Bord Altranais** (Nursing Board).

Reference period: 31st December.

Coverage:

- Information provided is the total number of registered nurses on the Board's register on 31st December each year. This does not necessarily mean that each nurse is active in the field of nursing.
- Data include midwives. It is not possible to distinguish between nurses and midwives as virtually all registered midwives also hold registered nursing qualifications.

Deviation from the definition: Data include midwives.

Professional nurses (ISCO-08 code: 2221)

Source of data: **An Bord Altranais** (Nursing Board).

Reference period: 31st December.

Coverage:

- Information provided is the total number of registered nurses on the Board's register on 31st December each year. This does not necessarily mean that each nurse is active in the field of nursing.
- Data include midwives. It is not possible to distinguish between nurses and midwives as virtually all registered midwives also hold registered nursing qualifications.

Associate professional nurses (ISCO-08 code: 3221)

Associate professional nurses do not feature in the Irish Health Service (Source: HSE, Nursing Services Directorate).

Practising caring personnel (personal care workers)

Source of data: **Health Service Staff Census.**

Coverage: These data only concern practising personnel employed in the public health service.

The following grades are included: Attendant (Multi-Task), Attendant (Multi-Task) Intern, Attendant/Aide, Care Assistant (Disability Services) Intern, Hairdresser/ Barber, Health Care Assistants, Health Care Assistants Intern, Home Help, Nurses' Aide, Nursing Auxiliary/Orderly, S.E.N. (General), S.E.N. (Psychiatric).

2017: Historical data between 1990-2000 have been revised to cover up-to-date organisation and grade structures.

Note: The increase between 1999 and 2001 is due to an increase in Attendants, Care Assistants and Home Helps, and the increase between 2005 and 2007 is due to an increase in Health Care Assistants and Home Helps.

Break in series:

2012: Addition of extra intern grades as follows: Attendant (Multi-Task) Intern, Care Assistant (Disability Services) Intern and Health Care Assistants Intern.

Deviation from definition: Data relates to direct public health service employment and does not include overtime, agency workers, or section 39 agencies, private hospitals, nursing homes or care providers.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level:

Data collection discontinued in 2017 (reference year 2015)

Data not available at regional level.

Greece

Practising midwives

Source of data: **Hellenic Statistical Authority (EL.STAT.)** – Annual Hospital Census.

Reference period: 31st December.

Deviation from the definition: Data refer to midwives working in hospital only.

Professionally active midwives

Data not available. (Data are reported under practising midwives).

Midwives licensed to practice

Data not available.

Practising nurses

Source of data: The Hospital census conducted by **ELSTAT** (on annual basis).

Reference period: 31st December.

Coverage: public and private hospitals.

Deviation from the definition: Data refer to nurses working in hospital only.

Note: According to our survey in hospitals, even if nurses have administrative or teaching duties they still continue to provide services to patients. Therefore, the number of nurses working in Greek hospitals is better represented under the “practising nurses” category and not under the “professionally active” one.

Professionally active nurses

Data not available.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: Hellenic Statistical Authority (EL.STAT.).

Reference period: 31st December.

Coverage: Qualified nurses working in hospital sector (public and private) and qualified nursing personnel (including nurses, midwives and health visitors) working in Public Health Centers.

Deviation from the definition: Only practicing professional nurses working in hospitals are included.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: Hellenic Statistical Authority (EL.STAT.).

Reference period: 31st December.

Coverage: Associate nurses working in hospital sector (public and private) and associate nursing personnel working in Public Health Centers.

Deviation from the definition: Only practicing associate professional nurses working in hospitals are included.

Practising caring personnel (personal care workers)

Source of data: The Hospital census (on annual basis) conducted by Hellenic Statistical Authority (ELSTAT).

Deviation from the definition: Data refer to caring personnel working in hospital only.

Notes:

- According to the survey in hospitals, even if caring personnel have administrative or teaching duties they still continue to provide services to patients. Therefore, the number of caring personnel working in Greek hospitals is better represented under the “practising caring personnel” category and not under the “professionally active” one.
- The number of caring personnel is dropping every year due to reduction of costs in hospitals.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level:

Data collection discontinued in 2017 (reference year 2015)

Source of data: Hellenic Statistical Authority (EL.STAT.)

Reference period: 31st December

Deviation from the definition: Our source of data is the Hospital census (on annual basis) conducted by ELSTAT. According to our survey in hospitals, even if nurses have administrative or teaching duties they still continue to provide services to patients. Therefore, the number of nurses working in Greek hospitals is better represented under the “practising nurses” category and not under the “professionally active” one.

Spain

Practising midwives

Data not available. Practising midwives are included in the number of practising nurses at 3 digit level of the National Occupations Classification (CNO-11), the Spanish equivalence of ISCO-08, in the Economically Active Population Survey. (Data based on Economically Active Population Survey and referring to CNO-11 codes at 4-digit level are not available).

Professionally active midwives

Data not available. Professionally active midwives are included in the number of professionally active nurses at 3 digit level of the National Occupations Classification (CNO-11), the Spanish equivalence of ISCO-08, in the Economically Active Population Survey. (Data based on Economically Active Population Survey and referring to CNO-11 codes at 4-digit level are not available).

Midwives licensed to practice

Source of data: **National Statistics Institute (INE)**, from the **Register of Nurses Council**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176781&menu=ultiDatos&idp=1254735573175.

Reference period: Data as of December 31.

Coverage:

- In Spain, the midwifery educational programme is a specialty of nursing education.
- Data include midwives “licensed to practice” and who are registered in the Nurses Council.

Practising nurses

Source of data: **National Statistics Institute (INE)**, based on the **Labour Force Survey**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595.

Reference period: Annual average. Three-year moving averages (e.g. data reported in 1996 is an average of 1995-1997).

Coverage:

- A significant revision of the numbers of nurses in previous years has been made in 2010 due to a clarification of definitions. The Spanish Working Group for the adaptation of ISCO-08 to our own classifications (CNO-11) determined that Spanish health professionals fit as follows:

A) The category 'associate professional nurses' (ISCO-08 code 3221) does not exist in Spain, so these series have been completely corrected.

B) The nursing aides working in Spain correspond entirely to the group 5 of the ISCO classification (ISCO-08 codes 5321, 5322) based on the tasks and functions they perform.

Therefore, based on these criteria, the series for practising nurses, professionally active nurses, associate professional nurses and caring personnel have been updated in 2010 for the period 1995-2008.

- The data exclusively include professional nurses (midwives included) who are actively practising nursing in the health sector. The number of practising nurses was obtained by calculating the number of nurses employed in the health sector according to NACE rev.2 (chapter Q) since 2009, and similarly with NACE Rev.1 and NACE Rev.1.1 before 2009.

- Data analysis over time should be carried out with caution. Data are obtained from a survey and fluctuations in the data can occur for a number of reasons, one of them being the sampling errors. These variations can lead to false assumptions about trends. We advise users of time series data to carefully explore the relevant issues before drawing any conclusions about the reasons for year-on-year changes.

- Up to 2010, the data by occupation are classified according to the National Occupations Classification (CNO-94 Spain code 272), the Spanish equivalence of ISCO-88, code 2230.
- From 2011 onwards data are classified according to CNO-11 Spain, code 212. The CNO-11 code 212 is the Spanish equivalence of ISCO-08 code 222 (nursing and midwifery professionals).
- During the **first quarter of 2005** various changes have been introduced into the **Economically Active Population Survey**:

1. New variables have been included in accordance with Eurostat (Statistical Office of the European Communities) requirements, set forth in Regulation 2257/2003.
2. A centralised procedure has been implemented for the process of the telephone interviews.
3. With the goal of further standardising the survey process, the questions of the questionnaire have been reformulated.

- The figures of practising midwives are not available, and it is not possible to subtract them from the total number of practising professional nurses.
- A university degree of 3 years is required to qualify as a nurse.

Deviation from the definition: Data include midwives.

Estimation method: In 2014, data series have been updated with Spanish population figures imported from Census 2011 and recalculated by using three-year moving averages in order to reduce the large year-to-year fluctuations in data derived from the LFS. The number reported in 1996 is an average of 1995-1997; the number for 2012 is an average of 2011-2013.

Professionally active nurses

Source of data: **National Statistics Institute (INE)**, based on the **Labour Force Survey**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595.

Reference period: Annual average. Three-year moving averages (e.g. data reported in 1996 is an average of 1995-1997).

Coverage:

- A significant revision of the numbers of nurses in previous years has been made in 2010 due to a clarification of definitions. The Spanish Working Group for the adaptation of ISCO-08 to our own classifications (CNO-11) determined that Spanish health professionals fit as follows:

- A) The category of 'associate professional nurses' (ISCO-08 code 3221) does not exist in Spain, so these series have been completely corrected.
- B) The nursing aides working in Spain correspond entirely to the group 5 of the ISCO classification (ISCO-08 codes 5321, 5322) based on the tasks and functions they perform.

Therefore, based on these criteria, the series for practising nurses, professionally active nurses, associate professional nurses and caring personnel have been updated in 2010 for the period 1995-2008.

- Furthermore, the data set for professionally active physicians, nurses and pharmacists has been updated with better estimates in 2010. In this way, all the series follow the methodological definition. Before correction, some figures were in line with the definition of 'economically active professionals' whose values could include unemployed professionals.
- The number of professionally active nurses was obtained by calculating the number of nurses employed in the health sector as well as in remaining sectors of NACE rev.2 since 2009, and similarly with NACE Rev.1 and NACE Rev1.1 before 2009. Thus, the 'Professionally active' data correspond to nurses regardless of NACE sector where they are working.
- Data analysis over time should be carried out with caution. Data are obtained from a survey and fluctuations in the data can occur for a number of reasons, one of them being the sampling errors. These variations can lead to false assumptions about trends. We advise users of time series data to carefully explore the relevant issues before drawing any conclusions about the reasons for year-on-year changes.

- Up to 2010, the data include professional nurses (midwives included) exclusively. The data by occupation are classified according to the National Occupations Classification (CNO-94 Spain code 272), the Spanish equivalence of ISCO-88, code 2230.

- From 2011 onwards data are classified according to CNO-11 Spain, code 212. The CNO-11 code 212 is the Spanish equivalence of ISCO-08 code 222 (nursing and midwifery professionals).

- During the **first quarter of 2005** various changes have been introduced into the **Economically Active Population Survey**:

1. New variables have been included in accordance with Eurostat (Statistical Office of the European Communities) requirements, set forth in Regulation 2257/2003.

2. A centralised procedure has been implemented for the process of the telephone interviews.

3. With the goal of further standardising the survey process, the questions of the questionnaire have been reformulated.

- The figures of professionally active midwives are not available, and it is not possible to subtract them from the total number of professionally active nurses.

Deviation from the definition: Data include midwives.

Estimation method: In 2014, data series have been updated with Spanish population figures imported from Census 2011 and recalculated by using three-year moving averages in order to reduce the large year-to-year fluctuations in data derived from the LFS. The number reported in 1996 is an average of 1995-1997; the number for 2012 is an average of 2011-2013.

Nurses licensed to practice

Source of data: **National Statistics Institute (INE)**, from the **Register of Nurses Council**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176781&menu=ultiDatos&idp=1254735573175.

Reference period: Data as of December 31.

Coverage:

- The data on professional nurses licensed to practice are taken from the Register of the Nurses Council. The category 'associate professional nurses' (ISCO-08 code 3221) does not exist in Spain.

- Data include solely nurses licensed to practice, not midwives.

Professional nurses (ISCO-08 code: 2221)

Source of data:

- For "practising" and "professionally active" nurses: **National Statistics Institute (INE)**, based on the **Labour Force Survey**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595.

- For nurses "licensed to practice": **National Statistics Institute (INE)**, from the **Register of Nurses Council**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176781&menu=ultiDatos&idp=1254735573175.

Coverage:

- Up to 2010, the data by occupation are classified according the National Occupations Classification (CNO-94 Spain, code 272), the Spanish equivalence of ISCO-88, code 2230. The "practising" data include professional nurses (223 ISCO-88 code, midwives included) who are actively practising nursing in the health sector. The figures of practising midwives are not available, and it is not possible to subtract them from the total number of practising professional nurses. In the same way, the figures of professionally active midwives are not available, and it is not possible to subtract them from the total number of professionally active nurses.

- From 2011 onwards data are classified according to CNO-11 Spain, code 212. The CNO-11 code 212 is the Spanish equivalence of ISCO-08 code 222 (nursing and midwifery professionals). The figures of practising or professionally active midwives are not available and it is not possible to subtract them from the total number of practising or professionally active nurses, respectively. Data based on Economically Active Population Survey and referring to CNO-11 codes at 4-digit level (Spanish equivalence of ISCO-08) are not available.

- During the **first quarter of 2005** various changes have been introduced into the **Economically Active Population Survey**:

1. New variables have been included in accordance with Eurostat (Statistical Office of the European Communities) requirements, set forth in Regulation 2257/2003.
2. A centralised procedure has been implemented for the process of the telephone interviews.
3. With the goal of further standardising the survey process, the questions of the questionnaire have been reformulated.

- A university degree of 3 years is required to qualify as a professional nurse.

Deviation from the definition: Data on “practising” and “professionally active” professional nurses include midwives.

Estimation method: In 2014, data series have been updated with Spanish population figures imported from Census 2011 and recalculated by using three-year moving averages in order to reduce the large year-to-year fluctuations in data derived from the LFS. The number reported in 1996 is an average of 1995-1997; the number for 2012 is an average of 2011-2013.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **National Statistics Institute (INE)**, based on the **Labour Force Survey**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595.

Coverage:

- A significant revision of the numbers of nurses in previous years has been made in 2010 due to a clarification of definitions. The Spanish Working Group for the adaptation of ISCO-08 to our own classifications (CNO-11) determined that Spanish health professionals fit as follows:

A) The category 'associate professional nurses' (ISCO-08 code 3221) does not exist in Spain, so these series have been completely corrected.

B) The nursing aides working in Spain correspond entirely to the group 5 of the ISCO classification (ISCO-08 codes 5321, 5322) based on the tasks and functions they perform.

Therefore, based on these criteria, the series for practising nurses, professionally active nurses, associate professional nurses and caring personnel have been updated in 2010 for the period 1995-2008.

Practising caring personnel (personal care workers)

Source of data: **National Statistics Institute (INE)**, based on the **Labour Force Survey**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595.

Reference period: Annual average. Three-year moving averages (e.g. data reported in 1996 is an average of 1995-1997).

Coverage:

- A significant revision of the numbers of nurses in previous years has been made in 2010 due to a clarification of definitions. The Spanish Working Group for the adaptation of ISCO-08 to our own classifications (CNO-11) determined that Spanish health professionals fit as follows:

A) The category 'associate professional nurses' (ISCO-08 code 3221) does not exist in Spain, so these series have been completely corrected.

B) The nursing aides working in Spain correspond entirely to the group 5 of the ISCO classification (ISCO-08 codes 5321, 5322) based on the tasks and functions they perform.

- From 1995 to 2010, the data include practising caring personnel (5132, 5133 ISCO-88 codes) exclusively. The data by occupation are classified according to the National Occupations Classification (CNO-94 Spain, code 511), the Spanish equivalence of ISCO-88 codes 5132, 5133.

- From 2011 onwards the data are classified according to CNO-11 Spain, codes 561 and 571. The CNO-11 codes 561 and 571 are the Spanish equivalence of ISCO-08 codes 5321 and 5322.

- The number of practising caring personnel was obtained by calculating the number of caring personnel employed in the health sector according to NACE rev.2 (chapter Q) or in private homes since 2009, and similarly with NACE Rev.1 and NACE Rev.1.1 from 1995 to 2008.

- Data analysis over time should be carried out with caution. Data are obtained from a survey and fluctuations in the data can occur for a number of reasons, one of them being the sampling errors. These variations can lead to false assumptions about trends. We advise users of time series data to carefully explore the relevant issues before drawing any conclusions about the reasons for year-on-year changes.

- An update of the figures for the period 1995-2010 has been carried out in 2012: Implementing the new classification ISCO-08 led to findings that indicate that many home-based personal care workers were encoded improperly as ISCO-88 code 5139 from 1995 to 2010. After a thorough review, the data series were updated for the period 1995-2010, including those personal workers mistakenly encoded at that time. Since 2011, all personal care workers (both home-based and in institutions) are encoded within 5321 and 5322 ISCO-08 codes.

- During the **first quarter of 2005** various changes have been introduced into the **Economically Active Population Survey**:

1. New variables have been included in accordance with Eurostat (Statistical Office of the European Communities) requirements, set forth in Regulation 2257/2003.
2. A centralised procedure has been implemented for the process of the telephone interviews.
3. With the goal of further standardising the survey process, the questions of the questionnaire have been reformulated.

Estimation method: In 2014, data series have been updated with Spanish population figures imported from Census 2011 and recalculated by using three-year moving averages in order to reduce the large year-to-year fluctuations in data derived from the LFS. The number reported in 1996 is an average of 1995-1997; the number for 2012 is an average of 2011-2013.

Professionally active caring personnel (personal care workers)

Source of data: **National Statistics Institute** (INE), based on the **Labour Force Survey**.

https://www.ine.es/dyngs/INEbase/es/operacion.htm?c=Estadistica_C&cid=1254736176918&menu=ultiDatos&idp=1254735976595.

Reference period: Annual average. Three-year moving averages (e.g. data reported in 1996 is an average of 1995-1997).

Coverage:

- A significant revision of the numbers of nurses in previous years has been made in 2010 due to a clarification of definitions. The Spanish Working Group for the adaptation of ISCO-08 to our own classifications (CNO-11) determined that Spanish health professionals fit as follows:

A) The category 'associate professional nurses' (ISCO-08 code 3221) does not exist in Spain, so these series have been completely corrected.

B) The nursing aides working in Spain correspond entirely to the group 5 of the ISCO classification (ISCO-08 codes 5321, 5322) based on the tasks and functions they perform.

Therefore, based on these criteria, the series for practising nurses, professionally active nurses, associate professional nurses and caring personnel have been updated for the period 1995-2008.

- The number of professionally active caring personnel was obtained by calculating the number of caring personnel employed in the health sector as well as in remaining sectors of NACE rev.2 since 2009, and similarly with NACE Rev.1 and NACE Rev1.1 from 1995 to 2008. Thus, the 'Professionally active' data correspond to caring personnel regardless of NACE sector where they are working.

- Data analysis over time should be carried out with caution. Data are obtained from a survey and fluctuations in the data can occur for a number of reasons, one of them being the sampling errors. These variations can lead to false assumptions about trends. We advise users of time series data to carefully explore the relevant issues before drawing any conclusions about the reasons for year-on-year changes.

- From 1995 to 2010, the data include professionally active caring personnel (5132, 5133 ISCO-88 codes) exclusively. The data by occupation are classified according the National Occupations Classification (CNO-94 Spain, code 511), the Spanish equivalence of ISCO-88 codes 5132, 5133.

- From 2011 onwards the data are classified according to CNO-11 Spain, codes 561 and 571. The CNO-11 codes 561 and 571 are the Spanish equivalence of ISCO-08 codes 5321 and 5322.

- An update of the figures for the period 1995-2010 has been carried out in 2012: Implementing the new classification ISCO-08 led to findings that indicate that many home-based personal care workers were encoded improperly as ISCO-88 code 5139 from 1995 to 2010. After a thorough review, the data series were updated for the period 1995-2010 including those personal workers mistakenly encoded at that time. Since 2011, all personal care workers (both home-based and in institutions) are encoded within 5321 and 5322 ISCO-08 codes.

- During the **first quarter of 2005**, various changes have been introduced into the **Economically Active Population Survey**:

1. New variables have been included in accordance with Eurostat (Statistical Office of the European Communities) requirements, set forth in Regulation 2257/2003.
2. A centralised procedure has been implemented for the process of the telephone interviews.
3. With the goal of further standardising the survey process, the questions of the questionnaire have been reformulated.

Estimation method: In 2014, data series have been updated with Spanish population figures imported from Census 2011 and recalculated by using three-year moving averages in order to reduce the large year-to-year fluctuations in data derived from the LFS. The number reported in 1996 is an average of 1995-1997; the number for 2012 is an average of 2011-2013.

Nursing professionals at regional level:

Data collection discontinued in 2017 (reference year 2015)

Source of data: National Statistics Institute (INE). Labour Force Survey (several issues).

http://www.ine.es/jaxi/menu.do?type=pcaxis&path=/t22/e308_mnu&file=inebase&N=&L=0

Reference period: annual average. Three-year moving averages.

Estimation method: Data on **Practising nurses** cannot separate between Ceuta (ES63) and Melilla (ES64) due to strong sampling errors in the Economically Active Population Survey. Data series on practising nurses by regions only available since year 2004.

Coverage: A significant revision of the numbers of nurses in previous years has been made in 2010, due to a clarification of definitions. The Spanish Working Group for the adaptation of ISCO-08 to our own classifications (CNO-11) determined that spanish health professionals fit as follows:

A) The figure of 'associate professional nurses' (ISCO code 3221) does not exist in Spain, so these series have been completely corrected.

B) The nursing aides working in Spain correspond entirely to the group 5 of the ISCO classification (ISCO codes - 5321, 5322) based on the tasks and functions they perform.

Therefore, based on these criteria, the series for practising nurses, professionally active nurses, associate professional nurses and caring personnel have been updated for the period 1995-2008.

- In 2014, data series have been updated with spanish population figures imported from Census 2011 and recalculated by using three-year moving averages in order to reduce the large year-to-year fluctuations in data derived from the LFS.

- During the first quarter of 2005 various changes have been introduced into the Economically Active Population Survey:

1. New variables have been included in accordance with Eurostat (Statistical Office of the European Communities) requirements, set forth in Regulation 2257/2003.
2. A centralised procedure has been implemented for the process of the telephone interviews.
3. With the goal of further standardising the survey process, the questions of the questionnaire have been reformulated.

France

Practising midwives

Source of data: ASIP- RPPS (**Répertoire Partagé des Professionnels de Santé**).

<http://esante.gouv.fr/espace-cps/editeurs/le-rpps>.

Reference period: 31st December.

Coverage:

- Data refer to metropolitan France and D.O.M. (overseas departments).
- The data only refer to midwives providing direct care to patients.

Professionally active midwives

Source of data:

- Up to 2009: **Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques** (DREES), Sous-direction de l'Observation de la Santé et de l'Assurance maladie, Bureau des Professions de santé, Répertoire ADELI.

- Since 2010: ASIP- RPPS (**Répertoire Partagé des Professionnels de Santé**).

<http://esante.gouv.fr/espace-cps/editeurs/le-rpps>.

Reference period: 31st December.

Coverage:

- Data refer to metropolitan France and D.O.M. (overseas departments).
- The data represent all active midwives, including those working in the administration, etc.

Break in time series: In 2010, there is a break in the series due to the change in data source (ADELI before 2010, RPPS since 2010).

Midwives licensed to practice

Data not available.

Practising nurses

Data not available. Data are available for "professionally active" nurses (including nurses in administrative, academic or research functions who are not providing direct care to patients).

Professionally active nurses

Source of data: **Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques** (DREES), Sous-Direction de l'Observation de la Santé et de

l'Assurance maladie, Bureau des Professions de santé, Répertoire ADELI.

Reference period: 31st December.

Coverage:

- Data refer to metropolitan France and D.O.M. (overseas departments).
- The data represent all active nurses, including those working in the administration, etc.
- Nursing assistants (“aide-soignantes”) are not included.

Break in time series:

- The decrease in 2007 reflects an adjustment in the ADELI file.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES)**, Sous-Direction de l'Observation de la Santé et de l'Assurance maladie, Bureau des Professions de santé, Répertoire ADELI.

Reference period: 31st December.

Coverage:

- Data refer to metropolitan France and D.O.M. (overseas departments).
- The data represent all active nurses, including those working in the administration, etc.

Break in time series:

- The decrease in 2007 reflects an adjustment in the ADELI file.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques (DREES)**, Sous-Direction de l'Observation de la Santé et de l'Assurance maladie, Bureau des Professions de santé, Répertoire ADELI.

- The category “associate professional nurses” does not exist in France.

Practising caring personnel (personal care workers)

Data not available. Data are available for “professionally active” caring personnel.

Professionally active caring personnel (personal care workers)

Source of data:

- From 1987 to 2002: Enquête Emploi (**INSEE**). Code profession P=5221 : nursing aids (public or private sector).
- From 2003 onwards: Enquête Emploi en Continu (**INSEE**). Code profession P=526a: nursing aids (public or private sector), P=563b: home care aids, P=526d: medical and psychological aid.

Reference period: 31st December.

Estimation method: The number of professionals is calculated as a moving average of the last three years (e.g. the 2016 number is the average of the 2014-16 raw data), in order to diminish the fluctuations in the numbers.

Coverage:

- The category caring personnel includes nursing aids and excludes dental assistants, veterinary assistants and nursery assistants.
- These data are not available for overseas departments.

Break in time series: 2003. Change in data source.

Nursing professionals at regional level:

Data collection discontinued in 2017 (reference year 2015)

Source of data: Ministère du Travail, des Relations sociales, de la Famille, de la Solidarité et de la Ville, Ministère de la Santé et des Sports, Ministère du Budget, des Comptes publics et de la Fonction publique, Direction de la Recherche, des Etudes, de l'Evaluation et des Statistiques. DREES. (Source: Répertoire ADELI), Sous Direction de l'Observation de la Santé et de l'Assurance maladie, Bureau des Professions de santé

Reference period: 31st December

Deviation from the definition: data refer to the concept "professional active".

Croatia

Practising midwives

Source of data: **Croatian Institute of Public Health**, Health Manpower Register,

Reference period: data on December 31st.

Professionally active midwives

Data not available.

Midwives licensed to practice

Source of data: **Croatian Chamber of Midwives**.

Coverage: data as of December 31st.

Practising nurses

Source of data: **Croatian Institute of Public Health**, Health Manpower Register,

Reference period: data on December 31st.

Coverage: public and private health sectors included, private nurses have been included since 1993.

Professionally active nurses

Data not available.

Nurses licensed to practice

Source of data: **Croatian Nursing Council**.

Coverage: data as of December 31st.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Croatian Institute of Public Health**, Health Manpower Register,

Reference period: data on December 31st.

Coverage: public and private health sectors included, private nurses have been included since 1993.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **Croatian Institute of Public Health**, Health Manpower Register,

Reference period: data on December 31st.

Coverage: public and private health sectors included, private nurses have been included since 1993.

Practising caring personnel (personal care workers)

Source of data: Croatian Institute of Public Health, Health Manpower Register.

Reference period: data on December 31st.

Coverage: public and private health sectors included, caring personnel in private sector have been included since 1993.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level:

Data collection discontinued in 2017 (reference year 2015)

Source: Croatian Institute of Public Health, Health Manpower Register

Reference period: data on December 31

Coverage: public and private health sectors included, private physicians have been included since 1993.

Italy

Practising midwives

Source of data: ISTAT provides data provided by COGEAPS <http://wp.cogeaps.it/>.

Reference period: 31st December.

Estimation method: data on the “Continuing Medical Training program” have been used to estimate the practicing personnel. In Italy, health professionals have to be recorded in the professional register to be licensed to practice and to acquire “training credits” while practicing. These credits are registered in the Continuing Training Education database. The estimate of practicing personnel was done by counting, among all registered professionals, those who acquired at least one credit in the last three years.

Professionally active midwives

Source of data: COGEAPS <http://wp.cogeaps.it/> and ISTAT, Labour Force Survey. <http://www.istat.it/it/archivio/8263>.

Reference period: 31st December.

Estimation method: the estimate is based on the number of practicing midwives (provided by COGEAPS) increased by a percentage of midwives who do not work in the Healthcare sector. This percentage is obtained from the labour force survey.

Midwives licensed to practice

Source of data: ISTAT provides data produced by FNOPO (National Institute keeping the register of midwives), www.fnopo.it.

Reference period: 31st December.

Practising nurses

Source of data: ISTAT provides data provided by COGEAPS. <http://wp.cogeaps.it/>.

Reference period: 31st December.

Estimation method: data on the “Continuing Medical Training program” have been used to estimate the practicing personnel. In Italy health professionals have to be recorded in the professional register to be licensed to practice and to acquire “training credits” while practicing. These credits are registered in the Continuing Training Education database. The estimate of practicing personnel was done by counting, among all registered professionals, those who acquired at least one credit in the last three years.

Estimation method: The numbers of practising nurses were estimated backwards up to 2003. The estimation is based on the proportion between nurses employed in hospitals and practising nurses. This proportion was almost stable overtime and on average it was 85%.

Professionally active nurses

Source of data: ISTAT, Labour Force Survey. <http://www.istat.it/it/archivio/8263>.

Reference period: two-year moving averages (year t is the average of the years t, t-1, e.g. year 2016 is the average of 2015 and 2016 data).

Coverage: Sample survey.

- Data include professionally active professional nurses. In the Italian regulatory system, the category “Associate professional nurses” does not exist.

Estimation method: Estimation from the sample survey. Data are affected by the statistical error due to the sample design.

Nurses licensed to practice

Source of data: ISTAT provides data produced by FNOPI (National Institute keeping the register of nurses), <http://www.fnopi.it>.

Reference period: 31st December.

Coverage:

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

Professional nurses (ISCO-08 code: 2221)

For practicing nurses:

Source of data: ISTAT provides data provided by COGEAPS <http://wp.cogeaps.it/>.

Reference period: 31st December.

Estimation method: data on the “Continuing Medical Training program” have been used to estimate the practicing personnel. In Italy health professionals have to be recorded in the professional register to be licensed to practice and to acquire “training credits” while practicing. These credits are registered in the Continuing Training Education database. The estimate of practicing personnel was done by counting, among all registered professionals, those who acquired at least one credit in the last three years.

For professionally active nurses:

Source of data: ISTAT, Labour Force Survey. <http://www.istat.it/it/archivio/8263>.

Reference period: two-year moving averages (year t is the average of the years t, t-1, e.g. year 2016 is the average of 2015 and 2016 data).

Coverage: Sample survey.

For nurses licensed to practice:

Source of data: ISTAT provides data produced by FNOPI (National Institute keeping the register of nurses), <http://www.fnopi.it>.

Reference period: 31st December.

Coverage: Data include licensed professional nurses.

Associate professional nurses (ISCO-08 code: 3221)

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

Practising caring personnel (personal care workers)

Source of data: ISTAT, Labour Force Survey. <http://www.istat.it/it/archivio/8263>.

Reference period: two-year moving averages (year t is the average of the years t, t-1, e.g. year 2016 is the average of 2015 and 2016 data).

Coverage: Sample survey.

Estimation method: Data include caring personnel working in the following economic sectors: Human health activities (Nace 2: 86), Residential care activities (Nace 2: 87), Social work activities without accommodation (Nace 2: 88), Activities of households as employers of domestic personnel (Nace 2: 97). Estimation from the sample survey. Data are affected by the statistical error due to the sample design.

Professionally active caring personnel (personal care workers)

Source of data: ISTAT, Labour Force Survey. <http://www.istat.it/it/archivio/8263>.

Reference period: two-year moving averages (year t is the average of the years t, t-1, e.g. year 2016 is the average of 2015 and 2016 data).

Coverage: Sample survey.

- Data include caring personnel working in the Health sector or in other economic sectors.

Estimation method: Estimation from the sample survey. Data are affected by the statistical error due to the sample design.

Nursing professionals at regional level:

Data collection discontinued in 2017 (reference year 2015)

2008-2010: ISTAT provides data produced by IPASVI (National Institute keeping the register of nurses) for nurses and by FNCO (National Institute keeping the register of midwives) for midwives. www.ipasvi.it.

2011-2012: ISTAT, Labour Force Survey. <http://www.istat.it/it/archivio/8263>

Estimation method: Estimation from the sample survey. Data are affected by the statistical error due to the sample design.

2013-onwards: ISTAT provides data provided by COGEAPS <http://wp.cogeaps.it/>.

Estimation method: data on the “Continuing Medical Training program” have been used to estimate the practicing personnel. In Italy health professionals have to be recorded in the professional register to be licensed to practice and to acquire “training credits” while practicing. These credits are registered in the Continuing Training Education database. The estimate of practicing personnel was done by counting, among all registered professionals, those who acquired at least one credit in the last three years.

Reference period:

2008-2010: 31st December.

2011-2012: Annual average

2013-onwards: 31st December.

Coverage:

2008-2010: Data include licensed qualified nurses and associate nurses and midwives.

2011-2012: Sample survey.

2013-onwards: estimation of practicing qualified nurses and associate nurses and midwives.

Deviation from the definition: data refer to licensed to practice up to 2010 and to professionally active for 2011 and 2012.

Cyprus

Practising midwives

Source of data: Public sector: Nursing services of the Ministry of Health, Private Sector: Inspectors of Private Medical Institutions (Ministry of Health)

Annual survey on "Health and Hospital Statistics"

Same source for all reference years

Reference period: 31st of December of the reference year

http://www.cystat.gov.cy/mof/cystat/statistics.nsf/populationcondition_23main_en/populationcondition_23main_en?OpenForm&sub=3&sel=4

Coverage: The data covers the Government Controlled Area of the Republic of Cyprus, both Public and Private Sectors.

Deviation from the definition The number of midwives of the public sector are also included in the number of nurses, since they are employed with the status of nursing officers. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold the position of nursing officer. Hence, they have also been included in the number of nurses.

No such deviation for the private sector, however it has been assumed that in the Private Sector, there are no midwives holding administrative positions. All midwives have been considered as practising midwives.

Estimation method Not applicable

Break in time series Not applicable

Professionally active midwives

Source of data: Public sector: Nursing services of the Ministry of Health, Private Sector: Inspectors of Private Medical Institutions (Ministry of Health)

Annual survey on "Health and Hospital Statistics"

Same source for all reference years

Reference period: 31st of December of the reference year

http://www.cystat.gov.cy/mof/cystat/statistics.nsf/populationcondition_23main_en/populationcondition_23main_en?OpenForm&sub=3&sel=4

Coverage: The data covers the Government Controlled Area of the Republic of Cyprus, both Public and Private Sectors.

Deviation from the definition The number of midwives of the public sector are also included in the number of nurses, since they are employed with the status of nursing officers. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold the position of nursing officer. Hence, they have also been included in the number of nurses.

No such deviation for the private sector, however it has been assumed that in the Private Sector, there are no midwives holding administrative positions. All midwives have been considered as practising midwives.

Estimation method: Not applicable

Break in time series: Not applicable

Midwives licensed to practice

Source of data Public sector: Nursing services of the Ministry of Health, Private Sector: Inspectors of Private Medical Institutions (Ministry of Health)

Annual survey on "Health and Hospital Statistics"

Same source for all reference years

Reference period: 31st of December of the reference year

http://www.cystat.gov.cy/mof/cystat/statistics.nsf/populationcondition_23main_en/populationcondition_23main_en?OpenForm&sub=3&sel=4

Coverage The data covers the Government Controlled Area of the Republic of Cyprus, both Public and Private Sectors.

Deviation from the definition The number of midwives of the public sector are also included in the number of nurses, since they are employed with the status of nursing officers. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold the position of nursing officer. Hence, they have also been included in the number of nurses.

No such deviation for the private sector, however it has been assumed that in the Private Sector, there are no midwives holding administrative positions. All midwives have been considered as practising midwives.

In Cyprus, retired midwives usually do not renew their "licence to practice", since in order to do so, they would need certificates for their participation in seminars, etc. Hence, it has been assumed that the retired midwives are not licensed to practice, so the number of "midwives licensed to practise" is equal to the number of "professionally active midwives".

Estimation method Not applicable

Break in time series Not applicable

Practising nurses

Source of data:

1980-2004: **Public medical institutions, as regards the Public Sector**

From 2005: **Inspectors of Private Medical Institutions** (Ministry of Health), as regards the Private Sector

Reference period: 31st December of the reference year.

Estimation method: The figures referring to years 1980-2004 for the private sector, have been estimated since no actual data are available for this period. From 2006 onwards the reported numbers are actual.

Numbers referring to the Public Sector are actual for all years and have been obtained from administrative sources supplied from the public medical institutions, whereas the numbers referring to the private sector from 2006 onwards have been obtained from administrative sources of the Inspectors of Private Medical Institutions (Ministry of Health).

Break in time series: 2005 due to a change in the data source.

2006 due to point deviation from the definition (point 3 below).

Deviation from the definition:

- 1) For the Public Sector, the midwives are included. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold the position of nursing officer. Hence, they have been included in the number of nurses. For the Private Sector, the midwives have been excluded.
- 2) Assumed that in the Private Sector, there are no nurses holding administrative positions. All nurses have been considered as practising nurses.
- 3) For 2005, the number of associate professional nurses refers only to the public sector, no data available for the private sector.

Professionally active nurses

Source of data:

2000-2005: **Public medical institutions**

From 2006: **Inspectors of Private Medical Institutions** (Ministry of Health)

Reference period: 31st December.

Estimation method: The figures referring to years 2000-2005 have been estimated since no actual data are available for this period for the private sector. From 2006 onwards the reported numbers are actual.

Numbers referring to Public Sector are actual for all years and have been obtained from administrative sources supplied from the public medical institutions, whereas the numbers referring to the private sector from 2006 onwards have been obtained from administrative sources of the Inspectors of Private Medical Institutions (Ministry of Health).

Break in time series: 2006 due to point deviation from the definition (point 3 below).

Deviation from the definition:

- 1) For the Public Sector, the midwives are included. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold the position of nursing officer. Hence, they have been included in the number of nurses. For the Private Sector, the midwives have been excluded.
- 2) Assumed that in the Private Sector, there are no nurses holding administrative positions. All nurses have been considered as practising nurses.
- 3) For 2005, the number of associate professional nurses refers only to the public sector, no data available for the private sector.

Nurses licensed to practice

Source of data:

2000-2005: **Public medical institutions**

From 2006: **Inspectors of Private Medical Institutions** (Ministry of Health)

Reference period: 31st December.

Estimation method: The figures referring to years 2000-2005 have been estimated since no actual data are available for this period for the private sector. From 2006 onwards the reported numbers are actual.

Numbers referring to Public Sector are actual for all years and have been obtained from administrative sources supplied from the public medical institutions, whereas the numbers referring to the private sector from 2006 onwards have been obtained from administrative sources of the Inspectors of Private Medical Institutions (Ministry of Health).

Break in time series: 2006 due to point deviation from the definition (point 3 below).

Deviation from the definition:

1. For the Public Sector, the midwives are included. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold

the position of nursing officer. Hence, they have been included in the number of nurses. For the Private Sector, the midwives have been excluded.

2. Assumed that in the Private Sector, there are no nurses holding administrative positions. All nurses have been considered as practising nurses.
3. For 2005, the number of associate professional nurses refers only to the public sector, no data available for the private sector.
4. In Cyprus, retired nurses usually do not renew their “licence to practice”, since in order to do so, they would need certificates for their participation in seminars, etc. Hence, it has been assumed that the retired nurses are not licensed to practice, so the number of “nurses licensed to practise” is equal to the number of “professionally active nurses”.

Professional nurses (ISCO-08 code: 2221)

Source of data:

2000-2005: **Public medical institutions**

From 2006: **Inspectors of Private Medical Institutions** (Ministry of Health)

Reference period: 31st December.

Estimation method: The figures referring to years 2000-2005 have been estimated since no actual data are available for this period for the private sector. From 2006 onwards the reported numbers are actual.

Numbers referring to Public Sector are actual for all years and have been obtained from administrative sources supplied from the public medical institutions, whereas the numbers referring to the private sector from 2006 onwards have been obtained from administrative sources of the Inspectors of Private Medical Institutions (Ministry of Health).

Break in time series: 2006 due to point deviation from the definition (point 3 below).

Deviation from the definition:

1. For the Public Sector, the midwives are included. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold the position of nursing officer. Hence, they have been included in the number of nurses. For the Private Sector, the midwives have been excluded.
2. Assumed that in the Private Sector, there are no nurses holding administrative positions. All nurses have been considered as practising nurses.
3. For 2005, the number of associate professional nurses refers only to the public sector, no data available for the private sector.

In Cyprus, retired nurses usually do not renew their “licence to practice”, since in order to do so, they would need certificates for their participation in seminars, etc. Hence, it has been assumed that the retired nurses are not licensed to practice, so the number of “nurses licensed to practise” is equal to the number of “professionally active nurses”.

Associate professional nurses (ISCO-08 code: 3221)

Source of data:

2000-2005: **Public medical institutions.**

From 2006: **Inspectors of Private Medical Institutions** (Ministry of Health).

Reference period: 31st December.

Estimation method: The figures referring to years 2000-2005 have been estimated since no actual data are available for this period for the private sector. From 2006 onwards the reported numbers are actual.

Numbers referring to Public Sector are actual for all years and have been obtained from administrative sources supplied from the public medical institutions, whereas the numbers referring

to the private sector from 2006 onwards have been obtained from administrative sources of the Inspectors of Private Medical Institutions (Ministry of Health).

Break in time series: 2006 due to point deviation from the definition (point 3 below).

Deviation from the definition:

1. For the Public Sector, the midwives are included. In Cyprus, all the midwives activated in the Public sector are nurses owning the extra qualification of midwifery and they hold the position of nursing officer. Hence, they have been included in the number of nurses. For the Private Sector, the midwives have been excluded.
2. Assumed that in the Private Sector, there are no nurses holding administrative positions. All nurses have been considered as practising nurses.
3. For 2005, the number of associate professional nurses refers only to the public sector, no data available for the private sector.

In Cyprus, retired nurses usually do not renew their "licence to practice", since in order to do so, they would need certificates for their participation in seminars, etc. Hence, it has been assumed that the retired nurses are not licensed to practice, so the number of "nurses licensed to practise" is equal to the number of "professionally active nurses".

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Data not available.

Latvia

Practising midwives

Source of data:

- Since 2005: **Health Inspectorate of Latvia**; Medical Persons' Register.
- 2004 and earlier: **Health Statistics and Medical Technologies State Agency**; Statistical Report No.17 "Report About Medical Staff".

Reference period: 31st December.

Break in time series: 2005: Change in data source.

Professionally active midwives

Source of data:

- Since 2005: **Health Inspectorate of Latvia**; Medical Persons' Register.
- 2004 and earlier: **Medical Professional Education Centre**; Register of Health Care Persons.

Reference period: 31st December.

Break in time series:

- 2005: Change in data source.
- 2009: The 23% decrease in the number of professionally active midwives in 2009 could be explained by the restructuring of health care services, i.e., number of hospitals with midwifery section was reduced.

Midwives licensed to practice

Source of data:

Health Inspectorate of Latvia; Medical Persons' Register.

Reference period: 31st December.

Note: There has been an improvement in the quality of the Medical Persons' Registry data in 2018. The data before 2018, not comparable, are not shown.

Practising nurses

Source of data:

- Since 2005: **Health Inspectorate of Latvia**; Medical Persons' Register.
- 2004 and earlier: **Health Statistics and Medical Technologies State Agency**; Statistical Report No.17 "Report About Medical Staff".

Reference period: 31st December.

Coverage:

- "Feldschers" or "doctor's assistants" are not included in the numbers of nurses.

Break in time series: 2005: Change in data source.

Note: Decrease in the number of nurses in year 2009 is due to restructuring of health care institutions.

Professionally active nurses

Source of data:

- Since 2005: **Health Inspectorate of Latvia**; Medical Persons' Register.
- 2004 and earlier: **Medical Professional Education Centre**; Register of Health Care Persons.

Reference period: 31st December.

Break in time series: 2005: Change in data source.

Note: Decrease in the number of nurses in year 2009 is due to restructuring of health care institutions.

Nurses licensed to practice

Source of data:

Health Inspectorate of Latvia; Medical Persons' Register.

Reference period: 31 December.

Note: There has been an improvement in the quality of the Medical Persons' Registry data in 2018. The data before 2018, not comparable, are not shown.

Professional nurses (ISCO-08 code: 2221)

Data not available.

Associate professional nurses (ISCO-08 code: 3221)

Data not available.

Practising caring personnel (personal care workers)

Source of data:

- Since 2005: **Health Inspectorate of Latvia**; Medical Persons' Register.
- 2004 and earlier: **Health Statistics and Medical Technologies State Agency**; Statistical Report No.17 "Report About Medical Staff".

Reference period: 31st December.

Coverage: The data coverage is complete. The data cover entire country, both public and private sectors, and there are no limitations in data coverage.

Break in time series: 2005: Change in data source.

Note: Decrease in the number of caring personnel in year 2009 is due to restructuring of health care institutions.

Professionally active caring personnel (personal care workers)

Source of data: **Health Inspectorate of Latvia**; Medical Persons' Register.

Reference period: 31st December.

Coverage: The data coverage is complete. The data cover entire country, both public and private sectors, and there are no limitations in data coverage.

Break in time series: 2005: Change in data source.

Note: Decrease in the number of caring personnel in year 2009 is due to restructuring of health care institutions.

Lithuania

Practising midwives

Source of data: **Health Information Centre of Institute of Hygiene**, data of entire annual survey of health establishments. Report "Health Statistics of Lithuania", available from

<http://www.hi.lt/health-statistic-of-lithuania.html>.

Reference period: 31st December.

Coverage: The number of practising midwives at the end of the year includes all professionally active midwives excluding those working in administration, health education and research.

Professionally active midwives

Source of data: **Health Information Centre of Institute of Hygiene**, data of entire annual survey of health establishments. Report "Health Statistics of Lithuania", available from

<http://www.hi.lt/health-statistic-of-lithuania.html>.

Reference period: 31st December.

Coverage:

- The number of midwives at the end of the year includes all active midwives working in health care, public health, health administration, health education and research institutions (public or private), including health care institutions under other ministries than the Ministry of Health.

- The number of midwives excludes: midwives working outside the country; midwives on the retired list and not practising or unemployed; midwives working outside health services, e.g. employed in industry, etc.

Break in series: 1991. Up to 1990: the number of midwives includes number of feldshers-midwives (mostly working in rural health centres), in 1991 most of the feldshers-midwives became nurses.

Midwives licensed to practice

Source of data: Up to 2006: **State Health Care Accreditation Agency** under the Ministry of Health, Register of licenses, Since 2011: Health Information Centre of Institute of Hygiene, data is calculated from Compulsory Health Insurance Fund information system (subsystem METAS).

Available on Official Statistics Portal of Statistics Lithuania <http://osp.stat.gov.lt/en>.

Reference period: 31st December.

Coverage: The number of midwives licensed to practice includes all midwives having valid license at the end of the year.

Break in time series:

- 2011: Data source changed.

Practising nurses

Source of data: **Health Information Centre of Institute of Hygiene**, data of entire annual survey of health establishments. Report "Health Statistics of Lithuania", available from <http://www.hi.lt/health-statistic-of-lithuania.html>.

Reference period: 31st December

Coverage: The number of practising nurses at the end of the year includes all professionally active nurses excluding those working in administration, health education and research.

Professionally active nurses

Source of data: **Health Information Centre of Institute of Hygiene**, data of entire annual survey of health establishments. Report "Health Statistics of Lithuania", available from <http://www.hi.lt/health-statistic-of-lithuania.html>

Reference period: 31st December.

Coverage:

- The number of nurses at the end of the year includes all active nurses working in health care, public health, health administration, health education and research institutions (public or private), including health care institutions under other ministries than the Ministry of Health.
- The number of nurses excludes: nurses working in social institutions, nurses working outside the country; nurses on the retired list and not practising or unemployed; nurses working outside health services, e.g. employed in industry, etc.

Nurses licensed to practice

Source of data:

- Up to 2006: **State Health Care Accreditation Agency** under the Ministry of Health, Register of licenses.

- Since 2011: Health Information Centre of Institute of Hygiene, data is calculated from Compulsory Health Insurance Fund information system (subsystem METAS).

Available on Official Statistics Portal of Statistics Lithuania <http://osp.stat.gov.lt/en>.

Reference period: 31st December.

Coverage: The number of nurses licensed to practice includes all nurses having valid license at the end of the year.

Break in time series:

- 2011: Data source changed.

- 2016: Since 2016 valid licenses with expired data of updating of license is treated like not valid license.

Professional nurses (ISCO-08 code: 2221)

All nurses are treated as professional nurses in Lithuania.

Associate professional nurses (ISCO-08 code: 3221)

There is no such category in Lithuania.

Practising caring personnel (personal care workers)

Source of data: **Health Information Centre of Institute of Hygiene**, data of entire annual survey of health establishments.

Reference period: 31st December

Coverage:

- The number of practising caring professionals at the end of the year includes all professionally active caring professionals (nurse assistants) with few months nursing courses excluding those working in administration, health education and research.

Professionally active caring personnel (personal care workers)

Source of data: **Health Information Centre of Institute of Hygiene**, data of entire annual survey of health establishments.

Reference period: 31st December

Coverage:

- The number of caring professionals at the end of the year includes all active caring professionals (nurse assistants) with few months nursing courses working in health care, public health, health administration, health education and research institutions (public or private), including health care institutions under other ministries than the Ministry of Health.

- The number of caring professionals excludes: those working in social institutions.

Luxembourg

Practising midwives

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Coverage:

- Head counts.

- **Practising midwives**; midwives who do not work in direct contact with patients (laboratories, administration, R&D, etc.) are excluded.

- Data should be considered with care due to methodological issues encountered during census series concerning midwives, nurses and pharmacists.

Break in time series: 2003 and 2005 due to adjustments to the methodology.

Professionally active midwives

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Midwives licensed to practice

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Practising nurses

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Coverage:

- Head counts.
- Since 2010: Nurses working in administration and research have been excluded.
- Data should be considered with care due to methodological issues encountered during census series concerning midwives, nurses and pharmacists.

Break in time series: 2003, 2005 and 2010.

- 2003 and 2005 due to adjustments to the methodology.

Professionally active nurses

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Nurses licensed to practice

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Coverage:

- Head counts.
- Data include graduate nurses, nurses specialised in paediatrics, psychiatry and anaesthesia, and medical technical assistants for surgery.
- Data should be considered with care due to methodological issues encountered during the census series concerning midwives, nurses and pharmacists.

Break in the series: 2003, 2005 and 2010 due to adjustments to the methodology.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Practising caring personnel (personal care workers)

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Coverage:

- Head count.
- Data include nursing assistants and nursing assistants specialised in psychiatry.

Professionally active caring personnel (personal care workers)

Source of data: **Direction de la Santé** - Service des statistiques. Register of doctors and health professionals.

Reference period: 31st December.

Hungary

Practising midwives

Source of data:

- Until 2016, **Hungarian Central Statistical Office** (KSH in Hungarian) www.ksh.hu; Report on personnel of health service.
- From 2017, **National Healthcare Service Center** (ÁEEK in Hungarian) www.enkk.hu. Full title of the database: Operational register.

Reference period: 31st December.

Coverage:

- From 1991, only persons who completed a midwifery educational programme are included.
- From 2017, Head count data: health professionals who are entitled to pursue the activities of a midwife in Hungary.

The Operational register includes the healthcare professionals who provide services directly to patients and are entitled to do this activity without supervision. The requirements for the renewal of the registration give the effect that the register does not include healthcare professionals who are working in administration, management, research and in other posts excluding direct contact with patients, or who are unemployed or retired, or working abroad.

Break in time series: 1991, 2017

Note: In 2007, the number of obstetrics and gynaecology hospital beds was reduced (from 1949 in 2006 to 1599 in 2007). This is the cause for the reduction in the number of midwives.

Professionally active midwives

Data not available.

Midwives licensed to practice

Source of data:

- 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: Data source for professionals licenced to practice is the Basic Register, which is a national healthcare qualifications register including the list of all the healthcare professionals holding qualification obtained or recognised in Hungary. So the basic register includes the healthcare professionals, who provide services directly to patients and also who are economically inactive (e.g. unemployed or retired and who are working abroad).

Practising nurses

Source of data:

- Until 2016, **Hungarian Central Statistical Office** (KSH in Hungarian) www.ksh.hu; Report on personnel of health service.
- From 2017, **National Healthcare Service Center** (ÁEEK in Hungarian) www.enkk.hu. Operational register.

Reference period: 31st December.

Break in time series:

- In 2000, health and social services were separated. Nurses working in social services have not been included in the data since 2000. In the same year a new international methodology was introduced which caused an increase in the number of associate nurses.
- In 2017: the Operational register is the source of the data.

Professionally active nurses

Data not available.

Nurses licensed to practice

Source of data:

- From 2013 until 2014: **Office of Health Care Authorisation and Administrative Procedures** (EEKH in Hungarian) www.eekh.hu, Basic register.
- From 2015 onwards, **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: Head count data from the Basic register (licensed to practice).

Professional nurses (ISCO-08 code: 2221)

Source of data:

- Until 2016 (for practicing professional nurses) Hungarian Central Statistical Office (KSH in Hungarian) www.ksh.hu; Report on personnel of health service.
- From 2013 until 2014: **Office of Health Care Authorisation and Administrative Procedures** (EEKH in Hungarian) www.eekh.hu, Basic register.
- From 2015 onwards, **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:

Coverage:

- From 1990: The report was completed according to the 1990 account of the Central Statistical Office "Number of posts and the staff of ancillary workers by activity". Nurse definition as of ISCO 88 (code 2230) includes graduated nurses, specialised nurses, ambulance nurses, and MCH nurses.

- From 2017:

* Head count data from the Basic register (licensed to practice) or from the Operational register (practising nurses).

* The classification of the professional nurses and associate professional nurses is based on the highest level of qualification obtained.

Break in time series: 2000, 2017.

- In 2000, health and social services were separated. Nurses working in social services have not been included in the data since 2000.

Associate professional nurses (ISCO-08 code: 3221)

Source of data:

- Until 2016 (for associate professional nurses) Hungarian Central Statistical Office (KSH in Hungarian) www.ksh.hu; Report on personnel of health service.
- From 2013 until 2014: **Office of Health Care Authorisation and Administrative Procedures** (EEKH in Hungarian) www.eekh.hu, Basic register.

- From 2015 onwards, **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:

- From 1990: The report was completed according to the 1990 account of the Central Statistical Office "Number of posts and the staff of ancillary workers by activity". Nurses following the definition ISCO 88 (code 323 – general nurses and nursing assistants) are included.

- From 2017:

* Head count data from the Basic register (licenced to practice) or from the Operational register (practising nurses).

* The classification of the professional nurses and associate professional nurses is based on the highest level of qualification obtained.

Break in time series: 2000, 2017.

- In 2000, health and social services were separated. Nurses working in social services have not been included in the data since 2000. In the same year a new international methodology was introduced which caused an increase in the number of associate nurses.

Practising caring personnel (personal care workers)

Source of data: **Hungarian Central Statistical Office** (KSH in Hungarian) www.ksh.hu; Report on personnel of health service.

Reference period: 31st December.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Hungarian Central Statistical Office (KSH in Hungarian) www.ksh.hu, Report on personnel of health service

Reference period: 31st December

Coverage: qualified nurses - MCH nurses and midwives included - and associate professional nurses.

Malta

Practising midwives

Source of data:

- Starting from 2009 data was collected by the **Directorate for Health Information and Research** from all establishments and departments within the Maltese healthcare system.

- Before 2009: the source is **Directorate Nursing Services**.

Reference period: 31st December.

Coverage: Before 2009 the numbers quoted refer only to midwives employed in state institutions. Figures are calculated estimates, based on their Full Time Equivalence.

Break in series: 2009. From 2009 data refers to midwives employed in both, state and private institutions, but does not include self-employed midwives. Data on practising midwives is not collected by the Council of Nurses and Midwives to date.

Professionally active midwives

Data not available.

Midwives licensed to practice

2016: Provisional data for midwives licensed to practice has been included.

From 2017, data for midwives licensed to practice has been obtained from the Council of Nurses and Midwives.

Practising nurses

Source of data:

- Starting from 2009 data was collected by the **Directorate for Health Information and Research** from all establishments and departments within the Maltese healthcare system.

- Before 2009: the source is **Directorate Nursing Services**.

Reference period: 31st December.

Coverage: Numbers quoted refer only to nurses employed in state institutions.

The 2001 figures relate to nurses working in Main Public Hospital and Primary Care. 2002 figures include nurses employed within the entire public sector. 2004 data includes nationwide active nurses. Starting from 2009, data refers to nurses employed in both, state and private institutions, but does not include self-employed nurses.

Figures for 2011 onwards also include service contracts. Figures are calculated estimates, based on Full Time Equivalence,

Break in the series: 2002, figures include nurses employed within the entire public sector.

2004 data includes nationwide active nurses and

2009 data refers to nurses employed in both, state and private institutions, but does not include self-employed nurses.

Professionally active nurses

Data not available.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data:

- Starting from 2009 data was collected by the **Directorate for Health Information and Research** from all establishments and departments within the Maltese healthcare system.

- Before 2009: the source is **Directorate Nursing Services**.

Reference period: 31st December.

Coverage: Numbers quoted refer only to nurses employed in state institutions.

The 2001 figures relate to nurses working in Main Public Hospital and Primary Care. 2002 figures include nurses employed within the entire public sector. 2004 data includes nationwide active nurses. Starting from 2009, data refers to nurses employed in both, state and private institutions, but does not include self-employed nurses. Figures for 2011 onwards also includes service contracts.

Figures are calculated estimates, based on Full Time Equivalence,

Break in the series: 2001, 2004 and 2009.

Associate professional nurses (ISCO-08 code: 3221)

The category 'Associate professional nurse' does not exist in Malta.

Practising caring personnel (personal care workers)

Data not available before year 2013

Source of data:

Data is collected by the **Directorate for Health Information and Research** from all establishments and departments within the Maltese healthcare system.

Reference period: 31st December.

Coverage: Data refers to caring personnel employed in both, state and private institutions, but does not include self-employed caring personnel. Figures include service contracts. Figures are calculated estimates, based on Full Time Equivalence.

The figure for 2013 has been corrected.

Professionally active caring personnel (personal care workers)

Data not available.

Netherlands

Practising midwives

Source of data: **Netherlands Institute for Research of Primary Health Care (NIVEL)**.

From 2014 data based on **BIG register** (register of (para) medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register).

Reference period: 31 December. From 2014 The last Friday before Christmas.

Coverage: Data from 2014 refer to midwives who:

- are licensed to practice; and
- live and work in the Netherlands. Their license requires that they have been practising in the past five years.

Break in time series: As of 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years. This means that from 2014 onwards the figures are in line with the definition of practising midwives. Until 2014, a different source was used for practising midwives, based on a register from NIVEL, that in turn is based inter alia on members and the quality register of the professional midwives organisation.

2019: Re-registration effect. Since 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years.

Professionally active midwives

Source of data: Data based on **BIG register** (register of (para) medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register).

Reference period: The last Friday before Christmas.

Coverage:

- Data refer to midwives who:

- are licensed to practice;
- live and work in the Netherlands;
- for employees: are active in a health- or social care sector or a health-care related sector; or
- for self-employed midwives: are economically active (this criterion is plausible given the duration of their education and training, in addition to the fact that it can be compared to

the number of practising midwives; licensing regulations passed in 2009 and effective in 2014 require that they have been practising – not necessarily fulltime – in the past five years).

- List of NACE codes used for health- or social care and healthcare related sectors: NACE v1: 851, 853, 2441, 2442, 331, 5146, 5231, 5232, 5248.2 (opticians), 6022 (part of transport for healthcare), 6602.3, 6602.4 (pension funds part for healthcare occupations), 6603 (part of health insurance funds and companies), 7310.3 (medical and pharmacological research and development), 745 (temporary work companies; very important for nurses, caring personnel and physiotherapists), 7522 (Ministry of Defense, including military hospital), 7523.2 (part of medical personnel for prisons, including prison hospital), 753 (compulsory health care insurance, operations for exceptional medical expenses act), 8022, 8030, 9304, 9305.

- NACE v2: 86, 87, 88, 212, 266, 325, 4646, 4773, 4774, 4778.2, 4932, 6530.3, 6530.9, 6512, 7211.2 + 7219.3 (R&D for health, medical products or pharmaceutical processes), 782, (8412 will be included when NACE v2 is available in SSB; Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security), 8422, 8423.2, 843, 8532, 854, 9313, 9609.

Note: As of 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years. This means that from 2014 onwards the figures in line with the definition of practising midwives. We will stop the old estimate of professionally active from 2014 onwards and continue with the practising definition.

Midwives licensed to practice

Source of data: Data based on **BIG register** (register of (para) medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register).

Reference period: The last Friday before Christmas.

Break in time series: As of 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years. As a result, the figures are significantly lower than before.

2019: Re-registration effect. Since 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years.

Practising nurses

Source of data: Until 2008 estimates, see coverage. From 2014 data based on **BIG register** (register of (para) medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register).

Reference period: The last Friday before Christmas.

Coverage:

- Until 2008: **Practising nurses** are estimated by calculating all registered nurses who are economically active in ISIC / NACE 86, 87, 88 or 7820 (working for temporary employment agencies) (85 and 7450 in ISIC 3 or NACE 1) multiplied by a factor (number of nurses in a function as nurse / number of employees with education as a nurse). That factor is derived from the Report Regiomarge on the labour market in Health Care, Social Care and Welfare by Prismant. The same report provides the shares of professional and associate professional nurses.

- From 2014 onwards: Data refer to nurses who are licensed to practice; and live and work in the Netherlands. Their license requires that they have been practising in the past five years;

Break in time series: 2014.

- As of 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years. This means that from 2014 onwards the figures are in line with the definition of practising nurses.

2019: Re-registration effect. Since 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years.

Professionally active nurses

Source of data: Data based on **BIG register** (register of (para)medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register).

Reference period: The last Friday before Christmas.

Coverage:

- Data refer to nurses who:

- are licensed to practice;
- live and work in the Netherlands; and
- are active in a health- or social care sector or a health-care related sector (licensing regulations passed in 2009 and effective in 2014 require that they have been practising – not necessarily fulltime – in the past five years).

- List of NACE codes used for health- or social care and healthcare related sectors: NACE v1: 851, 853, 2441, 2442, 331, 5146, 5231, 5232, 5248.2 (opticians), 6022 (part of transport for healthcare), 6602.3, 6602.4 (pension funds part for healthcare occupations), 6603 (part of health insurance funds and companies), 7310.3 (medical and pharmacological research and development), 745 (temporary work companies; very important for nurses, caring personnel and physiotherapists), 7522 (Ministry of Defense, including military hospital), 7523.2 (part of medical personnel for prisons, including prison hospital), 753 (compulsory health care insurance, operations for exceptional medical expenses act), 8022, 8030, 9304, 9305.

- NACE v2: 86, 87, 88, 212, 266, 325, 4646, 4773, 4774, 4778.2, 4932, 6530.3, 6530.9, 6512, 7211.2 + 7219.3 (R&D for health, medical products or pharmaceutical processes), 782, (8412 will be included when NACE v2 is available in SSB; Regulation of the activities of providing health care, education, cultural services and other social services, excluding social security), 8422, 8423.2, 843, 8532, 854, 9313, 9609.

Note: As of 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years. This means that from 2014 onwards the figures are (in this case substantially) lower than before, and in line with the definition of practising nurses. We will stop the old estimate of professionally active from 2014 onwards and continue with the practising definition.

Nurses licensed to practice

Source of data: Data based on **BIG register** (register of (para)medical professions) and **SSB database** (micro-integrated database of **Statistics Netherlands** with data from municipal register, tax register, social security, business register). 2020: External data from the BIG register

Reference period: The last Friday before Christmas. 2020: 1 February

Break in time series: 2014. As of 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years. As a result the figures are significantly lower than before.

2019: Re-registration effect. Since 2014, midwives, nurses and physiotherapists are obliged to re-register. The requirement is that they have been practising in the past 5 years.

Estimate: 2020: the development in the data from the BIG register (including non resident nurses) from 2019-2020 has been used to estimate the figure for 2020.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Social Statistical Database of Statistics Netherlands, BIG register** (official register of health care professionals) plus estimates.

Reference period: The last Friday before Christmas.

Coverage:

- **Practising nurses** are estimated by taking all registered nurses who are economically active in ISIC / NACE 86, 87, 88 or 7820 (working for temporary employment agencies) (85 and 7450 in ISIC 3 or NACE 1) multiplied by a factor (number of nurses in a function as nurse / number of employees with education as a nurse). That factor is derived from the Report Regiomarge on the labour market in Health Care, Social Care and Welfare by Prismant (until 2008).
- The same report provides the shares of professional and associate professional nurses.
- Professional nurse: education at level "5".

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **Social Statistical Database of Statistics Netherlands, BIG register** (official register of health care professionals) plus estimates.

Reference period: The last Friday before Christmas.

Coverage:

- **Practising nurses** are estimated by taking all registered nurses who are economically active in ISIC / NACE 86, 87, 88 or 7820 (working for temporary employment agencies) (85 and 7450 in ISIC 3 or NACE 1) multiplied by a factor (number of nurses in a function as nurse / number of employees with education as a nurse). That factor is derived from the Report Regiomarge on the labour market in Health Care, Social Care and Welfare by Prismant.
- The same report provides the shares of professional and associate professional nurses.
- Associate professional nurse: education at level "4".

Practising caring personnel (personal care workers)

Source of data:

- From 2012 onwards: **Labour Force Survey** (integrated in the Social Statistical Database).
- Up to and including 2011: **Social Statistical Database of Statistics Netherlands, Labour Force Survey and the BIG register**.

Reference period: Year average.

Coverage:

- From 2012 onwards: ISCO-08 5321 (health care assistants) and 5322 (home-based personal care workers).
- Up to and including 2011: ISCO 5321 and 5322 (ISCO 88: 5132 and 5133), plus the persons within ISCO 2221 and 3221 who are not a registered nurse.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Data based on BIG register (register of (para) medical professions) and SSB database (micro-integrated database of Statistics Netherlands with data from municipal register, tax register, social security, business register).

Reference period: last Friday before Christmas.

Deviation from the definition: Data refer to practising nurses (professional and associate) plus midwives. Data refer to the place where the nursing professionals live. Included are the nursing professionals working in the Netherlands, but living abroad. Their number is the difference between the total and the sum of the workers by region.

Break in time series: In 2014 a re-registration took effect in the BIG register for nurses, midwives and physiotherapists. Registrations were only renewed when the people had been practising in the past 5 years. The number of nurses, midwives and physiotherapists in the BIG register dropped drastically. The registration alone now ensures these people are professionally active and there was no need for a selection of jobs in a health- or social care sector or a healthcare-related sector as was the case in previous years.

Austria

Practising midwives

Source of data: **Austrian professional organisation of midwives.**

Reference period: 31st December.

Coverage:

- Midwifery professionals (ISCO-08 code: 2222). There are no midwifery associate professionals (ISCO-08 code: 3222) in Austria.
- Included are midwives practising exclusively in their private practice, exclusively in hospitals or both in their private practice and in hospitals.
- Included are midwives on maternity leave or for other reasons not economically active.
- Included are midwives with part-time working conditions.

Note: In Austria, midwives who do not provide services directly to patients occur exclusively in managerial training functions - their number cannot be determined, but is negligible. For this reason, the number of "Practising midwives" corresponds to that of professionally active midwives.

Professionally active midwives

Source of data: **Austrian professional organisation of midwives.**

Reference period: 31st December.

Coverage:

- Midwifery professionals (ISCO-08 code: 2222). There are no midwifery associate professionals (ISCO-08 code: 3222) in Austria.
- Included are midwives practising exclusively in their private practice, exclusively in hospitals or both in their private practice and in hospitals.
- Included are midwives on maternity leave or for other reasons not economically active.
- Included are midwives with part-time working conditions.

Note: In Austria, midwives who do not provide services directly to patients occur exclusively in managerial training functions - their number cannot be determined, but is negligible. For this reason, the number of "Practising midwives" corresponds to that of professionally active midwives.

Midwives licensed to practice

Source of data: Austrian professional organisation of midwives.

Reference period: 31st December.

Coverage:

- Midwifery professionals (ISCO-08 code: 2222). There are no midwifery associate professionals (ISCO-08 code: 3222) in Austria.
- Included are midwives practising exclusively in their private practice, exclusively in hospitals or both in their private practice and in hospitals.
- Included are midwives on maternity leave or for other reasons not economically active.
- Included are midwives with part-time working conditions.
- Midwives for whom their midwifery education is not a prerequisite for the execution of the job
- Midwives licensed to practice but who due to various reasons are not economically active (e.g. unemployed or retired).

Practising nurses

Source of data:

- Up to 2018: **Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection**, Hospital statistics.
- From 2019 onwards: **Austrian National Public Health Institute (GÖG)**, Health Professions Registry.

Reference period: 31st December.

Coverage:

- Up to 2018: Included are nurses employed in hospitals. Excluded are midwives.
- From 2019 onwards:
 - * Included are registered nurses working in hospitals, convalescent homes, rehabilitation facilities, extramural care centres, doctors' practices, long-term care facilities, mobile care or care for the disabled.
 - * Excluded are:
 - non-registered nurses
 - registered nurses, who are not yet employed after training
 - as a nurse registered jobseekers
 - as a nurse registered volunteers
 - as a nurse registered pensioners
 - registered nurses working in research or educational institutions, tissue banks, industrial companies or other non-healthcare institutions

Deviation from the definition: nurses working in other settings than hospitals are not included until 2018.

Break in time series: 2019. Change in data source and methodology in 2019.

Professionally active nurses

Source of data: **Austrian National Public Health Institute (GÖG)**, Health Professions Registry.

Reference period: 31st December.

Coverage:

- Included are registered professionally active nurses.
- Excluded are:
 - non-registered nurses
 - registered nurses, who are not yet employed after training
 - as a nurse registered jobseekers
 - as a nurse registered volunteers
 - as a nurse registered pensioners

Nurses licensed to practice

Source of data: **Austrian National Public Health Institute (GÖG)**, Health Professions Registry.

Reference period: 31st December.

Coverage:

- Included are all registered nurses:
- practising nurses
- professionally active nurses
- registered nurses, who are not yet employed after training
- as a nurse registered jobseekers
- as a nurse registered volunteers
- as a nurse registered pensioners
- Excluded are non-registered nurses.

Professional nurses (ISCO-08 code: 2221)

Source of data:

- Up to 2018: **Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection**, Hospital statistics.
- From 2019 onwards: **Austrian National Public Health Institute (GÖG)**, Health Professions Registry.

Reference period: 31st December.

Coverage: Included are professional nurses (ISCO-08 code: 2221). Three years of study are required to qualify as a professional nurse.

Deviation from the definition: Nurses working in other settings than hospitals are not included until 2018.

Break in time series: 2019. Change in data source and methodology in 2019.

Associate professional nurses (ISCO-08 code: 3221)

Source of data:

- Up to 2018: **Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection**, Hospital statistics.
- From 2019 onwards: **Austrian National Public Health Institute (GÖG)**, Health Professions Registry.

Reference period: 31st December.

Note: Training as an associate professional nurse was introduced in Austria in September 2016.

Coverage: Included are associate professional nurses (ISCO 3221). Two years of study are required to qualify as an associate professional nurse.

Deviation from the definition: Nurses working in other settings than hospitals are not included until 2018.

Break in time series: 2019. Change in data source and methodology in 2019.

Practising caring personnel (personal care workers)

Source of data:

- Up to 2018: **Austrian Federal Ministry of Social Affairs, Health, Care and Consumer Protection**, Hospital statistics.
- From 2019 onwards: **Austrian National Public Health Institute (GÖG)**, Health Professions Registry.

Reference period: 31st December.

Coverage:

- Up to 2018: Included are health care assistants (ISCO 5321) employed in hospitals (HP.1).

- From 2019 onwards:

* Included are health care assistants in institutions (ISCO 5321) and home-based personal care workers (ISCO-08 5322). One year of study is required to qualify as a personal care worker.

* Included are registered personal care workers working in hospitals, convalescent homes, rehabilitation facilities, extramural care centres, doctors' practices, long-term care facilities, mobile care or care for the disabled.

* Excluded are:

- non-registered personal care workers
- registered personal care workers, who are not yet employed after training
- as personal care workers registered jobseekers
- as personal care workers registered volunteers
- personal care workers registered pensioners
- registered personal care workers working in research or educational institutions, tissue banks, industrial companies or other non-healthcare institutions

Note: Until 2016, health care assistants (ISCO 5321) were reported in the column "associate professional nurses" (ISCO 3221), as the occupational classification "associate professional nurses" had not existed in Austria until then. In 2016, there was a change in the law on training for health and nursing care, which introduced this occupational group (see also "Associate professional nurses").

Therefore, a comprehensive correction was carried out in this respect in 2019. Health care assistants previously listed in the "associate professional nurses" column have now been moved to the correct "practising caring personnel" column.

Deviation from the definition: Caring personnel working in other settings than hospitals are not included until 2018.

Break in time series: 2019. Change in data source and methodology in 2019.

Professionally active caring personnel (personal care workers)

Source of data: Austrian National Public Health Institute (GÖG), Health Professions Registry.

Reference period: 31st December.

Coverage:

- Included is registered active caring personnel.
- Excluded are:
 - non-registered personal care workers
 - registered personal care workers, who are not yet employed after training
 - as personal care workers registered jobseekers
 - as personal care workers registered volunteers
 - as personal care workers registered pensioners

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Austrian Federal Ministry of Health, Hospital Statistics

Reference period: 31 December

Coverage: data are only for nursing professionals working in inpatient hospitals (HP 1).

Poland

Practising midwives

Source of data: Ministry of Health and from 2004 the Ministry of Interior and the Ministry of National Defence.

Reference period: 31st December.

Coverage: Data regarding midwives are based on head counts. Midwives are counted in the main workplace. The categories “Midwifery associate professionals” or “Nurses working as midwives” do not exist in Poland.

- Since 2004, data from the Ministry of National Defence and the Ministry of Interior and Administration.
- Since 2004, midwives working in private medical offices as a main workplace.
- Foreign midwives licensed to practice and actively practising in the country.
- Since 2004, teaching and administration staff is excluded.

Break in time series: 2004. Since 2004, midwives working primarily in education and administration are excluded, and midwives working in private medical offices as well as midwives employed by the Ministry of Defence and the Ministry of Interior and Administration are included.

Professionally active midwives

Source of data: **Ministry of Health, Ministry of Interior, Ministry of National Defence.**

Reference period: 31st December.

Coverage:

- **Practising midwives.**

- Since 2004, midwives with universities, units of state or local self-government administration or the National Health Fund as the primary workplace are included.

Midwives licensed to practice

Source of data: Ministry of Health. **Register of nurses and midwives of the Main Polish Chamber of Nurses and Midwives.**

Reference period: 31st December.

Practising nurses

Source of data: **Ministry of Health, Ministry of Interior, Ministry of National Defence and Central Statistical Office.**

Reference period: 31st December.

Coverage: Data regarding nurses are based on head counts. Nurses are counted in the main workplace. Nurses working in nurseries do not include midwives. Nurses working in prisons are excluded.

Breaks in time series:

- Since 2004: Nurses working in private medical offices as a main workplace are included, as well as nurses working in the Ministries of National Defence and Interior and Administration.
- Since 2005: Nurses working in facilities of stationary social welfare and in nurseries are included.

Note: The category “Associate Professional Nurse” does not exist in Poland.

Professionally active nurses

Source of data: Ministry of Health, Ministry of Interior, Ministry of National Defence and Central Statistical Office.

Reference period: 31st December.

Coverage: **Practising nurses** and nurses with universities, state or local self-government administration or the National Health Fund as the primary workplace.

Nurses licensed to practice

Source of data: **Ministry of Health. Register of nurses and midwives of the Main Polish Chamber of Nurses and Midwives.**

Reference period: 31st December.

Professional nurses (ISCO-08 code: 2221)

See: "Practising nurses", "Professionally active nurses", and "Nurses licensed to practice".

Associate professional nurses (ISCO-08 code: 3221)

The category "Associate professional nurses" does not exist in Poland.

Practising caring personnel (personal care workers)

Source of data: Ministry of Health.

Coverage: The data apply only to Patient care assistants. Other professions do not exist in the Polish health care system.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Ministry of Health and from 2004 the Ministry of Interior and the Ministry of National Defence.

Reference period: 31st December.

Coverage: Data regarding midwives and nurses are based on head counts. Midwives and nurses are counted in the main workplace.

Inclusion:

- Since 2004 data from the Ministry of National Defence and the Ministry of Interior.
- Since 2004 midwives and nurses working in private medical offices as a main workplace.
- Foreign midwives licensed to practice and actively practising in the country.

Exclusion:

- Since 2004 teaching and administration staff.

Break in time series:

- 2004: Since 2004, midwives working primarily in education and administration are excluded, and includes midwives and nurses working in private medical offices, and midwives and nurses employed by the Ministry of Defence and the Ministry of Interior.

Portugal

Practising midwives

Data are available for "professionally active" midwives (including midwives in administrative, academic or research functions who are not providing direct care to patients).

Professionally active midwives

Source of data: **Statistics Portugal and the Council of Nurses.**

Coverage:

- Data for midwives in Portugal refer to nurses specialised in Maternal Health and Obstetrics.
- Maternal Health and Obstetrics is currently a nursing specialty.

Midwives licensed to practice

Data not available.

Practising nurses

Data are available for “professionally active” nurses (including nurses in administrative, academic or research functions who are not providing direct care to patients).

Professionally active nurses

Source of data: **Statistics Portugal** and the **Council of Nurses**.

Reference period: 31st December.

Coverage:

- Becoming legally permitted to nursing is dependent on getting a professional license from the Council of Nurses.
- All nurses are registered by place of activity. Non-practising nurses are excluded.
- The number of nurses excludes the number of midwives (nurses specialised in Maternal Health and Obstetrics).
- Data include all active nurses licensed to practice. They include nurses working in administration, management, research and in other posts that exclude direct contact with patients.

Deviation from the definition:

- Nurses who hold a post / job under which nursing education is not required are not excluded.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Statistics Portugal** and the **Council of Nurses**.

Reference period: 31st December.

Coverage:

- Becoming legally permitted to nurse is dependent on getting a professional license from the Council of Nurses.
- All nurses are registered by place of activity. Non-practising nurses are excluded.
- The number of nurses excludes the number of midwives. Midwifery is a specialty of nursing.
- Data include all active nurses licensed to practice. They include nurses working in administration, management, research and in other posts that exclude direct contact with patients.

Deviation from the definition:

- Nurses who hold a post / job under which nursing education is not required are not excluded.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **Statistics Portugal** and the **Council of Nurses**.

Note: The category “Associate professional nurses” does not exist in Portugal.

Practising caring personnel (personal care workers)

Source of data: **Statistics Portugal** - Hospital Survey / Official Clinic Survey.

Reference period: 31st December.

Coverage:

- Only data on nurse's assistants and medical care assistants in hospitals and official clinics (important: some aids practise in both health establishments and/or in other private ambulatory health establishments) are available.

Note: Since 2008 (including reference year 2008), separate inquiries by the Official Clinics Survey for this variable stopped. Therefore, global data have to be estimated. Data should be used with caution.
Break in time series: 2012.

- Up to 2010, the data reported in the category "practising caring personnel" correspond to the sum of two professional categories working in hospitals ("other nursing staff" + "auxiliary staff of medical action") and one category in the service of health centers ("other nursing staff").

- In 2011, the categories "other nursing staff" and "auxiliary staff of medical action" in the Hospitals Survey were replaced by the category "auxiliary nursing personnel". The 2011 number is not shown (there was a strong decrease).

- From 2012 onwards, the Hospitals Survey was again revised in order to split the categories "auxiliary nursing staff" and "auxiliary personnel of medical action" and remained unchanged to the present.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Statistics Portugal and Council of Nurses.

Reference period: 31st December.

Coverage:

- The Council of Nurses, developing a legal nursing activity is dependent on getting a professional license by the Council.

- All nurses are registered by place of activity. Not practising nurses are excluded.

- The number of nurses includes the number of midwives. The midwifery professional is a speciality of nursing, therefore, and according to the definitions, sources and methods, they are counted as nurses.- Data refer to practising nurses: nurses licensed to practice, by place of activity (Nursing Council).

- Nurses practising abroad are not included.

Deviation from the definition: the number of midwives included, are nurses with a specialization in Maternal health and obstetrics and not a separate profession.

Romania

Practising midwives

Source of data:

Ministry of Health for all by 2007 data

National Institute of Statistics, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage:

- Only the Ministry of Health network, by 2007.

- All public and private sectors since 2007.

- Until 2007 midwives working in administration, research and in other posts that exclude direct contact with patients could not be totally excluded.

The number of midwives includes: practising midwives and nurses with specialized education (upper secondary ISCED level 3 and post-secondary non-tertiary ISCED level 4) working most of the time in

obstetrics and gynecology departments and midwives with university degree (tertiary education, ISCED level 5)

From 2009 data for practising midwives are the same as professionally active midwives because in this period weren't midwives working in administration, management, research and in other posts excluding direct contact with patients.

Break in the series: 2007.

Professionally active midwives

Source of data: **National Institute of Statistics**, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

The number of professionally active midwives includes practising midwives and nurses with specialized education (upper secondary ISCED level 3 and post-secondary non-tertiary ISCED level 4) working most of the time in obstetrics and gynecology departments and practising midwives with university degree (tertiary education, ISCED level 5). The number of professionally active midwives includes also midwives working in administration, management, research and in other posts excluding direct contact with patients.

From 2009, data for practising midwives are the same as professionally active midwives because in this period weren't midwives working in administration, management, research and in other posts excluding direct contact with patients.

Midwives licensed to practice

Source of data: **Order of Nurses, Midwives and Medical Assistants in Romania**

Reference period: data as of 31st December.

Coverage: The data cover public and private sector. Data doesn't include: nurses working most of the time in OG departments. midwives that are not practicing midwifery (e.g. they perform nursing activities in independent medical offices). Presently there are no longer associate professionals midwives graduating, only tertiary education midwives are graduating.

Break in series

Beginning with 2017, midwives that are not practicing midwifery (e.g. they perform nursing activities in independent medical offices and are licensed as such) are not included.

Practising nurses

Source of data:

National Institute of Statistics, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage: The data cover public and private sector.

Data from 2000 till 2009 refers to ancillary medical staff.

Since 2010, the data refer only to nurses.

The ancillary medical staff includes: medical assistants, pharmacy assistants, nurses, infant care personnel, sanitary technicians, laboratory assistants, registering clerks, masseur, autopsy assistant and statistician specialised in health statistics, medical physical trainer, ergo therapy trainer and other categories of medical staff with equivalent upper secondary level of education.

The data include also associated nurses from dentists units and pharmaceutical units (level of education is ISCED 3 or 4 and ISCO codes are 3221).

The number of practising nurses does not include midwives and physiotherapists. Until 2007, ancillary medical staff working in administration, research and in other posts that exclude direct contact with patients could not be totally excluded.

Number of nurses decreased in 2010 because in the period 2000-2009 data refer to ancillary medical staff (see definition above).

Break in the series: 2010.

Professionally active nurses

Source of data: **National Institute of Statistics**, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage: The data cover public and private sector.

Data from 2000 till 2009 refer to ancillary medical staff.

Since 2010, the data refer only to nurses.

The ancillary medical staff includes: medical assistants, pharmacy assistants, nurses, infant care personnel, sanitary technicians, laboratory assistants, registering clerks, masseur, autopsy assistant and statistician specialized in health statistics, medical physical trainer, ergo therapy trainer and other categories of medical staff with equivalent upper secondary level of education.

The data include also associated nurses from dentists units and pharmaceutical units (level of education is ISCED 3 or 4 and ISCO codes are 3221).

Until 2007, ancillary medical staff working in administration, research and in other posts that exclude direct contact with patients could not be totally excluded.

Number of nurses decreased in 2010 because in the period 2000-2009 data refers to ancillary medical staff (see definition above)

The number of professionally practising active nurses does not include midwives and physiotherapists

Break in the series: 2010.

Since 2007, the first series of nurses ISCED 5 were graduated. The trend of increasing of number of professional nurses remains because new generations of nurses are graduated from the university.

Nurses licensed to practice

Source of data: **Order of Nurses, Midwives and Medical Assistants in Romania**

Reference period: data as of 31st December.

Coverage: The data cover public and private sector.

Professional nurses (ISCO-08 code: 2221)

Source of data: **National Institute of Statistics**, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage:

Data cover the "Nursing professionals" from public and private sector.

First series of nurses ISCED 5 graduated in 2007. The trend of increasing of number of professional nurses remains because of the increasing number of graduates.

Break in the series: 2010.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **National Institute of Statistics**, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage:

The data cover all sanitary personnel from public and private sector.

The data cover all public and private sector.

Data from 2007 till 2009 refer to ancillary medical staff.

Since 2010, the data refer to nurses.

The ancillary medical staff includes: medical assistants, pharmacy assistants, nurses, infant care personnel, sanitary technicians, laboratory assistants, registering clerks, masseur, autopsy assistant and statistician specialized in health statistics, medical physical trainer, ergo therapy trainer and other categories of medical staff with equivalent upper secondary level of education. The data include associated nurses from dentists units and pharmaceutical units. It would be specified that for nurses and midwives the level of education is ISCED 3 or 4 and ISCO codes are 3221 and 3232.

Number of nurses decreased in 2010 because in the period 2007-2009 data refer to ancillary medical staff (see definition above).

Break in the series: 2010.

Practising caring personnel (personal care workers)

Source of data: **National Institute of Statistics**, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage:

The data cover all sanitary personnel from public and private sector.

The "Caring personnel" include: stretcher bearers, bathing personnel, gypsum operative, mud-bath personnel, laundresses, ambulance drivers, cleaning personnel, disinfection and disinfestations agents and other medical personnel similar to the medical auxiliary staff. The medical auxiliary staff provides cleaning and hygiene services in the medical units, prepare materials necessary for the activity, the transport of patients, etc.

From total number of caring personnel the cleaning personnel, disinfection and disinfestations agents could not be excluded.

Until 2007, caring personnel working in administration, research and in other posts that exclude direct contact with patients could not be totally excluded.

Professionally active caring personnel (personal care workers)

Source of data: **National Institute of Statistics**, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31st December.

Coverage:

The data cover all sanitary personnel from public and private sector.

The "Caring personnel" include: stretcher bearers, bathing personnel, gypsum operative, mud-bath personnel, laundresses, ambulance drivers, cleaning personnel, disinfection and disinfestations agents and other medical personnel similar to the medical auxiliary staff. The medical auxiliary staff provides cleaning and hygiene services in the medical units, prepare materials necessary for the activity, the transport of patients, etc.

From total number of caring personnel the cleaning personnel, disinfection and disinfestations agents could not be excluded.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: National Institute of Statistics.

Reference period: data as of 31st December.

Until 2007 nursing working in administration, research and in other posts that exclude direct contact with patients could not be totally excluded.

The data cover public and private sector.

Data from 2000 till 2009 refers to ancillary medical staff and midwives

Since 2010 the data refers only to nurses and midwives

All data refers to nursing and midwives associate and professionals (ISCO-08: 2221, 3221, 2222, 3222)

The ancillary medical staff includes: medical assistants, pharmacy assistants, nurses, infant care personnel, sanitary technicians, laboratory assistants, registering clerks, masseur, autopsy assistant and statistician specialised in health statistics, medical physical trainer, ergo therapy trainer and other categories of medical staff with equivalent upper secondary level of education.

The data include also associated nurses from dentists units and pharmaceutical units. It would be specified that for midwives and nurses the level of education is ISCED 3 or 4 and ISCO codes are 3231 and 3232.

Until 2007 ancillary medical staff working in administration, research and in other posts that exclude direct contact with patients could not be totally excluded.

Number of nurses and midwives declined in 2010 because in the period 2000-2009 data refers to ancillary medical staff (see definition above).

Break in the series: 2010.

Slovenia

Practising midwives

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage:

- **Practising midwives** are those working in the health-care sector (primary and secondary care) including public health institutes and the health insurance institute.
- The National Health Care Providers Database is a registry with total (100 %) coverage of health workers.

Professionally active midwives

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage:

- **Professionally active midwives** include practising professionals working in the health care sector and professionals working at HP4, 6.1, 6.3-6.9 and HP7 providers.
- The National Health Care Providers Database is a registry with total (100 %) coverage of health workers.

Midwives licensed to practice

Data not available.

Practising nurses

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage:

- **Practising nurses** are those working in the health-care sector (primary and secondary care), including public health institutes and the health insurance institute.
- The National Health Care Providers Database is a registry with total (100 %) coverage of health workers.

Professionally active nurses

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage:

- **Professionally active nurses** include practising professionals working in the health-care sector and professionals working at HP4, 6.1, 6.3-6.9 and HP7 providers.
- The National Health Care Providers Database is a registry with total (100 %) coverage of health workers.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage:

- From 1999 to 2002 data on bachelor's of science in nursing (completed programme for midwives) are included within the number of qualified nursing staff. From 2003 on those data are shown separately.
- 2000-2002: Midwives are included in qualified nurses; break in series between 2002 and 2003.
- The National Health Care Providers Database is a registry with total (100 %) coverage of health workers.

Break in time series: 2003.

Note: Qualified (professional) nurses are defined as nurses with a bachelor of science in nursing (3 - year higher education) and state registered nurses (2 – year higher education).

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage: The National Health Care Providers Database is a registry with total (100 %) coverage of health workers.

Note: Associate professional nurses are defined as nurses with 4 years of secondary education in nursing.

Practising caring personnel (personal care workers)

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage: Practising caring personnel are those working in the health-care sector (primary and secondary care), including public health institutes and the health insurance institute.

Break in time series: 2012, due to improved reporting from the providers of social care, i.e. included are providers which also provide health care (e.g. homes for the elderly, residential facilities for the disabled persons), additionally to social care.

Professionally active caring personnel (personal care workers)

Source of data: **National Institute of Public Health, Slovenia**; National Health Care Providers Database.

Reference period: 31st December.

Coverage: Professionally active caring personnel include practising professionals working in the health-care sector and professionals working at HP4, 6.1, 6.3-6.9 and HP7 providers.

Break in time series: 2012, due to improved reporting from the providers of social care, i.e. included are providers which also provide health care (e.g. homes for the elderly, residential facilities for the disabled persons), additionally to social care.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: National Institute of Public Health, Slovenia; National Health Care Providers Database.

Reference period: 31st December.

Slovakia

Practising midwives

Data not available. Suitable data source for providing “practising” concept is under development. Data are available for “professionally active” midwives (including midwives in administrative, academic or research functions, who are not providing direct care to patients).

Professionally active midwives

Source of data: **National Health Information Center.**

- The data come from “The Annual report on structure and number of health professionals and health care workers in the Slovak Republic”; therefore, only data on professionally active midwives are provided.

Reference period: 31st December.

Midwives licensed to practice

Data not available.

Practising nurses

Data not available. Suitable data source for providing “practising” concept is under development.

Data are available for "professionally active" nurses (including nurses in administrative, academic or research functions who are not providing direct care to patients).

Professionally active nurses

Source of data: **National Health Information Center.**

- The data come from "The Annual report on structure and number of health professionals and health care workers in the Slovak Republic"; therefore, only data on professionally active nurses are provided.

Reference period: 31st December.

Note: Employees of denationalised establishments emerging during the process of privatisation have been included in the statistical databases since 1998.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: **National Health Information Center.**

- There is no register of nurses and midwives in the Slovak Republic. The data come from "The Annual report on structure and number of health professionals and health care workers in the Slovak Republic"; therefore, only data on professionally active nurses are provided. (A national administrative register of healthcare professionals is under development).

Reference period: 31st December.

Note: Employees of denationalised establishments emerging during the process of privatisation have been included in the statistical databases since 1998.

Coverage: There is no distinction between professional and associate professional nurses in the Slovak Republic. All nurses are reported in the category professional nurses.

Associate professional nurses (ISCO-08 code: 3221)

There is no distinction between professional and associate professional nurses in the Slovak Republic. All nurses are considered professional nurses.

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Source of data: **Record of Ministry of Labour, Social Affairs and Family of the Slovak Republic, No. 11.01, 01-02.**

Coverage: Data refer to formal carers at home and formal carers and health assistants (not nurses) at institutions and social service facilities.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: National Health Information Center

Annual report on structure and amount of health professionals

Reference period: 31st December

Difference in methodology: Total number includes number of professionally active nurses and midwives. Nurses at regional level are divided from Total number of professionally active nurses and midwives.

No register of nurses and midwives exist at all and therefore we are able to provide only data from the Annual report on structure and amount of health professionals – on health care workers in the Slovak Republic and therefore only data on professionally active midwives and nurses is provided.

Finland

Practising midwives

Source of data: THL Health Personnel Statistics; **National Institute for Health and Welfare**. The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage: from 2013 - excluding nurses who are working most of the time as midwives but who have not exam in midwifery.

Professionally active midwives

Source of data: THL Health Personnel Statistics; **National Institute for Health and Welfare**. The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage: from 2013 - including also nurses who are working most of the time as midwives but who have not exam in midwifery.

Midwives licensed to practice

Source of data: VALVIRA. **National Supervisory Authority for Welfare and Health**. Register on Qualified Health Care Personnel, number of persons aged less than official retirement age (60/63 years) with qualification on 31 December.

Reference period: 31st December.

Deviation from the definition: Data from 1994 to 2004 refer to midwives and community health nurses (terveydenhoitaja) data.

Break in times series:

- Breaks are caused by structural changes in midwife education. The two-year curriculum was discontinued in 1971. Specialist nurse-based midwife education was run 1968-1986, and the last midwives graduated in 1994. The new midwife education on secondary level was started in 1985. The length of education was 3.5 years or 4.5 years, and it was lengthened with obligatory training in 1993. Since 1995, midwife education has followed the EU regulation. Additionally, all graduates with the new secondary level health care professional education have been authorised to nurse since 1 August 1996. The first graduates completed their studies in 2000.
- Until 1993, the Finnish data include only midwives who have midwife education as their basic education. Since 1994 they also include also specialist nurses with midwife qualifications.
- From 2005, figures include only the numbers of midwives' professional group.
- From 2013 there is age limitation from 18 to 68 year olds.

Practising nurses

Source of data: **THL Health Personnel Statistics; National Institute for Health and Welfare**. The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage: Data include nurses active in health care in Finland.

Professionally active nurses

Source of data: **THL Health Personnel Statistics; National Institute for Health and Welfare.** The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage: Data include nurses active in health care in Finland.

Nurses licensed to practice

Source of data: VALVIRA. **National Supervisory Authority for Welfare and Health.** Register on Qualified Health Care Personnel, number of persons aged less than official retirement age (58-63 years) with qualification on 31 December. Including public health nurses.

Reference period: 31st December.

Coverage:

- From 2013 on: classification of professional nurses consists of both ISCO-08 codes 2221 (in Finland codes 22211 and 22212) and 3221 (in Finland code 32211) but excluding public health nurses (32212). From 2013 on figures of “associate professional nurses” consist of ISCO-08 code 32212 (public health nurse) as well as other ISCO-codes that are related health care education (671101, 771201 and 772501). All midwives also are licenced nurses, and there are overlapping of the figures of midwives and nurses.

- From 2013 there is age limitation from 18 to 68 year olds. Probably the figures for “nurses licenced to practice” referred before (2011-2012) only to the class nurses (ISCO-08 code 2221 and 32211) but not to the associate professional nurses (ISCO-08 class 32212). Both the age limitation and the deviation of definition cause break for the time series in 2013.

Professional nurses (ISCO-08 code: 2221)

Source of data: THL Health Personnel Statistics; **National Institute for Health and Welfare.** The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage:

- Data include nurses active in health care in Finland.

- The data cover the number of matrons and ward sisters (codes 22301 and 22302 in the Statistics of Finland Classification of Occupations 2001).

- From 2013 on: classification of professional nurses consists of both ISCO-08 codes 2221 (in Finland codes 22211 and 22212) and 3221 (in Finland code 32211) but excluding public health nurses (32212).

Associate professional nurses (ISCO-08 code: 3221)

Source of data: THL Health Personnel Statistics; **National Institute for Health and Welfare.** The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage:

- Data include nurses active in health care in Finland.

- The data cover the number of nurses and public health nurses (codes 32311 and 32312 in the Statistics of Finland Classification of Occupations 2001).

- From 2013 on: Figures consist of ISCO-08 code 32212 (public health nurse) as well as other ISCO-codes that are related health care education (671101, 771201 and 772501).

Practising caring personnel (personal care workers)

Source of data: THL Health Personnel Statistics; **National Institute for Health and Welfare**. The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage: Data include caring personnel active in health care in Finland.

From 2013 on: Figures consist of ISCO-08 code 5321 and 5322 as well as ISCO-08 code 5329.

Professionally active caring personnel (personal care workers)

Source of data: THL Health Personnel Statistics; **National Institute for Health and Welfare**. The data for 2000 and 2005 onwards are based on the Employment Register kept by Statistics Finland.

Reference period: Data refer to information for the whole year.

Coverage: Data include caring personnel active in health care in Finland – practicing caring personnel limited to social welfare and health care sector.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Administrative figures (National Register of Health Care Professionals).

Reference period: 31st December

Deviation from the definition: Nurses are in "professionally active".

Sweden

Practising midwives

Source of data: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- **Practising midwives** are defined as licensed midwives registered in NACE-codes that are considered to be within the health-care sector.
- 100% coverage until 2018.
- The entire time series has been revised in 2021.

Professionally active midwives

Source of data: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- In addition to the NACE-codes used to identify practicing midwives the NACE-codes are used to identify professional active midwives:
 - 75.1 - Public authorities
 - 80.3 - Higher education establishments
- 100% coverage until 2018.
- The entire time series has been revised in 2021.

Midwives licensed to practice

Source of data: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- Non-retired personnel.
- 100% coverage for licensed to practise nurses until 2019.
- The entire time series has been revised in 2021.

Practising nurses

Source of data:

- From 1995: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- Practising nurses are defined as licensed nurses registered in NACE-codes that are considered to be within the health-care sector.
- 100% coverage for practising nurses until 2018.
- The entire time series has been revised in 2021.

Professionally active nurses

Source of data: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- In addition to the NACE-codes used to identify practicing nurses the NACE-codes are used to identify professional active nurses:
 - 75.1 - Public authorities
 - 80.3 - Higher education establishments
- 100% coverage for practising nurses until 2018
- The entire time series has been revised in 2021.

Nurses licensed to practice

Source of data: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- Non-retired personnel.
- 100% coverage for licensed practising physicians until year 2019.
- The entire time series has been revised in 2021.

Professional nurses (ISCO-08 code: 2221)

Source of data:

- Before 1995: Data came from the register of certified nurses and population census 1990.
- From 1995: **National Board of Health and Welfare**, LOVA-register (change of register-name from former NPS-register).

Reference period: 1st November.

Coverage:

- Licensed nurses registered in NACE-codes that are considered to be within the health-care sector.
- 100% coverage until year 2018.
- The entire time series has been revised in 2021.

Break in time series: Figures on nurses before 1995 are not consistent with the data from 1995 onwards because of differences in sources and methodology.

Associate professional nurses (ISCO-08 code: 3221)

Data not available.

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: National Board of Health and Welfare, National Planning Support (NPS) register.

Reference period: 1st November

Coverage: 100 per cent

The discrepancy between the national total and the sum of the regions is the number of personnel deployed abroad in for example foreign military operations.

Iceland

Practising midwives

Source of data: **Directorate of Health.**

Reference period: 31st December.

Coverage:

- Midwives: 18 months of university education after completion of a nursing degree.
- Figures refer to midwives within hospitals, healthcare centres and nursing homes.
- **Practising midwives** - may refer more to professionally active midwives (but the group of non-practising midwives is small).
- The peak in 2001 is due to "change of source and methodology".
- Year 2011. The peak cannot be explained fully but the figure for 2011 should be considered as an estimate.

The Directorate of Health that supplies the data uses data from the Association of Midwives and in 2012 a special work was conducted on its behalf on the number of midwives and hence the figure for 2012 is considered right.

Professionally active midwives

Source of data: **Directorate of Health.**

Reference period: 31st December.

Coverage:

- Midwives: 18 months of university education after completion of a nursing degree.
- Figures refer to midwives within hospitals, healthcare centres and nursing homes.
- The peak in 2001 is due to “change of source and methodology”.
- Year 2011. The peak cannot be explained fully but the figure for 2011 should be considered as an estimate.

The Directorate of Health that supplies the data uses data from the Association of Midwives and in 2012 a special work was conducted on its behalf on the number of midwives and hence the figure for 2012 is considered right.

Midwives licensed to practice

Source of data:

2016 and onwards: **The Directorate of Health**, Register of Licenced Health Care Professionals.

Until 2015: **The Directorate of Health**. Register of Midwives.

Reference period: 31st December.

Coverage:

- Midwives: 18 months of university education after completion of a nursing degree.
- Includes are all midwives with a license (all ages regardless of employment status, employment location (inside or outside of the country) or nationality).

Break in time series: Break in series in 2016 is due to change in data source. The data source is the Register of Licenced Health Care Professionals instead of the Register of Midwives, which no longer exists.

Practising nurses

Source of data: **Directorate of Health, Association of Icelandic Nurses and the Icelandic Union of Practical Nurses.**

Reference period: 31st December.

Coverage:

- Professional nurses: Four years of university education leading to a B.Sc. degree.
- Associate/Licensed practical nurses: Three years of education in secondary school (non-university) and 16 weeks of practical training in health institutions.
- Figures refer to nurses who are members of The Association of Icelandic Nurses and associate practical nurses who are members of the Icelandic Union of Practical Nurses.

Professionally active nurses

Source of data: **Directorate of Health, Association of Icelandic Nurses and The Icelandic Union of Practical Nurses.**

Reference period: 31st December.

Coverage:

- Professional nurses: Four years of university education leading to a B.Sc. degree.
- Associate/Licensed practical nurses: Three years of education in secondary school (non-university) and 16 weeks of practical training in health institutions.
- Figures refer to nurses who are members of The Association of Icelandic Nurses and associate practical nurses who are members of the Icelandic Union of Practical Nurses.

Nurses licensed to practice

Source of data:

2016 and onwards: **The Directorate of Health**, Register of Licenced Health Care Professionals.

Until 2015: **The Directorate of Health**, Register of professional nurses.

Reference period: 31st December.

Coverage:

- Includes (from 2016) all professional nurses and associate professional nurses with a license (all ages regardless of employment status, employment location (inside or outside of the country) or nationality).

Break in time series: Break in series in 2016 is due to change in data source. The data source is the Register of Licenced Health Care Professionals instead of the Register of Nurses, which no longer exists.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Directorate of Health - Association of Icelandic Nurses.**

Reference period: 31st December.

Coverage:

- Professional nurses: Four years of university education leading to a B.Sc. degree.

- Figures refer to nurses that are members of The Association of Icelandic Nurses.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: **Directorate of Health, The Icelandic Union of Practical Nurses.**

Reference period: 31st December.

Coverage:

- Associate/licensed practical nurses: Three years of education in secondary school (non-university) and 16 weeks of practical training in health institutions.

- As of 2006 a new "associate nurse bridge" programme of 4 semesters of education was offered for health assistants with at least five years working experience as caring assistants. In 2008, 107 (2007:8; 2006:3) graduated from this programme and 115 from the general programme for associate professional nursing. The big increase in the number of associate nurses between 2007 and 2008 is to some extent due to this new programme, as 107 associate nurses graduated from it in 2008 in addition to the 115 graduating from the ordinary programme in 2008. This is also reflected in the fact that The Directorate of Health gave licenses to 188 new associate nurses in 2008. The increase in 2008 may also be explained by a number of associate nurses returning to these jobs from work in different jobs prior to the economic collapse.

Practising caring personnel (personal care workers)

Source of data: Statistics Iceland, Labour Force Survey.

Reference period: 1st January to 31st December each year (a continuous survey).

Coverage: People 16-74 years old. A sample from the National Registry.

- Data refers to people in main job in ISCO-08 532 (Iceland ISTARF95 5132, 5133, 5139).

- The data series 2003-2016 provided in 2017 as provisional data for the time being. Further study on it is needed.

Professionally active caring personnel (personal care workers)

Data not available.

Liechtenstein

Practising midwives

Source of data: Data on the midwives employed by the Hospital in Vaduz are available for the whole period. From 2000 onward additional data is available 2000 to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht), 2005 and later: list of midwives licensed to practise at the Department of Health.

Deviation from the definition: 2002 2003, 2004: 6 (7) foreign Midwives licenced to practice in Liechtenstein are available. Information on these Persons is not available for other years reported. As it is not known, if these Persons did actually work in Liechtenstein, they are excluded from the database.

Estimation method: The hospital in Vaduz reports the total of nurses and midwives. Separation of the two is not reported for every year. For the missing years, marked with "E", as an assumption the number equals the year before.

Break in time series: from 2000 onward additional data are available.

Professionally active midwives

Source of data: Data on the midwives employed by the Hospital in Vaduz are available for the whole period. From 2000 onward additional data is available: 2000to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht), 2005 and later: list of midwives licensed to practise at the Department of Health.

Deviation from the definition: 2002 2003, 2004: 6 (7) foreign Midwives licenced to practice in Liechtenstein are available. Information on these Persons is not available for other years reported. As it is not known, if these Persons did actually work in Liechtenstein, they are excluded from the database.

Estimation method: The hospital in Vaduz reports the total of nurses and midwives. Separation of the two is not reported for every year. For the missing years, marked with "E", as an assumption the number equals the year before. Census data 2010 on professionally active midwives is taken as estimates up to 2013. At the beginning of 2014 the Hospital Vaduz closed down its maternity ward. Therefore data of the 2010 census on midwives in different jobs is not valid for the year 2014 onward (missing values). Results of the 2015 census, now available, are taken as an estimate for 2014.

Break in time series: from 2000 onward additional data are available.

From 2010 onward: Census data on professionally active midwives.

Midwives licensed to practice

Source of data: Data on the midwives employed by the Hospital in Vaduz are available for the whole period. From 2000 onward additional data is available: **2000** to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht). 2005 and later: list of midwives licensed to practise at the Department of Health.

Deviation from the definition: 2002 2003, 2004: 6 (7) foreign Midwives licenced to practice in Liechtenstein are available. Information on these Persons is not available for other years reported. As it is not known, if these Persons did actually work in Liechtenstein, they are excluded from the database.

There is no data on unemployed, retired midwives or such working in other jobs. We therefore assume professionally active = practising = licensed to practice

Estimation method: The hospital in Vaduz reports the total of nurses and midwives. Separation of the two is not reported for every year. For the missing years, marked with "E", as an assumption the number equals the year before. Census data 2010 on professionally active midwives is taken as

estimates up to 2013. At the beginning of 2014 the Hospital Vaduz closed down its maternity ward. Therefore, data of the 2010 census on midwives in different jobs or such not economically active is not valid for the year 2014 onward (missing values). For 2014 results of the 2015 census are taken as an estimate. From 2015 onward values are updated due to the availability of the 2015 census.

Break in time series: from 2000 onward additional data are available. From 2010 on, Census data on professionally active midwives and those who are not economically active.

Practising nurses

Source of data: Data on the nurses employed by the Hospital in Vaduz are available for the whole period. From 2005 onward additional data is available: 2000 to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht); 2005 and later: list of midwives licensed to practise at the Department of Health.

2010 additional Data of the APH Balzers and from 2012 onward of the LAK, both long term care facilities, are available. From 2013 (Familienhilfe Liechtenstein) resp. 2014 (Lebenshilfe Balzers, ambulant) on two more Institutions report their employees (indicated with "B").

With the 2016 delivery the time series was checked once again; minor differences between 2000 and 2009 result, e.g. from corrections in the information on midwives, the elimination of double counting (persons who are included in the list of the Office of Public Health as well as the hospital employment data) and additional information on "ruhend gestellte Bewilligungen" (licensed to practice but not economically active).

Coverage: Data on associate professional nurses up to 2008 for hospital only, from 2009 onward data of the Office of Public Health., later on more Institutions were included (see source of data).

Deviation from the Definition: -

Estimation method: The hospital in Vaduz reports the total of nurses and midwives. Separation of the two is not reported for every year. For the missing years, marked with "E", as an assumption the number equals the year before.

Break in time series: Data on the nurses employed by the Hospital in Vaduz are available for the whole period. The "break in series" indicate, that in these years and onward additional data are taken into account: 2000 2004 Yearly report of the Liechtenstein Government; 2005 and later: list of nurses/midwives licensed to practise at the Department of Health; 2010 and 2012 onward long term care facilities, 2013 and 2014 two more homecare Institutions (also see "source of data"). Please note that the estimates (E) indicated in the midwives-sheet are also relevant for the nurses (for hospital employment: total nurses and midwives - midwives). 2017: a private hospital opened; 2018: The private hospital was closed again; 2018 (P): the second private Hospital did not yet report data on 2018 therefore the numbers for 2017 were taken into account.

In 2019, a private mental health hospital was opened.

Professionally active nurses

Source of data: Data on the nurses employed by the Hospital in Vaduz are available for the whole period. From 2005 onward additional data is available: 2000 to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht); 2005 and later: list of midwives licensed to practise at the Department of Health.

2010 additional Data of the APH Balzers and from 2012 onward of the LAK, both long term care facilities, are available. From 2013 (Familienhilfe Liechtenstein) resp. 2014 (Lebenshilfe Balzers, ambulant) onward two more Institutions report their employees (indicated with "B"). From 2010 on nurses licensed to practice, but are not active in this specific sort of job, are included, source: census (Codes ISCO 2221 and 3221).

Coverage: Data on associate professional nurses up to 2008 for hospital only, from 2009 onward data of the Office of Public Health, later on more Institutions were included (see source of data).

Deviation from the Definition:

Estimation method: The hospital in Vaduz reports the total of nurses and midwives. Separation of the two is not reported for every year. For the missing years, marked with “E”, as an assumption the number equals the year before.

2011 onward: Latest census data is available for 2010. These are also taken as estimates for the following years.

From 2015 onward values are updated due to the availability of the 2015 census.

Break in time series: from 2000 onward additional data are available, from 2010 resp. 2012 on also for the long term care facilities, and from 2012 resp. 2014 on also two homecare-facilities mentioned above. Please note that the estimates (E) indicated in the midwives-sheet are also relevant for the nurses (for hospital employment: total nurses and midwives - midwives). The B in 2010 indicates additional data available from census on persons licensed to practice but work different fields. 2017: a private hospital opened; 2018: The private hospital was closed again; 2018 (P): the second private Hospital did not yet report data on 2018 therefore the numbers for 2017 were taken into account. In 2019, a private mental health hospital opened.

Nurses licensed to practice

Source of data: Data on the nurses employed by the Hospital in Vaduz are available for the whole period. From 2005 onward additional data is available: 2000 to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht); 2005 and later: list of midwives licensed to practise at the Department of Health.

2010 additional Data of the APH Balzers and from 2012 onward of the LAK, both long term care facilities, are available (indicated with “B”). From 2013 (Familienhilfe Liechtenstein) resp. 2014 (Lebenshilfe Balzers, ambulant) onward two more Institutions report their employees. From 2010 on nurses licensed to practice, but are not active in this specific sort of job or are not economically active are included, source: census (Codes ISCO 2221 and 3221).

With the 2016 delivery the time series was checked once again; minor differences between 2000 and 2009 result, e.g. from corrections in the information on midwives, the elimination of double counting (persons who are included in the list of the Office of Public Health as well as the hospital employment data) and additional information on “ruhend gestellte Bewilligungen” (licensed to practice but not economically active).

Coverage: Data on associate professional nurses up to 2008 for hospital only, from 2009 onward data of the Office of Public Health, later on more Institutions were included (see source of data)

Deviation from the Definition:

Estimation method: The hospital in Vaduz reports the total of nurses and midwives. Separation of the two is not reported for every year. For the missing years, marked with “E”, as an assumption the number equals the year before. 2011 onward: Latest census data is available for 2010. These are also taken as estimates for the following years. From 2015 onward values are updated due to the availability of the 2015 census.

Break in time series: from 2000 onward additional data are available, from 2010 resp. 2012 on also for the long term care facilities, and from 2012 resp. 2014 on also two homecare-facilities mentioned above. Please note that the estimates (E) indicated in the midwives-sheet are also relevant for the nurses (for hospital employment: total nurses and midwives - midwives). The B in 2010 indicates additional data available from census on persons licensed to practice but work different fields or are not economically active. 2017: a private hospital opened; 2018: The private hospital was closed again; 2018 (P): the second private Hospital did not yet report data on 2018 therefore the numbers for 2017 were taken into account. In 2019, a private mental health hospital opened.

Professional nurses (ISCO-08 code: 2221)

Source of data: Data on the nurses employed by the Hospital in Vaduz are available for the whole period. From 2005 onward additional data is available: 2000 to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht). 2005 and later: list of midwives licensed to practise at the Department of Health.

2010 additional data of the APH Balzers and from 2012 onward of the LAK, both long term care facilities, are available (indicated with "B"). From 2013 (Familienhilfe Liechtenstein) resp. 2014 (Lebenshilfe Balzers, ambulant) on two more Institutions report their employees. From 2010 on census data is taken into account for information on "professionally active" and nurses "licensed to practice".

Estimation method 2011 onward: Latest census data is available for 2010. These are also taken as estimates for the following years. From 2015 onward values are updated due to the availability of the 2015 census. 2017: a private hospital opened; 2018: The private hospital was closed again; 2018 (P): the second private Hospital did not yet report data on 2018 therefore the numbers for 2017 were taken into account. In 2019, a private mental health hospital opened.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: Data on the nurses employed by the Hospital in Vaduz are available for the whole period. From 2005 onward additional data is available: 2000 to 2004: Yearly Report of the Liechtenstein Government (Rechenschaftsbericht). 2005 and later: list of midwives licensed to practise at the Department of Health.

2010 additional data of the APH Balzers and from 2012 onward of the LAK, both long term care facilities, are available (indicated with "B"). From 2013 (Familienhilfe Liechtenstein) resp. 2014 (Lebenshilfe Balzers, ambulant) on two more Institutions report their employees. From 2010 on census data is taken into account for information on "professionally active" and nurses "licensed to practice".

Estimation method 2011 onward: Latest census data are available for 2010. These are also taken as estimates for the following years. From 2015 onward values are updated due to the availability of the 2015 census. 2017: a private hospital opened; 2018: The private hospital was closed again; 2018 (P): the second private Hospital did not yet report data on 2018 therefore the numbers for 2017 were taken into account. In 2019, a private mental health hospital opened

Practising caring personnel (personal care workers)

Source of data: **Health care assistants:** Most Health care assistants are already counted for the Hospital employment questionnaire. Additional data of the two long term care facilities (APH Balzers, LAK) as well as the two main homecare institutions (Familienhilfe Liechtenstein, Lebenshilfe Balzers ambulant) are available.

Coverage: from 2010 resp. 2012 on data of the two long term care facilities (APH Balzers, LAK), from 2013 and 2014 on also the two main homecare institutions and from 2016 on data of care allowances are included .

Additional information on homecare employees in Liechtenstein are collected from the administration of care allowances ("Pflegegeld"; = number of employees in private households, who get paid from care allowances).

Estimation method:-

Break in time series: Data on additional institutions included (see source of data): 2010 resp. 2012: two long term care facilities, 2013 and 2014 two main homecare institutions, 2016 employees in private households paid for from care allowances. 2017: a private hospital opened; 2018: The private hospital was closed again; 2018 (P): the second private Hospital did not yet report data on

2018 therefore the numbers for 2017 were taken into account. In 2019, a private mental health hospital opened.

Professionally active caring personnel (personal care workers)

Source of data: **Health care assistants:** Most Health care assistants are already counted for the Hospital employment questionnaire. Additional data of the two long term care facilities (APH Balzers, LAK) as well as the two main homecare institutions (Familienhilfe Liechtenstein, Lebenshilfe Balzers ambulant) are available.

Coverage: from 2010 resp. 2012 on data of the two long term care facilities (APH Balzers, LAK), from 2013 and 2014 on also the two main homecare institutions and from 2016 on data of care allowances are included.

Additional information on homecare employees in Liechtenstein are collected from the administration of care allowances ("Pflegegeld"; = number of employees in private households, who get paid from care allowances). We check if personnel working in the administration of caring personnel belongs to this category. If yes, it will still be a very low number.

In the meantime we assume practising = professionally active.

Estimation method:-

Break in time series: Data on additional institutions are included (also see source of data): 2010 resp. 2012: two long term care facilities, 2013 and 2014 two main homecare institutions, 2016 employees in private households paid for from care allowances. In 2019, a private mental health hospital opened.

Norway

Practising midwives

Source of data: **Statistics Norway;** Register-based statistics on employment of health-care personnel. See http://www.ssb.no/hesospers_en/.

Reference period: 3rd week of November.

Coverage:

- The figures provided give the number of practising midwives within HP1-HP3. There is no guarantee that these professionals actually work in patient care as data refer to the education the individuals have rather than the job they hold within HP 1-3.

- From 2009, data include all personnel within HP1-HP4.

Break in time series: 2009, 2015.

- Up to 2008, data include all personnel within HP1-HP3. From 2009, it also includes HP4.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called "a-ordningen" (the a-system).

Professionally active midwives

Source of data: **Statistics Norway;** Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Reference period: 3rd week of November.

Coverage: The figures provided cover all professionally active midwives in all industries.

Break in time series: 2015.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called “a-ordningen” (the a-system).

Midwives licensed to practice

Source of data: **Statistics Norway;** Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Reference period: 3rd week of November.

Coverage: The figures provided cover all registered midwives.

Break in time series: 2015.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called “a-ordningen” (the a-system).

Practising nurses

Source of data: **Statistics Norway;** Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Reference period: 3rd week of November.

Coverage:

- The figures provided give the number of practising nursing within HP1-HP3. There is no guarantee that these professionals actually work in patient care as data refer to the education the nurses have rather than the job they hold within HP 1-3.

- From 2009, data include all personnel within HP1-HP4.

Break in time series: 2009, 2015.

- Up to 2008, data include all personnel within HP1-HP3. From 2009, it also includes HP4.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called “a-ordningen” (the a-system).

Professionally active nurses

Source of data: **Statistics Norway;** Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Coverage: The figures provided cover all professionally active nurses in all industries.

Reference period: 3rd week of November.

Break in time series: 2015.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called "a-ordningen" (the a-system).

Nurses licensed to practice

Source of data: **Statistics Norway**; Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Coverage: The figures provided cover all registered nurses.

Reference period: 3rd week of November.

Break in time series: 2015.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called "a-ordningen" (the a-system).

Professional nurses (ISCO-08 code: 2221)

Source of data: **Statistics Norway**; Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Reference period: 3rd week of November.

Coverage: The figures provided give the number of practising nursing within HP1-HP3. There is no guarantee that these professionals actually work in patient care as data refer to the education the nurses have rather than the job they hold within HP 1-3.

Break in time series: 2009, 2015.

- From 2009, "practising" data include all personnel within HP1-HP4.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called "a-ordningen" (the a-system).

Associate professional nurses (ISCO-08 code: 3221)

Norway has no occupation corresponding to ISCO-08 code: 3221.

Practising caring personnel (personal care workers)

Source of data: **Statistics Norway**; Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Reference period: 3rd week of November.

Coverage:

- The figures provided give the number of professionally active caring personnel within HP1-HP3. There is no guarantee that these professionals actually work in patient care as data refer to the education the individuals have rather than the job they hold within HP 1-3.

- 2009 and onwards: data include all personnel within HP1-HP4.

Break in time series: 2009, 2015.

- Up to 2008, data include all personnel within HP1-HP3. From 2009, it also includes HP4.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called “a-ordningen” (the a-system).

Professionally active caring personnel (personal care workers)

Source of data: **Statistics Norway**; Statistics on health-care personnel. Administrative registers. See http://www.ssb.no/hesospers_en/.

Reference period: 3rd week of November.

Coverage: The figures provided cover all professionally active caring personnel in all industries.

- 2009 and onwards: data include all personnel within HP1-HP4.

Break in time series: 2009, 2015.

- Up to 2008, data include all personnel within HP1-HP3. From 2009, it also includes HP4.

- As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called “a-ordningen” (the a-system).

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Statistics Norway, Register-based statistics on employment of health care personnel.

Reference period: 3rd week of November

Estimation method: The regional figures do not add up because some nursing professionals can't be placed according to region.

Coverage: Because of national registration and quality, it is also chosen to include physicians in HP4 from 2009. Personnel is included based on education, not occupation, therefore nursing professionals not providing services directly to patients are included. .

Break in time series: 2009.

Note: For some institutions the variable Official Municipality Key is missing in the business register. Therefore it can be differences between the totals (national level) and the sum of regions. As from 2015, the register-based employment statistics will be based on a new data source for employees. Until the end of 2014, the main data source was The Central Register on Employers and Employees (EE register), produced by the Norwegian Labour and Welfare Organisation (NAV). In 2015, this reporting to NAV was coordinated with the reporting of earnings and personnel data to the Tax Administration and Statistics Norway. This common reporting system is called “a-ordningen” (the a-system).

Switzerland

Practising midwives

Source of data: FSO Federal Statistical Office, Neuchâtel; hospital statistics; yearly census.

Coverage: Midwives working in hospitals. The ambulatory health care sector is not yet covered.

Estimation method: Until 2009, estimations were made with data on professions from 75% of hospitals. Hospitals giving valid information on professions are reasonably assumed to be representative of the whole category (university hospitals, acute hospitals, psychiatric hospitals, rehabilitation hospitals, and other specialised hospitals).

Break in time series: 2005 and 2010.

- Since 2005, practising midwives in hospitals are included.

- Since 2010, hospital statistics have been revised; no estimation needed.

Professionally active midwives

Data not available.

Midwives licensed to practice

Data not available.

Practising nurses

Source of data: **FSO Federal Statistical Office**, Neuchâtel; hospital statistics, statistics of medical-social institutions, community nursing statistics; yearly census.

Coverage: Annual full surveys on employment in hospitals, nursing homes and community nursing home services. The ambulatory health care sector is not yet covered.

Estimation method:

- Hospital data: Until 2009, estimations were made with data on professions from 75% of hospitals. Hospitals giving valid information on professions are reasonably assumed to be representative of the whole category (university hospitals, acute hospitals, psychiatric hospitals, rehabilitation hospitals, and other specialised hospitals).

- Nursing homes data: In 2018, for the whole series (from 2007 to 2016), the method to identify nurses from medical-social institutions has been revised. The estimation of total nurses has been retrospectively adapted.

Break in time series: Since 2010, hospital statistics have been revised; no estimation needed.

Professionally active nurses

Data not available.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: **FSO Federal Statistical Office**, Neuchâtel; hospital statistics, statistics of medical-social institutions, community nursing statistics; yearly census.

Coverage: Full surveys on employment in hospitals, nursing homes and community nursing home services. The ambulatory health care sector is not yet covered.

Estimation method:

- Hospital data: Until 2009, estimations were made with data on professions from 75% of hospitals. Hospitals giving valid information on professions are reasonably assumed to be representative of the whole category (university hospitals, acute hospitals, psychiatric hospitals, rehabilitation hospitals, and other specialised hospitals).

- Nursing homes data: In 2018, for the whole series (from 2007 to 2016), the method to identify nurses from medical-social institutions has been revised. The estimation of total nurses has been retrospectively adapted.

Break in time series: Since 2010, hospital statistics have been revised; no estimation needed.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: FSO Federal Statistical Office, Neuchâtel; hospital statistics, statistics of medical-social institutions, community nursing statistics; yearly census.

Coverage: Full surveys on employment in hospitals, nursing homes and community nursing home services. The ambulatory health care sector is not yet covered.

Estimation method:

- Hospital data: Until 2009, estimations were made with data on professions from 75% of hospitals. Hospitals giving valid information on professions are reasonably assumed to be representative of the whole category (university hospitals, acute hospitals, psychiatric hospitals, rehabilitation hospitals, and other specialised hospitals).

- Nursing homes data: In 2018, for the whole series (from 2007 to 2016), the method to identify nurses from medical-social institutions has been revised. The estimation of total nurses has been retrospectively adapted.

Break in time series: Since 2010, hospital statistics have been revised; no estimation needed.

Practising caring personnel (personal care workers)

Source of data: FSO Federal Statistical Office, Neuchâtel; hospital statistics, statistics of medical-social institutions, community nursing statistics; yearly census.

Coverage: Full surveys on employment in hospitals, nursing homes and community nursing home services. The ambulatory health care sector is not yet covered.

Estimation method:

- Hospital data: Until 2009, estimations were made with data on professions from 75% of hospitals. Hospitals giving valid information on professions are reasonably assumed to be representative of the whole category (university hospitals, acute hospitals, psychiatric hospitals, rehabilitation hospitals, and other specialised hospitals).

- Nursing homes data: In 2018, for the whole series (from 2007 to 2016), the method to identify caring personnel from medical-social institutions has been revised.

Break in time series: Since 2010, hospital statistics have been revised; no estimation needed.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Data not available.

Montenegro

Practising midwives

Data not available.

Note: Data for practising midwives and professionally active midwives cannot be split at the moment.

Professionally active midwives

Source of data: The source for all data submitted is the Institute of Public Health. Some additional information can be found in Health Statistical Yearbooks available at <http://www.ijzcg.me/>

Reference period: December 31st.

Coverage: Only data from the public sector.

Deviation from the definition:

Midwives licensed to practice

The category does not exist.

Practising nurses

Data not available.

Note: Data for practising midwives and professionally active midwives cannot be split at the moment.

Professionally active nurses

Source of data: The source for all data submitted is the Institute of Public Health. Some additional information can be found in Health Statistical Yearbooks available at <http://www.ijzcg.me/>

Reference period: December 31st.

Coverage: Only data from the public sector.

Deviation from the definition: We included nurses with finished three- year faculty (bachelors) and four-year faculty, nurses with higher and secondary education.

Break in time series: From 2014, we excluded laboratory technicians, sanitary technicians and physiotherapy technicians.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: The source for all data submitted is the Institute of Public Health. Some additional information can be found in Health Statistical Yearbooks available at <http://www.ijzcg.me/>

Reference period: December 31st.

Coverage: Only data from the public sector.

Deviation from the definition: We included nurses with finished three- year faculty (bachelors) and four-year faculty, nurses with higher and secondary education.

Break in time series: In 2017, we excluded laboratory technicians, sanitary technicians and physiotherapy technicians.

Associate professional nurses (ISCO-08 code: 3221)

The category does not exist.

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Data not available.

North Macedonia

Practising midwives

Data not available.

Professionally active midwives

Source of data: **Institute for Public Health –Skopje**. Report for health staff in health sector (3-00-60).

Reference period: 31st December.

Note: Starting from 2008, midwifery education becomes university-level education (instead of secondary school level).

Midwives licensed to practice

Data not available.

Practising nurses

Data not available.

Professionally active nurses

Source of data: **Institute for Public Health –Skopje**. Report for health staff in health sector (3-00-60).

Reference period: 31st December.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data: **Institute for Public Health –Skopje**. Report for health staff in health sector (3-00-60).

Reference period: 31st December.

Associate professional nurses (ISCO-08 code: 3221)

The category “Associated professional nurse” does not exist.

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Source of data: **Institute for Public Health –Skopje**. Report for health staff in health sector (3-00-60).

Reference period: 31st December.

Coverage: Up until 2005, the data sets for private sector are incomplete, because private sector physicians were not sending reports regularly to the relevant organisations. Ever since 2006, more strict controls for regular reporting were put into practice by the Ministry of Health, which resulted in very accurate report sending and vastly improved evidence of health personnel. The new software from 2006 comprises private sector.

Break in the series: 2006.

Note: Private for profit hospitals were introduced in year 2006, which is probably the explanation for sudden increase in year 2007.

Albania

Practising midwives

Data not available.

Professionally active midwives

Data not available.

Midwives licensed to practice

Data not available.

Practising nurses

Source of data: Ministry of Health

Deviation from the definition: 1990-2009: number of nurses and midwives

Professionally active nurses

Data not available.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Data not available.

Associate professional nurses (ISCO-08 code: 3221)

Data not available.

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Data not available.

Serbia

Practising midwives

Data available from 2016.

Source of data: Institute of Public Health of Serbia, National register on health care human resources.

Data as of December 31. <http://www.batut.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Deviation from the definition: From 2016 to 2018, the data also include gynecology and obstetrics nurses.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was

improved. Data collected by the new methodology have been reported since 2020 including midwifery professionals, midwifery associate, and nurses who are working most of the time as midwives.

Professionally active midwives

Source of data: Institute of Public Health of Serbia, National register on health care human resources. Data as of December 31. <http://www.batut.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Deviation from the definition: From 2003 to 2018, the data also include gynecology and obstetrics nurses.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was improved. Data collected by the new methodology have been reported since 2020 including midwifery professionals, midwifery associate, and nurses who are working most of the time as midwives.

Midwives licensed to practice

Source of data: Chamber of Nurses and Health Technicians in Serbia. Data as of December 31. <http://www.kmszts.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia.

Deviation from the definition: From 2016 to 2018, the data also include gynecology nurses.

Practising nurses

Data available from 2016.

Source of data: Institute of Public Health of Serbia, National register on health care human resources. Data as of December 31. <http://www.batut.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was improved. Data collected by the new methodology have been reported since 2020.

Professionally active nurses

Source of data: Institute of Public Health of Serbia, National register on health care human resources. Data as of December 31. <http://www.batut.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons,

social services) than the Ministry of Health are not included. Data from private health sector are not included.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was improved. Data collected by the new methodology have been reported since 2020.

Nurses licensed to practice

Source of data: Chamber of Nurses and Health Technicians in Serbia. Data as of December 31.

<http://www.kmszts.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia.

Deviation from the definition: From 2012 to 2015, data on midwives licensed to practice are included in total number of nurses licensed to practice. By 2016, only active members of Chamber of Nurses and Technicians are reported.

Professional nurses (ISCO-08 code: 2221)

Source of data: Institute of Public Health of Serbia, National register on health care human resources.

Data as of December 31. <http://www.batut.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Deviation from the definition: Data include nurses with ISCED level 4 and level 5 education.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was improved. Data collected by the new methodology have been reported since 2020.

Associate professional nurses (ISCO-08 code: 3221)

Source of data: Institute of Public Health of Serbia, National register on health care human resources.

Data as of December 31. <http://www.batut.org.rs/>.

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Deviation from the definition: Data include nurses with ISCED level 3 education.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was improved. Data collected by the new methodology have been reported since 2020.

Practising caring personnel (personal care workers)

This subcategory does not exist in the country.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was improved. Data collected by the new methodology have been reported since 2020.

Professionally active caring personnel (personal care workers)

This subcategory does not exist in the country.

Break in time series: During 2019, a new IT solution was piloted and implemented, and the methodology for collecting data on human resources for health in the Republic of Serbia was improved. Data collected by the new methodology have been reported since 2020.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data: Institute of Public Health of Serbia, National register on health care human resources. Data as of December 31. <http://www.batut.org.rs/>

Coverage: Data for Kosovo-Metohija province are not included in the coverage of data for the Republic of Serbia. Data from health institutions under other ministries (military services, prisons, social services) than the Ministry of Health are not included. Data from private health sector are not included.

Deviation from the definition: Data refer to professionally active physicians

Turkey

Practising midwives

Data not available. Data are available for "professionally active" midwives (including midwives in administrative, academic or research functions who are not providing direct care to patients).

Professionally active midwives

Source of data:

- From 2000 onwards: **General Directorate for Health Services, Ministry of Health.**
- Up to 1999: **Health Statistics Yearbook - Ministry of Health.**

Coverage:

- Total number of midwives in the MoH, university, and private sectors.
- Ministry of Health, university, private and other sectors (other public establishments, local administrations and since 2012 MoND-affiliated facilities) are included.
- Unemployed and retired midwives, midwives working abroad and students who have not yet graduated from school are not included.
- The small number of midwives working in administration is included.
- A quantitative increase was noted in the employment of midwives in 2006-2007 period.

Break in time series: 2018.

- In 2018, the used database for health personnel has been changed. This new source keeps the data as person-based. Health personnel data were collected from health facilities as health facility-based before 2018.

Midwives licensed to practice

Data not available.

Practising nurses

Data not available. Data are available for "professionally active" nurses (including nurses in administrative, academic or research functions who are not providing direct care to patients).

Professionally active nurses

Source of data:

- From 2000 onwards: **General Directorate for Health Services, Ministry of Health.**
- Up to 1999: **Health Statistics Yearbook - Ministry of Health.**

Coverage:

- Total number of nurses in the MoH, university and private sectors.
- Ministry of Health, university, private and other sectors (other public establishments, local administrations and since 2012 MoND-affiliated facilities) are included.
- Nurses who work abroad, who are retired/unemployed or who have not graduated from schools yet are not included.
- Nurses acting as managers are included.
- Midwives are excluded, even if some of them act as nurses in Turkey.

Break in time series: 2018.

- In 2018, the used database for health personnel has been changed. This new source keeps the data as person-based. Health personnel data were collected from health facilities as health facility-based before 2018.

Nurses licensed to practice

Data not available.

Professional nurses (ISCO-08 code: 2221)

Source of data:

- From 2000 onwards: **General Directorate for Health Services, Ministry of Health.**
- Up to 1999: **Health Statistics Yearbook - Ministry of Health.**

Coverage:

- Total number of nurses in the MoH, university and private sectors.
- Ministry of Health, university, private and other sectors (other public establishments, local administrations and since 2012 MoND-affiliated facilities) are included.
- The number of nurses who work abroad or who are retired/unemployed or who have not graduated from schools yet is not included.
- Nurses acting as managers are included.
- Midwives are excluded, even if some of them act as nurses in Turkey.

Break in time series: 2018.

- In 2018, the used database for health personnel has been changed. This new source keeps the data as person-based. Health personnel data were collected from health facilities as health facility-based before 2018.

Associate professional nurses (ISCO-08 code: 3221)

Nurses in Turkey are not employed and do not practice as “associate professional nurses”.

Practising caring personnel (personal care workers)

Data not available.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Source of data:

- From 2000 onwards: General Directorate for Health Services, Ministry of Health
- Up to 1999: Ministry of Health; Health Statistics Yearbook.

Deviation from the definition: Data refer to professionally active nurses and professionally active midwives.

Coverage:

- Total number of nurses and midwives in the MoH, University, Private and Other Sector.
- Unemployed and retired nurses and midwives, nurses and midwives working abroad and students who have not yet graduated from school, are not included.
- Nurses and Midwives working in administration, even if little in number, are included.
- Up to 1999: Data includes Nurses and Midwives working in public or university administration.
- Data between 2000 and 2010 were updated parallel to changes in definitions in terms of the difference between active working and staffed personnel.

United Kingdom

Practising midwives

Source of data:

- **England:** Updated revisions in 2018. HCHS Midwives. 2000-2008: Non Medical Workforce Census; 2009 onwards: NHS Hospital & Community Health Service (HCHS) workforce statistics. The 2000-2008 data have been revised to exclude bank staff. The 2009-2014 data were previously rolecount; they are now headcount so 2009 onwards data are consistent.

- **Wales:** Welsh Government: <http://gov.wales/statistics-and-research/?topic=Health+and+social+care&lang=en>.

- **Scotland:** Information Services Division, Scottish Workforce Information Standard System.

- **Northern Ireland:** Department for Health, Social Services and Public Safety: http://www.dhsspsni.gov.uk/index/stats_research.

Reference period: As at 30th September, unless elsewhere stated.

Coverage:

- Does not include private sector.

- **Scotland:** Data excludes bank and agency staff.

- **Northern Ireland:** Data exclude bank, agency staff and staff on career breaks. Midwives are registered with the Nursing & Midwifery Council after completing either a degree or Diploma in Midwifery or an 18 month pre-registration course if already a registered nurse.

- **England:** Data exclude bank staff.

- **Wales:** Data exclude bank staff.

Deviation from the definition:

- **Scotland:** Data will exclude some midwives with low level qualifications that may fall under the definition of associate midwives. Data include midwives with Agenda for Change bands 5-9. Therefore, the Scotland figure is likely to be an undercount compared to the definition. The methodology used for 2000 to 2006 figures is different from the one used in later years. The figures for 2000 to 2006 are for employment rather than true headcount, meaning that there is some double counting when a midwife holds more than one post.

Estimation method:

- **Wales:** Data prior to 2008 are estimates. Between 2007 and 2008, there was a large reduction in headcount numbers for non-medical staff in Wales, as records with whole-time equivalent (WTE) equal to 0 had been revised. This decrease was due to improvements in data quality, not a reduction in staff numbers, and 2008 headcounts are more accurate than previous figures. Therefore, the ratio between headcounts and WTE numbers for the affected staff categories in 2008 were calculated. These ratios were then applied to WTE figures for years prior to 2008 to produce estimates for those

years.

- **Scotland:** Data for 2006 has been estimated based on an average of the figures from 2005 and 2007.

Break in time series: 2009.

- **England:** The break in the time series in 2009 relates to the change in the collection methodology: HCHS data changed from an annual census collection to monthly workforce statistics from the Electronic Staff Record (ESR).

- **England:** Up to 2008, data are based on rolegcount; since 2009, they are based on headcount.

Professionally active midwives

Data not available.

Midwives licensed to practice

Source of data: Nursing and Midwifery Council (NMC), United Kingdom.

<https://www.nmc.org.uk/about-us/reports-and-accounts/registration-statistics/>.

Reference period: Data as at 30 September every year.

Coverage: Data include all midwives eligible to practice in the UK.

Practising nurses

Source of data:

- **England:**

* HCHS Nurses. 2000-2008: Non Medical Workforce Census; 2009 onwards: NHS Hospital & Community Health Service (HCHS) workforce statistics. (Data as at 30 September each year). The 2000-2008 data have been revised to exclude bank staff. The data from 2009 are headcount. HCHS Nurses are a component of Total, Professional and Associate Professional Nurses so the HCHS revisions as detailed above affect all three columns.

* General Practice - Practice Nurses. 2000-2014: General & Personal Medical Services Statistics; 2015 onwards: Primary Care Workforce Tool. (Data as at 30 September each year).

- **Wales:** Welsh Government: <http://gov.wales/statistics-and-research/?topic=Health+and+social+care&lang=en>.

- **Scotland:** Information Services Division, Scottish Workforce Information Standard System.

- **Northern Ireland:** Department for Health, Social Services and Public Safety:

http://www.dhsspsni.gov.uk/index/stats_research.

Coverage:

- Does not include private sector.

- Data for professional and associate professional nurses available for England, Scotland and Northern Ireland only.

- **Scotland:** From 2007 onwards, Professional nurses are categorised as those with Agenda for Change bands 5-9 and Associate professional nurses those with Agenda for Change bands 1-4. For 2000 to 2006 (pre Agenda for Change), professional nurses are categorised as registered nurses and associate professional nurses as unregistered nurses. Data exclude bank and agency staff.

- **Northern Ireland:** 'Total nurses' includes qualified and nurse support staff, 'Professional nurses' includes qualified nurses only (Band 5+) and 'Associate Professional nurses' include nurse support staff (nursing auxiliary roles Band 1-4). Data in general exclude bank and agency staff as well as staff on career breaks. Nurses are qualified following either a 3 year programme leading to registration as a nurse with the Nursing & Midwifery Council or a Diploma/Degree in Nursing Sciences in one of the following areas: adult, mental health, learning disability or children's nursing. There are no national minimum qualifications for nurse support staff, but some will have a National Vocational Qualification.

- **England:** Data exclude bank staff.

- **Wales:** Data exclude bank staff.

Estimation method:

- **Wales:** Data prior to 2008 are estimates. Between 2007 and 2008, there was a large reduction in headcount numbers for non-medical staff in Wales, as records with whole-time equivalent (WTE) equal to 0 had been revised. This decrease was due to improvements in data quality, not a reduction in staff numbers, and 2008 headcounts are more accurate than previous figures. Therefore, the ratio between headcounts and WTE numbers for the affected staff categories in 2008 were calculated. These ratios were then applied to WTE figures for years prior to 2008 to produce estimates for those years.

Deviation from the definition: The numbers of practising nurses are underestimated, e.g. Scotland, Wales and NI exclude at least partially nurses in primary care settings; the four nations exclude at least partially nurses in social services, Third-sector, private sector nursing and residential homes.

Break in time series:

- **England:** There are breaks in the time series in 2009 and 2015 which relate to changes in the collection methodology: 2009 - HCHS data changed from an annual census collection to monthly workforce statistics from the Electronic Staff Record (ESR); 2015 - GP Practice Nurse data changed from an annual census collection to a quarterly collection from the Primary Care Workforce Tool (PCWT). 2009 onwards: Total Nurses do not equal sum of component parts due to HCHS staff working in more than one role.

- **England:** Up to 2008, data are based on rolecount; since 2009, they are based on headcount.

- **Scotland:** In 2014, figures for nurses have been added from 2000 to 2006. The methodology differs from the later years, since 2000-2006 figures are for employment rather than true headcount, and may double count nurses holding more than one post.

- **Northern Ireland:** In 2014 we have been able to properly identify all trainees and they have now been excluded, hence the decrease in the number provided for qualified midwives.

Note:

- From 2007 onwards, the sum of professional nurses and associate professional nurses is slightly different from the total number of nurses. This is due to double counting. Professional nurses are categorised as AfC Bands 5-9 and Associate professional nurses AfC Bands 1-4, and it is possible for someone to work two positions on different bands.

Professionally active nurses

Data not available.

Nurses licensed to practice

Source of data: **Nursing and Midwifery Council (NMC)**, United Kingdom.

Coverage: Data include all nurses eligible to practice in the UK.

Professional nurses (ISCO-08 code: 2221)

Source of data:

- **England:**

* HCHS Nurses. 2000-2008: Non Medical Workforce Census; 2009 onwards: NHS Hospital & Community Health Service (HCHS) workforce statistics. (Data as at 30 September each year). The 2000-2008 data have been revised to exclude bank staff. The data from 2009 are headcount. HCHS Nurses are a component of Total, Professional and Associate Professional Nurses.

* General Practice - Practice Nurses. 2000-2014: General & Personal Medical Services Statistics; 2015 onwards: Primary Care Workforce Tool. (Data as at 30 September each year).

- **Wales:** Welsh Government: <http://gov.wales/statistics-and-research/?topic=Health+and+social+care&lang=en>.

- **Northern Ireland:** Department for Health, Social Services and Public Safety:
http://www.dhsspsni.gov.uk/index/stats_research.

- **Scotland:** Information Services Division, Scottish Workforce Information Standard System.

Coverage:

- Does not include private sector.

- **Scotland:** From 2007 onwards, data include nursing staff with Agenda for Change bands 5-9. For 2000 to 2006 (pre Agenda for Change), professional nurses are defined as registered nurses. Data exclude bank and agency staff.

- **Northern Ireland:** Includes qualified nurses. Nurses (Band 5+) are qualified following either a 3 year programme leading to registration as a nurse with the Nursing & Midwifery Council or a Diploma/Degree in Nursing Sciences in one of the following areas: adult, mental health, learning disability or children's nursing.

- **England:** Data exclude bank staff.

Break in time series:

- **England:** There are breaks in the time series in 2009 and 2015 which relate to changes in the collection methodology: 2009 - HCHS data changed from an annual census collection to monthly workforce statistics from the Electronic Staff Record (ESR); 2015 - GP Practice Nurse data changed from an annual census collection to a quarterly collection from the Primary Care Workforce Tool (PCWT). 2009-2017: Total Nurses do not equal sum of component parts due to HCHS staff working in more than one role.

- **England:** Up to 2008, data are based on rolecount; since 2009, they are based on headcount.

- **Scotland:** In 2014, figures for nurses have been added from 2000 to 2006. The methodology differs from the later years, since 2000-2006 figures are for employment rather than true headcount, and may double count nurses holding more than one post.

Note:

- From 2007 onwards, the sum of professional nurses and associate professional nurses is slightly different from the total number of nurses. This is due to double counting. Professional nurses are categorised as AfC Bands 5-9 and Associate professional nurses AfC Bands 1-4, and it is possible for someone to work two positions on different bands.

Associate professional nurses (ISCO-08 code: 3221)

Source of data:

- **England:**

* HCHS Nurses. 2000-2008: Non Medical Workforce Census; 2009 onwards: NHS Hospital & Community Health Service (HCHS) workforce statistics. (Data as at 30 September each year). The 2000-2008 data have been revised to exclude bank staff. The data from 2009 are headcount. HCHS Nurses are a component of Total, Professional and Associate Professional Nurses.

* General Practice - Practice Nurses. 2000-2014: General & Personal Medical Services Statistics; 2015 onwards: Primary Care Workforce Tool. (Data as at 30 September each year).

- **Wales:** Welsh Government: <http://gov.wales/statistics-and-research/?topic=Health+and+social+care&lang=en>.

- **Northern Ireland:** Department for Health, Social Services and Public Safety:
http://www.dhsspsni.gov.uk/index/stats_research.

- **Scotland:** Information Services Division, Scottish Workforce Information Standard System.

Coverage:

- Does not include private sector.

- **Northern Ireland:** Includes nurse support staff (Band 1-4), i.e. nursing auxiliary type roles. There are no national minimum qualifications for nurse support staff, but some will have a National Vocational Qualification.

- **Scotland:** From 2007 onwards, data include nursing staff with Agenda for Change bands 1-4. For 2000 to 2006 (pre Agenda for Change), associate professional nurses are defined as unregistered

nurses. Data excludes bank and agency staff.

- **England:** Data exclude bank staff.

Break in time series:

- **England:** There are breaks in the time series in 2009 and 2015 which relate to changes in the collection methodology: 2009 - HCHS data changed from an annual census collection to monthly workforce statistics from the Electronic Staff Record (ESR); 2015 - GP Practice Nurse data changed from an annual census collection to a quarterly collection from the Primary Care Workforce Tool (PCWT). 2009 onwards: Total Nurses do not equal sum of component parts due to HCHS staff working in more than one role.

- **England:** Up to 2008, data are based on rolecount; since 2009, they are based on headcount.

- **Scotland:** In 2014, figures for nurses have been added from 2000 to 2006. The methodology differs from the later years, since 2000-2006 figures are for employment rather than true headcount, and may double count nurses holding more than one post.

Note:

- From 2007 onwards, the sum of professional nurses and associate professional nurses is slightly different from the total number of nurses. This is due to double counting. Professional nurses are categorised as AfC Bands 5-9 and Associate professional nurses AfC Bands 1-4, and it is possible for someone to work two positions on different bands.

Practising caring personnel (personal care workers)

Source of data:

- **England:** Minimum Dataset for Social Care (NMDS-SC) and represent Skills for Care's estimated number of jobs in the adult social care sector in England. These estimates were based on data collected from the statutory sector as at September 2012 to 2018 and the independent sector as at March 2013 to 2019.

- **Northern Ireland:** Health and Social Care Northern Ireland's Human Resources Management System (HRMS) and Human Resources, Payroll, Travel and Subsistence (HRPTS) systems. As of 30th September. In 2020, Northern Ireland has supplied a revised time series for 2017 – 2019. Caring personnel estimates now cover public and private sectors.

Coverage:

- 2012-onwards: UK estimates based on **England and Northern Ireland only**. In 2020, these data have been re-weighted to cover the UK as a whole.

- **England:** Main job roles included from 'Direct Care' are 'Senior Care Worker' and 'Care Worker'. These estimates were based on data collected from the statutory sector as at September 2012 to 2018 and the independent sector as at March 2013 to 2019.

- **Northern Ireland** are able to provide data between 2011-2013 but are unable to provide data for 2014 due to a recording issue. 2014 has been estimated. 2015 is official Northern Ireland data. In 2020, Caring Personnel source has been updated to include all sector's data, therefore 2017 and 2018 data are revised and 2019 onwards will be from the new source.

Estimation Method: Re-weighting of England and Northern Ireland caring personnel numbers to a United Kingdom estimate is calculated using the official Mid-year Population Estimates (MYEs), published by the Office for National Statistics.

Break in time series: There is a break in the series in 2017 due to Northern Ireland beginning the supply of caring personnel from all sectors of the economy, instead of just the public sector.

Professionally active caring personnel (personal care workers)

Data not available.

Nursing professionals at regional level

Data collection discontinued in 2017 (reference year 2015)

Data not available.