

## Eurostat – Health care staff

### Hospital employment

#### Definitions

Updated: September 2021

Total hospital employment	<b>Number of persons employed (head counts), and number of full-time equivalent (FTE) persons employed in general and specialised hospitals. Self-employed are included.</b>  <b><u>Inclusion</u></b> - Service contracts with non-employed health professionals on treatment of hospital patients (head counts).
Physicians employed in hospital	<b>Number of physicians (see definition of physicians above) directly employed in a hospital.</b>
Professional nurses and midwives employed in hospital	<b>Number of professional nurses and midwives (see definition of professional nurses and midwives above) directly employed in a hospital.</b>
Associate professional nurses employed in hospital	<b>Number of associate professional nurses (see definition of associate professional nurses above) directly employed in a hospital.</b>
Health care assistants employed in hospital	<b>Number of health care assistants (see definition of health care assistants above) directly employed in a hospital. (ISCO-08 code: 5321)</b>
Other health service providers employed in hospital	<b><u>Inclusion</u></b> - Dentists - Pharmacists - Physiotherapists - Psychologists - Dieteticians - Audiologists and speech therapists - Laboratory assistants - Other health professionals and associate professionals.
Other staff employed in hospital	<b>Other employees not elsewhere classified.</b>

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 31<sup>st</sup> 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

Source of data: **SPF Santé publique - Service comptabilité des hôpitaux.**

Reference period: 31<sup>st</sup> December.

#### ***Physicians***

Coverage: Concerns only physicians employed by the hospitals (labour contract). Therefore, coverage does not include those working on a self-employed basis within the infrastructure of the hospital.

### Bulgaria

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

Reference period: 31 December

#### ***Total hospital employment***

Coverage: All persons (head counts) who worked on a basic labour contract in all type of hospitals as well as in dispensaries (HP.1).

Since 2010 the pulmonary dispensaries are transformed into specialized hospitals, dermato-venereological dispensaries – into Dermato-venereological centres, oncological dispensaries – into Complex oncological centres, psychiatric dispensaries – into Mental health centres. The activities and functions of the centres and dispensaries are same.

#### ***Physicians employed in hospitals***

Coverage: All physicians (head counts) who worked on a basic labour contract in inpatient health establishments (HP.1). Physicians with maxillo-facial surgery speciality are excluded.

#### ***Professional nurses and midwives employed in hospitals***

Metadata information and comments: All qualified nurses and midwives (head counts) who worked on a basic labour contract in inpatient health establishments (HP.1)

#### ***Associate professional nurses employed in hospitals***

This category doesn't exist.

#### ***Health care assistants employed in hospitals (ISCO-08 code: 5321)***

Coverage: All Health care assistants (head counts) (ISCO-08 code: 5329) who worked on a basic labour contract in inpatient establishments (HP1).

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 made by appointment or alone.

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

Break in time series – up to 2013 the category does not exists

According to the National Classification of Occupations and Duties, consistent with the International Standard Classification of Occupations (ISCO-08), the code 5321 includes hospital attendans (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 follow: assisting patients whit 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.

### ***Other health service providers employed in hospitals***

Metadata information and comments: Other health professionals who worked on a basic labour contract in inpatient health establishments (HP.1).

Inclusion: Dentists (whit Physicians with maxillo-facial surgery speciality), pharmacists, doctors' assistants, laboratory assistants (clinical and X-ray), dental mechanics, sanitary inspectors, other medical specialists who worked on a basic labour contract in inpatient health establishments (HP.1). Physician physiotherapists are included.

### ***Other staff employed in hospitals***

Metadata information and comments: Other staff (non-health professionals) who work on a basic labour contract in inpatient health establishments (HP.1).

Break in time series – up to 2013 the category Health care assistants does not exists. All these professionals are included in the group "Other staff employed in hospitals" - non health professionals working on a basic labour contract in inpatient health establishments.

## **Czechia**

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

Reference period: 31<sup>st</sup> December.

Coverage:

- Providers: Hospitals and specialised therapeutic institutes (excluding balneologic institutes, convalescence homes for children, institutes for long-term patients and hospices).
- Measurement units: head counts (employees on payroll and employers), FTE (employees on payroll, employers and contractual workers).
- Double counting of health workers working in more than one health establishment (applies only to head counts variable).
- In 2014, complete data are not available. Estimate is calculated from available data for 2014 and data from 2013.

Break in time series:

- Since 2016 (administrative change in the records of hospitals, some separate facilities have been integrated to hospital as a department. This explains the increase in hospital employment in 2016).
- 2017: Due to change in legislation, new category of practical nurse (formerly called medical assistant) is considered and reported as associate professional nurse.

### ***Professional nurses and midwives***

Coverage: Nurses and midwives.

Deviation from definition: These data include also associate professional nurses (till 2016).

- Following revisions performed in 2021, data are not available in 2005-09 and 2011-2015.

### ***Associate professional nurses***

- Until 2016, data not available (the number of associate professional nurses is included in the number of professional nurses).
- Since 2017: Practical nurses.
- Following revisions performed in 2021, data are not available in 2005-09 and 2011-2015.

### ***Health care assistants***

Coverage: Medical assistants (until 2016), auxiliary nurses and hospital porters.

- Following revisions performed in 2021, data are not available in 2005-09 and 2011-2015.

### ***Other health service providers***

Coverage: Dentists, pharmacists, paramedical workers with professional qualifications (excluding nurses and midwives), paramedical workers with professional and specialised qualifications, health care workers pursuing paramedical profession under professional supervision or direct guidance (excluding medical assistants, auxiliary nurses and hospital porters) and other professional workers in health care.

- Following revisions performed in 2021, data are not available in 2005-09 and 2011-2015.

### ***Other staff employed in hospitals***

Coverage: Teachers and schoolmasters, technical and economic personnel, manual workers and operational personnel.

## **Denmark**

Source of data:

- 1980-2000: **The Danish Health Data Authority**, Labour Register for Health Personnel.
- 2001-2016: **The Danish Health Data Authority**, Data from The joint municipal payroll data office (KRL).

Reference period:

- 1980-2000: 31<sup>st</sup> December.
- 2001-2016: yearly average.

Coverage: 2001-2016: Only public section of hospital staff is included.

Note: 2001-2016 figures are based on the employee's job description, while 1980-2000 figures are based on employee's education.

## **Germany**

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: 31<sup>st</sup> December.

Coverage:

- Hospital employment comprises employment in all types of hospitals (HP1.1, 1.2 and 1.3) in all sectors (public, not-for-profit and private).
- Included are persons employed in general hospitals, mental health hospitals and prevention and rehabilitation facilities.
- Data on total hospital employment exclude non-employed physicians and non-employed professional nurses and midwives with service-contracts on treatment of hospital patients.
- From 2000 onwards data from Health Labour Accounts have been completely revised. Therefore comparable data before 2000 is not available. Data are rounded to the nearest thousand.

Estimation method: The number of FTE is calculated by adding the full and appropriate proportion of part-time occupied employees. FTE are measured by the number of hours of a standard labour contract.

### ***Physicians***

#### Coverage:

- Data contain the number of physicians directly employed by a hospital.
- Excluded are physicians with specialty "dental, oral and maxillofacial surgery".

### ***Professional nurses and midwives***

#### Coverage:

- Data contain the number of professional nurses and midwives directly employed by hospitals.
- Included are professional nurses and midwives with a 3-year education (nurses, paediatric nurses and nurses for the elderly).
- Excluded are associate professional nurses with a 1-year education and students who have not yet graduated.

### ***Associate professional nurses***

#### Coverage:

- Data contain the number of associate professional nurses directly employed by hospitals.
- Included are 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, midwives, emergency medical assistants and students who have not yet graduated.

### ***Health care assistants***

- Data not available. (Health care assistants are part of the group "Other health service providers employed in hospital" and cannot be reported separately.)

### ***Other health service providers***

Coverage: Data contain the number of other health professionals (e.g. dentists, physiotherapist, laboratory assistants, emergency medical assistants, health care assistants) working in hospitals and students who have not yet graduated.

### ***Other staff***

Coverage: Data contain the number of other staff employed by hospitals (e.g. cleaning and kitchen staff, craftsmen, secretaries).

## **Estonia**

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

#### Reference period:

- 2006-2012: 31<sup>st</sup> of December.
- Since 2013: November.

#### Coverage:

- For 2006-2012, the head count distribution is made according to the 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 the occupation with the highest workload.

- In 2013, previous long-term care hospitals (HP.1) have been classified amongst long-term nursing care facilities HP.2, according to the SHA 2011. Therefore, the total number of hospitals decreased in 2013 as well as the numbers of hospital employment.

- Since 2013, the data include only persons providing health-care services and not the staff providing other support services in hospital.

Break in time series: 2013.

Note: All data series for "Hospital employment" 2013-2015 were updated in 2018 after data revision.

### ***Professional nurses and midwives***

Break in time series: 2012. 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.

### ***Associate professional nurses***

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

### ***Other health service providers***

Break in time series: 2012.

- 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.

- From 2012, assistant physicians (students), assistant nurses (students), assistant midwives (students) and assistant radiology technicians (students) who have no medical speciality are included. Before 2012, these data were not collected.

### ***Other staff***

Break in time series: 2012, 2013.

- In 2012, the social workers employed in hospitals are included. Before 2012, these data were not collected.

- Since 2013, data about non-medical personnel are not anymore collected. The collected data include only persons providing health-care services and not the staff providing other support services in hospital.

## **Ireland**

Source of data: **HR Management Information**, Health Service Executive.

Reference period: 31st December.

Coverage:

- In 2018, the time series have been revised to reflect the following definition: Number of persons employed (head counts), and number of full-time equivalent (FTE) persons employed in Acute Hospital Services.

- Data relates to direct public health service employment & does not include overtime, agency workers or private hospitals.
- All employees under the aegis of Acute Services (excluding Ambulance Services) are included.
- Where appropriate figures are presented as headcount (actual numbers of staff) or whole time equivalent (WTE/ FTE) which adjusts the figures to take account of part-time working.
- Some figures have been restated to reflect up-to-date organisation & grade structures.
- In addition, previous returns reflect a correction in terms of the mapping of post registration nursing students who were incorrectly mapped as they are qualified nursing professionals.
- Associate professional nurses do not feature in the Irish Health Service (Source: HSE, Nursing Services Directorate).

**Staff are categorised as follows:**

Physicians

Consultant Anaesthesia  
Consultant Dentistry  
Consultant Emergency Medicine  
Consultant Intensive Care Medicine  
Consultant Medicine  
Consultant Obstetrics & Gynaecology  
Consultant, Other  
Consultant Paediatrics  
Consultant Pathology  
Consultant Psychiatry  
Consultant Radiology  
Consultant Surgery

Interns

Other Medical

Registrar

Senior House Officer

Senior Registrar

Specialist Registrar

Professional nurses

Advanced Nurse/ Midwife Practitioner

Clinical Nurse/ Midwife Manager

Clinical Nurse/ Midwife Specialist

Director Nursing/Midwifery, Assistant

Director of Nursing/Midwifery

Graduate Nursing/ Midwifery

Nursing Bank

Nursing Education/Clinical

Other Nursing/ Midwifery

Post-registration Nurse Students

Public Health Nursing

Staff Midwives

Staff Nurse [Intellectual Disability]

Staff Nurse [Psychiatric]

Staff Nurses [General/ Children's]

Health care assistants

HCA, Nurse's Aide, etc.

Home Helps

Other health Service providers

Ambulance Control

Ambulance Officers

Audiology

Biochemists

Clinical Engineering

Clinical Measurement

Counsellor Therapists

Dental Hygienists

Dentists

Dietitians

Dosimetrists

Health & Social Care Assistants  
HSCP Trainees/Students  
Medical Laboratory  
Occupational Therapists  
Orthoptists  
Other Care Grades  
Other Health & Social Care  
Other Labs & Associated  
Perfusionists  
Pharmacy  
Phlebotomists  
Physicists  
Physiotherapists  
Play Therapists/ Specialists  
Podiatrists & Chiropodists  
Pre-Hospital Care (Ambulance)  
Pre-registration Nurse Students  
Pre-registration Nursing/ Midwifery  
Psychologists  
Radiation Therapists  
Radiographers  
Social Care  
Social Workers  
Speech & Language Therapists  
Other hospital staff  
Catering  
Executive Management  
General Administrative (III & IV)  
Household Services  
Maintenance  
Middle Management (V-VII)  
Other Administrative  
Other Support  
Portering  
Senior Management (VIII & GM)  
Technical Services

## **Greece**

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

Reference Period: 31<sup>st</sup> December.

### ***Other health service providers***

Coverage: The number of other health professionals employed by hospital includes: pharmacists, physics and radiophysics, psychologists, laboratory assistants, physiotherapists, occupational therapists, and dieticians.

### ***Other staff***

Coverage: Administrative staff is included.

## Spain

### Source of data:

- Up to 2009: **Ministry of Health** from **Statistics on Health Establishments Providing Inpatient Care** (ESCRI).
  - Since 2010: **Ministry of Health** from **Specialised Care Information System** – Statistics on Health Centres for Specialised Care, SCIS (Sistema de Información de Atención Especializada – Estadística de Centros Sanitarios de Atención Especializada, SIAE.).
- <https://www.mscbs.gob.es/estadEstudios/estadisticas/estHospilInternado/inforAnual/homeESCRI.htm>.

Reference period: 31<sup>st</sup> December.

### Coverage:

- All public and private hospitals in Spain are included.
- FTE data are not available.

### **Physicians**

Coverage: Number of physicians employed by hospital: doctors in training (interns and resident) are included.

Break in time series: 2010. Until 2009, Family practitioners in training in hospital are included. Since 2010, Family practitioners in training in hospital are excluded.

### **Associate professional nurses**

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

### **Other health service providers**

Coverage: Other health professionals include other health staff (with university degree or adequate diploma) working in the hospital (e.g. physiotherapists, psychologists, pharmacists, etc.).

### **Other staff**

Coverage: Other staff includes non-health staff working in hospital (e.g. administrative staff, etc.).

## France

Source of data: **Ministère des Solidarités et de la Santé - Direction de la Recherche, des Études, de l'Évaluation et des Statistiques** (DREES). Data are from the "Statistique Annuelle des Établissements de santé (SAE)".

Reference period: 31<sup>st</sup> December.

### Coverage:

- Data refer to metropolitan France and D.O.M. (overseas departments).
- Total hospital employment includes salaried personnel (medical and non-medical), interns/residents, "faisants fonction d'internes (FFI)" and "diplômés inter-universitaires de spécialité (DIS)" as well as self-employed medical personnel. Information on self-employed non-medical personnel is not available.

### Estimation method:

- Until 2008, fixed-term contracts were not counted in the head count nor in the FTE. Only the paid monthly average FTE is known. The FTE of fixed-term contracts are estimated by the paid monthly average FTE. Head counts cannot be estimated.
- FTE of self-employed medical personnel is not available, but we know the head count of the self-employed. The FTE are estimated from head counts by applying conventional calculating rules according to the working time of the self-employed.

#### Break in time series:

- From 2000 onwards, the “faisants fonction d’internes (FFI)” and “diplômés inter-universitaires de spécialité (DIS)” are not available by specialty. Therefore, the FFI-DIS data have been estimated based on their ratios in the total number of FFI-DIS over 1994-1999.
- From 2009 onwards, head counts of fixed-term contracts are also included for the non medical staff. Previously only head count of rolling contracts and holders and trainees of the public service were counted.
- From 2011 onwards, the number of persons employed in nursing structures or in nurses and midwives schools legally depending on hospitals are not counted.
- - From 2013 onwards, the SAE survey has been recasted (review and update of the questionnaire, change of the unit surveyed [from legal entity to geographical establishment], improvement of the consistency between the survey and an administrative source of data on the activity of hospitals). Though the principles of the survey remain the same, some concepts and some questions have changed: this can lead to break in series for the year 2013. In this recast, the change of the unit surveyed results in a better quality of data collected in general (less double counting than before), so that the quality of data for the number of persons employed can be marginally improved.

#### **Physicians**

##### Coverage:

- Data include self-employed physicians.
- FTE of self-employed medical personnel is not available, but the head count of these self-employed is known. The FTE are estimated from head counts by applying conventional calculating rules according to the working time of the self-employed.

Break in time series: 2000, 2013 (see above).

#### **Professional nurses and midwives, Health care assistants, Other staff**

Estimation method: Until 2008, fixed-term contracts were not counted in the head count or in the FTE. Only the paid monthly average FTE is known. The FTE of fixed-term contracts are estimated by the paid monthly average FTE. Head counts cannot be estimated.

Break in time series: 2009, 2011, 2013 (see above).

#### **Associate professional nurses**

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

#### **Other health service providers**

##### Coverage:

- Data include the service contracts with non-employed medical staff.

##### Estimation method:

- From 2000 onwards, FFI-DIS pharmacists and odontologists have been estimated based on their ratios in total FFI-DIS over 1994-1999.
- Until 2008, fixed-term contracts were not counted in the head count nor in the FTE. Only the paid monthly average FTE is known. The FTE of fixed-term contracts are estimated by the paid monthly average FTE. Head counts cannot be estimated.
- FTE of self-employed medical personnel is not available, but the head count of the self-employed is known. The FTE are estimated from head counts by applying conventional calculating rules according to the working time of the self-employed.

Break in time series: 2000, 2009, 2011, 2013 (see above).

## **Croatia**

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

Reference period: data on December 31.

Coverage: public and private health sectors included.

## Italy

Source of data: **Ministry of Health** – General Directorate of digitalisation, health information system and statistics – **Office of Statistics**. [www.salute.gov.it/statistiche](http://www.salute.gov.it/statistiche).

Reference period: 1<sup>st</sup> January.

Coverage:

- Data available for head counts only.
- Since 2003, data refer to public and private hospitals, including private hospitals not accredited by the National Health Service.

### **Associate professional nurses**

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

### **Health care assistants**

- Data not available. (This category of workers is included in “Other staff employed in hospital”).

## Cyprus

Source of data: Annual survey conducted from the **Statistical Service of Cyprus**.

Reference period: 31<sup>st</sup> December.

### **Total hospital employment**

Data not available due to the fact that not all categories are filled in, i.e no data available for other health service providers employed in hospitals, other staff employed in hospitals.

### **Physicians employed in hospitals**

Coverage: Data on hospital manpower concern the **public sector only**.

No data on hospital manpower available for the year 2000.

Break in series: From 2011 onwards, included are the trainees, i.e. physicians who have completed their studies in medicine at university level (granted by adequate diploma) and who are licensed to practice and are attending a postgraduate internship for obtaining specialization but at the same time they are providing services in the hospital. No data on the trainees is available for previous years.

### **Professional nurses and midwives employed in hospitals**

Coverage:

- From 2006 up to 2010, included are the professionally active nurses and the professionally active psychiatric nurses employed in public sector’s hospitals. Midwives activated in the public sector’s hospitals with the status of nursing officers are included. All the nurses and midwives activated in the private sector are included, irrespectively if they are employed in hospitals or not, since the disaggregation was not available.

- From 2011 onwards, the disaggregation of the nurses activated in the private sector, to those working in hospitals or in other medical institutions is available, hence , included are the professionally active nurses and the professionally active psychiatric nurses employed in public sector’s hospitals. Midwives activated in the public sector’s hospitals with the status of nursing officers are included. Nurses and midwives employed in hospitals of the private sector are included. Nurses and midwives of the private sector not employed in hospitals have been excluded.

### ***Associate professional nurses employed in hospitals***

Data for associate professional nurses employed in hospitals exists only from 2005 onwards.

Source of data for private sector: Private Clinic Inspectors.

Deviation from the definition: For 2005, the number of associate professional nurses refers only to the public sector, no data available for the private sector (a break in series occurs in 2006).

### ***Health care assistants employed in hospitals (ISCO-08 code: 5321)***

Data not available.

### ***Other health service providers employed in hospitals***

Data available from 2001 onwards and cover only the Hospitals of the Public Sector. The following providers are included: dentists, pharmacists, medical physics, chemists, dieticians, clinical psychologists, physiotherapists, radiographers, orthoptists, speech-therapists, dental hygienists, audiologists, occupational therapists, thalassaemia laboratory officers, technologists and assistants, radioisotope laboratory and nuclear medicine technologists, medical laboratory personnel.

### ***Other staff employed in hospitals***

Data available from 2001 onwards and cover only the Hospitals of the Public Sector. The following providers are included: sanitary officers, sanitary inspectors, electrograph assistants and technicians, technicians of dental laboratory, physics technicians, laboratory technicians, pharmacy technicians, technicians of extracorporeal circulation, dental clinic assistants, occupational therapist assistants, mortuary assistants.

## **Latvia**

Source of data: **Centre for Disease Prevention and Control**; Statistical Report.

Reference period: 31<sup>st</sup> December.

Note: Data for full-time equivalent (FTE) not available.

Break in time series: 2018. The variations observed in 2018 for health care assistants, other health service providers and other health service providers may be explained by changes in data collection and format of the statistical report, as well as with the registration of new specialties in the Medical Persons' Register.

### ***Associate professional nurses***

Data not available. (Within the Latvian Statistical System data on nurses are not completely comparable and compatible with requirements (practising nurses/professionally active nurses/nurses licensed to practise). Health statistics data from the Health Economic Center and the Health Inspectorate include information on nurses in the main job distinguishing between nurses with secondary medical education and nurses with higher education. Latvia has no practice in publication of information about nurses according to the ISCO-88 classification for all nurses authorised to carry out professional activity regardless of the level of education. Thus, nursing care staff breakdown in Professional and Associate professional nurses is not possible, and all nurses are included in group Professional nurses).

### ***Other health service providers***

Note: There is no specific explanation regarding the increase by 10% in the number of "other health service providers employed in hospital" in 2014, but it could be caused by data reporting problems.

## **Lithuania**

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

Reference period: 31<sup>st</sup> December

Coverage:

- Data for all hospitals excluding nursing hospitals. Service contracts with non-employed health professionals are excluded.
- The Annual survey collection includes data on physical persons and full time equivalents. For physical persons: a person is included only if this institution is the main job for this person. If a person is working in several institutions he/she will be presented as a physical person only once. But FTE will be presented for the person in every institution he works.
- For full time equivalents data on contractual working hours is presented in annual survey: an employee with a full-time employment contract is counted as 1 FTE; depending on the contractual hours an employee could work 0.25, 0.5, 0.75, 1.25, 1.5 FTE.
- Full time equivalents data is higher than head count data. Very often in Lithuania medical specialists (especially physicians) and some other employees are working more than 1 staff (1.25 or 1.5).

### ***Associate professional nurses***

- There is no such category in Lithuania.

## **Luxembourg**

### ***Total hospital employment***

Source of data:

- Head Counts (2005-2006): Administrative database on social security registration, survey on physicians working in hospitals (**IGSS**), provider registration database (**National Health Insurance**).
- Full Time Equivalents (1999-2008): **National Health Insurance**.

Coverage:

**Head counts:**

- The definition of health employment is linked to the SHA provider classification of HP1.
- About half of the hospitals have subcontracting contracts for the cleaning and kitchen auxiliary services. People providing these services are not included.

**Full Time Equivalents:**

- Doctors are not included, since almost all doctors have private offices and it is very difficult to make the link with hospitals based on administrative sources.
- Approximately half of the hospitals have subcontracting contracts for the cleaning and kitchen auxiliary services. People providing these services are not included.
- The staff of the specialised institution 'Centre National de Rééducation Fonctionnelle et de Réadaptation de Hamm' is included in data from 2002.
- In 2003: The opening of a general hospital replaced two old private hospitals in July 2003.
- Data for 2008 are estimated.
- In 2008: There was no negotiated staff for some of the hospitals. The rate indicated for "total hospital staff" has been calculated with the staff negotiated for the previous year (for those hospitals only) and should be considered as provisional.

### ***Physicians, Other health service providers, Other staff***

- Data not available.

### ***Professional nurses and midwives, Associate professional nurses, Health care assistants***

Source of data: **Direction de la santé**, service des statistiques.

Reference period: 31<sup>st</sup> December.

## Hungary

Source of data: **Hungarian Central Statistical Office** (KSH in Hungarian) [www.ksh.hu](http://www.ksh.hu), "Report on personnel of health service" per ICHA-HP categories: 1.1 (General hospitals); 1.2 (Mental health and substance abuse hospitals); 1.3 (Specialty hospitals).

Reference period: 31<sup>st</sup> December.

Coverage: Includes physicians, nurses, midwives, other health personnel (e.g. pharmacists), health care assistants and other staff.

Method used to calculate the number of full-time equivalents (FTE): FTE employment measured by the number of hours actually or usually worked divided by the average number of hours worked in full-time jobs.

## Malta

### ***Total hospital employment***

Source of data: Figures for Hospital Manpower for 2007 comprise only personnel employed in State Hospitals.

Data sources from 2009 onwards are the establishments themselves, Data collated by the Directorate for Health Information and Research from data received from state and private hospitals.

Break in series: 2009.

### ***Physicians employed in hospitals***

Sources of the data: Data comes from the establishments themselves.

Reference period: 31<sup>st</sup> December

Coverage:

For 2007, number of physicians employed by hospital, head count: includes 65 physicians working on contract.

For 2009, the figure of 636, head count, includes 7 working on contract.

Figures for 2010 onwards include physicians working on contract.

### ***Professional nurses and midwives employed in hospitals***

Sources of the data: Data comes from the establishments themselves.

Reference period: 31<sup>st</sup> December

Coverage: For 2007, number of qualified nurses and midwives employed by hospital, head count: includes 18 Nurses/Midwives working on contract

For 2009 data collected from state and private hospitals. The figure of 2159, head count, includes 1 working on contract.

Figures from 2010 onwards include nurses working on contract.

Break in series: 2009.

### ***Associate professional nurses employed in hospitals***

This category does not exist in Malta.

### ***Health care assistants employed in hospitals (ISCO-08 code: 5321)***

Sources of the data: Data comes from the establishments themselves.

Reference period: 31<sup>st</sup> December.

For 2009, the figure of 1356, head count, includes 194 working on contract.

Figures for 2010 onwards include contracted workers.

### ***Other health service providers employed in hospitals***

Sources of the data: Data comes from the establishments themselves.

Reference period: 31<sup>st</sup> December.

Coverage: For 2007, number of other health professionals employed by hospital, head count: includes 2 Other Health Professionals working on contract.

For 2009, the number of 859 other healthcare professionals, head count, includes 22 working on contract.

Figures for 2010 onwards include contracted other healthcare professionals.

Figures for other health service providers employed in hospital for 2013 and 2014 were revised as it was noted that staff who were not working in a hospital had been inadvertently included.

### ***Other staff employed in hospitals***

Sources of the data: Data comes from the establishments themselves.

Reference period: 31<sup>st</sup> December.

For 2009, the figure of 1622, head count, includes 550 working on contract.

Figures for 2010 onwards include contracted workers.

## **Netherlands**

Source of data: **Statistics Netherlands.**

- 2012 onwards: Data based on **BIG Register** (register of (para) medical professions); **SSB database** (micro-integrated database of Statistics Netherlands with data from the municipal register, tax register, social security, and business register).

- 2006-2011: **Annual reports social account.**

- 2002-2005: **Prismant survey.**

- 1980-2001: Survey.

Coverage: Does not include self-employed medical specialists who work in the hospital.

Estimation method:

- Since 1999: The data have been distributed among 1) physicians (based on the BIG register) 2) nurses and midwives (based on the BIG register) 3) Health care assistants (based on LFS estimates for ISCO 5132) 4) other employees (up till 2009 further distribution was possible to other health service providers and other staff using the annual reports social account).

- Until 2005: The figures present persons employed (FTEs) in general, university and specialised hospitals, including mental hospitals. The data are based on an annual questionnaire among hospitals. All persons paid by the institution, both persons on the payroll and those who are paid by the institution in another way (temporary employees, employees of employment agencies), are included. This means that administrative staff, technicians, maintenance staff, etc., when paid directly by the institution, are included. On the other hand, medical specialists are not all included as these are often self-employed or organised in partnerships per specialty.

- The increase between 1997 and 1998 is due to the inclusion of (out-patient) mental health care institutions that have been merged with mental hospitals into integrated mental hospital institutions. Moreover, the data now comprise annual averages and are no longer data per 31 December.

Break in time series:

- 2002, 2006 and 2012 due to changes in the source.

- 2014: due to obligatory reregistration the number of nurses and midwives (and physiotherapists) is lowered substantially.

### ***Professional nurses and midwives, Associate professional nurses***

Coverage: No distinction could be made between qualified nurses and associate nurses. Therefore, all nurses have been reported in the number of professional nurses and midwives.

Break in time series: In 2014, the number of nurses and midwives (and physiotherapists) was lowered substantially due to obligatory reregistration.

### ***Other health service providers, Other staff***

Coverage: "Other staff employed in hospitals" includes students in nursing and caring that work in the hospital. Since 2010, they are included in other health service providers.

Break in time series: Since 2010, the data previously reported under "Other staff employed in hospitals" are included under "Other health service providers employed in hospitals".

## **Austria**

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

Reference period: 31<sup>st</sup> December (head count), period 1<sup>st</sup> January to 31<sup>st</sup> December (FTE).

Coverage:

- Head counts: Included are physicians, nurses, midwives, assistants, and selected other health service providers employed in hospitals (HP.1). Excluded is non-medical academic and non-medical staff employed in hospitals.

- FTE: Included are all employees in hospitals (HP.1).

Estimation method: Up to 2007, FTE are the sum of approx. 90% FTE (in publicly financed hospitals) and 10% head counts (in private for-profit hospitals). From 2008 onwards, all hospitals (publicly financed and private for-profit hospitals) have to report FTE.

### ***Physicians***

Coverage: Head counts/FTE of physicians employed in hospitals (HP.1), dentists included.

- Coverage of head counts is complete.

Estimation method: Up to 2007, FTE are the sum of approx. 90% FTE (in publicly financed hospitals) and 10% head counts (in private for-profit hospitals). From 2008 onwards, all hospitals (publicly financed and private for-profit hospitals) have to report FTE.

### ***Professional nurses and midwives***

Coverage: Head counts/FTE of professional nurses and midwives employed in hospitals (HP.1).

- Coverage of head counts is complete.

Estimation method: Up to 2007, FTE are the sum of approx. 85% FTE (in publicly financed hospitals) and 15% head counts (in private for-profit hospitals). From 2008 onwards, all hospitals (publicly financed and private for-profit hospitals) have to report FTE.

### ***Associate professional nurses***

Coverage: Head counts/FTE of health care assistants (ISCO 3221) employed in hospitals (HP.1).

- Coverage of head counts is complete.

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 the occupational group "associate professional nurses". Training as an associate professional nurse was introduced in Austria in September 2016. The first associate professional nurses have been employed in Austrian hospitals in 2017.

In the course of this year's data delivery, a comprehensive correction was carried out in this respect. The health care assistants previously listed in the "associate professional nurses" column have now been moved to the "practising caring personnel" column.

### ***Health care assistants***

Coverage: Head counts/FTE of health care assistants (ISCO 5321) employed in hospitals (HP.1).  
- Coverage of head counts is complete.

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").

In the course of this year's data delivery, a comprehensive correction was carried out in this respect. Health care assistants previously listed in the "associate professional nurses" column have now been moved to the "practising caring personnel" column.

### ***Other health service providers***

Coverage:

- Head counts: Included are physiotherapists, occupational therapists, dietitians, audiologists, speech therapists, laboratory assistants, and radiological assistants employed in hospitals (HP.1). All other health professionals are excluded.

- FTE: Complete coverage; included are the professions listed in "Head counts", plus all other health professionals (e.g. pharmacists) employed in hospitals (HP.1).

### ***Other staff***

Coverage:

- Head count: Data not available.

- FTE: Complete coverage; included is administration, office and operational personnel employed in hospitals (HP.1).

## **Poland**

### ***Total hospital employment, Associate professional nurses, Health care assistants, Other health service providers, Other staff***

Data not available.

### ***Physicians, Professional nurses and midwives***

Source of data: **Ministry of Health.**

Coverage:

- Due to the possibility of physicians, midwives and nurses working in several places, the data may be duplicated.

- Excludes physicians, midwives and nurses employed in hospitals founded by the Ministry of Interior and Administration.

## **Portugal**

Source of data: **National Statistical Office - Survey on Hospitals.**

Reference period: 31<sup>st</sup> December.

Coverage:

- The Hospital Survey began in 1985. This survey covers the whole range of hospitals acting in Portugal: hospitals managed by the National Health Service (public hospitals with universal access), non-public state hospitals (military and prison) and private hospitals.

- Information on full time equivalents is not available.

Break in time series: 1999.

- In 1999, a methodological change occurred in this survey. Information regarding qualified nurses

and midwives, associate professional nurses and caring staff became available from then on. Before 1999, these data were included in “Other health professionals employed in hospital” and “Other staff employed in hospital”. Therefore, there is a break in these series in 1999.

### ***Physicians***

Coverage: Includes all physicians employed in hospital.

### ***Professional nurses and midwives***

Coverage: Includes all specialised nurses employed in hospital since 1999.

### ***Associate professional nurses***

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

### ***Health care assistants***

Coverage: Includes all “other nursing staff” (nurse’s assistants and medical care assistants) employed by hospitals since 1999.

- The 2011 numbers of health care assistants and other staff employed in hospital have been estimated by the OECD Secretariat (to eliminate the break due to a partial switch between both categories in 2011).

### ***Other health service providers***

Coverage: Includes “technical diagnosis and therapeutic staff” and “senior health technician staff”.

Break in time series: 1999.

- In 1999, a methodological change occurred in this survey. Information regarding qualified nurses and midwives, associate professional nurses and caring staff became separately available from then on. Therefore, there is a break in the series “Other health professionals employed by hospital” in 1999.

### ***Other staff***

Coverage: Includes “other senior technician staff”, “administration staff”, “administrative and technical-professional staff”, “auxiliary staff of medical action”, and “other staff”.

- The 2011 numbers of health care assistants and other staff employed in hospital have been estimated by the OECD Secretariat (to eliminate the break due to a partial switch between both categories in 2011).

Break in time series: 2009.

- In 1999, a methodological change occurred in this survey. Information regarding qualified nurses and midwives, associate professional nurses and caring staff became separately available from then on. Therefore, there is a break in the series “Other staff employed by hospital” in 1999.

## **Romania**

Source of data:

2000-2006: **Ministry of Public Health.**

2007: **National Institute of Statistics**, Activity of Sanitary Units – annual survey performed by NIS.

Reference period: data as of 31<sup>st</sup> December.

Coverage:

For the period 2000-2006, the data cover only Ministry of Health network.

For 2007, data cover public and private sector.

From 2018, it refers to the staff employed in hospitals, excluding medical centres that provide predominately out-patient services, but provide also day-care services for some specialisations (with a small number of beds/places).

### ***Total hospital employment***

Hospital employment on FTE basis is calculated as 1 FTE for a worker with full-time employment and 1 FTE for 2 part-time workers.

Break in the series: 2007.

### ***Physicians employed in hospitals***

Break in the series: 2007.

The number of physicians in hospitals is oscillating because some of these doctors are registered on integrated ambulatory hospital. Also, in hospitals are employed resident physicians whose number increases in some years, and decreases in other years.

Until 2010 the data for the private sector are collected centrally, from administrative sources (data from the Ministry of Health), but the some of the private hospitals refused to report statistical data to the Ministry of Health.

Since 2010, NIS collected data through a Web application directly from hospitals. In 2010 several private hospitals were reported.

### ***Professional nurses and midwives employed in hospitals***

Coverage:

Data cover public and private sector.

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 university.

### ***Associate professional nurses employed in hospitals***

Coverage:

Data from 2007 till 2009 refers to ancillary medical staff.

Since 2010, the data refers 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. 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 declined in 2010 because in the period 2007-2009 data refers to ancillary medical staff (see definition above)

Break in the series: 2007, 2010

### ***Health care assistants employed in hospitals (ISCO-08 code: 5321)***

Coverage:

In health care assistants employed in hospitals was included the health care personnel (another then nurses and midwives): 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.

Break in series: 2007.

### ***Other health service providers employed in hospitals***

Coverage:

Data from 2007 till 2009 refer to dentists, pharmacists, physiotherapists and other sanitary staff with high education level (biologists, chemists, psychologists etc).

Since 2010, data refers to: dentists, pharmacists, physiotherapists and other sanitary staff with high education level (biologists, chemists, psychologists etc) and other than nurses and midwives sanitary staff (infant care personnel, sanitary technicians, laboratory assistants, registering clerks, masseur etc.)

The number of physicians in hospitals is oscillating because some of these doctors are registered on integrated ambulatory hospital. Also, in hospitals are employed resident physicians whose number increases in some years and decreases in other years.

Until 2010 the data for the private sector are collected centrally, from administrative sources (data from the Ministry of Health), but some of the private hospitals refused to report statistical data to the Ministry of Health.

Since 2010, NIS collected data through a Web application directly from hospitals. In 2010 several private hospitals were reported.

Break in series: 2007.

### ***Other staff employed in hospitals***

Coverage:

Break in series: 2007.

## **Slovenia**

Source of data: **National Institute of Public Health, Slovenia, National Health Care Providers Database.** With this database, data on hours worked (FTE) and jobs (number of contracts) were not available.

Reference period: 31<sup>st</sup> December.

### ***Health care assistants***

Break in time series: 2012.

- Until 2012: health care assistants who were individually registered in National Health Care Providers Database.

- From 2012: health care assistants who were individually registered in National Health Care Providers Database and the number of health care assistants which are reported only as aggregated data from health care providers to the National Health Care Providers Database.

Health care providers report following categories of employed staff as aggregated data:

- health care workers with less than 4 years of secondary education (includes predominantly health care assistants) and
- non-health care workers with less than university education.

### ***Other staff***

Break in time series: 2012.

- Until 2012: staff who was individually registered in National Health Care Providers Database.

- From 2012: staff who was individually registered in National Health Care Providers Database and the number of other staff which are reported only as aggregated data from health care providers to the National Health Care Providers Database.

Health care providers report following categories of employed staff as aggregated data:

- health care workers with less than 4 years of secondary education (includes predominantly health care assistants) and
- non-health care workers with less than university education.

Note: The 2016 data are not yet available for several categories.

## Slovakia

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

- "Annual report S (MZ SR) 1 – 01 on network of health care providers" for data up to 2008.
- "Report on network of health care providers" since 2009.

Reference period: 31<sup>st</sup> December.

Coverage:

- Data are available for FTE hospital employment in Hospitals - HP1 (according to the recommendations and definitions following the SHA version 1.0.) in the territory of the Slovak Republic (i.e. general hospitals, specialty hospitals, sanatoriums - i.e. hospitals providing long-term care for the chronically ill and hospitals providing rehabilitation and related services to physically challenged or disabled people).
- There are no data available for head count.
- Total hospital employment includes only health care workers. No data exist regarding other staff.

Break in time series:

- 2009: Data source changed from "Annual report S (MZ SR) 1 – 01 on network of health care providers" for years 2008 and earlier to "Report on network of health care providers" in 2009. From 2009 onwards, service contracts with non-employed health professionals are included in the data (which is not the case for data before 2009).

### ***Associate professional nurses***

- The category "Associate professional nurse" does not exist in the Slovak Republic. All nurses are classified as Professional nurses.

### ***Health care assistants, Other health service providers***

- The 2008 data have been estimated by the OECD Secretariat based on the respective share of these categories in 2007 and 2009.

## Finland

### ***Physicians***

Source of data:

- Until 2009: **Finnish Medical Association.** Register of the Finnish Medical Association which is updated by a yearly survey covering all physicians licensed to practice in Finland who are not retired.
- From 2010 to 2014: **Finnish Medical Association.** Data from an annual survey: "Physicians' Working Conditions and Health".
- In 2015: **Finnish Medical Association.** Data from "Finnish Medical Association Labour Market Survey 2016".

Reference period: Mid-March.

Break in time series: 2010 (change in data source).

### ***Professional nurses and midwives, Associate professional nurses, Health care assistants, Other health service providers, Other staff***

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

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

Coverage: Professionals working in hospitals listed by their primary employment.

Break in time series: 2007 due to a change in the classification of economic activities.

## Sweden

### **Total hospital employment**

Data not available.

## Iceland

Source of data: **The Ministry of Finance and Economic Affairs.**

Reference period: December each year.

Coverage:

- Data exclude service contracts with non-employed health professionals who treat hospital patients (head counts).
- Data refer to persons employed in hospitals referring to health care facilities with 24-hour access to a hospital physician.

### **Associate professional nurses**

Coverage: Associate professional nurses/practical nurses employed in hospitals.

### **Health care assistants**

- Data not available. Health care assistants are included in "Other staff employed in hospitals".

### **Other staff**

Coverage: All others are included except physicians, professional nurses, midwives, associate nurses, and other health service providers employed in hospitals.

## Liechtenstein

Source of data: data reports from hospitals, new data from private hospital from 2010 on.

Coverage: 100% Changes in the number of staff from 2017 to 2019 are due to the change in the number of hospitals: a private hospital opened in 2017 and closed in 2018, and in 2019 a private mental health hospital opened.

## Norway

Source of data: **Statistics Norway;** Register-based statistics on employment of health-care personnel.

Reference period: 3<sup>rd</sup> week of November.

Deviation from the definition: Data refer to economically active professionals.

Coverage:

- The figures provided give the number of practising personnel within HP1. There is no guarantee that these professionals actually work in patient care as data refer to education the individuals have rather than the job they hold within the HP structure.
- The health sector in Norway underwent a large reorganisation in 2001. Figures are therefore provided from 2002.

Break in time series: 2009, 2015.

- 2009: New calculation method.

- 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***

Norway has no occupation corresponding to ISCO-08 code 3221.

### ***Other health service providers, Other staff***

Break in time series: 2005. Until 2004, “other staff” (head count) include other health service providers (reported separately as of 2005).

## **Switzerland**

Source of data: **FSO Federal Statistical Office**, Neuchâtel; hospital statistics; yearly census.

Reference period: FTE based on yearly average.

Deviation from definition: Self-employed persons (mostly physicians) are not included.

Estimation method: The method used for FTE calculation is based on detailed data on contractual working hours.

Break in time series: 2010.

- Until 2009, the hospital employment estimate was made with data on professions from 75% of hospitals.

- Hospital statistics have been revised since 2010. No more estimation needed, all categories can be identified.

### ***Physicians***

Coverage: There are a large number of self-employed physicians working in hospitals without being employed, leading to a severe underestimation of medical attendance in hospitals.

## **Montenegro**

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.

Note: There is no data available for FTE.

### ***Professional nurses and midwives employed in hospitals.***

Deviation from the definition:.

Break in time series: We included nurses with finished three- year faculty (bachelors) and four-year faculty, nurses with higher and secondary education in 2017, and excluded laboratory technicians, sanitary technicians and physiotherapy technicians.

### ***Associate professional nurses employed in hospitals***

The category does not exist.

### ***Health care assistants employed in hospitals (ISCO-08 code: 5321)***

The category does not exist.

### ***Other staff employed in hospitals***

Deviation from the definition: Non medical staff is included.

## North Macedonia

Source of data: Institute for Public Health –Skopje. Report for hospitals (3-21-60).

Reference period: 31<sup>st</sup> December.

Methodological change in inclusion and exclusion criteria was introduced in line with EUROSTAT in 2004-2007.

### ***Physicians employed in hospitals***

Break in time series:

- 2007: Methodological change in inclusion and exclusion criteria was introduced in line with EUROSTAT in 2007.

### ***Professional nurses and midwives employed in hospitals***

Break in time series:

- 2004: Methodological change in inclusion and exclusion criteria was introduced in line with EUROSTAT in 2004.

### ***Associate professional nurses employed in hospitals***

The category “Associated professional nurse” does not exist.

### ***Health care assistants employed in hospitals (ISCO-08 code: 5321)***

Break in time series:

- 2007: Methodological change in inclusion and exclusion criteria was introduced in line with EUROSTAT in 2007.

### ***Other health service providers employed in hospitals***

Break in time series:

- 2004: Methodological change in inclusion and exclusion criteria was introduced in line with EUROSTAT in 2004.

### ***Other staff employed in hospitals***

Break in time series:

- 2004: Methodological change in inclusion and exclusion criteria was introduced in line with EUROSTAT in 2004.

## Albania

Data not available.

## Serbia

### ***Other staff employed in hospitals***

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: The method 3) For countries which do not have any detailed information on working hours has been used to convert head counts into FTE data.

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.

## Turkey

Source of data: **General Directorate for Health Services, Ministry of Health.**

Coverage:

- Total hospital employment includes physicians, nurses, midwives, other health service providers and other employees working in the MoH, universities, private and other sector (other public establishments, local administrations and since 2012, MoND-affiliated facilities).
- Total hospital employment is available from 2011 onwards because the numbers of other staff employed in hospital are missing before then.

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.

### ***Physicians***

Coverage:

- Physicians in the MoH, universities, private and other sector are included.
- Physicians acting as managers in the MoH, universities and private sector are included.

### ***Professional nurses and midwives***

Coverage:

- Professional nurses and midwives in the MoH, universities, private and other sector are included.
- Professional nurses and midwives acting as managers in the MoH, universities and private sector are included.

### ***Associate professional nurses, Health care assistants***

- Data not available.

### ***Other health service providers***

Coverage:

- Other health service providers include: Surgery Technician, Anesthesia Technician, Biologist, Environmental Health Technician, Child Development Specialist, Dental Technician, Dietitian, Physical Therapy Technician, Physiotherapist, Emergency and First Aid Technician, Heart-Lung Pump Operation Technician, Laboratory Technician, Audiologist, Audiometric Technician, Orthopedic Technician, Pathological Anatomy Technician, Perfusion Pump Technician, prosthetic Technician, Psychologist, X-ray Technician, Health Physician, Health Officer of the war, Health Technician, Cytopathologist, Social Worker, Medical Secretary, Medical Technologist, Public Health Technician.
- Other health service providers employed in hospitals cover those in the MoH, universities, private and other sector.
- Data also include dentists and pharmacists working in public hospitals. For the private sector, data on dentists and pharmacists are available but there is no possibility to disaggregate salaried professionals from self-employed professionals. Hence, dentists and pharmacists working in the private sector are excluded.

### ***Other staff***

Coverage:

- This number includes Lawyers, Imams and other hospital staff not elsewhere classified, working in the MoH, universities, private and other sector.

- Data are available since 2011.

Break in time series: 2013. In 2018, the data on “Other staff” have been revised since 2013, with a data source offering a better coverage. This explains the increase in the number of Other staff and Total hospital employment in 2013.

## **United Kingdom**

### ***Total hospital employment***

Source of data: **NHS-Digital.**

Estimation method: In 2020 NHS-Digital supplied England statistics for every category of head-counts and full-time equivalents (FTEs) in a time series from 2009 to 2019. In 2020 this time series has been re-weighted (grossed-up) to represent United Kingdom estimates based on per-capita population share. The ‘total hospital employment’ estimates previously submitted by the UK have been revised since 2009.