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YEARS



الهيئة العامة للإحصاء  
General Authority for Statistics

## Methodology and Quality Report for Healthcare Establishments and Workforce Statistics

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V-4.0

Quality management

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## 1. Contact

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1.6. Contact phone number	199009

## 2. Methodology and Quality Update

2.1. Latest Update on Methodology and Quality	19/10/2025
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## 3. Statistical Presentation

3.1. Data description
<p><b>It presents statistics on healthcare establishments and workforce, providing data on healthcare establishments and workforce in the Kingdom of Saudi Arabia.</b></p> <ul style="list-style-type: none"><li>• Healthcare establishments and their distribution in the Kingdom of Saudi Arabia.</li><li>• Healthcare workforce and their distribution in the Kingdom of Saudi Arabia.</li></ul> <p><b>The data on healthcare establishments and workforce statistics are useful in estimating:</b></p>

- Number of hospitals in the Kingdom of Saudi Arabia by administrative region and sector for 2024.
- Number of hospitals per 10,000 population in 2024.
- Number of hospitals per 100,000 population in 2024.
- Number of hospital beds by administrative region and sector, 2024.
- Number of hospital beds in the government sector by administrative region and specialization, 2024.
- Number of hospital beds in the private sector by administrative region and specialization, 2024.
- Number of hospital beds per 1,000 population, 2024.
- Number of hospital beds per 10,000 population, 2024.
- Number of primary healthcare centers and medical complexes by administrative region and sector, 2024.
- Primary healthcare centers and medical complexes per 10,000 population, 2024.
- Number of private sector pharmacies by administrative region, 2024.
- Number of physicians by sex and nationality, 2024.
- Number of dentists by sex and nationality, 2024.
- Number of nurses by sex and nationality, 2024.
- Number of midwives by sex and nationality, 2024.
- Number of pharmacists by sex and nationality, 2024.
- Number of allied health professionals by sex and nationality, 2024.
- Number of medical doctors (per 10,000 population) by sex and nationality, 2024.
- Number of dentists (per 10,000 population) by sex and nationality, 2024.
- Number of nurses (per 10,000 population) by sex and nationality, 2024.
- Number of nurses including midwives (per 10,000 population) by sex and nationality, 2024.
- Number of midwives (per 10,000 population) by sex and nationality, 2024.
- Number of pharmacists (per 10,000 population) by sex and nationality, 2024.
- Number of allied health professionals (per 10,000 population) by sex and nationality, 2024.
- Midwives per 1,000 live births by sex and nationality, 2024.
- Number of nurses per medical doctors by sex and nationality, 2024.
- Growth rate of the health workforce between 2023 and 2024.

### 3.2. Classifications

The following classifications are applied in healthcare establishments and workforce statistics:

**Saudi Standard Classification of Occupations (ISCO\_08):**

A statistical classification based on the International Classification (ISCO\_08) that provides a system for the classification and compilation of professional information obtained through censuses, statistical surveys, and administrative records.

This classification is used in healthcare establishments and workforce statistics to classify workers based on their professions.

#### **Saudi Classification of Specializations and Educational Levels:**

An statistical classification based on the International Standard Classification of Education (ISCED\_11) and (ISCED\_13) for education and training, issued by the United Nations Educational, Scientific and Cultural Organization (UNESCO). It serves as the reference classification for organizing educational programs and qualifications according to their levels and fields of study. It comprehensively covers all educational programs, levels, and methods, spanning from early childhood education to higher education levels.

This classification is used in Healthcare Establishments and Workforce Statistics to classify individuals 15 years and older according to their majors and education levels.

#### **National Code of Countries and Nationalities (3166 ISO - codes Country):**

A statistical classification based on the international standard (ISO 3166\_Country codes), which is a standard issued by the International Organization for Standardization (ISO of the UN), and this classification gives numeric and literal codes for the world's (248) countries, based on the classification of countries.

The classification is used in Healthcare Establishments and Workforce Statistics to classify Saudi or non-Saudi individuals.

Metadata is collected through interviews, so that outputs can be produced in accordance with all relevant classifications.

The classifications are available on the GASTAT's website [www.stats.gov.sa](http://www.stats.gov.sa)

### **3.3. Statistical concepts and definitions**

#### **Terminologies and concepts for healthcare establishments and workforce statistics:**

- Healthcare establishments:

Governmental or private healthcare facilities that provide healthcare services, including: (Hospital, primary healthcare centers, general medical complex, specialized medical

complex, clinic, radiology center, medical laboratory, day surgery center, auxiliary health service center, and emergency medical transport service centers)

- Hospital:

It is a medical facility that provides comprehensive treatment and healthcare services around the clock. The hospital includes different departments such as emergency, intensive care, surgery, and other specialized departments.

- General Medical Complex:

It is a place where doctors of different specialties gather to provide a variety of health services to the patients, such as examinations and specialized treatment. It differs from a hospital in that it does not deal with emergencies.

- Specialized Medical Complex:

It is a complex that includes doctors and specialists in a particular field such as orthopedics or dermatology. It provides specialized treatment services not provided by public facilities.

- Clinic:

It is a small medical facility that provides treatment and medical care for minor illnesses and daily complaints. It may be an individual clinic, a medical complex or a hospital.

- Radiology Center:

It is a specialized facility for conducting medical examinations using radiological techniques such as X-ray, Magnetic Resonance Imaging (MRI), and Computed Tomography (CT).

- Medical Laboratory:

It is a place where laboratory tests and medical examinations are conducted, such as blood tests, urine tests, and other analyses that assist in diagnosing diseases.

- Same-Day Surgery Center:

It is a medical facility that provides minor surgical services where patients can undergo surgery and return home on the same day without the need for hospital admission.

- Supportive Health Services Center:

It is a center that provides auxiliary services to support primary healthcare, such as physical therapy, psychological care, or home care.

- Ambulance Transport Service Centers:

They are services that provide the transportation of patients or injured individuals to hospitals or medical centers via ambulances, often catering to emergency cases.

- **Health Workforce:**

It is a group of individuals specialized in providing health services and medical care, including a wide range of professions and roles working in various healthcare fields. The goal of this workforce is to maintain the health of the community, prevent diseases, and provide treatment.

**The health workforce includes a variety of professions, such as:**

- **Doctors:**

General practitioners and specialists who diagnose and treat diseases.

- **Nurses:**

They are responsible for providing nursing care to patients, such as monitoring health conditions, administering medications, and assisting patients in their recovery.

- **Midwives:**

A midwife is a person who has successfully completed a midwifery education program based on the essential competencies for midwifery practice and the international education standards set by the International Confederation of Midwives (ICM). The program is recognized in the country of qualification. A midwife has obtained the necessary licensing and classification from the Saudi Commission for Health Specialties (SCFHS) and has demonstrated competency in midwifery practice.

- **Pharmacists:**

They specialize in dispensing medications, checking for drug interactions, and providing advice on how to use them.

### 3.4. Data sources

**The healthcare establishments and workforce statistics data rely on two sources:**

**First source:** The data on healthcare establishments and workforce statistics are based on the General Authority for Statistics' population estimates.

**Main published variables:**

- Sex.
- Nationality.
- Administrative region.

**Second source:** Administrative records for healthcare establishments and workforce statistics from:

- Ministry of Health
- Saudi Commission for Health Specialties.
- Other government entities such as the Ministry of Defense, the National Guard, and the Ministry of Interior.

**The main published variables from the administrative data source are:**

- The number of healthcare establishments and workforce.

### 3.5. Designing the data collection tool

Not applicable because the data are registry-based .

### 3.6. Questionnaire test (cognitive test)

Not applicable because the data are registry-based .

### 3.7. Statistical population

The statistical population for healthcare establishment and workforce statistics consists of healthcare establishments and the healthcare workforce in the Kingdom of Saudi Arabia.

### 3.8. Sample Design

Not applicable, as the Healthcare Establishments and Workforce Statistics report relies on registry-based data sources and on population estimates from the General Authority for Statistics.

### 3.9. Statistical unit (sampling unit)

The statistical units in healthcare establishments and workforce statistics are the facility and the individual.

### 3.10. Data collection

#### **Data collection from administrative records:**

In coordination with GASTAT's relevant departments responsible for conducting the survey and managing data collection, the administrative data for the publication of Healthcare Establishments and Workforce Statistics are obtained from the Ministry of Health, the Saudi Commission for Health Specialties, and other government entities, including data on the number of healthcare establishments and the workforce.

The data is stored in the authority's databases after undergoing auditing and review processes following approved statistical methods and recognized quality standards. If errors or discrepancies are discovered, the data is cross-referenced with the data source for correction or clarification.

### 3.11. Data collection frequency

The data collection process for Healthcare Establishments and Workforce Statistics is conducted on an annual basis.

### 3.12. Reference area

The healthcare establishment and workforce statistics publication cover 13 administrative regions in Saudi Arabia.

### 3.13. Reference period (time reference)

#### **The reference period for the variables and dataset is as follows:**

Data from administrative records are based on the last day of the Gregorian year 2024.

### 3.14. Base period

The indicators are calculated using 2023 as the base year and are subsequently published on an annual basis.

### 3.15. Measurement unit

- Most results are measured by numbers (e.g., number of workforce and establishments) (in thousands)
- Some indicators are calculated as rates (e.g., growth rate of the health workforce between 2023 and 2024) (percentage).

### 3.16. Time coverage

Data from administrative records are available annually up to 2024.

### 3.17. Publication frequency

The results of Healthcare Establishments and Workforce Statistics are published annually according to the approved statistical plan.

## 4. Statistical processing

### 4.1. Error detection

Missing or anomalous entries are identified by comparing multiple sources. This includes logical verification of registry data received from relevant authorities and comparison with other sources, previous years' data, and the logical consistency of changes.

### 4.2. Data integration and matching from multiple sources

Data received from different entities are reviewed, and the respective entities are consulted if discrepancies are found between sources.

### 4.3. Imputation and calibration

Not applicable because the data are registry-based.

### 4.4. Seasonal adjustments

Not applicable, as the data are registry-based and already pre-aligned.

### 4.5. Adjustment of preliminary results

Not applicable, as the data are registry-based and already pre-aligned.

## 5. Quality dimensions

### 5.1. Suitability

A criterion that indicates how well the product meets users' needs.

#### 5.1.1. User needs

**Internal users at the General Authority for healthcare establishments and workforce statistics data:**

- Health and education statistics.
- Services statistics.

**Some external users and beneficiaries who greatly rely on healthcare establishments and workforce statistics data, including:**

- Government entities.
- Regional and international organizations.
- Research institutions.
- Media.

- Individuals.

### The disseminated key variables that are mostly used by external users:

All product variables and indicators.	Ministry of Health
Variables and indicators related to healthcare establishments.	Saudi Health Council
Variables and indicators related to the health workforce.	Saudi Commission for Health Specialties.

### 5.1.2. Completeness

The Healthcare Establishments and Workforce Statistics data are based on two main sources—population estimates and administrative records to provide comprehensive information on healthcare establishments and the workforce. The data are considered complete.

### 5.2. Accuracy and reliability

A standard that measures how close the calculations or estimates are to the exact or true values that reflect reality.

#### 5.2.1. Overall accuracy

**The quality of data for Healthcare Establishments and Workforce Statistics is enhanced to improve data accuracy through:**

- Data is checked with previous years to identify any significant changes in the data.
- The internal consistency of the data is checked before it is finalized.
- The links between variables are checked and coherence between different data series is confirmed.

### 5.3. Timeliness and punctuality

A standard that measures the time gap between the availability of information and the occurrence of the event.

However, timeliness reflects the time difference between the date of data publication and the target date when it is actually published.

### 5.3.1. Timeliness

The General Authority for Statistics is committed to applying internationally recognized standards regarding the announcement, clarification of the time of publishing statistics on its official website, as outlined in the statistical calendar, as well as adhering to the announced time of publication. In the event of any delay, updates will be provided accordingly.

### 5.3.2. Punctuality

Publication is carried out according to the release dates specified in the Statistical Calendar for Healthcare Establishments and Workforce Statistics on the General Authority for Statistics' website.

The data are available at the expected time, as scheduled in the statistical release calendar, If the publication is delayed, reasons shall be provided.

## 5.4. Coherence and comparability

The ability for users to access data, the availability of accurate or complete data, and the availability of a methodology and quality report.

### 5.4.1. Comparability - geographical

The data are comparable both nationally and internationally.

### 5.4.2. Comparability - over time

**Healthcare Establishments and Workforce Statistics publication began as an annual publication in 2023, with several indicators added for 2024, including:**

- Growth rate of the health workforce between 2023 and 2024.
- Number of private sector pharmacies.
- Midwives per 1,000 live births.

#### 5.4.3. Coherence- Cross domain

Not applicable because the data are registry-based.

#### 5.4.4. Coherence- Sub-annual and annual statistics

Not applicable because the data are registry-based.

#### 5.4.5. Coherence- National Accounts

Not applicable because the data are registry-based.

#### 5.4.6. Coherence- Internal

The estimates in the Healthcare Establishments and Workforce Statistics are fully internally consistent, as they all rely on the same microdata set and are calculated using the same estimation methods.

### 5.5. Accessibility and clarity

The ability for users to access data, the availability of accurate or complete data, and the availability of a methodology and quality report.

#### 5.5.1. Press releases

The announcements for each publication are available on the statistical calendar as mentioned in 9.1. The press releases can be viewed on the website of GASTAT on the link:

[Press release](#)

### 5.5.2. Publications

The General Authority for Statistics regularly publishes the Healthcare Establishments and Workforce Statistics according to a pre-established release plan, and these publications are made available on the GASTAT's website. GASTAT is keen to publish its publications in a way that serves all users of different types, including publications in different formats that contain (publication tables, data graphs, indicators, metadata, methodology, and questionnaires) in both English and Arabic.

The results of the Healthcare Establishments and Workforce Statistics are available at:

[Publications](#)

### 5.5.3. On-line database

**The data is published on the statistical database:**

[GASTAT \(stats.gov.sa\)](http://stats.gov.sa)

### 5.5.4. Microdata accessibility

Not available.

### 5.5.5. References and standards

**Healthcare Establishments and Workforce Statistics:**

The concepts, definitions, issues and classifications are based on international standards.

- [SDG 3.C.1](#)
- [physicians](#)
- [Midwives](#)
- [Nurses](#)
- [Dentists](#)
- [Pharmacists](#)
- [Hospital](#)

## 6. Quality assurance

GASTAT considers the following principles: Impartiality, ensuring that the statistical product is user-oriented, maintaining the quality of processes and outputs, enhancing the effectiveness of statistical operations, and reducing the burden on respondents.

Data is validated through procedures and quality controls that are applied during the process at various stages, such as: (data entry, data collection, and other final controls).

## 7. Quality assessment

GASTAT performs all statistical activities according to a national model (Generic Statistical Business Process Model - GSBPM). According to the GSBPM, the final stage of statistical activities is overall evaluation using information gathered in each stage or sub-process. This information is used to prepare the evaluation report, which outlines all the quality issues related to the specific statistical activity and serves as input for improvement actions.

## 8. Confidentiality

### 8.1. Confidentiality - Policy

According to Royal Decree No. 23 dated 07/12/1379, data must always be kept confidential and must be used by GASTAT for statistical purposes only.

Therefore, the data is protected in the data servers of GASTAT.

### 8.2. Confidentiality - Data Treatment

Data were displayed in appropriate tables to facilitate their summarization, comprehension, and results extraction. Also, to compare data with other data and extract statistical meanings for the study community. It is also easier to check tables without the need to see any sensitive or confidential data, which violates the confidentiality of statistical data.

## 9. Publishing policy

### 9.1. Statistical calendar

The Healthcare Establishments and Workforce Statistics have been included in the Statistical Calendar.

[Statistical Calendar](#)

### 9.2. User access

One of GASTAT's objectives is to better meet its clients' needs, so it immediately provides them with the publication's results once the Healthcare establishments and workforce statistics publication is published.

**It also receives questions and inquiries from clients about the publication and its results through various communication channels, such as:**

- GASTAT official website: [www.stats.gov.sa](http://www.stats.gov.sa)
- GASTAT official e-mail address: [info@stats.gov.sa](mailto:info@stats.gov.sa)
- Client support e-mail address: [info@stats.gov.sa](mailto:info@stats.gov.sa)
- Official visits to GASTAT's official head office in Riyadh or one of its branches in Saudi Arabia.
- Official letters.
- Statistical telephone: (199009).

## 10. Comments