

Metadata Report of Health Determinants Statistics Publication

V-2.0

Quality Management

Last update: 05.02.2023



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1. Contact

1.1.	Contact organization	General Authority of Statistics
1.2.	Contact organization unit	Health and Education Statistics Dept.
1.3.	Contact person function	Director of Health and Education Statistics
1.4.	Contact mail address	P.O. Box: 3735 Riyadh, 11481 Kingdom of Saudi Arabia
1.5.	Contact email address	info@stats.gov.sa
1.6.	Contact phone number	920020081

2. Metadata Update

34 M . I .		05/11/2022
2.1. Metadat	ta last update	06/11/2023

3. Statistical Presentation

3.1. Data description

The Health Determinants Statistics publication presents health statistics for all adults aged 15 and over and children aged under 15 in Saudi Arabia.

The Health Determinants Statistics publication is a publication conducted to collect data on the main characteristics as following:

Physical activity statistics.



- Obesity and overweight statistics.
- Statistics on tobacco consumption and exposure to passive smoking.
- Nutrition statistics.

The data It is further used to estimate the:

- Percentage of physical activity (150 minutes or more per week of physical activity ranging from moderate to intense) among adults (18 years and over).
- The rate of physical activity for 60 minutes per day among children and adolescents.
- Body mass index in adults (15 years and over) by sex and nationality.
- Obesity rate according to sex, nationality, and administrative region among adults (15 years and over).
- Body mass index for children (0-14 years) by sex and nationality.
- Obesity rate according to sex, nationality, and administrative region among children (under 15 years old).
- Percentage of tobacco smokers by sex and type of tobacco.
- Percentage of people who quit smoking and have previously consumed tobacco daily, according to sex.
- Percentage of individuals eating fruits during the week, excluding non-fresh juices, for the population aged 15 years and over, according to administrative region and sex.
- The amount of fruit servings eaten on normal days for residents aged 15 years and over, according to administrative region and sex.

3.2. Classification system

The following classifications are applied in Health Determinants Statistics publication:

National classification of economic activities (ISIC4):

The statistical classification based on the International Standard of Industrial Classification of All Economic Activities (ISIC4) is used to describe productive activities of an establishment.

Saudi Standard Classification of professions (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 and statistical surveys, as well as administrative records. This classification is used in



the National Health Survey and Child Health and Well-Being Survey in order to classify employees based on their professions.

Saudi classification of specializations and educational levels:

A statistical classification based on the International Standard Education Classification (ISCED_11) and (ISCED_13) for Education and Training Issued by United Nations Educational, Scientific and Cultural Organization (UNESCO) which is the reference classification for the organization of educational programs and related qualifications by education levels and fields. It is comprehensive for all educational programs, levels and methods, and covers all levels of education from kindergarten to postgraduate levels. This classification is used in the National Health Survey and Child Health and Well-Being Survey to classify individuals 15 years and above 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 the National Health Survey and Child Health and Well-Being Survey to classify Saudi or non-Saudi individuals.

The classifications are available on the GASTAT's website: www.stats.gov.sa

3.3. Sector coverage

Not applicable.

3.4. Statistical concepts and definitions

Terminologies and concepts of Health Determinants Statistics publication:

- Health determinants include the following dimensions:
 Physical activity, body mass and weight, tobacco prevalence, intake of vegetables and fruits.
- Passive smoking:

It is the inhalation of smoke emitted from a burning cigarette, or smoke that may come out of the mouth or nose of another smoker.

- Smoked tobacco:
- Includes cigarettes, rollable tobacco, bidis cigars, smoking pipes, hookahs, and electronic cigarettes.
- Smokeless tobacco:

Includes chewing, sniffing, and moist tobacco.

Acute (intense) physical activity:



It causes a significant increase in the number of breathing times or heart rate, such as: (lifting heavy objects, drilling, or cutting wood).

• Moderate physical activity (moderate):

It causes a slight increase in the number of breathing or heartbeats, such as: (brisk walking, carrying light things, cleaning, cooking, or washing clothes).

3.5. Statistical unit

The statistical unit in Health Determinants Statistics publication is an individual.

3.6. Statistical population

The statistical populations of Health Determinants Statistics publication are the Saudi and non-Saudi individuals who normally reside in Saudi Arabia.

3.7. Reference area

The survey sample is a representative sample for Saudi Arabia's 13 administrative regions.

3.8. Time coverage

Data are available for 2023.

3.9. Base period

Not applicable.

4. Unit of measure

- Most results measure number of (for EX: the amount of fruit servings eaten on normal days).
- Some indicators are reported as rates (EX: the percentage of physical activity).



5. Reference period

References period to the variables or dataset as following:

The data is based on the beginning of the data collection date on 30/4/2023.

6. Confidentiality

6.1. Confidentiality - policy

According to the Royal Decree No. 23 dated 07-12-1397, data must always be kept confidential, and must be used by GASTAT only for statistical purposes. Therefore, the data are protected in the data servers of the Authority.

6.2. Confidentiality - data treatment

Data were displayed in appropriate tables to facilitate its 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 the original questionnaire, which usually include data like names and addresses of individuals, names of data providers, which violates data confidentiality of statistical data.

"Anonymity of data" is one of the most important procedures. To keep data confidential, GASTAT removed information on individual persons, households, or business entities such a way that the respondent cannot be identified either directly (by name, address, contact number, identity number etc.) or indirectly (by combining different - especially rare - characteristics of respondents: age, occupation, education etc.).



7. Release policy

7.1. Release calendar

The Health Determinants Statistics publication results are bound by a release calendar.

7.2. Release calendar access

Available on the: https://www.stats.gov.sa/en/future-releases

7.3. User access

One of GASTAT's objectives is to meet better its clients' needs, so it immediately provides them with the bulletin's results once the Health Determinants Statistics publication is published.

It also receives questions and inquiries of the clients about the Bulletin and its results through various communication channels, such as:

- GASTAT's official website: <u>www.stats.gov.sa</u>
- GASTAT's official e-mail address: info@stats.gov.sa
- Client Support's e-mail address: cs@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: (92002008).

8. Frequency of dissemination

Annual.			



9. Accessibility and clarity

9.1. News release

The announcements for each publication are available on release calendar as mentioned in 7.2. Release calendar access. The news release can be viewed on the website of GASTAT in the link:

https://www.stats.gov.sa/en/news.

9.2. Publications

GASTAT issues Health Determinants Statistics publications and reports on a regular basis within a pre-prepared publishing plan and installed on the GASTAT's website.

GASTAT is keen to publish its publications in a manner that serves all users of different types, including publications in different formats that contain (publication tables, data graphs, indicators, metadata, methodology, and used questionnaires) in both English and Arabic.

The Health Determinants Statistics publication are available on the link: https://www.stats.gov.sa/en/950-0

9.3. On-line database

The data is published in the statistical database: https://database.stats.gov.sa/home/indicator/542

9.4. Micro-data access

Microdata are unit-level data obtained from sample surveys, censuses, and administrative systems. They provide information about characteristics of individual people or entities such as households, business enterprises, facilities, farms, or even geographical areas such as villages or towns.

The different types of microdata files to meet different information needs:

• Public use:



It consists sets of records containing information on individual persons, households, or business entities anonymized in such a way that the respondent cannot be identified either directly (by name, address, contact number, identity number etc.) or indirectly (by combining different - especially rare - characteristics of respondents: age, occupation, education etc.).

Scientific use:

These files established based on specific methodology asked by data requester to extract the datasets with specific characteristics used for strategic studies and decision making as well scientific research purposes on individuals, households and enterprises with no direct identifiers, which have been subject to control methods to protect confidentiality.

Eligible users can access microdata sets through secure interface built-in by GASTAT called "Etaha" with specific documentary requirements.

9.5. Other

Not available.

9.6. Documentation on methodology

The Health Determinants Statistics publication concepts, definitions, issues and classifications are based on internationally recognized scientific standards, by following the stages of statistical work contained in the Generic Statistical Business Process Model (GSBPM), starting with the stage of identifying needs, passing through the stage of design, construction, collection, processing, analysis, publication, and ending with the evaluation stage, while the methodology for drawing the sample was as follows:

- The survey population was divided into non-overlapping parts characterized by relative homogeneity in their units. Each part is considered a class, and each class is treated as an independent community in its own right.
- A random sample was drawn from each layer independently, and in the end all the drawn sampling units were combined to form the total sample.
- The sample units were selected from among the statistical frameworks that were
 designed to cover the target statistical population in two stages. In the first stage, the
 primary sampling units (enumeration areas) were selected from the 2022 Saudi Census
 framework, and using regular random sampling (4131) enumeration areas were
 selected for the National Health survey, and (4537) enumeration areas for the Child
 Health and well-being survey, distributed among all strata in all administrative regions
 using the method proportional to size by weighting the number of individuals in them,

then in the second stage selecting the final sampling units, which are individuals in the enumeration areas that were chosen in the stage. The first is using a simple random sample of (20) individuals from each enumeration area, meaning a total of (82,620) individuals for the National Health survey, and (90,740) individuals for the Kingdomwide child health and well-being survey.

- Preparing the optimal methodology for selecting sample units with the aim of providing outputs with the required quality, while reducing the burden on data providers through statistical methods known to statisticians, such as using rotation methods and monitoring overlap.
- The tool (GPAQ) was used to calculate the percentage of physical activity.
- The tool (GSHS) was used to calculate the percentage of physical activity.
- The (who) methodology was used to calculate the body mass index in adults.
- The (who) methodology was used to calculate the obesity rate.
- The (who) methodology was used to calculate the body mass index for children (0-14 years).
- The (who) methodology was used to calculate the percentage of obesity in children (under 15 years old).
- The (who) methodology was used to calculate the percentage of tobacco smokers by sex and type of tobacco.
- The (who) methodology was used to calculate the percentage of people who quit smoking and had previously consumed tobacco daily.
- The (<u>Eurostat</u>) methodology was used to calculate the percentage of people who eat fruits during the week, excluding fresh juices.
- The (<u>Eurostat</u>) methodology was used to calculate the amount of fruit servings eaten on normal days.

The descriptive data required to describe the concepts, the statistical framework, and sample allocation and selection were also identified.



9.7. Quality documentation

Quality documentation covers documentation on methods and standards for assessing, measuring, and monitoring the quality of statistical process and output. It is based on standard quality criteria such as relevance, accuracy and reliability, timeliness and punctuality, accessibility and clarity, comparability, and coherence.

10. Quality management

10.1. Quality assurance

GASTAT declares that it considers the following principles: impartiality, user orientated, quality of processes and output, effectiveness of statistical processes, reducing the workload for respondents.

Quality controls and validation of data are actions carried out throughout the process in different stages such as the data input and data collection and other final controls.

10.2. Quality assessment

GASTAT performs all statistical activities according to a national model (Generic Statistical Business Process Model - GSBPM). According to the GSBPM, the final phase of statistical activities is overall evaluation using information gathered in each phase 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.

11. Relevance

11.1. User needs

Internal GASTAT's users, which make use of Health Determinants Statistics publication data, include:



- Social Statistics.
 - Population, Gender and Diversity Statistics.
 - Living Conditions, Lifestyle and Justice Statistics.
 - Health and Education Statistics.

External users who make significant use of (Health Determinants Statistics publication**) data include, but is not limited to:**

- The governmental entities.
- Regional and International Organizations.
- Research institutions.
- Media.
- Individuals.

The disseminated key variables that mostly used by key users:

Ministry of Health	All survey variables and indicators.
Ministry of Economy and Planning	All survey variables and indicators.
Public Health Authority	All survey variables and indicators.
Saudi Health Council	All survey variables and indicators.
National Health Information Center	All survey variables and indicators.
Health Sector Transformation Program	All survey variables and indicators.
Ministry of Sports	Indications for physical activity.

11.2. User satisfaction

Not available.

11.3. Completeness

Health Determinants Statistics publication data are Survey data from:

- National Health survey.
- Child Health and well-being survey.

The data is in complete status.



12. Accuracy and reliability

12.1. Overall accuracy

- The data collected is improved through the researchers, that have been selected according to a set of practical and objective criteria and training program related to the field of work.
- The electronic data collection form of the National Health Survey and Child Health and Well Being Survey. questionnaire includes Alert, prevention rules and correction rules during the data collection process in order to improve data quality.
- Overall, the 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

13. Timeliness and punctuality

13.1. Timeliness

GASTAT uses the Special Data Dissemination Standard (SDDS) issued by the International Monetary Fund. According to this Standard, all statistics agencies are required to publish data on an annual basis, and with a delay of not more than a half year (180 days) after the end of the reference period. If the data are from different source, they may be published in a different frequency.

13.2. Punctuality

Publication takes place in accordance with published release dates for Health Determinants Statistics publication in the GASTAT webpage.

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



14. Coherence and comparability

14.1. Comparability - geographical			
Data are fully comparable.			
14.2. Comparability - over time			
The publication of Health Determinants statistics started in 2023 as an annual survey, which is one of the new surveys carried out by the General Authority for Statistics.			
14.3. Coherence- cross domain			
Not applicable.			
14.3.1. Coherence - sub annual and annual statistics			
Not applicable.			
14.3.2. Coherence- National Accounts			
Not applicable.			
14.4. Coherence - internal			

15. Resources used

Not applicable.

Description	Total
Total staff (GASTAT's staff, researchers)	937



Number of units in the National Health survey.	82 ,620
Number of units in the child health and well-being survey	90,620
Total days of data collection period (end date - start date)	85
Average conducted interviewer per day (during data collection)	Not Applicable

16. Data revision

16.1. Data revision - policy

Not applicable, only final results will be published.

16.2. Data revision - practice

Not applicable, only final results will be published.

17. Statistical processing

17.1. Source data

Health Determinants statistics are based on the data of the National Health Survey and the Child Health and Wellbeing Survey implemented by the General Authority for Statistics.

The disseminated key variables of survey data are:

- Nationality.
- Administrative region.
- Age groups.

17.2. Frequency of data collection

Annual.



17.3. Data collection

Data collection from survey:

Data are collected from a sample consisting of male and female individuals (Saudis and non-Saudis) aged 15 years and over and children under 15 years in Saudi Arabia, through computer-assisted telephone interviews (CATI), computer-assisted online interviews (CAWI) and interviews. Computer Assisted Personalization (CAPI).

17.4. Data validation

Data are reviewed and matched to ensure their accuracy and precision in a way that suits their nature with the aim of giving the presented statistics quality and accuracy.

The data of the publication's current year are compared with the data of the previous year to ensure their integrity and consistency in preparation for processing data and extracting and reviewing results.

In addition to the data processing and tabulation to check their accuracy, all the outputs are stored and uploaded to the database after being calculated by GASTAT to be reviewed and processed by specialists in Health and Education Statistics - Social statistics through modern technologies and software designed for this purpose.

17.5. Data compilation

Data Coding:

In the Health Determinants statistics publication, interviewers collect from respondents, a detailed description of each field. This information is then coded in-house by an automated process, which is reviewed by a small-dedicated team of coding experts using a series of consistency checks.

Data Editing:

Specialists of Health and Education Statistics – Social statistics Department have processed and analyzed data in this stage, and this step was based on the following measures:

- Sort and arrange data in groups or different categories in a serial order.
- Summarize detailed data into main points or main data.
- Linking between many parts of data and make them connected.



- Process incomplete or missing data.
- Process illogical data.
- Converting data into statistically significant data.
- Organize, display and interpret data.

Extrapolation and weighting:

After processing the data collected from the responding (individuals), survey weights were generated to produce indicator tables by following two main steps in creating survey weights:

- Adjustment of non-response.
- Calibration weight.

Applied statistical estimation:

GASTAT has relied on the formulas approved by the international standards in calculating Health Determinants statistics publication indicators, as follows:

- The tool (GPAQ) was used to calculate the percentage of physical activity (150 minutes or more per week of physical activity ranging from moderate to intense) among adults (18 years and over).
- The tool (<u>GSHS</u>) was used to calculate the percentage of physical activity for 60 minutes per day among children and adolescents.
- The (who) methodology was used to calculate the body mass index for adults (15 years and over) by sex and nationality.
- The (who) methodology was used to calculate the obesity rate according to sex, nationality, and administrative region among adults (15 years and over).
- The (who) methodology was used to calculate the body mass index for children (0-14 years) according to sex and nationality.
- The (who) methodology was used to calculate the percentage of obesity according to sex, nationality, and administrative region among children (under 15 years old).
- The (who) methodology was used to calculate the percentage of tobacco smokers by sex and type of tobacco.
- The (who) methodology was used to calculate the percentage of people who quit smoking and had previously consumed tobacco daily by sex.
- The (<u>Eurostat</u>) methodology was used to calculate the percentage of those who eat fruits during the week, excluding fresh juices, for the population aged 15 years and over, by administrative region and sex.
- Use the (<u>Eurostat</u>) methodology to calculate the amount of servings of fruit eaten on normal days for residents aged 15 years and over by administrative region and sex.

17.6. Adjustment

Not applicable, only final results will be published.



18.	Comment			