

Ghana - GH011 Excess Mortality: Surveillance Episodes Datasets

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Visit our data catalog at: <https://data.agincourt.co.za/index.php>

Overview

Identification

ID NUMBER

GH011-EXMORTALITY-02

Version

VERSION DESCRIPTION

v1: Dataset for public distribution.

PRODUCTION DATE

2023-06-01

NOTES

v1: Dataset for public distribution.

Overview

ABSTRACT

Following the declaration of COVID-19 as a pandemic by the World Health Organization, there have been high levels of reported deaths, at least in countries with functioning civil registration and vital statistics (CRVS). These largely under-represent the true mortality due to COVID-19. A fundamental question, then, is what is the impact of COVID-19 on mortality and the scale of excess deaths, and the population sub-groups most affected, particularly in low- and middle-income settings? Constructing a true representation of COVID-19 deaths can be useful for social policies and future pandemic preparedness planning. The goal of this initiative is to characterise all-cause mortality rates and trends, by age and sex, across a range of rural and urban sub-Saharan African and South Asian settings under continuous health and demographic surveillance.

This a multinational initiative bringing together 17 sites/centres from Africa and South Asia. This dataset represents a snapshot of the continually evolving data in the underlying longitudinal databases maintained by the nodes.

KIND OF DATA

Event history data

UNITS OF ANALYSIS

Exposure Episodes

Scope

NOTES

Each record in the dataset represents a period of observation for an individual during which all the recorded characteristics of the individual stay constant. For example, on the birthday of the individual a new episode will start, because the age of the individual has changed. An out-migration will result in a new episode, because the location or residential status has changed. Any change in one of the status values, such as education or marital status, will likewise result in a new episode on the date of the change.

TOPICS

| Topic | Vocabulary | URI |
|-------|------------|-----|
|-------|------------|-----|

| Topic | Vocabulary | URI |
|--------------------------------|------------|-----|
| Episodes, Mortality, Migration | | |

KEYWORDS

Episodes, Mortality, Migration

Coverage

GEOGRAPHIC COVERAGE

The data are collected from the Navrongo Health and Demographic Surveillance System (NHDSS) in the Kassena-Nankana East Municipal and Kassena-Nankana West District of

the Upper East Region of Ghana. The NHDSS site covers an area of approximately 1675 km² and borders Burkina Faso to the North.

UNIVERSE

Households resident in dwellings within the study area will be eligible for inclusion in the surveillance. All individuals identified by the household proxy informant as a member of the household will be enumerated. A resident household member is an individual that intends to sleep the majority of time at the dwelling occupied by the household over a four-month period. Households will include resident and non-resident members. An individual is a non-resident member if they have close ties to the household, but do not physically reside with the household most of the time. They can also be called temporary migrants and they are enumerated within the household list. Because household membership is not tied to physical residency, an individual may be a member of more than one household.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

| Name | Affiliation |
|---------------------|---------------------------------|
| Dr Patrick O. Ansah | Navrongo Health Research Centre |
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OTHER PRODUCER(S)

| Name | Affiliation | Role |
|-----------------|---------------------------------|----------------------|
| Timothy Awine | Navrongo Health Research Centre | Technical Assistance |
| Samuel Oladogun | Navrongo Health Research Centre | Technical Assistance |
| Peter Wontuo | Navrongo Health Research Centre | Technical Assistance |

FUNDING

| Name | Abbreviation | Role |
|--|--------------|-----------------|
| Bill & Melinda Gates Foundation, Seattle, WA | BMGF | Current Funder |
| South African Population Research Infrastructure Network, South Africa | SAPRIN | Current Funder |
| Wellcome Trust, UK | Wellcome | Previous Funder |

OTHER ACKNOWLEDGEMENTS

| Name | Affiliation | Role |
|-------------------------|---------------------------------|----------------|
| Data Science Department | Navrongo Health Research Centre | Providing Data |

| Name | Affiliation | Role |
|---------------------------|----------------------------------|--------------------|
| SAMRC/Wits Agincourt Team | Agincourt | Data Review |
| Kobus Herbst | SAPRIN | Data Review And QA |
| Beth Tippet-Barr | Nyanja Health Research Institute | Reviews |

DDI DOCUMENT ID
GH011-EXMORTALITY-02

Sampling

Sampling Procedure

This dataset is not based on a sample but contains information from the complete demographic surveillance areas.

Questionnaires

Overview

The data on this Repository is not the result of a single questionnaire but is a result of harmonised data from three different sites longitudinally collected over more than twenty years using different questionnaires that varied over time and site.

Data Collection

Data Collection Dates

| Start | End | Cycle |
|------------|------------|----------|
| 1993-07-01 | 2021-12-31 | Multiple |

Time Periods

| Start | End | Cycle |
|------------|-----|----------|
| 1993-07-01 | | Multiple |

Data Collection Notes

In all the HDSS nodes, data are collected from a household proxy respondent, preferably the head of household or any next available senior adult resident household member, after informed consent was obtained by trained fieldworkers. Respondents are informed of the purpose and confidentiality of the interview, their right to refuse participation or withdraw from the study, and that scientists would be given access to anonymised data to analyse and publish information.

Questionnaires

The data on this Repository is not the result of a single questionnaire but is a result of harmonised data from three different sites longitudinally collected over more than twenty years using different questionnaires that varied over time and site.

Data Processing

Data Editing

The first step in the data preparation process is quality assurance. The Data Management hub team assess the data submitted to ensure it is in the correct format and falls within expected value ranges. Other potential issues checked include: missing data, incorrect data types, unexpected duplicate or orphan records. The principle of the data quality checks is that if the data conversion conducted by the nodes was complete and accurate, there should be little or no difference in the data quality and demographic indicators between the base and versions of the nodal data. If the data submitted by the nodes meets the criteria for inclusion into the consolidated dataset the data moves to the second step of the data production process. However, if the data fail the inclusion checks, this could then lead to another iteration of data submission and quality control checks until Data Management hub is satisfied that they have high quality data.

Data Appraisal

Estimates of Sampling Error

Not Applicable

File Description

Variable List

GH011_RawCensoredEpisodes

Content

Cases 285824

Variable(s) 13

Structure Type:
Keys: ()

Version

Producer

Missing Data

Variables

| ID | Name | Label | Type | Format | Question |
|-----|--------------|--------------|----------|-----------|----------|
| V14 | recnr | RecNr | contin | numeric | |
| V15 | countryid | CountryId | discrete | numeric | |
| V16 | centreid | CentreId | discrete | character | |
| V17 | individualid | IndividualId | discrete | character | |
| V18 | sex | Sex | discrete | numeric | |
| V19 | dob | DoB | discrete | character | |
| V20 | episode | Episode | discrete | numeric | |
| V21 | episodes | Episodes | discrete | numeric | |
| V22 | startevent | StartEvent | discrete | character | |
| V23 | startdate | Start Date | discrete | character | |
| V24 | endevent | EndEvent | discrete | character | |
| V25 | enddate | End Date | discrete | character | |
| V26 | days | Days | contin | numeric | |

RecNr (recnr)

File: GH011_RawCensoredEpisodes

Overview

| | |
|------------------|-----------------------------|
| Type: Continuous | Valid cases: 285824 |
| Format: numeric | Invalid: 0 |
| Width: 12 | Minimum: 1 |
| Decimals: 0 | Maximum: 285824 |
| Range: 1-285824 | Mean: 142912.5 |
| | Standard deviation: 82510.4 |

CountryId (countryid)

File: GH011_RawCensoredEpisodes

Overview

| | |
|-----------------|---------------------|
| Type: Discrete | Valid cases: 285824 |
| Format: numeric | Invalid: 0 |
| Width: 8 | |
| Decimals: 0 | |
| Range: 288-288 | |

CentreId (centreid)

File: GH011_RawCensoredEpisodes

Overview

| | |
|-------------------|---------------------|
| Type: Discrete | Valid cases: 285824 |
| Format: character | Invalid: 0 |
| Width: 5 | |

IndividualId (individualid)

File: GH011_RawCensoredEpisodes

Overview

| | |
|-------------------|---------------------|
| Type: Discrete | Valid cases: 285824 |
| Format: character | Invalid: 0 |
| Width: 9 | |

Sex (sex)

File: GH011_RawCensoredEpisodes

Overview

| | |
|-----------------|---------------------|
| Type: Discrete | Valid cases: 285824 |
| Format: numeric | Invalid: 0 |
| Width: 8 | |
| Decimals: 0 | |
| Range: 1-2 | |

DoB (dob)

File: GH011_RawCensoredEpisodes

Overview

DoB (dob)

File: GH011_RawCensoredEpisodes

Type: Discrete

Format: character

Width: 11

Valid cases: 285824

Minimum: NaN

Maximum: NaN

Episode (episode)

File: GH011_RawCensoredEpisodes

Overview

Type: Discrete

Format: numeric

Width: 8

Decimals: 0

Range: 1-6

Valid cases: 285824

Invalid: 0

Episodes (episodes)

File: GH011_RawCensoredEpisodes

Overview

Type: Discrete

Format: numeric

Width: 8

Decimals: 0

Range: 1-6

Valid cases: 285824

Invalid: 0

StartEvent (startevent)

File: GH011_RawCensoredEpisodes

Overview

Type: Discrete

Format: character

Width: 3

Valid cases: 285824

Invalid: 0

Start Date (startdate)

File: GH011_RawCensoredEpisodes

Overview

Type: Discrete

Format: character

Width: 11

Valid cases: 285824

Minimum: NaN

Maximum: NaN

EndEvent (endevent)

File: GH011_RawCensoredEpisodes

Overview

Type: Discrete

Format: character

Width: 3

Valid cases: 285824

Invalid: 0

End Date (enddate)

File: GH011_RawCensoredEpisodes

Overview

| | |
|-------------------|---------------------|
| Type: Discrete | Valid cases: 285824 |
| Format: character | Minimum: NaN |
| Width: 11 | Maximum: NaN |

Days (days)

File: GH011_RawCensoredEpisodes

Overview

| | |
|------------------|---------------------------|
| Type: Continuous | Valid cases: 285824 |
| Format: numeric | Invalid: 0 |
| Width: 8 | Minimum: 1 |
| Decimals: 0 | Maximum: 2855 |
| Range: 1-2855 | Mean: 1569.8 |
| | Standard deviation: 966.4 |

