

Malawi - ALPHA HIV Incidence and Mortality Data, Karonga 2002-2017

**Malawi Epidemiology and Intervention Research Unit, London School of Hygiene
and Tropical Medicine**

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Visit our data catalog at: <https://www.datafirst.uct.ac.za/dataportal/index.php>

Identification

SURVEY ID NUMBER

mwi-alpha-him-karonga-2002-2017-v1

TITLE

ALPHA HIV Incidence and Mortality Data, Karonga 2002-2017

SUBTITLE

Karonga 2002-2017

COUNTRY

Name	Country code
Malawi	mwi

STUDY TYPE

Demographic and Health Surveillance System

SERIES INFORMATION

The ALPHA (Analysing Longitudinal Population-based HIV/AIDS Data in Africa) Network is a collaboration among 10 longitudinal studies in Sub-Saharan Africa. These studies collect data on HIV infection alongside demographic, behavioural, socio-economic, and clinical data from residents of the study areas. The Network harmonises the data and conducts comparable and pooled analyses on HIV. The ALPHA HIV Incidence and Mortality Data for Karonga, Malawi, is part of the international data harmonisation and analysis programme of the ALPHA network.

ABSTRACT

This dataset is created from harmonising longitudinal population-based demographic surveillance and repeated serological survey data collected by a Health and Demographic Surveillance Study in Karonga, Malawi. The data harmonisation is coordinated by the ALPHA Network which curates individual-level data on demographic surveillance, verbal autopsy interviews, serological and sexual behaviour surveys, and individually-linked data from HDSS and medical facilities.

The data from the Karonga site in Malawi include two data files:

HIV incidence data

This data file includes data on resident study participants aged 15-49 who have had one negative HIV test and at least one subsequent HIV test done in the study for research purposes. Data may be split into multiple observations for each person to describe time spent in different residencies, different age groups and different calendar year periods. All timings are given as age at event, instead of the dates. Dates of birth were rounded to the 15th of the month, and all other dates were offset by the same amount and the time elapsed between the rounded dates is used as the age at event. To enable multiple imputation of seroconversion dates the times (ages) of last negative test and first positive test have been included in the data.

Mortality data

This data file was created as described here (<https://gatesopenresearch.org/articles/1-4>)

KIND OF DATA

Event History data

UNIT OF ANALYSIS

Individuals

Version

VERSION DESCRIPTION

Version 1: Edited, anonymised data available with restrictions

VERSION DATE

2017

Scope

NOTES

The data covers demographic surveillance and repeated serological survey data from the study site in Karonga, Malawi collected through demographic surveillance, verbal autopsy interviews, serological and sexual behaviour surveys. Also included is data from HDSS and medical facilities.

Coverage

GEOGRAPHIC COVERAGE

The data covers the Karonga demographic surveillance area in rural northern Malawi

Producers and sponsors

PRIMARY INVESTIGATORS

Name	Affiliation
Malawi Epidemiology and Intervention Research Unit	ALPHA Network
London School of Hygiene and Tropical Medicine	ALPHA Network

PRODUCERS

FUNDING AGENCY/SPONSOR

Name	Role
Wellcome Trust	Funding agency

Data Collection

DATES OF DATA COLLECTION

Start	End	Cycle
2002	2017	Mortality data
2002	2011	Incidence data

DATA COLLECTION MODE

Face-to-face [f2f]

Access policy

CONTACTS

Name	Affiliation	Email	URL
DataFirst helpdesk	University of Cape Town	support@data1st.org	www.support.data1st.org

ACCESS CONDITIONS

Licensed access data, available under conditions

CITATION REQUIREMENTS

Malawi Epidemiology and Intervention Research Unit and London School of Hygiene and Tropical Medicine. ALPHA HIV Incidence and Mortality Data, Karonga 2002-2017 [dataset]. Version 1. Karonga and London: MEIRU and LSHTM [producers],

2017. Cape Town: DataFirst [distributors], 2022. DOI: <https://doi.org/10.25828/wcty-q497>

ACCESS AUTHORITY

Name	Affiliation	Email
DataFirst	University of Cape Town	support@data1st.org

ARCHIVE WHERE STUDY IS ORIGINALLY STORED

Karonga (MW011)

Metadata production

PRODUCERS

Name	Abbreviation	Affiliation	Role
Malawi Epidemiology and Intervention research Unit	MEIRU	ALPHA Network	Metadata creator
London School of Hygiene and Tropical Medicine	LSHTM	ALPHA Network	Metadata creator
DataFirst		University of Cape Town	Metadata creator

DATE OF METADATA PRODUCTION

2024-08-23

DDI DOCUMENT VERSION

v2

Data Description

Data file	Cases	Variables
incidence_Karonga	25136	12
mortality_for_sharing_Karonga	134177	13

Data file: incidence_Karonga

Cases: 25136

Variables: 12

Variables

ID	Name	Label	Question
V21	sex	Sex	
V22	idno	Participant ID number	
V23	study_name	Study name	
V24	fouryear	Calendar year, grouped in 4 years post 2005	
V25	agegrp	Five year age group	
V26	timein	Start of episode (age)	
V27	t0	Stata variable: age at start of episode	
V28	timeout	End of episode (age)	
V29	t	Stata variable: age at end of episode	
V30	fail	Seroconversion occurred at the end of this episode	
V31	st	Stata variable: in survival analysis	
V32	d	Stata variable: failure (seroconversion)	

Total: 12

Data file: mortality_for_sharing_Karonga

Cases: 134177

Variables: 13

Variables

ID	Name	Label	Question
V33	sex	Sex	
V34	study_name	Study name	
V35	fouryear	Calendar year, grouped in 4 years post 2005	
V36	hivstatus_broad	HIV status	
V37	idno	Participant ID number	
V38	agegrp	Five year age group	
V39	timein	Start of episode (age)	
V40	t0	Stata variable: age at start of episode	
V41	timeout	End of episode (age)	
V42	t	Stata variable: age at end of episode	
V43	fail	Seroconversion occurred at the end of this episode	
V44	st	Stata variable: in survival analysis	
V45	d	Stata variable: failure (seroconversion)	

Total: 13

SEX: Sex**Data file:** incidence_Karonga**Overview**

Valid: 25136 Invalid: 0
 Type: Discrete Decimal: 0 Width: 1 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Men	10978	43.7%
2	Women	14158	56.3%

IDNO: Participant ID number**Data file:** incidence_Karonga**Overview**

Valid: 25136 Invalid: 0 Minimum: 0 Maximum: 1053316824 Mean: 267750757.749 Standard deviation: 238135144.793
 Type: Continuous Decimal: 0 Width: 10 Range: 0 - 1053316824 Format: Numeric

STUDY_NAME: Study name**Data file:** incidence_Karonga**Overview**

Valid: 25136 Invalid: 0
 Type: Discrete Decimal: 0 Width: 2 Range: 1 - 10 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Karonga	25136	100%
2	Kisesa	0	0%
3	Manicaland	0	0%
4	Masaka	0	0%
5	Rakai	0	0%
6	uMkhanyakude	0	0%
7	Aginicourt	0	0%
8	Kisumu	0	0%
9	Ifakara	0	0%

10	Nairobi	0	0%
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FOURYEAR: Calendar year, grouped in 4 years post 2005

Data file: incidence_Karonga

Overview

Valid: 25136 Invalid: 0
Type: Discrete Decimal: 0 Width: 1 Range: 0 - 6 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	1995-99	0	0%
1	2000-04	28	0.1%
2	2005-08	9854	39.2%
3	2009-12	14553	57.9%
4	2013-16	701	2.8%
5	2017-20	0	0%
6	2021-24	0	0%

AGEGRP: Five year age group

Data file: incidence_Karonga

Overview

Valid: 25136 Invalid: 0
Type: Discrete Decimal: 0 Width: 2 Range: 0 - 18 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	0-4	0	0%
1	5-9	0	0%
2	10-14	0	0%
3	15-19	6829	27.2%
4	20-24	4836	19.2%
5	25-29	4187	16.7%
6	30-34	3339	13.3%
7	35-39	2451	9.8%

8	40-44	1936	7.7%
9	45-49	1558	6.2%
10	50-54	0	0%
11	55-59	0	0%
12	60-64	0	0%
13	65-69	0	0%
14	70-74	0	0%
15	75-79	0	0%
16	80-84	0	0%
17	85-89	0	0%
18	90+	0	0%

TIMEIN: Start of episode (age)

Data file: incidence_Karonga

Overview

Valid: 25136 Invalid: 0 Minimum: 15 Maximum: 49.996 Mean: 27.094 Standard deviation: 9.562
 Type: Continuous Decimal: 0 Width: 16 Range: 15 - 49.9958932238193 Format: Numeric

T0: Stata variable: age at start of episode

Data file: incidence_Karonga

Overview

Valid: 25136 Invalid: 0 Minimum: 15 Maximum: 49.996 Mean: 27.094 Standard deviation: 9.562
 Type: Continuous Decimal: 0 Width: 16 Range: 15 - 49.9958932238193 Format: Numeric

TIMEOUT: End of episode (age)

Data file: incidence_Karonga

Overview

Valid: 25136 Invalid: 0 Minimum: 15.001 Maximum: 50 Mean: 28.246 Standard deviation: 9.549
 Type: Continuous Decimal: 0 Width: 16 Range: 15.0006844626968 - 50 Format: Numeric

T: Stata variable: age at end of episode

Data file: incidence_Karonga

Overview

Valid: 25136 Invalid: 0 Minimum: 15.001 Maximum: 50 Mean: 28.246 Standard deviation: 9.549
 Type: Continuous Decimal: 0 Width: 16 Range: 15.0006844626968 - 50 Format: Numeric

FAIL: Seroconversion occurred at the end of this episode**Data file:** incidence_Karonga**Overview**

Valid: 24890 Invalid: 246

Type: Discrete Decimal: 0 Width: 1 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0		24790	98.6%
1		100	0.4%
Sysmiss		246	

ST: Stata variable: in survival analysis**Data file:** incidence_Karonga**Overview**

Valid: 25136 Invalid: 0

Type: Discrete Decimal: 0 Width: 1 Range: 1 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1		25136	100%

D: Stata variable: failure (seroconversion)**Data file:** incidence_Karonga**Overview**

Valid: 25136 Invalid: 0

Type: Discrete Decimal: 0 Width: 1 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0		25036	99.6%

1		100	0.4%
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SEX: Sex**Data file: mortality_for_sharing_Karonga****Overview**

Valid: 134177 Invalid: 0
 Type: Discrete Decimal: 0 Width: 1 Range: 1 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Men	61563	45.9%
2	Women	72614	54.1%

STUDY_NAME: Study name**Data file: mortality_for_sharing_Karonga****Overview**

Valid: 134177 Invalid: 0
 Type: Discrete Decimal: 0 Width: 2 Range: 1 - 10 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Karonga	134177	100%
2	Kisesa	0	0%
3	Manicaland	0	0%
4	Masaka	0	0%
5	Rakai	0	0%
6	uMkhanyakude	0	0%
7	Aginicourt	0	0%
8	Kisumu	0	0%
9	Ifakara	0	0%
10	Nairobi	0	0%

FOURYEAR: Calendar year, grouped in 4 years post 2005**Data file: mortality_for_sharing_Karonga****Overview**

Valid: 134177 Invalid: 0

Type: Discrete Decimal: 0 Width: 1 Range: 0 - 6 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	earliest-1999	0	0%
1	2000-04	19151	14.3%
2	2005-08	40535	30.2%
3	2009-12	38290	28.5%
4	2013-16	35151	26.2%
5	2017-20	1050	0.8%
6	2021-24	0	0%

HIVSTATUS_BROAD: HIV status

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0
 Type: Discrete Decimal: 0 Width: 1 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Negative	52834	39.4%
2	Positive	4393	3.3%
3	Unknown	76950	57.3%

IDNO: Participant ID number

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0 Minimum: 4352 Maximum: 1068013100 Mean: 264298199.872 Standard deviation: 234308548.56
 Type: Continuous Decimal: 0 Width: 10 Range: 4352 - 1068013100 Format: Numeric

AGEGRP: Five year age group

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0
 Type: Discrete Decimal: 0 Width: 2 Range: 0 - 18 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	0-4	0	0%
1	5-9	0	0%
2	10-14	0	0%
3	15-19	34578	25.8%
4	20-24	27849	20.8%
5	25-29	22599	16.8%
6	30-34	17798	13.3%
7	35-39	13427	10%
8	40-44	10156	7.6%
9	45-49	7770	5.8%
10	50-54	0	0%
11	55-59	0	0%
12	60-64	0	0%
13	65-69	0	0%
14	70-74	0	0%
15	75-79	0	0%
16	80-84	0	0%
17	85-89	0	0%
18	90+	0	0%

TIMEIN: Start of episode (age)

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0 Minimum: 15 Maximum: 49.999 Mean: 27.011 Standard deviation: 9.277
 Type: Continuous Decimal: 0 Width: 16 Range: 15 - 49.9986310746064 Format: Numeric

T0: Stata variable: age at start of episode

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0 Minimum: 15 Maximum: 49.999 Mean: 27.011 Standard deviation: 9.277

Type: Continuous Decimal: 0 Width: 16 Range: 15 - 49.9986310746064 Format: Numeric

TIMEOUT: End of episode (age)

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0 Minimum: 15.001 Maximum: 50 Mean: 28.408 Standard deviation: 9.367
 Type: Continuous Decimal: 0 Width: 16 Range: 15.0006844626968 - 50 Format: Numeric

T: Stata variable: age at end of episode

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0 Minimum: 15.001 Maximum: 50 Mean: 28.408 Standard deviation: 9.367
 Type: Continuous Decimal: 0 Width: 16 Range: 15.0006844626968 - 50 Format: Numeric

FAIL: Seroconversion occurred at the end of this episode

Data file: mortality_for_sharing_Karonga

Overview

Valid: 132880 Invalid: 1297
 Type: Discrete Decimal: 0 Width: 1 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0		131819	98.2%
1		1061	0.8%
Sysmiss		1297	

ST: Stata variable: in survival analysis

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0
 Type: Discrete Decimal: 0 Width: 1 Range: 1 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1		134177	100%

D: Stata variable: failure (seroconversion)

Data file: mortality_for_sharing_Karonga

Overview

Valid: 134177 Invalid: 0
 Type: Discrete Decimal: 0 Width: 1 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0		133116	99.2%
1		1061	0.8%

Download related resources

Other materials

Contextual documentation for the shared ALPHA-Karonga data

Title	Contextual documentation for the shared ALPHA-Karonga data
Date	2021-01-01
Country	Malawi
Language	English
Contributor(s)	This document describes the ALPHA data harmonised from the original Karonga HDSS data
Filename	him-karonga-2002-2017-info.pdf
