

Ethiopia - Dabat HDSS Core Dataset 2009-2015 (Release 2018)

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Visit our data catalog at: <http://indepth-ishare.org/index.php>

Overview

Identification

ID NUMBER

INDEPTH.ET051.CMD2015.V1

Version

VERSION DESCRIPTION

ET051.CMD2015.v1: Edited data, first version, for internal review only

ET051.CMD2015.v2 : Edited dataset for public distribution

PRODUCTION DATE

2018-05-25

NOTES

Developed during iSHARE2 workshop in May 2018

Overview

ABSTRACT

Introduction:

Dabat Health and Demographic Surveillance System (HDSS), also called the Dabat Research Center (DRC), was established at Dabat District in 1996 after conducting initial census. Later re-census was done in 2008. The surveillance is run by the College of Medicine and Health Sciences which is one of the colleges/faculties of the University of Gondar. Dabat district is one of the 21 districts in North Gondar Administrative Zone of Amhara Region in Ethiopia. According to the report published by the Central Statistical Agency in 2007, the district has an estimated total population of 145,458 living in 27 rural and 3 urban Kebeles (sub-districts). The altitude of the district ranges from about 1000 meters to over 2500 meters above sea level. The district population largely depends on subsistence agriculture economy. There are two health centers, three health stations, and twenty-nine health posts providing health services for the community. An all-weather road runs from Gondar town through Dabat to some towns of Tigray. Dabat town, the capital of Dabat District, is located approximately 821 km northwest of Addis Ababa and 75 kms north of Gondar town. The surveillance is funded by Centers for Disease Control and Prevention (CDC) through Ethiopian Public Health Association.

Objectives:

Dabat HDSS/ Dabat Research Centre was established to generate longitudinal data on health and population at district level and provide a study base and sampling frame for community-based research.

Methods:

Dabat district was initially selected purposively as a surveillance site for its unique three climatic conditions, namely Dega (high land and cold), Woina dega (mid land and temperate) and Kolla (low land and hot). The choice was made with the assumption that there would be differences in morbidity and mortality in the different climatic areas. Accordingly, seven kebeles from Dega, one kebele from Woina dega, and two kebeles from Kolla were selected randomly after stratification of the kebeles by climatic zone.

After the re-census, update has been done regularly every 6 months. During each round, data has been collected using a semi-structured questionnaire which included information related to birth and other pregnancy outcomes, death, migration, and marital status change. Interviews are administered to the heads of the household but in the absence of the head, the next elder family member is interviewed. This is only done after repeated trial of getting the head. While the regular update round is every six months, deaths that occur in the surveillance site are reported immediately to the data collectors by the local guides. After the mourning period, usually 45 days, the trained data collectors administer Verbal Autopsy (VA)

questionnaire to the close relative of the deceased to get information on the possible cause(s) of death. Three VA questionnaires are prepared for the age groups 0-28 days, 29 days to 15 years, and greater than 15 years. To assign cause(s) of death, the VA data collected by data collectors is given to physicians who have got training on VA. These physicians independently assign causes of death using the standard International Classification of Diseases (ICD-10).

KIND OF DATA

Event history data

UNITS OF ANALYSIS

Individual

Scope

NOTES

The scope covers Individuals attributes such as individuals identifier, sex, date of birth, mother id, number of birth, start and end event types (codes), and start and end dates.

TOPICS

Topic	Vocabulary	URI
Demography [N01.224]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Birth Rate [N01.224.935.849.500]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Emigration and Immigration [N01.224.625.350]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Sex Ratio [N01.224.803.815]	MeSH	http://www.ncbi.nlm.nih.gov/mesh

KEYWORDS

Mortality, Fertility, Migration, Population

Coverage

GEOGRAPHIC COVERAGE

Dabat HDSS included seven rural kebeles (sub districts) and three urban kebeles in Dabat district which is located 75 km North of Gondar town in Ethiopia. There are highlands, midlands and few low land households in the HDSS site.

UNIVERSE

All individuals residing in Dabat HDSS site

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Dr. Kassahun Alemu (From 2017 onwards)	Dabat HDSS, University of Gondar
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OTHER PRODUCER(S)

Name	Affiliation	Role
Centers for Disease Control and Prevention	US government	Training

Name	Affiliation	Role
Ethiopian Public Health Association	Dabat HDSS, University of Gondar	Training
Dr. Gashaw Andargie	Dabat HDSS, University of Gondar	Assistant Coordinator
Prof. Mengesha Admassu	Dabat HDSS, University of Gondar	Team Member
Dr. Sisay Yifru	Dabat HDSS, University of Gondar	Team Member
Dr. Shitaye Alemu	Dabat HDSS, University of Gondar	Team Member
Mr. Temesgen Azemeraw	Dabat HDSS, University of Gondar	Data Manager
Dr. Kassahun Alemu	Dabat HDSS, University of Gondar	Coordinator Dabat HDSS

FUNDING

Name	Abbreviation	Role
CDC, Atlanta	CDC	Funding
Ethiopian Public Health Association	EPHA	Manage the funding on behalf of CDC
University of Gondar	UoG	Contribution in kind and monitoring and evaluation

OTHER ACKNOWLEDGEMENTS

Name	Affiliation	Role
Mr. Temesgen Azmeraw	Dabat HDSS, University of Gondar	Data Management

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
iSHARE2 Technical Team	iSTT	INDEPTH Network	Technical Support
INDEPTH Network	int.indepth	INDEPTH Network	Agency
Temesgen Azemeraw	TA	University of Gondar	DDI Author

DATE OF METADATA PRODUCTION
2018-07-10

DDI DOCUMENT VERSION
DDI.INDEPTH.ET051.CMD2015.v1

DDI DOCUMENT ID
DDI.INDEPTH.ET051.CMD2015.v1

Sampling

Sampling Procedure

Not applicable

Deviations from Sample Design

NA

Response Rate

On an average the response rate is about 99% over the years in every round.

Weighting

NA

Questionnaires

Overview

All questionnaires are prepared in Amharic language. The surveillance questionnaires are related to birth and other pregnancy outcomes, death, and migration.

Data Collection

Data Collection Dates

Start	End	Cycle
2009-01-01	2015-12-31	Release Coverage

Time Periods

Start	End	Cycle
2008-01-10		0
2008-10-12		1
2009-04-09		2
2009-10-11		3
2010-04-09		4
2010-10-11		5
2011-04-09		6
2011-10-12		7
2012-04-09		8
2012-10-12		9
2013-04-09		10
2013-10-12		11
2014-04-09		12
2015-10-12		13

Data Collection Mode

Face-to-face [f2f]

Data Collection Notes

During establishment of the surveillance ethical clearance was secured from the University of Gondar institutional review board and CDC. Then informed consent was obtained from each household head included in the surveillance.

Data collectors were trained during census and re-census. Refresher trainings were also given at least once a year. Additionally, any newly recruited data collectors and supervisors received training before they start their actual work. Physicians were also trained on verbal autopsy. After 2008 three trainings were given for physicians until 2011. Besides, supervisions were done about three times during each update cycles.

All interviews are conducted in Amharic language, a national language also spoken by people in the surveillance area. The interview takes averagely 15 minutes for the surveillance while around 30 minutes for the verbal autopsy questionnaires.

There are 34 local guides, 17 data collectors, and 4 field supervisors.

Questionnaires

All questionnaires are prepared in Amharic language. The surveillance questionnaires are related to birth and other pregnancy outcomes, death, and migration.

Data Collectors

Name	Abbreviation	Affiliation
Dabat HDSS	DHDSS	University of Gondar

Supervision

The center has four field supervisors. In addition, research team members supervise data collection process every month during the cycle data collection period. Supervisors check about five percent of the filled questionnaire for consistencies.

Data Processing

Data Editing

The filled questionnaire is checked by filled supervisors, document clerk, data entry clerks for missings and other violations. In addition, DRC Software, a software developed from Microsoft Access and Visual Basic, checks violations against set of rules for data quality during data entry.

Other Processing

The filled questionnaire is checked by filed supervisor, document clerk, and data entry clerks.

Data Appraisal

Estimates of Sampling Error

Not applicable

Other forms of Data Appraisal

CentreId MetricTable QMetric Illegal Legal Total Metric RunDate

ET051 MicroDataCleaned Starts 92742 2018-05-25 14:02

ET051 MicroDataCleaned Transitions 0 221342 221342 0. 2018-05-25 14:02

ET051 MicroDataCleaned Ends 92742 2018-05-25 14:02

ET051 MicroDataCleaned SexValues 221342 2018-05-25 14:02

ET051 MicroDataCleaned DoBValues 390 220952 221342 0. 2018-05-25 14:02

File Description

Variable List

ET051.CMD2015.v2

Content	This file contains event history data of Dabat HDSS
Cases	229484
Variable(s)	14
Structure	Type: Keys: ()
Version	ET051.CMD2015.v2
Producer	Dabat HDSS
Missing Data	

Variables

ID	Name	Label	Type	Format	Question
V1	RecNr	RecNr	contin	numeric	
V2	CountryId	CountryId	discrete	numeric	
V3	CentrelId	CentrelId	discrete	character	
V4	IndividualId	IndividualId	contin	numeric	
V5	Sex	Sex	discrete	numeric	
V6	DoB	DoB	discrete	character	
V7	EventCount	EventCount	discrete	numeric	
V8	EventNr	EventNr	discrete	numeric	
V9	EventCode	EventCode	discrete	character	
V10	EventDate	EventDate	discrete	character	
V11	ObservationDate	ObservationDate	discrete	character	
V12	LocationId	LocationId	contin	numeric	
V13	MotherId	MotherId	contin	numeric	
V14	DeliveryId	DeliveryId	contin	numeric	

RecNr (RecNr)

File: ET051.CMD2015.v2

Overview

Type: Continuous	Valid cases: 229484
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-126704	Maximum: 229484
	Mean: 114742.5
	Standard deviation: 66246.5

Description

A sequential number uniquely identifying each record in the data file

CountryId (CountryId)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: numeric	Invalid: 0
Decimals: 0	
Range: 231-231	

Description

ISO 3166-1 numeric code of the country where the surveillance site is situated

CentreId (CentreId)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: character	Invalid: 0
Width: 5	

Description

An identifier issued by INDEPTH to each member centre of the format CCNNNS, Where CCNNNS is the INDEPTH Member site code, constructed as follows:

- CC the ISO 3166-1 alpha-2 code of the country where the site is situated
- NN is a sequential number uniquely identifying an INDEPTH member centre within the country. Starting with 01 to 99, for a maximum of 99 centres per country
- S is a sequential character uniquely identifying the geographical surveillance site. Starting with 1 to 9, thereafter A to Z, for a maximum of 35 sites per centre.

IndividualId (IndividualId)

File: ET051.CMD2015.v2

Overview

Type: Continuous	Valid cases: 229484
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-59083	Maximum: 92763
	Mean: 46477.9
	Standard deviation: 26782

Description

A number uniquely identifying all the records belonging to a specific individual in the data file. This number is not the same as the identifier used by a contributing centre to be identify the individual

Sex (Sex)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: numeric	Invalid: 0
Decimals: 0	
Range: 0-2	

Description

Sex of the individual

DoB (DoB)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: character	Minimum: NaN
	Maximum: NaN

Description

The date of birth of the individual Format YYYY-MM-DD

EventCount (EventCount)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: numeric	Invalid: 0
Decimals: 0	
Range: 2-9	

Description

The total number of events associated with this individual in this data set

EventNr (EventNr)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: numeric	Invalid: 0
Decimals: 0	
Range: 1-9	

Description

A number increasing from 1 to EventCount for each event record in order of event occurred

EventCode (EventCode)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: character	Invalid: 0
Width: 3	

Description

EventCode (EventCode)

File: ET051.CMD2015.v2

A code which identifies the type of event that has occurred

EventDate (EventDate)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 229484
Format: character	Minimum: NaN
	Maximum: NaN

Description

The date on which the event occurred Format: YYYY-MM-DD

ObservationDate (ObservationDate)

File: ET051.CMD2015.v2

Overview

Type: Discrete	Valid cases: 205427
Format: character	Minimum: NaN
	Maximum: NaN

Description

Date on which the event was observed (recorded), also known as surveillance visit date Format YYYY-MM-DD

LocationId (LocationId)

File: ET051.CMD2015.v2

Overview

Type: Continuous	Valid cases: 229484
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-13057	Maximum: 21288
	Mean: 10636.9
	Standard deviation: 6138.7

Description

Unique identifier associated with a residence unit within the site and is the location where the individual was or became resident, when the event occurred. this identifier is not the same as the identifier used internally by the contributing centre

MotherId (MotherId)

File: ET051.CMD2015.v2

Overview

Type: Continuous	Valid cases: 19333
Format: numeric	Invalid: 210151
Decimals: 0	Minimum: 17
Range: 16-59078	Maximum: 92763
	Mean: 46685.2
	Standard deviation: 26793.5

Description

The individual of the mother, only provided for BTH events

DeliveryId (DeliveryId)

File: ET051.CMD2015.v2

Overview

Type: Continuous	Valid cases: 19333
Format: numeric	Invalid: 210151
Decimals: 0	Minimum: 1
Range: 1-7125	Maximum: 11900
	Mean: 5766.7
	Standard deviation: 3313.2

Description

The RecNr of the delivery event associated with this birth

