

Bangladesh - Chakaria HDSS INDEPTH Core Dataset 2005-2015 (Release 2018)

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Report generated on: July 2, 2018

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

Overview

Identification

ID NUMBER
INDEPTH.BD013.CMD2015.v1

Version

VERSION DESCRIPTION
CMD2015.v1: Edited Dataset for public distribution

PRODUCTION DATE
2018-05-22

NOTES
CMD2015.v1

Overview

ABSTRACT

Chakaria Health and Demographic Surveillance System (CHDSS), located on the south-eastern coast of the Bay of Bengal, and is one of the field sites of International Centre for Diarrhoeal Disease Research, Bangladesh (ICDDR) was established in 1999 covering 183 villages of 166,405 individuals living in 26,979 households. In CHDSS since 2004 data on socio-demographic and health indicators including birth, death, migration, marriage, maternal health, education and employment have been systematically collected and recorded from 7,042 households, randomly chosen from the total of 26,979 households through quarterly household visits by a team of surveillance workers (SWs) with supervision from a team of two supervisors. In 2011 data collection system was modified choosing 49 villages randomly from a total of 183 which were divided into 14 work areas and 14 SWs were recruited from their residing areas. Most of the households included in the system prior to this modification were also included in the new system. The modification of the system has resulted the visit by SWs almost double the number of households, saving time spent on travel in comparison with the previous system. In addition, the modification allowed the possibility of estimating migration as the system includes complete villages. Currently, surveillance covers 82,160 individuals (16,272 households). The primary objective of CHDSS is to monitor the changes in socio-demographic indicators, inequalities in health and impact of public health interventions. A demographic change was accompanied by a shift from traditional to modern society during the past decade, but inequality in health still persists. The findings from the surveillance are shared regularly among the local and global communities. Data are also available upon request to ICDDR and INDEPTH for use by researchers and policy makers.

KIND OF DATA
Event history data

UNITS OF ANALYSIS
Individual

Scope

NOTES

So far, all the important demographic indicators related to fertility, mortality, migration and nuptiality have been measured. Information on causes of deaths and migration are also collected and tabulated. In addition, indicators of special interest such as hunger, water and sanitation, use of family planning, use of safe delivery services, immunization, health-seeking behaviour, use of iodized salt, consumption of tobacco, nutritional anthropometry, ownership of mobile phone and household socio-economic condition have been collected when felt appropriate. Socio-economic inequities for the major health and

demographic indicators have always been assessed and published.

TOPICS

Topic	Vocabulary	URI
Demography [N01.224]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Emigration and Immigration [N01.224.625.350]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Mortality [N01.224.935.698]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Birth Rate [N01.224.935.849.500]	MeSH	http://www.ncbi.nlm.nih.gov/mesh

KEYWORDS

Fertility, Mortality, Migration

Coverage

GEOGRAPHIC COVERAGE

Chakaria is one of the 500 upazilas (sub-districts) in Bangladesh. It is located between latitudes 21o34' and 21o55' North and longitudes 91o54' and 92o13' East in the southeastern coast of the Bay of Bengal. Administratively, it is under Cox's Bazar district with an estimated population of 511,861 in 2013. The highway from Chittagong to Cox's Bazar passes through Chakaria. The east side of Chakaria is hilly, while on the west side towards the Bay of Bengal is lowland. The Chakaria HDSS covered 11 unions, namely Baraitali, Kaiarbil, Bheola Manik Char, Paschim Boro Bheola, Shaharbil, Kakara, Harbang, Purba Boro Bheola, Surajpur Manikpur, Konakhali, and Dhemoshia.

UNIVERSE

Although Chakaria HDSS started in 1999, covering 183 villages of 166,405 individuals living in 26,979 households, data collection was interrupted during 2001-03. Since 2004, quarterly data collection has resumed, and data have been systematically collected from 7,042 households, randomly chosen from the total of 26,979 households. Data have been collected through quarterly visits by a team of surveillance workers (SWs) with supervision from a team of two supervisors. On a typical day, prior to 2011 a SW would come to the office and take a list of households assigned by the supervisors, travel to respondents' households, update the events and return the collected data sheets to the office. Using this system, data collection and data management took a significant amount of time and money, involving daily travel to the households by SWs. The above system of data collection was modified in 2011. The modification involved choosing 49 villages randomly from a total of 183. The 49 villages were divided into 14 work areas and 14 SWs were recruited from the 14 work areas where they resided. Most of the households included in the system prior to this modification were also included in the new system. The modification of the system has resulted in the SWs visiting almost double the number of households in comparison with the previous system, saving time spent on travel in the earlier system. In addition, the modification allowed the possibility of estimating migration as the system includes complete villages. Currently, surveillance covers 82,029 individuals (16,624 households).

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

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Dr. Abbas Bhuiya (Upto 2017)	Chakaria Health and Demographic Surveillance System, ICDDR,B

OTHER PRODUCER(S)

Name	Affiliation	Role
Amena Sultana	Chakaria Health and Demographic Surveillance System, ICDDR,B	Check quality of data and analyze

Name	Affiliation	Role
Shehrin Shaila Mahmood	Chakaria Health and Demographic Surveillance System, ICDDR,B	Technical support in report writing
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Asiful Haidar Chowdhury	Chakaria Health and Demographic Surveillance System, ICDDR,B	Data quality check, Data analysis, Interpretation of findings, Technical support in report writing
Md. Abdur Razzak Ali Sorker	Chakaria Health and Demographic Surveillance System, ICDDR,B	Technical support in HDSS online application

FUNDING

Name	Abbreviation	Role
International Centre for Diarrhoeal Disease, Research, Bangladesh	ICDDR,B	

OTHER ACKNOWLEDGEMENTS

Name	Affiliation	Role
Department for International Development (UK Aid)		
Government of Bangladesh		
Global Affairs Canada	GAC	
Swedish International Development Cooperation Agency	Sida	
Chakaria villagers		
Team members of the Chakaria Community Health Project		
Surveillance Workers		
Data Manger		
Field Reserach Manager		

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
iSHARE2 Technical Team	iS2TT	INDEPTH Network	Documentation of the study
INDEPTH Network	int.indepth	INDEPTH Network	agency
Md Abdur Razzak Ali Sorker	MARAS	ICDDR,B	DDI Author

DATE OF METADATA PRODUCTION

2018-05-22

DDI DOCUMENT VERSION

Version BD013.CMD2015.v1: 2018-05-22

DDI DOCUMENT ID

DDI.INDEPTH.BD013.CMD2015.v1

Sampling

Sampling Procedure

This dataset is related to the demographic surveillance population as a whole

Deviations from Sample Design

Not applicable

Response Rate

On an average the response rate is 99.99% in all rounds over the years.

Weighting

Not applicable

Questionnaires

Overview

Child Health Profile form
Death form
Household Characteristics form
DSS data collection blank form
Abolished form
Correction form
Listing form
Migration form

Data Collection

Data Collection Dates

Start	End	Cycle
2005-01-01	2015-12-31	Release Coverage

Time Periods

Start	End	Cycle
2004-03-02		01
2004-07-07		02
2004-11-21		03
2005-03-08		04
2005-09-10		05
2006-02-14		06
2006-05-04		07
2006-08-02		08
2007-03-07		09
2007-12-05		10
2008-08-05		11
2009-02-02		12
2009-05-14		13
2009-10-18		14
2010-02-15		15
2011-01-13		16
2011-01-20		17
2011-06-29		18
2012-01-07		19
2012-05-31		20
2013-03-24		21
2013-06-30		22
2014-03-03		23
2014-11-30		24
2015-02-08		25
2015-09-17		26
2016-01-17		27
2016-05-05		28
2016-08-24		29
2016-11-27		30
2017-05-31		31
2017-09-12		32
2017-09-12		33
2017-11-30		34

Data Collection Mode

Proxy Respondent [proxy]

Data Collection Notes

Data have been collected through quarterly visits by a team of surveillance workers (SWs) with supervision from a team of two supervisors. On a typical day, prior to 2011 a SW would come to the office and take a list of households assigned by the supervisors, travel to respondents' households, update the events and return the collected data sheets to the office. The above system of data collection was modified in 2011. The modification involved choosing 49 villages randomly from a total

of 183. The 49 villages were divided into 14 work areas and 14 SWs were recruited from the 14 work areas where they resided.

Questionnaires

Child Health Profile form
 Death form
 Household Characteristics form
 DSS data collection blank form
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 Correction form
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 Migration form

Data Collectors

Name	Abbreviation	Affiliation
Surveillance workers	SWs	Chakaria HDSS
Supervisors		Chakaria HDSS

Supervision

Two supervisors supervised the data-collection process. To detect any anomalies, the supervisors re-visited 5% of the households, chosen randomly, within 2 days of data collection by the field workers. Later on, the supervisors and the relevant field workers together sorted out any inconsistencies in the collected data. All the filled-up questionnaires were manually checked for completeness and for any inconsistencies.

Data Processing

Data Editing

All the filled-up questionnaires were manually checked for completeness and for any inconsistencies. Subsequently, computer-based data-editing procedures were applied to ensure the quality of data.

Data Appraisal

Estimates of Sampling Error

Not applicable

Other forms of Data Appraisal

CentreId MetricTable QMetric Illegal Legal Total Metric RunDate

BD013 MicroDataCleaned Starts 152667 2018-05-22 15:09

BD013 MicroDataCleaned Transitions 0 320667 320667 0. 2018-05-22 15:09

BD013 MicroDataCleaned Ends 152667 2018-05-22 15:09

BD013 MicroDataCleaned SexValues 320667 2018-05-22 15:09

File Description

Variable List

BD013.CMD2015.v1

Content	This file contains BD013 INDEPTH Core microdataset in event history format. This file was generated using ETL through Pentaho Kettle.
Cases	344561
Variable(s)	14
Structure	Type: Keys: ()
Version	CMD2015.v1: for public distribution
Producer	Chakaria HDSS
Missing Data	None

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: BD013.CMD2015.v1

Overview

Type: Continuous	Valid cases: 344561
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-326162	Maximum: 344561
	Mean: 172281
	Standard deviation: 99466.3

Description

A sequential number uniquely identifying each record in the datafile

CountryId (CountryId)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: numeric	Invalid: 0
Decimals: 0	
Range: 50-50	

Description

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

CentreId (CentreId)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: character	Invalid: 0
Width: 5	

Description

An identifier issued by INDEPTH to each member centre of the format CCCSS, where CCC is a sequential centre identifier and SS is a sequential identifier of the site within the centre in the case of multiple site centres

IndividualId (IndividualId)

File: BD013.CMD2015.v1

Overview

Type: Continuous	Valid cases: 344561
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-145661	Maximum: 152845
	Mean: 76438.1
	Standard deviation: 44109.4

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 issued by a contributing centre to identify the individual.

Sex (Sex)

File: BD013.CMD2015.v1

Sex (Sex)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: numeric	Invalid: 0
Decimals: 0	
Range: 0-2	

Description

Sex of the individual. 1 for Male and 2 for Female

DoB (DoB)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: character	Minimum: NaN
	Maximum: NaN

Description

The date of birth of the individual. Format: YYYY/MM/DD

EventCount (EventCount)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: numeric	Invalid: 0
Decimals: 0	
Range: 2-10	

Description

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

EventNr (EventNr)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: numeric	Invalid: 0
Decimals: 0	
Range: 1-10	

Description

A number increasing from 1 to Eventcount for each event record in order of event occurrence

EventCode (EventCode)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: character	Invalid: 0
Width: 3	

Description

EventCode (EventCode)

File: BD013.CMD2015.v1

A code identifying the type of event that has occurred

EventDate (EventDate)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 344561
Format: character	Minimum: NaN
	Maximum: NaN

Description

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

ObservationDate (ObservationDate)

File: BD013.CMD2015.v1

Overview

Type: Discrete	Valid cases: 104243
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: BD013.CMD2015.v1

Overview

Type: Continuous	Valid cases: 344561
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-25319	Maximum: 29464
	Mean: 14711.7
	Standard deviation: 8493

Description

Unique identifier associated with a residential 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: BD013.CMD2015.v1

Overview

Type: Continuous	Valid cases: 37323
Format: numeric	Invalid: 307238
Decimals: 0	Minimum: 18
Range: 5-145660	Maximum: 152826
	Mean: 76299.4
	Standard deviation: 44074.9

Description

The IndividualID of the mother. Only provided for BTH events.

DeliveryId (DeliveryId)

File: BD013.CMD2015.v1

Overview

Type: Continuous	Valid cases: 37323
Format: numeric	Invalid: 307238
Decimals: 0	Minimum: 1
Range: 1-17629	Maximum: 24553
	Mean: 12308.4
	Standard deviation: 7032.7

Description

The RecNr of the delivery event associated with this birth

