

Nigeria - Cross River HDSS INDEPTH Core Dataset 2017 (Release 2019)

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Overview

Identification

ID NUMBER
INDEPTH.NG021.CMD2017.v1

Version

VERSION DESCRIPTION
NG021.CMD2017.v1: Edited dataset for public distribution

PRODUCTION DATE
2019-06-23

Overview

ABSTRACT

First established in September 2010 as a pilot surveillance site in Idundu Ward of Akpabuyo Local Government Area (LGA), Cross River State, Nigeria; the Cross River HDSS began full operations in November 2012 with two Demographic Surveillance Area (DSA) sites (urban and rural). As at mid-Year 2016, the two sites comprised a combined population of 33,461 in 8,344 households. The rural site covers a number of contiguous communities from Edet Nsa, Eneyo South, Ikot Eyo, and Ikot Nakanda wards of the Akpabuyo LGA; while the urban cohort has some communities from the Ikot Ansa and Ikot Ishie localities of Calabar Municipality. The rural and urban sites are further delineated into 46 and 43 contiguous Enumeration Areas (EAs) respectively. Calabar Municipal, with an area of 142km², is located between latitude 4° 15' and 5° North and longitude 8° 25' and 8° 30' East with average elevation of 98m above sea level. The city majorly comprises of the Qua and Efik ethnic groups. Similarly, Akpabuyo LGA, spanning an area of 1241km², lies between latitude 4° 5' and 5° 40' North and longitude 8° 25' and 8° 32' East. In addition to the Qua and Efik found in Calabar Municipal, Akpabuyo LGA also has the Efut ethnic group. Both sites are situated in the tropical rain forest belt of southern Nigeria, with an annual rainfall in the range of 2500mm to 3000mm and mean annual temperature of 30°C.

The primary purpose for which the Cross River HDSS was established is to help fill the void created by near absence of reliable mechanisms for obtaining community-based data into the national health information and vital registration systems. This has been sustained as the main organizational goal of the Cross River HDSS, which is to generate timely and reliable data on health, demographic and socioeconomic indicators at community level, to inform health policy and planning at LGA, State and National levels. Data collection is done predominantly with mobile technology. Categories of data collected include household-level data on socioeconomic status, individual demographics (age, sex, level of education, work status, education and marital status), pregnancies, births, migrations, deaths and verbal autopsy. We also collect data on immunization, breastfeeding and prevalent childhood illnesses including malaria, diarrhoea and respiratory infections; as well as risk factors and care-seeking related to reproductive health and non-communicable diseases such as blood pressure and anthropometric assessments. All data is stored in the Cross River HDSS database running on MySQL server and accessed by authorized users through the OpenHDS open source web application. Data is exported in CSV and related formats for analysis. Data analysis is done with the R Software for Statistical Computing, EPI Info and STATA.

KIND OF DATA
Event history data

UNITS OF ANALYSIS
Individual

Scope

NOTES

The scope of the Multiple Indicator Cluster Survey includes:

- HOUSE: House ID, house name, number of households, geolocation (latitude & longitude).
- HOUSEHOLD: Household ID, household head, household members, Socioeconomic information, such as, house ownership, no. of sleeping rooms, material used for floor, material used for walls, material used for roof, source of domestic water, cooking fuel, land ownership, types of living assets, ownership and use of insecticide-treated nets, educational status and enrolment, type of toilet facilities, hand washing, etc.
- INDIVIDUAL: Individual ID, name, gender, date of birth, occupation, marital status, educational status, relationship to the head of household, mother ID, father ID.
- RESIDENCY: Residency status update (present, absent, out-migrated, dead).
- BIRTHS: Name and gender of child, date of birth, place of birth, material used to cut umbilical cord, material applied to cut umbilical cord, name and ID of mother, individual ID of father, number of live births including the current, no. of live births from recent pregnancy, whether birth is registered and place of registration.
- DEATHS: Name of deceased, age at death, place of death, cause of death through VA, sex of deceased, individual ID.
- VACCINATION: Immunization information on all children under 5 years, type and date of immunization, ownership of immunization card.
- PREGNANCY OBSERVATION: Number of months of pregnancy, ANC attendance, place of ANC, whether pregnant woman has received tetanus toxoid, estimated date of conception.
- IN-MIGRATION: Type of in-migration, origin of in-migrant, reason for migration, date of migration.
- OUT-MIGRATION: Reason for migration, date of migration, gender, house name, household name, name of out-migrant.

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

Mortality, Fertility, Migration

Coverage

GEOGRAPHIC COVERAGE

The rural site covers a number of contiguous communities from Edet Nsa, Eneyo South, Ikot Eyo, Ikot Nakanda wards of the LGA; while the urban cohort has some communities from the Ikot Ansa and Ikot Ishie localities of the Municipality. The rural and urban sites are further delineated into 46 and 43 contiguous Enumeration Areas (EAs) respectively. Calabar Municipal, with an area of 142km², is located between latitude 4° 15' and 5° North and longitude 8° 25' and 8° 30' East with average elevation of 98m above sea level. The city majorly comprises of the Quas and Efiks ethnic groups. Similarly, Akpabuyo LGA, spanning an area of 1241km², lies between latitude 4° 5' and 5° 40' North and longitude 8° 25' and 8° 32' East. In addition to the Quas and Efiks found in Calabar Municipal, Akpabuyo LGA has the Efuts ethnic group. Both sites are situated in the tropical rain forest belt of southern Nigeria, with an annual rainfall in the range of 2500mm to 3000mm and mean annual temperature of 30°C.

UNIVERSE

The survey covered currently resident household members, all resident women aged 15-49 years, and all resident children aged 0-4 years (under age 5) in both urban and rural DSAs (demographic surveillance areas) of the Cross River HDSS.

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
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OTHER PRODUCER(S)

Name	Affiliation	Role
Friday Odey	University of Calabar	VA Physician
Ekpereonne B. Esu	University of Calabar	Field Epidemiologist
Ideba Mboto	University of Calabar	Cross River HDSS Computing Centre
Anthony Okoro	Cross River HDSS	Cross River HDSS Computing Centre
Ememobong Aquaisua	Cross River HDSS	Field Supervisor
Naomi Eni	University of Calabar	Administration & CLO
Alice Uzuta	Cross River HDSS	Undergraduate Public Health Student Trainee

FUNDING

Name	Abbreviation	Role
University of Calabar	UNICAL	Core personnel and infrastructural funding
International Development Research Centre Canada	IDRC	Setup grant and capacity building
Tertiary Education Trust Fund	TETFund	Nested studies

OTHER ACKNOWLEDGEMENTS

Name	Affiliation	Role
Cross River Ministry of Health		Partnership for smooth operations in CRS
Akpabuyo Local Government Council		Host LGA for Rural Cohort
Calabar Municipal Council		Host LGA for Urban Cohort
Field Data Collectors & Data Centre Staff	Staff of Cross River HDSS	Daily data collection/Field work

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
Iwara I. Arikpo	IIA	Cross River HDSS	DDI Author
Martin M. Meremikwu	MMM	Cross River HDSS	DDI Co-Author

DATE OF METADATA PRODUCTION
2019-06-30

DDI DOCUMENT VERSION
DDI.INDEPTH.NG021.CMD2017.v1 - (June 2019)

DDI DOCUMENT ID
DDI.INDEPTH.NG021.CMD2017.v1

Sampling

Sampling Procedure

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

Deviations from Sample Design

Not Applicable

Response Rate

Near 100%

Weighting

Not applicable

Questionnaires

Overview

Household listing form
Baseline census form
Pregnancy form
Birth Registration form
Inmigration form
Outmigration form
Under-5 Child form
Socioeconomic indicators form
Death form
Verbal autopsy (Neonates, Child & Adult) forms
Marriage form
Social group form
Vaccination form
Visit form

Data Collection

Data Collection Dates

Start	End	Cycle
2013-01-01	2017-12-31	Release coverage

Time Periods

Start	End	Cycle
2013-07-15		Round 1 (Rural)
2014-03-21		Round 2 (Rural)
2014-09-16		Round 3 (Rural)
2015-03-23		Round 4 (Rural)
2013-10-22		Round 1 (Urban)
2014-06-03		Round 2 (Urban)
2014-11-03		Round 3 (Urban)
2015-09-30		Round 4 (Urban)
2016-05-30		Round 5 (Rural & Urban)

Data Collection Mode

Proxy Respondent [proxy]

Data Collection Notes

Field workers visit each household for event during each update round. Data collection is predominantly paperless (using mobile tools).

Questionnaires

Household listing form
 Baseline census form
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 Marriage form
 Social group form
 Vaccination form
 Visit form

Data Collectors

Name	Abbreviation	Affiliation
Cross River HDSS	CRHDSS	University of Calabar

Supervision

The CRHDSS operates a 3-level data collection supervision method. At first level, the field workers are on daily basis being supervised by enumerator supervisors (who have higher college training with over 6 years in data collection procedures. They work with the field workers daily and report to the field supervisor and field manager. The field supervisors provide the second level supervision. The supervisors are graduate students with training in Health Informatics. They visit the field at random to supervise and monitor the progress of field work. They address field challenges and report to the field manager issues requiring urgent attention. The Centre Director, Site leader, Field epidemiologist, and other scientific board members provide the third and highest level of supervision. Occasionally, they visit the field to assess the progress made during the round and also observe the approach and commitment of other junior field staff.

Data Processing

No content available

Data Appraisal

Estimates of Sampling Error

Not Applicable

Other forms of Data Appraisal

CentreId MetricTable QMetric Illegal Legal Total Metric RunDate

NG021 MicroDataCleaned Transitions 0 76668 76668 0. 2019-06-23 11:22

NG021 MicroDataCleaned Ends 36953 2019-06-23 11:22

NG021 MicroDataCleaned SexValues 76668 2019-06-23 11:22

NG021 MicroDataCleaned DoBValues 76668 2019-06-23 11:22

File Description

Variable List

NG021.CMD2017.v1

Content	Event history Micro Data Set
Cases	87753
Variable(s)	14
Structure	Type: Keys: ()
Version	NG021.CMD2017.v1
Producer	Cross River HDSS
Missing Data	

Variables

ID	Name	Label	Type	Format	Question
V1	RecNr	RecNr	discrete	numeric	
V2	CountryId	CountryId	discrete	numeric	
V15	CentrelId	CentrelId	discrete	character	
V3	IndividualId	IndividualId	discrete	numeric	
V4	Sex	Sex	discrete	numeric	
V16	DoB	DoB	discrete	character	
V6	EventCount	EventCount	discrete	numeric	
V7	EventNr	EventNr	discrete	numeric	
V17	EventCode	EventCode	discrete	character	
V18	EventDate	EventDate	discrete	character	
V19	ObservationDate	ObservationDate	discrete	character	
V12	LocationId	LocationId	discrete	numeric	
V13	MotherId	MotherId	discrete	numeric	
V14	DeliveryId	DeliveryId	discrete	numeric	

RecNr (RecNr)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: numeric	Invalid: 0
Decimals: 0	

Description

A sequential number uniquely identifying each record in the data file.

CountryId (CountryId)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: numeric	Invalid: 0
Decimals: 0	

Description

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

CentreId (CentreId)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
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: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: numeric	Invalid: 0
Decimals: 0	

Description

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

Sex (Sex)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: numeric	Invalid: 0
Decimals: 0	

Description

Sex of the individual.

DoB (DoB)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: character	

Description

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

EventCount (EventCount)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: numeric	Invalid: 0
Decimals: 0	

Description

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

EventNr (EventNr)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: numeric	Invalid: 0
Decimals: 0	

Description

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

EventCode (EventCode)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: character	Invalid: 0
Width: 3	

Description

A code identifying the type of event that has occurred.

EventDate (EventDate)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: character	

Description

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

ObservationDate (ObservationDate)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 82580
Format: character	

Description

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

Dates less than 1800/01/01 are missing values.

LocationId (LocationId)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 87753
Format: numeric	Invalid: 0
Decimals: 0	

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 to be the same as the identifier used internally by the contributing centre.

MotherId (MotherId)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 2792
Format: numeric	Invalid: 84961
Decimals: 0	

Description

individualId of the mother. Only provided for BTH events.

DeliveryId (DeliveryId)

File: NG021.CMD2017.v1

Overview

Type: Discrete	Valid cases: 2792
Format: numeric	Invalid: 84961
Decimals: 0	

Description

RecNr of the delivery event associated with this birth.

