

# BURKINA FASO - Nanoro HDSS INDEPTH Core Dataset 2009-2014 (Released 2017)

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Report generated on: June 30, 2017

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

## Overview

### Identification

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**ID NUMBER**

INDEPTH.BF021.CMD2014.v1

### Version

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**VERSION DESCRIPTION**

CMD2014.v1: Edited dataset for public distribution

**PRODUCTION DATE**

2017-05-18

### Overview

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**ABSTRACT**

CLINICAL RESEARCH UNIT OF NANORO, NANORO HDSS PROFILE The Nanoro Health and Demographic Surveillance System (HDSS) was established in 2009 by the Clinical Research Unit of Nanoro - Institut de Recherche en Sciences de la Sant (IRSS-CRUN) with the aim of providing a core framework for clinical trials and also to support the Burkina Faso health authorities in generating epidemiological data that can contribute to the setup and assessment of health interventions. This is achieved by providing an excellent platform for generating epidemiological data fully compliant with international standards. The site activities are currently oriented towards the research (drugs and vaccines) on diseases of public health importance with a specific focus on malaria.

Nanoro is a rural area located in the Centre-West of the country, at approximately 85 Km from the capital city, Ouagadougou. The HDSS area lies between longitudes 192537 and 23146 W and latitudes 1257955 and 1272863 N and covers 24 villages which represents a surface of 594.3 Km<sup>2</sup> (~36% of the Nanoro Health District area). In this area, health care is provided by seven peripheral health posts and one referral hospital. Nanoro HDSS is in the Sudano-Sahelian climate which has two main seasons: a rainy season from June to October (average rainfall of 450-700 mm/year, average temperature >30C) followed by a dry season from November to May (the temperature may vary from 17C in December to a maximum of 43C in April).

The population under surveillance is about 63 395 residents (in 2011) with a majority of illiterate people. They are subsistence farmers, cattle-keepers and housewives. The main ethnic groups are Mossi, Gourounsi and Fulani.

**KIND OF DATA**

Event history data

**UNITS OF ANALYSIS**

Individual

### Scope

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**NOTES**

The scope of the Survey includes:

- HOUSEHOLD: Household characteristics, household listing,maternal mortality

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- WOMEN: Women's characteristics, child mortality

- CHILDREN: Children's characteristics, birth registration

**TOPICS**

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

**KEYWORDS**

Fertility, Mortality, Migration, Population

## Coverage

**GEOGRAPHIC COVERAGE**

Nanoro is a rural area located in the Centre-West of the country, at approximately 85 Km from the capital city, Ouagadougou. The HDSS area lies between longitudes 192537 and 23146 W and latitudes 1257955 and 1272863 N and covers 24 villages which represents a surface of 594.3 Km<sup>2</sup> (~36% of the Nanoro Health District area). In this area, health care is provided by seven peripheral health posts and one referral hospital.

**UNIVERSE**

All individual resident in the HDSS

## Producers and Sponsors

**PRIMARY INVESTIGATOR(S)**

Name	Affiliation
TINTO Halidou	IRSS- Centre Muraz
DERRA Karim	CRUN

**OTHER PRODUCER(S)**

Name	Affiliation	Role
KAZIENGA Adama		Data Manager upto December 2015
HIEN S. Franck	CRUN	Data Manager from April 2016
VALEA Innocent	IRSS- Centre Muraz	Quality Manager
TAHITA Marc	CRUN	Head of Laboratory
ROUAMBA Eli	CRUN	Geographer
HIEN S. Franck	CRUN	Data Manager

**FUNDING**

Name	Abbreviation	Role
Malaria Clinical Trials Alliance	MCTA	
Malaria Vaccine Initiative	MVI	
European and Developing Clinical Trial Partnership	EDCTP	
European Union	FP(7)	
MALARIA IN PREGNANCY CONSORTIUM (GATES FONDATION)	MiP Consortium	
National Institute of Health	NIH	
WHO/TROPICAL DISEASE RESEARCH	WHO/TDR	
BELGIUM CORPORATION (FRAMEWORK AGREEMENT 3 WITH ITM ANTWERP,BELGIUM)	BC	

Name	Abbreviation	Role
PHARMACEUTICAL COMPANIES (GSK, SANOFI AVENTIS, SIGMA TAU, NOVARTIS)		
INDEPTH NETWORK	INDEPTH NETWORK	

**OTHER ACKNOWLEDGEMENTS**

Name	Affiliation	Role
Field Team	CRUN	
Data Clerks	CRUN	
Nanoro Community and their Chiefs		
Nanoro Health District and Administrative Authorities		
Institute of Tropical Medicine, Belgium	ITM - Antwerp	

## Metadata Production

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**METADATA PRODUCED BY**

Name	Abbreviation	Affiliation	Role
iSHARE2 Technical Team	iS2TT	INDEPTH Network	Documentation of the study
INDEPTH Network	int.indepth	INDEPTH Network	agency
Nanoro HDSS	NHDSS	IRSS	agency
Karim Derra	KD	CRUN-IRSS	DDI Author
Franck HIEN	FH	CRUN-IRSS	DDI Author

**DATE OF METADATA PRODUCTION**

2017-05-18

**DDI DOCUMENT VERSION**

CMD2014.v1: 2017-05-18

**DDI DOCUMENT ID**

DDI.INDEPTH.BF021.CMD2014.V1

## Sampling

### Sampling Procedure

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No sampling is done

### Deviations from Sample Design

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Not Applicable

### Response Rate

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No refusals

### Weighting

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Not Applicable

# Questionnaires

## Overview

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The questionnaires are redesigned by the Demographer in collaboration with the other member of the HDSS team. It contains the household questionnaire, the compound questionnaire and all the events forms needed for the data capture concerning the events (marriage, pregnancy, birth, in/out-migration, death, verbal autopsy...) which must be registered during the round. After the validation of the questionnaires, the data management team makes the copy of each questionnaire for the field team. Then, they print the household register by cluster for the field team before starting the next round. The data are collected by FW and controlled by FS.

## Data Collection

### Data Collection Dates

Start	End	Cycle
2009-03-19	2014-12-31	Release Coverage

### Time Periods

Start	End	Cycle
2009-03-19		0
2009-08-31		1
2010-01-01		2
2010-05-01		3
2010-09-01		4
2011-01-01		5
2011-05-01		6
2011-09-20		7
2012-01-01		8
2012-09-14		9
2013-05-27	2013-10-10	11
2016-06-16	2016-06-16	14

### Data Collection Mode

Proxy Respondent [proxy]

#### DATA COLLECTION NOTES

Nanoro HDSS use paper based collection during the initial census and the different rounds. The field team is composed by a Demographer, a Geographer, Field Supervisors (FS), Field workers (FW), and Community key informants. The Demographic Surveillance area is divided into four part belong to each FS with two or three FW in his charge. All the compounds in the HDSS were numbered with a unique code and geocoded. These data were entered into a geographic information system (GIS) before to the start of surveillance.

During data capture, if some inconsistency checks is found due to the system that is used for data entry who is HRS2, the questionnaire is send back to the FS. The FS will correct the questionnaire and then send back to the data entry team.

### Data Collectors

Name	Abbreviation	Affiliation
Coordinators		CRUN
Field Supervisors		CRUN
Field Workers		CRUN
Community Key Informants		CRUN

#### SUPERVISION

The FS visit is done in order to ensure the quality of data collected by the FW. For that, they select a sample of household and make his own update and then compare to the update of these household by the FW. During a visit, the FS listens and observes as the FW conducts the interviews without interrupting. The FS uses a checklist to write observations and comments for feedback and further training.

After data collection and before data entry, the FS checks questionnaires for completeness, consistency and accuracy. If a questionnaire failed to meet the quality standard requirements, the FS send back the questionnaires to the FW for correction on the field. After these corrections the FS send the household register to the field coordinator who make a checks on the questionnaire before sending to the data entry team.

## **Data Processing**

### Data Editing

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The forms are controlled by supervisor before moving for data entry



## Data Appraisal

### Other forms of Data Appraisal

CentreId MetricTable QMetric Illegal Legal Total Metric RunDate  
BF021 MicroDataCleaned Starts 95866 2017-05-18 13:44  
BF021 MicroDataCleaned Transitions 0 230712 230712 0 2017-05-18 13:44  
BF021 MicroDataCleaned Ends 95866 2017-05-18 13:44  
BF021 MicroDataCleaned SexValues 230712 2017-05-18 13:44  
BF021 MicroDataCleaned DoBValues 230712 2017-05-18 13:45

# File Description

# Variable List

**BF021.CMD2014.v1**

Content	Event History Data
Cases	261518
Variable(s)	14
Structure	Type: Keys: ()
Version	CMD2014.V1
Producer	Nanoro HDSS
Missing Data	

**Variables**

ID	Name	Label	Type	Format	Question
V1	RecNr	RecNr	contin	numeric	
V2	CountryId	CountryId	discrete	numeric	
V3	CentreId	CentreId	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: BF021.CMD2014.v1

**Overview**

Type: Continuous	Valid cases: 261518
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-237870	Maximum: 261518
	Mean: 130759.5
	Standard deviation: 75493.9

**Description**

A sequential number uniquely identifying each record in the data file

**CountryId (CountryId)**

File: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
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: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
Format: character	Invalid: 0
Width: 5	

**Description**

An identifier issued by INDEPTH to each member centre of the format CCNNS, Where CCNNS 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: BF021.CMD2014.v1

**Overview**

Type: Continuous	Valid cases: 261518
Format: numeric	Invalid: 0
Decimals: 0	Minimum: 1
Range: 1-94442	Maximum: 95987
	Mean: 47412.7
	Standard deviation: 27355.1

**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: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
Format: numeric	Invalid: 0
Decimals: 0	
Range: 0-2	

**Description**

Sex of the individual  
 1=Male  
 2=Female

**DoB (DoB)**

File: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
Format: character	Minimum: NaN
	Maximum: NaN

**Description**

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

**EventCount (EventCount)**

File: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
Format: numeric	Invalid: 0
Decimals: 0	
Range: 2-12	

**Description**

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

**EventNr (EventNr)**

File: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
Format: numeric	Invalid: 0
Decimals: 0	
Range: 1-12	

**Description**

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

**EventCode (EventCode)**

File: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
Format: character	Invalid: 0
Width: 3	

**EventCode (EventCode)**

File: BF021.CMD2014.v1

**Description**

A code which identifies the type of event that has occurred

**EventDate (EventDate)**

File: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261518
Format: character	Minimum: NaN
	Maximum: NaN

**Description**

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

**ObservationDate (ObservationDate)**

File: BF021.CMD2014.v1

**Overview**

Type: Discrete	Valid cases: 261471
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: BF021.CMD2014.v1

**Overview**

Type: Continuous	Valid cases: 261482
Format: numeric	Invalid: 36
Decimals: 0	Minimum: 1
Range: 1-5474	Maximum: 5733
	Mean: 2763.8
	Standard deviation: 1571.3

**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: BF021.CMD2014.v1

**Overview**

Type: Continuous	Valid cases: 22583
Format: numeric	Invalid: 238935
Decimals: 0	Minimum: 3
Range: 3-94441	Maximum: 95975
	Mean: 47915
	Standard deviation: 27282.5

**Description**

The individual of the mother, only provided for BTH events



## DeliveryId (DeliveryId)

File: BF021.CMD2014.v1

### Overview

Type: Continuous	Valid cases: 22583
Format: numeric	Invalid: 238935
Decimals: 0	Minimum: 1
Range: 1-12246	Maximum: 12751
	Mean: 6135.3
	Standard deviation: 3615

### Description

The RecNr of the delivery event associated with this birth

