

South Africa - Participation in Africa Centre's HIV surveillance between 2003 and 2012

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Overview

Identification

ID NUMBER

AC.HIV.Participation.2003.2012

Version

VERSION DESCRIPTION

1.1.0

PRODUCTION DATE

2015-02-23

Overview

ABSTRACT

The Africa Centre for Health and Population Studies has hosted a socio-demographic household surveillance in a rural sub-district of uMkhanyakude in northern KwaZulu-Natal (South Africa) since 2000. The surveillance area is 438 km in size and includes a population of approximately 90 000 isiZulu-speaking people. The study area is characterized by high adult HIV prevalence (24% in adults aged 15 years and older in 2011) and high levels of poverty and unemployment (in 2010, 67% of adults over the age of 18 were unemployed). At any point in time, about one-third of the population under demographic surveillance does not physically reside in the surveillance area, although they are considered to be household members (membership is defined by household head). Demographic events and socio-economic data are collected on a regular basis from a key household informant.

Starting in 2003, a nested HIV surveillance was conducted among resident adults, who are asked to respond to some health and sexual behaviour questions and provide a dried blood spot sample which is tested for HIV. For each survey round, teams of two trained fieldworkers visit each eligible individual in his or her households. If a person is absent, the field workers make up to four repeat visits to the same household. Except for the first HIV surveillance round, which took place over 18 months starting in 2003, all subsequent rounds were done on an annual basis.

All adults residing in the area and who were able to provide informed written consent were eligible to participate in HIV surveillance. From 2003 to 2006, eligibility was restricted to women aged 15-49 years and men aged 15-54. From 2007 onwards, all persons aged 15 years and older were eligible.

Every year, an additional sample of 12.5% of non-residents was also eligible for HIV surveillance.

The population of eligible resident participants changes substantially on a yearly basis. Thus from 2004 onwards, at the beginning of each calendar year, a list of all resident persons eligible to participate in HIV surveillance was generated from information available in the demographic database. During fieldwork operations, some persons became ineligible "a posteriori", because the information of death, out-migration or sickness was not available at the time the eligibility list was generated or because their situation changed.

Description of annual HIV surveillance datasets produced by Africa Centre is available on [.](#)

This dataset has been built using the annual datasets of the first 9 survey rounds of HIV surveillance, i.e. rounds conducted between 2003 and 2012.

Only data of resident members have been used, i.e. in each annual dataset, data concerning non-resident members (at that time) was excluded.

For each annual dataset, premature completion was recoded to identify individuals who appears "a posteriori" being ineligible for that specific survey round (due to out-migration, death or not being able to provide a written informed consent) and individuals who were eligible but not contacted.

This dataset contains 60,954 rows, each row corresponding to a resident member who have been eligible at least once for HIV surveillance between 2003 and 2012.

KIND OF DATA

Biomeasures data

UNITS OF ANALYSIS

Individuals

Scope

NOTES

The participation of individuals eligible for HIV sero-surveillance in the surveillance over the period 2003-2012 as well as their HIV status in the case of consent

TOPICS

Topic	Vocabulary	URI
HIV Seroprevalence [N06.850.520.450.500.950.375]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Selection Bias [N06.850.490.500.500]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Population Surveillance [N06.850.520.308.250.700]	MeSH	http://www.ncbi.nlm.nih.gov/mesh
Disease Transmission, Infectious [N06.850.310]	MeSH	http://www.ncbi.nlm.nih.gov/mesh

Coverage

GEOGRAPHIC COVERAGE

Demographic and HIV surveillance area situated in the south-east portion of the uMkhanyakude district of KwaZulu-Natal province near the town of Mtubatuba. It is bounded on the west by the Umfolozi-Hluhluwe nature reserve, on the South by the Umfolozi river, on the East by the N2 highway (except from portions where the Kwamsane township straddles the highway) and in the North by the Inyalazi river for portions of the boundary.

The area is 438 square kilometers.

UNIVERSE

Resident Adults 15yrs and older

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Dr Kobus Herbst	Africa Centre
Dr Till Barnighausen	Africa Centre
Mr Tinofa Mutevedzi	Africa Centre
Mr Dickman Gareta	Africa Centre

OTHER PRODUCER(S)

Name	Affiliation	Role
Joseph Larmarange	Africa Centre	scientist and statistician
Tinofa Mutevedzi	Africa Centre	data collection

FUNDING

Name	Abbreviation	Role
Wellcome Trust	WT	funder

OTHER ACKNOWLEDGEMENTS

Name	Affiliation	Role
Kobus Herbst	Africa Centre	Data Manager
Dickman Gareta	Africa Centre	Data Manager

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
Joseph Larmarange	JL	Africa Centre	Data documentation
Kobus Herbst	KH	Africa Centre	Documentation Review

DATE OF METADATA PRODUCTION

2015-02-23

DDI DOCUMENT VERSION

1.2.0

DDI DOCUMENT ID

DDI.AC.HIV.Participation.2003.2012

Sampling

Sampling Procedure

Exhaustive

Response Rate

Contact rate (among eligible participants) per survey round:

2003/04: 79.5%

2005: 95.4%

2006: 96.8%

2007: 93.1%

2008: 95.8%

2009: 94.3%

2010: 87.3%

2011: 85.2%

2012: 77.3%

Consent rate (proportion consenting to provide a blood sample for HIV surveillance among contacted participants) per survey round:

2003/04: 57.8%

2005: 40.6%

2006: 37.6%

2007: 34.7%

2008: 32.8%

2009: 32.1%

2010: 40.1%

2011: 40.0%

2012: 33.5%

Questionnaires

No content available

Data Collection

Data Collection Dates

Start	End	Cycle
2002-11	2005-02	Round 2003/2004
2005-01	2006-02	Round 2005
2006-01	2007-02	Round 2006
2007-01	2007-12	Round 2007
2008-01	2008-12	Round 2008
2009-01	2009-12	Round 2009
2010-01	2010-12	Round 2010
2011-01	2011-12	Round 2011
2012-01	2012-12	Round 2012

Time Periods

Start	End	Cycle
2002-11		Data Collection

Data Collection Mode

Face-to-face [f2f]

DATA COLLECTION NOTES

For data collected as part of the HIV sero-survey, teams of two trained fieldworkers visit each eligible individual in his or her household on an annual basis. If a subject is absent, the field workers make up to four repeat visits to the same household. If a subject no longer lives in the household, the field worker hands the case to a specially trained tracking team that attempts to find the individual in his or her new residence which may be as far as Johannesburg or Durban. After written informed consent, field workers collect blood by finger prick and prepare dried blood spots for HIV testing according to the Joint United Nations Programme on HIV/AIDS (UNAIDS) and World Health Organization (WHO) Guidelines for Using HIV Testing Technologies in Surveillance. HIV status is determined by antibody testing with a broad-based HIV-1/HIV-2 ELISA (Vironostika HIV-1 Microelisa System Biomerieux, Durham, NC, USA) followed by a confirmatory ELISA (Wellcozyme HIV 12 GACELISA; Murex Diagnostics Benelux B.V., Breukelen, The Netherlands). HIV test results can be obtained confidentially in a number of counselling centres which have been set up for that purpose in the survey area.

Data Processing

No content available

Data Appraisal

No content available

File Description

Variable List

Participation 2003-2012

Content	This dataset has been built using the annual datasets of the first 9 survey rounds of HIV surveillance, i.e. rounds conducted between 2003 and 2012. Only data of resident members have been used, i.e. in each annual dataset, data concerning non-resident members (at that time) was excluded. For each annual dataset, premature completion was recoded to identify individuals who appears "a posteriori" being ineligible for that specific survey round (due to out-migration, death or not being able to provide a written informed consent) and individuals who were eligible but not contacted. This dataset contains 60,954 rows, each row corresponding to a resident member who have been eligible at least once for HIV surveillance between 2003 and 2012.
Cases	60954
Variable(s)	12
Structure	Type: relational Keys: AnonymisedID(Anonymised Individual Identifier)
Version	1.1.0
Producer	
Missing Data	

Variables

ID	Name	Label	Type	Format	Question
V37	AnonymisedID	Anonymised Individual Identifier	discrete	numeric	
V38	Sex	Sex	discrete	numeric	
V39	YearOfBirth	Year of Birth	discrete	numeric	
V40	R2004	Participation in round 2003/2004	discrete	numeric	
V41	R2005	Participation in round 2005	discrete	numeric	
V42	R2006	Participation in round 2006	discrete	numeric	
V43	R2007	Participation in round 2007	discrete	numeric	
V44	R2008	Participation in round 2008	discrete	numeric	
V45	R2009	Participation in round 2009	discrete	numeric	
V46	R2010	Participation in round 2010	discrete	numeric	
V47	R2011	Participation in round 2011	discrete	numeric	
V48	R2012	Participation in round 2012	discrete	numeric	

Anonymised Individual Identifier (AnonymisedID)

File: Participitation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-60954

Valid cases: 60954
 Invalid: 0
 Minimum: 1
 Maximum: 60954

Sex (Sex)

File: Participitation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-2

Valid cases: 60954
 Invalid: 0

Year of Birth (YearOfBirth)

File: Participitation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1798-2003

Valid cases: 60954
 Invalid: 0
 Minimum: 1920
 Maximum: 1996
 Mean: 1976
 Standard deviation: 16.7

Participation in round 2003/2004 (R2004)

File: Participitation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2005 (R2005)

File: Participitation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2006 (R2006)

File: Participitation 2003-2012

Overview

Participation in round 2006 (R2006)

File: Participation 2003-2012

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2007 (R2007)

File: Participation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2008 (R2008)

File: Participation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2009 (R2009)

File: Participation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2010 (R2010)

File: Participation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2011 (R2011)

File: Participation 2003-2012

Overview

Type: Discrete
 Format: numeric
 Decimals: 0
 Range: 1-6

Valid cases: 60954
 Invalid: 0

Participation in round 2012 (R2012)

File: Participitation 2003-2012

Overview

Type: Discrete
Format: numeric
Decimals: 0
Range: 1-6

Valid cases: 60954
Invalid: 0

