

South Africa - HIV After 40 2010-2019

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Report generated on: June 9, 2024

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Identification

SURVEY ID NUMBER

zaf-ana-wits-hiva40-2010-2019-v1

TITLE

HIV After 40 2010-2019

COUNTRY

Name
South Africa

STUDY TYPE

Demographic and Health Surveillance System

ABSTRACT

The HIVafter40 data file is the basis for the research publication:

Houle B., Kabudula C.W., Tilstra A.M., Mojola S.A., Schatz E., Clark S.J., Angotti N., Gómez-Olivé F.X., and Menken J. 2022. Twin epidemics: the effects of HIV and systolic blood pressure on mortality risk in rural South Africa, 2010-2019. BMC Public Health 22 (1):387. DOI: 10.1186/s12889-022-12791-z. PMID: 35209881; PMCID: PMC8866551.

The HIVafter40_Twin_Epidemics_HIV_NCD data was created as part of the HIVafter40 project, the successor to the Ha Nakekela Project, both nested within the Agincourt Health and socio-Demographic System (AHDSS) located in Northeastern South Africa. The projects use mixed methods to measure prevalence and incidence of HIV and NCDs, investigate health and sexual behaviours, and study how people have coped with the abrupt introduction of a new and deadly health threat and efforts to prevent and ameliorate it. The overall goal of HIVafter40 is to examine life course and contextual variation in HIV risk and protective behaviors and mortality in a rural sub-Saharan African population.

The AHDSS has, since 1992, collected an annual census from households in a defined geographic area of Mpumalanga Province. The 2009 census served as the sampling frame for the 2011 Ha Nakekela Project. The AHDSS provides rapid measures of vital statistics and is the basis of a wide range of more detailed studies. As of June 2018, the study site consisted of 31 villages with a population of 116,549 people, living in 22,721 households. Further information is available at <<https://www.agincourt.co.za/>> and specifically for census data collection, at <https://www.agincourt.co.za/?page_id=1805>

The Ha Nakekela project undertook two data collection efforts:

1. The Ha Nakekela Survey

This survey is based on an age/sex stratified sample of respondents in the 2009 AHDSS Census. Carried out in 2010-11, the cross-sectional survey included 5,080 respondents, of whom 2,080 are aged 40 - 93. It has 3 parts:

Behavioral Risk Assessment (based on BERIS Sexual Behavior Questionnaire)
Chronic Disease Risk Factor Surveillance (based on STEPS Health Risk Questionnaire)
HIV and Non-Communicable Disease (NCD) biometric data

2. The Izindaba za Badala (Matters that Concern Older People)

This Study (IZB) is nested within the Ha Nakekela Survey. It consisted of three related interview studies carried out in 2013: IZB Life History Interviews: 60 life history interviews with people with and without HIV aged 40-84 who participated in the Ha Nakekela Survey

IZB Community Focus Group Interviews: 9 community focus group interviews with a total of 77 respondents

IZB Key informant Interviews: 9 health workers interviews in 3 local health clinics

The HIVafter40 project added two follow-up data files:

a. AHDSS_Ha_Nakekela_HIV_Hyp_Sample.dta

This data file contains information on the Ha Nakekela sample in which individuals were linked to their location/outcome reports in successive AHDSS censuses through 2020. This dataset permits examination of mortality in the nine years subsequent to participation in the Ha Nakekela Survey. HIVafter40_Twin_Epidemics_HIV_NCD.dta is a subset of this dataset.

b. Izindaba za Badala Round 2

IZB Life History Interviews: 25 in-depth follow-up interviews in 2018

IZB Community Focus Group Interviews: 10 community focus group interviews with a total of 84 participants in 2018

IZB Key informant Interviews (cancelled due to the COVID-19 epidemic): 10 community focus group interviews with a total of 84 participants planned for 2020.

The website <https://hivafter40.princeton.edu/> is regularly updated and contains the most complete information on the projects.

KIND OF DATA

Survey data

UNIT OF ANALYSIS

Individuals

Version

VERSION DESCRIPTION

v1. Edited, anonymised data for public distribution

VERSION DATE

2022

Scope

NOTES

The projects measured prevalence and incidence of HIV and NCDs, and investigated health and sexual behaviours, as well as how people have coped with the abrupt introduction of a new and deadly health threat and efforts to prevent and ameliorate it. The Ha Nakekela Survey collected Behavioral Risk Assessment data (based on BERIS Sexual Behavior Questionnaire), Chronic Disease Risk Factors (based on STEPS Health Risk Questionnaire), and biometric data on HIV and Non-Communicable Diseases (NCDs)

KEYWORDS

Keyword
HIV
Non-Communicable Diseases
Behavioral Risk Assessment
Chronic Disease Risk Factors

Coverage

GEOGRAPHIC COVERAGE

The study was conducted in the Agincourt Health and socio-Demographic System (AHDSS) site located in Mpumalanga Province, Northeastern South Africa.

GEOGRAPHIC UNIT

The data is at the level of Village.

Producers and sponsors

PRIMARY INVESTIGATORS

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Nicole Angotti	American University
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Jill Williams	University of Colorado Boulder
Vusi Dlamini	University of Maryland, College Park
Erin Ice	University of Michigan

FUNDING AGENCY/SPONSOR

Name	Abbreviation	Role
National Institute on Aging	NIA	Funding Agency
Wellcome Trust		Funding Agency
University of Colorado Boulder Innovative Seed Grant		Funding Agency
William and Flora Hewlett Foundation	WFHF	Funding Agency
SPARC Fellowship, Wits		Funding Agency

Data Collection

DATES OF DATA COLLECTION

Start	End
2010	2019

DATA COLLECTION MODE

Face-to-face

SUPERVISION

Oversight and Ethics Approval

HIVafter40/Ha Nakekela received IRB approvals from the University of Colorado Boulder, the University of Michigan, Princeton University, the University of the Witwatersrand Human Research Ethics Committee, and the Department of Health, Mpumalanga Provincial Government, South Africa.

DATA COLLECTION NOTES

The projects used mixed methods which are discussed in the supporting documentation. Data was collected face-to-face with questionnaires and in focus groups.

Questionnaires

QUESTIONNAIRES

Data was collected using an Interview Schedule for individuals, one for Key Informants, and one for Focus Groups. The BERIS Sexual Behavior Questionnaire and the World Health Organisation's STEPS Health Risk Questionnaire informed the data collection.

Data collection instruments are provided with the data files and can also be downloaded from <https://hivafter40.princeton.edu/study-instruments>

Access policy

CONTACTS

Name	Affiliation	Email	URL
DataFirst Support	University of Cape Town	support@data1st.org	www.support.data1st.org

ACCESS CONDITIONS

Public access data for use under a Creative Commons CC-BY (Attribution-only) License

CITATION REQUIREMENTS

Houle, B. et al. HIV After 40 2010-2019 [dataset]. Version 1. Agincourt: HIVafter40 and Ha Nakekela (We Care) Projects [producers], 2022. Cape Town: DataFirst [distributor], 2022. DOI: <https://doi.org/10.25828/vr0p-ch08>

ACCESS AUTHORITY

Name	Affiliation	Email	URL
DataFirst	University of Cape Town	support@data1st.org	support.data1st.org

Metadata production

PRODUCERS

Name	Affiliation	Role
DataFirst	University of Cape Town	Metadata producer

DATE OF METADATA PRODUCTION

2022-10-04

DDI DOCUMENT VERSION

Version 2

Data Description

Data file	Cases	Variables
HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v	32491	24

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Cases: 32491

Variables: 24

Variables

ID	Name	Label	Question
V25	Outcome		
V26	test_outcomeN	0-4 Neg/Pos/not found/refusal test/	
V27	dead	Death recorded in AHDSS	
V28	male		
V29	edu	Edu Low/Primary/Secondary+	
V30	south_african		
V31	working	Currently working	
V32	mar3	Single/Married_Cohabiting/Divorced_Widowed	
V33	qses3	Household wealth quintile 1-2/3/4-5	
V34	systolic2	Mean systolic mmHg	
V35	histbpmed	History of HTN medication	
V36	diastolic2	Mean diastolic mmHg	
V37	hyp_simple	Normotensive/Hypertensive	
V38	sbp_cat2	Systolic cutoffs 120/140/160	
V39	hiv_positive		
V40	vl_simple_400	Viral load: Neg/Suppressed<=400/Unsuppressed>400	
V41	vl_simple_2013	2013 Viral load: Neg/Suppressed<=1000/Unsuppressed>1000	
V42	t0	analysis time when record begins	
V43	m		
V44	V20		
V45	EndYear		
V46	agecat		
V47	wt_new		
V48	agegroups	Age groups	

Total: 24

OUTCOME:**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 23 Range: 1 - 5 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	participant	23035	70.9%
2	not found	7553	23.2%
3	dead before survey date	0	0%
4	refused	1903	5.9%
5	ineligible	0	0%

TEST_OUTCOMEN: 0-4 Neg/Pos/not found/refusal test/**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 14 Range: 0 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	negative	16270	50.1%
1	positive	5278	16.2%
2	refused test	1487	4.6%
3	refused survey	1903	5.9%
4	not found	7553	23.2%

DEAD: Death recorded in AHDSS**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 9 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0		29122	89.6%
1		3369	10.4%

MALE:

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 9 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	female	17666	54.4%
1	male	14825	45.6%

EDU: Edu Low/Primary/Secondary+

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 37 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	None/very low (<= 3 years)	13166	40.5%
2	Primary(4-8 years)	8386	25.8%
3	Secondary school or higher (>8 years)	10939	33.7%

SOUTH_AFRICAN:

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 13 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	other	9448	29.1%
1	south african	23043	70.9%

WORKING: Currently working

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 30713 Invalid: 1778
 Type: Discrete Decimal: 0 Width: 11 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	not working	19121	58.9%
1	working	11592	35.7%
Sysmiss		1778	

MAR3: Single/Married_Cohabiting/Divorced_Widowed

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32479 Invalid: 12
 Type: Discrete Decimal: 0 Width: 18 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	Single	4560	14%
2	Married/cohabiting	17985	55.4%
3	Widowed/divorced	9934	30.6%
Sysmiss		12	

QSES3: Household wealth quintile 1-2/3/4-5**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 32375 Invalid: 116
 Type: Discrete Decimal: 0 Width: 9 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	quint 1/2	10690	32.9%
2	quint 3	6587	20.3%
3	quint 4/5	15098	46.5%
Sysmiss		116	

SYSTOLIC2: Mean systolic mmHg**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 22716 Invalid: 9775 Minimum: 79 Maximum: 255 Mean: 134.279 Standard deviation: 22.142
 Type: Continuous Decimal: 0 Width: 9 Range: 79 - 255 Format: Numeric

HISTBPMED: History of HTN medication**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 23035 Invalid: 9456
 Type: Discrete Decimal: 0 Width: 9 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0		18693	57.5%
1		4342	13.4%
Sysmiss		9456	

■ DIASTOLIC2: Mean diastolic mmHg**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 22759 Invalid: 9732 Minimum: 44 Maximum: 170.5 Mean: 88.624 Standard deviation: 15.562
 Type: Continuous Decimal: 0 Width: 9 Range: 44 - 170.5 Format: Numeric

■ HYP_SIMPLE: Normotensive/Hypertensive**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 17750 Invalid: 14741
 Type: Discrete Decimal: 0 Width: 33 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	Normotensive	12091	37.2%
1	Hypertensive: reported or treated	5659	17.4%
Sysmiss		14741	

■ SBP_CAT2: Systolic cutoffs 120/140/160**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 22491 Invalid: 10000
 Type: Discrete Decimal: 0 Width: 9 Range: 1 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	<120	6164	19%
2	120-139	8506	26.2%
3	140-159	5066	15.6%
4	160+	2755	8.5%
Sysmiss		10000	

HIV_POSITIVE:**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 21548 Invalid: 10943

Type: Discrete Decimal: 0 Width: 9 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	Negative	16270	50.1%
1	Positive	5278	16.2%
Sysmiss		10943	

VL_SIMPLE_400: Viral load: Neg/Suppressed<=400/Unsuppressed>400**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 21430 Invalid: 11061

Type: Discrete Decimal: 0 Width: 16 Range: 0 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0	HIV Negative	16270	50.1%
1	Suppressed<=400	2200	6.8%
2	Unsuppressed>400	2960	9.1%
Sysmiss		11061	

VL_SIMPLE_2013: 2013 Viral load: Neg/Suppressed<=1000/Unsuppressed>1000**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 21430 Invalid: 11061

Type: Discrete Decimal: 0 Width: 17 Range: 0 - 2 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
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0	HIV Negative	16270	50.1%
1	Suppressed<=1000	2642	8.1%
2	Unsuppressed>1000	2518	7.7%
Sysmiss		11061	

T0: analysis time when record begins

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0 Minimum: 31.239 Maximum: 103.138 Mean: 53.486 Standard deviation: 14.067
 Type: Continuous Decimal: 0 Width: 10 Range: 31.2388774811773 - 103.137577002053 Format: Numeric

M:

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 9 Range: 1 - 10 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1		3104	9.6%
2		3225	9.9%
3		3319	10.2%
4		3362	10.3%
5		3425	10.5%
6		3479	10.7%
7		3485	10.7%
8		3507	10.8%
9		3491	10.7%
10		2094	6.4%

V20:

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 9 Range: 1 - 10 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1		20	0.1%
2		174	0.5%
3		308	0.9%
4		410	1.3%
5		535	1.6%
6		593	1.8%
7		735	2.3%
8		1103	3.4%
9		11243	34.6%
10		17370	53.5%

ENDYEAR:

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0

Type: Discrete Decimal: 0 Width: 9 Range: 0 - 1 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
0		31859	98.1%
1		632	1.9%

AGECAT:

Data file: HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v

Overview

Valid: 32491 Invalid: 0

Type: Discrete Decimal: 0 Width: 9 Range: 2 - 4 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
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2		19864	61.1%
3		8149	25.1%
4		4478	13.8%

WT_NEW:**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 31156 Invalid: 1335 Minimum: 0.00152 Maximum: 110.597 Mean: 5.06 Standard deviation: 5.794
 Type: Continuous Decimal: 0 Width: 9 Range: 0.00152363744564354 - 110.597366333008 Format: Numeric

AGEGROUPS: Age groups**Data file:** HIVafter40_Twin_Epidemics_HIV_Hyp_Stata12v**Overview**

Valid: 32491 Invalid: 0
 Type: Discrete Decimal: 0 Width: 9 Range: 1 - 3 Format: Numeric

Questions and instructions

CATEGORIES

Value	Category	Cases	
1	40-55	17399	53.6%
2	56-65	6030	18.6%
3	66+	9062	27.9%

Download related resources

Questionnaires

hiva40-2010-2019-instruments.zip

Title	hiva40-2010-2019-instruments.zip
Author(s)	Houle, B. et al
Date	2022
Country	South Africa
Language	English
Description	This is a zipped folder containing the data collection instruments for the study
Filename	hiva40-2010-2019-instruments.zip

Other materials

Codebook_AHDSS_HaNakekela_HIV_Hyp

Title	Codebook_AHDSS_HaNakekela_HIV_Hyp
Author(s)	Brian Houle and Jane Menken
Date	2022-07-08
Country	South Africa
Language	English
Contributor(s)	This is the codebook for the Ha Nakekela (We Care) Project data
Filename	ahdss-hanakekela-hiv-hyp-codebook.pdf

Codebook_HIVafter40_Twin_Epidemics_HIV_Hyp

Title	Codebook_HIVafter40_Twin_Epidemics_HIV_Hyp
Author(s)	Brian Houle and Jane Menken 8 July 2022
Date	2022-07-08
Country	South Africa
Language	English
Contributor(s)	This is the codebook for the HIVafter40 Project
Filename	hivafter40-twin-epidemics-hiv-hyp-codebook.pdf

README: File and Project Descriptions HIVafter40 and Ha Nakekela (We Care)

Title	README: File and Project Descriptions HIVafter40 and Ha Nakekela (We Care)
Author(s)	Houle, B. et al
Date	2022
Country	South Africa
Language	English
Publisher(s)	Australian National University
Description	This document provides information on the study and the data files that are shared with the research publication
Filename	hiva40-2010-2019-project.pdf

hiva40-2010-2019-dofiles.zip

Title	hiva40-2010-2019-dofiles.zip
Author(s)	Houle, B. et al
Date	2022
Country	South Africa
Language	English
Description	This is a zipped folder containing the syntax files used to create the data.
Filename	hiva40-2010-2019-dofiles.zip
