

South Africa - SAPRIN COVID-19 surveillance intensive cohort April- December 2020: sub-dataset for Protective Behaviours and Secondary Harms paper

SAPRIN

Report generated on: August 13, 2021

Visit our data catalog at: <https://saprindata.samrc.ac.za/index.php>

Overview

Identification

ID NUMBER
SAPRIN.SC19SICAD2020V1

Version

VERSION DESCRIPTION
v1: Dataset for public distribution

PRODUCTION DATE
2021-08-13

Overview

ABSTRACT

This study aimed to conduct active COVID-19 surveillance and estimate the health and non-health impacts of the COVID-19 epidemic in rural South Africa. In particular, the study focused on how households responded to the Covid-19 epidemic in terms of COVID-19-related knowledge and protective behaviours, health and economic impacts of NPIs, and mental health. To this end, data was collected during 2020 as part of SAPRIN's wider work to monitor and help respond to the COVID-19 epidemic. Each SAPRIN node sampled a small proportion of households in their surveillance areas (between 750 and 2250) and invited them to participate in intensive study, answering questionnaires every 2-3 weeks between April and December 2020. At each interview, a household representative responded to questions for themselves, for the household as a whole and for each household member. The data was then linked to key sociodemographic features of the responding households. This dataset contains only those variables relevant to the first academic paper published on this cohort (<https://doi.org/10.2196/26073>).

KIND OF DATA
Event history data

UNITS OF ANALYSIS
Interviews nested within responding households

Scope

NOTES

The questionnaire included both household-level and individual-specific questions, the latter of which could be directly addressed by other household members if they were present. The primary respondent acted as a proxy in all other cases. COVID-19 symptom screening was included in the questionnaire, and those who satisfied the Department of Health's COVID-19 symptom criteria were referred for additional investigation, testing, and management.

TOPICS

Topic	Vocabulary	URI
South Africa; Self report; Prospective studies; Longitudinal studies; COVID-19; Mental health; Social welfare; Masks; Pensions		

KEYWORDS
COVID-19, Surveillance, South Africa, Screening, Health and Demographic Surveillance System

Coverage

GEOGRAPHIC COVERAGE

The data are collected in three SAPRIN nodal surveillance areas in South Africa. The Agincourt site covers approximately 420 km² in Bushbuckridge district, Mpumalanga province, close to the Mozambique border. The DIMAMO site covers approximately 200 km² in Capricorn district, Limpopo Province, approximately 40 km from urban Polokwane. The AHRI site covers approximately 438 km² in the southeast of Umkhanyakude district, KwaZulu-Natal province, close to Mtubatuba town. The dataset contains within-node units separating each area into 20-40 sub-units.

UNIVERSE

Eligibility covered all the adult (over age 18) resident population within each of the three SAPRIN nodal sites. Residence was defined as intention to sleep the majority of time at the dwelling in these areas over a four-month period

Producers and Sponsors

PRIMARY INVESTIGATOR(S)

Name	Affiliation
Guy Harling	Africa Health Research Institute, KwaZulu-Natal, South Africa Institute for Global Health, University College London, London, United Kingdom Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa Department of Epidemiology, Harvard T.H. Chan School of Public Health, Harvard University, Boston, MA, United States Center for Population and Development Studies, Harvard T.H. Chan School of Public Health, Harvard University, Boston, MA, United States School of Nursing and Public Health, University of KwaZulu-Natal, Durban, South Africa
Francesc Xavier Gómez-Olivé	Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa International Network for the Demographic Evaluation of Populations and Their Health Network, Accra, Ghana
Joseph Tlouyamma	Dikgale-Mamabolo-Mothiba Population Health Research Centre, School of Health Care Sciences, Faculty of Health Sciences, University of Limpopo, Mankweng, South Africa Department of Computer Science, School of Mathematical and Computer Sciences, Faculty of Science and Agriculture, University of Limpopo, Mankweng, South Africa Dikgale-Mamabolo-Mothiba Population Health Research Centre, School of Health Care Sciences, Faculty of Health Sciences, University of Limpopo, Mankweng, South Africa Department of Computer Science, School of Mathematical and Computer Sciences, Faculty of Science and Agriculture, University of Limpopo, Mankweng, South Africa
Tinofa Mutevedz	Department of Science and Innovation-Medical Research Council South African Population Research Infrastructure Network, Johannesburg, South Africa
Chodziwadziwa Whiteson Kabudula	Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa
Ruth Mahlako	Dikgale-Mamabolo-Mothiba Population Health Research Centre, School of Health Care Sciences, Faculty of Health Sciences, University of Limpopo, Mankweng, South Africa
Urisha Singh	Africa Health Research Institute, KwaZulu-Natal, South Africa
Daniel Ohene-Kwofie	Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa
Rose Buckland	Institute for Global Health, University College London, London, United Kingdom
Pedzisai Ndagurwa	Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa
Dickman Gareta	Africa Health Research Institute, KwaZulu-Natal, South Africa

Resign Gunda	Africa Health Research Institute, KwaZulu-Natal, South Africa School of Nursing and Public Health, University of KwaZulu-Natal, Durban, South Africa
Thobeka Mngomezulu	Africa Health Research Institute, KwaZulu-Natal, South Africa School of Nursing and Public Health, University of KwaZulu-Natal, Durban, South AfricaAfrica Health Research Institute, KwaZulu-Natal, South Africa
Siyabonga Nxumalo	Africa Health Research Institute, KwaZulu-Natal, South Africa
Emily B Wong	Africa Health Research Institute, KwaZulu-Natal, South Africa Division of Infectious Diseases, University of Alabama, Birmingham, Birmingham, AL, United States
Kathleen Kahn	Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa International Network for the Demographic Evaluation of Populations and Their Health Network, Accra, Ghana
Mark J Siedner	Africa Health Research Institute, KwaZulu-Natal, South Africa Harvard Medical School and the Medical Practice Evaluation Center, Massachusetts General Hospital, Boston, MA, United States
Eric Maimela	Dikgale-Mamabolo-Mothiba Population Health Research Centre, School of Health Care Sciences, Faculty of Health Sciences, University of Limpopo, Mankweng, South Africa Department of Public Health, School of Health Care Sciences, Faculty of Health Sciences, University of Limpopo, Mankweng, South Africa
Stephen Tollman	Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa International Network for the Demographic Evaluation of Populations and Their Health Network, Accra, Ghana
Mark Collinson	Medical Research Council/Wits Rural Public Health and Health Transitions Research Unit (Agincourt), School of Public Health, Faculty of Health Sciences, University of the Witwatersrand, Johannesburg, South Africa

OTHER PRODUCER(S)

Name	Affiliation	Role
South African Population Research Infrastructure Network		

FUNDING

Name	Abbreviation	Role
Department of Science and Innovation - South African Population Research Infrastructure Network	DSI-SAPRIN	Funding for Nodes
Wellcome Trust	WT	Funding for AHRI
Wellcome Trust	WT	Fellowship for Guy Harling
Royal Society	RS	Fellowship for Guy Harling
National Institutes of Health	NIH	Funding for Emily B Wong

Metadata Production

METADATA PRODUCED BY

Name	Abbreviation	Affiliation	Role
South African Population Research Infrastructure Network	SAPRIN		

DATE OF METADATA PRODUCTION

2021-08-13

DDI DOCUMENT VERSION

Version 1 (August 2021)

DDI DOCUMENT ID
DDI.SAPRIN.SC19SICAD2020V1

Sampling

No content available

Questionnaires

No content available

Data Collection

Data Collection Dates

Start	End	Cycle
2020-04-15	2020-12-24	SAPRIN

Time Periods

Start	End	Cycle
2020-04-15		SAPRIN

Data Processing

No content available

Data Appraisal

No content available

File Description

Variable List

SC19SICAD2020

Content

Cases	32526
Variable(s)	42
Structure	Type: Keys: ()
Version	
Producer	
Missing Data	

Variables

ID	NAME	LABEL	TYPE	FORMAT	QUESTION
V43	interviewkey	Unique ID for interview	discrete	character	
V44	contact_date	Date of interview	discrete	character	
V45	source	Type of interview conducted	discrete	numeric	
V46	wave	Data collection wave	discrete	numeric	
V47	hh_intid	Unique ID for household within node	contin	numeric	
V48	lntid	Unique ID for household respondent within node	contin	numeric	
V49	Sex	Sex of household respondent	discrete	numeric	
V50	Age	Age of household respondent at interview date	contin	numeric	
V51	currently_resident		discrete	numeric	
V52	hh_current_contact	Outcome of contact attempt	discrete	numeric	
V53	hh_ar03__8	Household members are wearing face masks	discrete	numeric	
V54	hh_phq2_pos	PHQ2 score >2, possible depression	discrete	numeric	
V55	hh_gad2_pos	GAD2 score >2, possible anxiety	discrete	numeric	
V56	hseh_children	Number of children in household	discrete	numeric	
V57	hseh_adults	Number of working age adults in household	discrete	numeric	
V58	hseh_seniors	Number of people aged over 60 in household	discrete	numeric	
V59	hseh_size	Number of people in household (res + non-res)	contin	numeric	
V60	hseh_ses_quint	Quintiles of household wealth within node (1 highest)	discrete	numeric	
V61	hseh_emp_count	Number of full/parttime employed people in household	discrete	numeric	
V62	hseh_pens_count	Number of pension grant receivers in household	discrete	numeric	
V63	hseh_ogrant_count	Number of non-pension grant receivers in household	discrete	numeric	
V64	hseh_pens_bin	Any employed individual in HH at last HDSS interview	discrete	numeric	
V65	hseh_ogrant_bin	Any employed individual in the household at last HDSS interview	discrete	numeric	
V66	lockdown_level	Government lockdown level at interview date	discrete	numeric	
V67	hh_ahri_cohort	AHRI allocation cohort	discrete	numeric	
V68	node	Node data line comes from	discrete	numeric	
V69	hh_agin_cohort	Agincourt allocation cohort	discrete	numeric	
V70	hh_dimamo_cohort	Randomly selected household cohort	discrete	numeric	

V71	contact_month	Month of interview	discrete	numeric
V72	hh_tm01_any	Any household member has left home in past 7 days	discrete	numeric
V73	nodewave	Combination of node (100s) and study wave	contin	numeric
V74	hh_maxedu	Summarized highest educational attainment in household	discrete	numeric
V75	hh_success_bin	Outcome of contact attempt successful (binary)	discrete	numeric
V76	nodemonth	Combination of node (100s) and month of 2020	contin	numeric
V77	hh_xx01_bin	Respondent feels they know enough or more about COVID-19 pandemic	discrete	numeric
V78	hh_hv01_bin	Anyone visited respondents home in past 7 days	discrete	numeric
V79	hh_hi01_bin	Any household member unable to access healthcare in past 7 days	discrete	numeric
V80	hh_hi04_bin	COVID has affected household's ability to earn money in past 7 days	discrete	numeric
V81	hh_hs01_bin	Any daily medicine missed in past week	discrete	numeric
V82	hh_ar03_out	Household members are avoiding going out/to work	discrete	numeric
V83	hh_ar03_trans	Household members are avoiding public transport	discrete	numeric
V84	hh_grpAgeSex6	Six age-sex categories of hh primary respondent	discrete	numeric

Unique ID for interview (interviewkey)

File: SC19SICAD2020

Overview

Type: Discrete
Format: character
Width: 11

Valid cases: 28601
Invalid: 0

Date of interview (contact_date)

File: SC19SICAD2020

Overview

Type: Discrete
Format: character
Width: 11

Valid cases: 22927
Minimum: NaN
Maximum: NaN

Type of interview conducted (source)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 12
Decimals: 0
Range: 1-3

Valid cases: 32526
Invalid: 0

Data collection wave (wave)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 12
Decimals: 0
Range: 1-14

Valid cases: 32526
Invalid: 0

Unique ID for household within node (hh_intid)

File: SC19SICAD2020

Overview

Type: Continuous
Format: numeric
Width: 12
Decimals: 0
Range: 2003-139824099001

Valid cases: 32517
Invalid: 9
Minimum: 2003
Maximum: 139824099001
Mean: 639565531.5
Standard deviation: 3717366467.5

Unique ID for household respondent within node (llntid)

File: SC19SICAD2020

Overview

Type: Continuous
Format: numeric
Width: 12
Decimals: 0
Range: 8003-2797886002

Valid cases: 22927
Invalid: 9599
Minimum: 8003
Maximum: 2797886002
Mean: 611974653.7
Standard deviation: 836200771.7

Sex of household respondent (Sex)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 12
Decimals: 0
Range: -1-2

Valid cases: 22927
Invalid: 9599

Age of household respondent at interview date (Age)

File: SC19SICAD2020

Overview

Type: Continuous
Format: numeric
Width: 12
Decimals: 0
Range: 0-954

Valid cases: 22927
Invalid: 9599
Minimum: 0
Maximum: 954
Mean: 32.7
Standard deviation: 23.9

(currently_resident)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 12
Decimals: 0
Range: 1-3

Valid cases: 22927
Invalid: 9599

Outcome of contact attempt (hh_current_contact)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 25
Decimals: 0
Range: 1-93

Valid cases: 32526
Invalid: 0

Household members are wearing face masks (hh_ar03__8)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 12
Decimals: 0
Range: 0-1

Valid cases: 22627
Invalid: 9899

PHQ2 score >2, possible depression (hh_phq2_pos) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22957
Invalid: 9569

GAD2 score >2, possible anxiety (hh_gad2_pos) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22957
Invalid: 9569

Number of children in household (hseh_children) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-14

Valid cases: 23095
Invalid: 9431

Number of working age adults in household (hseh_adults) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-17

Valid cases: 23095
Invalid: 9431

Number of people aged over 60 in household (hseh_seniors) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-3

Valid cases: 23095
Invalid: 9431

Number of people in household (res + non-res) (hseh_size) File: SC19SICAD2020

Overview

Type: Continuous
Format: numeric
Width: 9
Decimals: 0
Range: 0-26

Valid cases: 23095
Invalid: 9431
Minimum: 0
Maximum: 26
Mean: 5.7
Standard deviation: 3.4

Quintiles of household wealth within node (1 highest) (hseh_ses Quint) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 8
Decimals: 0
Range: 1-5

Valid cases: 26929
Invalid: 5597

Number of full/parttime employed people in household (hseh_emp_count) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-10

Valid cases: 31116
Invalid: 1410

Number of pension grant receivers in household (hseh_pens_count) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-3

Valid cases: 31116
Invalid: 1410

Number of non-pension grant receivers in household (hseh_ogrant_count) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-16

Valid cases: 31116
Invalid: 1410

Any employed individual in HH at last HDSS interview (hseh_pens_bin)
File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 31385
Invalid: 1141

Any employed individual in the household at last HDSS interview (hseh_ogrant_bin)
File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 31385
Invalid: 1141

Government lockdown level at interview date (lockdown_level)
File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 23
Decimals: 0
Range: 1-8

Valid cases: 31385
Invalid: 1141

AHRI allocation cohort (hh_ahri_cohort)
File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 11
Decimals: 0
Range: 1-7

Valid cases: 10469
Invalid: 22057

Node data line comes from (node)
File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 1-3

Valid cases: 32526
Invalid: 0

Agincourt allocation cohort (hh_agin_cohort) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 11
Decimals: 0
Range: 0-6

Valid cases: 12392
Invalid: 20134

Randomly selected household cohort (hh_dimamo_cohort) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 12
Decimals: 0
Range: 1-7

Valid cases: 9634
Invalid: 22892

Month of interview (contact_month) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 1-12

Valid cases: 31385
Invalid: 1141

Any househld member has left home in past 7 days (hh_tm01_any) File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22836
Invalid: 9690

Combination of node (100s) and study wave (nodewave) File: SC19SICAD2020

Overview

Type: Continuous
Format: numeric
Width: 9
Decimals: 0
Range: 101-311

Valid cases: 32526
Invalid: 0
Minimum: 101
Maximum: 311
Mean: 203.7
Standard deviation: 78.1

Summarized highest educational attainment in household (hh_maxedu)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 19
Decimals: 0
Range: 1-4

Valid cases: 26477
Invalid: 6049

Outcome of contact attempt successful (binary) (hh_success_bin)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 32526
Invalid: 0

Combination of node (100s) and month of 2020 (nodemonth)

File: SC19SICAD2020

Overview

Type: Continuous
Format: numeric
Width: 9
Decimals: 0
Range: 104-312

Valid cases: 31385
Invalid: 1141
Minimum: 104
Maximum: 312
Mean: 202.5
Standard deviation: 78

Respondent feels they know enough or more about COVID-19 pandemic (hh_xx01_bin)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22999
Invalid: 9527

Anyone visited respondents home in past 7 days (hh_hv01_bin)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22989
Invalid: 9537

Any household member unable to access healthcare in past 7 days (hh_hi01_bin)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22976
Invalid: 9550

COVID has affected household's ability to earn money in past 7 days (hh_hi04_bin)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22959
Invalid: 9567

Any daily medicine missed in past week (hh_hs01_bin)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22984
Invalid: 9542

Household members are avoiding going out/to work (hh_ar03_out)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22627
Invalid: 9899

Household members are avoiding public transport (hh_ar03_trans)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 9
Decimals: 0
Range: 0-1

Valid cases: 22627
Invalid: 9899

Six age-sex categories of hh primary respondent (hh_grpAgeSex6)

File: SC19SICAD2020

Overview

Type: Discrete
Format: numeric
Width: 12
Decimals: 0
Range: 1-13
Invalid: 101

Valid cases: 22458
Invalid: 10068