NAIIS 2018 COLLABORATING INSTITUTIONS
Federal Ministry of Health, Nigeria (FMoH)
National Agency for the Control of AIDS, Nigeria (NACA)
National Population Commission, Nigeria (NPopC)
National Bureau of Statistics, Nigeria (NBS)
The United States Centers for Disease Control and Prevention (CDC)
The Global Fund to Fight AIDS, Tuberculosis and Malaria (GF)
Center for International Health, Education, and Biosecurity (Ciheb) at the University of Maryland, Baltimore (UMB)
ICF International
African Field Epidemiology Network (AFENET)
University of Washington (UW)
The Joint United Nations Programme on HIV and AIDS (UNAIDS)
World Health Organization (WHO)
United Nations Children's Fund (UNICEF)

DONOR SUPPORT AND DISCLAIMER
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SUGGESTED CITATION

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1. **What is NAIIS 2018?**
The Nigeria 2018 Population-based HIV Indicator and Impact Assessment (NAIIS 2018) is a cross-sectional household-based survey in Nigeria. Led by the Government of Nigeria, the survey was implemented in the Federal Republic of Nigeria (Nigeria) by the NAIIS Consortium, led by the University of Maryland, Baltimore (UMB) under the supervision of the NAIIS Technical Committee and was conducted from July through December 2018.

2. **Purpose of the NAIIS 2018 Data Use Manual Supplement**
The purpose of the NAIIS 2018 *Data Use Manual Supplement* (hereafter, “Manual Supplement”) is to accompany the *Data Use Manual*, which contains information on the data generally applicable to all surveys, including an overview of the Project, survey design and sampling, measures, and a guide for users on how to access and use the data. This *Manual Supplement* contains NAIIS 2018 survey specifications, including survey-specific eligibility criteria, sampling approaches and measures. A summary of NAIIS 2018 findings can be found in the *NAIIS 2018 Summary Sheet*.

3. **Other Documentation and Resources**
In addition to this *Manual Supplement*, users should refer to the *NAIIS Data Use Manual* for general information on the data, as well as other survey-specific documentation including:

- **Survey Questionnaires:** Three questionnaires are provided, the NAIIS 2018 household, adult and adolescent questionnaires. These questionnaires illustrate the questionnaire’s structure, including the order that the questions were asked, each question’s wording, variable names and labels, value coding and labels, and skip patterns.

- **Codebooks:** Codebooks are provided for each dataset, indicating all variables contained within. These codebooks document each variable’s name, category (i.e., the questionnaire module or source data of the variable), label (i.e., question wording or other label), type (e.g., integer, select one, select multiple, free text, and date/time) and coding values and labels.

- **Variable Frequencies:** Variable frequencies are provided, which contain frequencies of all categorical variables in each dataset.

- **CONSORT Diagrams:** CONSORT (CONsolidated Standard Of Reporting Trial) style diagrams define key analytic variables that combine sets of source variables. A list of CONSORT Diagrams is provided at the end of this *Manual Supplement*.

- **NAIIS 2018 Technical Report:** Technical details of NAIIS 2018 sampling and weighting procedures are provided in deeper detail.
## Survey Design and Data Collection

### Survey Design Characteristics

<table>
<thead>
<tr>
<th>Survey design Characteristics</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Data source for survey weighting¹</td>
<td>2006 Nigeria Census</td>
</tr>
<tr>
<td>Sampling stratum</td>
<td>State</td>
</tr>
<tr>
<td>Primary sampling unit</td>
<td>Census Enumeration Areas (EA)</td>
</tr>
<tr>
<td>Urban/rural categorization</td>
<td>Urban/rural</td>
</tr>
</tbody>
</table>

### Survey administration

- **Data collection dates**: July 2018 – Dec 2018
- **Languages**: English, Hausa, Igbo and Yoruba

### Sample size²

- **Number of selected EAs**: 4,035
- **Household respondents**: 83,909
- **Individual interviews**
  - Adults (15-64 years): 186,405
  - Adolescents (10-14 years): 10,665
  - Children (0-9 years): 26,623
- **Biomarker test participants**
  - Adults (15-64 years): 173,719
  - Adolescents (10-14 years): 9,789
  - Children (0-9 years): 22,706


5. **Survey Questionnaires**

In participating households, a household questionnaire is administered to the household head. Then, individual questionnaires are administered to eligible and consenting individuals in the household. Adults (15+ years) complete an adult questionnaire, and adolescents (10-14 years) complete an adolescent questionnaire. Adults also provide data on their children (0-14 years) as part of the “children” module of the adult questionnaire. Modules included in each questionnaire and their associated eligibility criteria are listed in the table below. The content and order of each module may differ between NAIIS and other PHIA surveys. Users can refer to each PHIA survey’s *Survey Questionnaires, Codebooks*, and *Manual Supplements*.

<table>
<thead>
<tr>
<th>Questionnaire Module</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Household questionnaire</strong></td>
<td>Sample of households within selected EAs</td>
</tr>
<tr>
<td>Household roster</td>
<td></td>
</tr>
<tr>
<td>Household characteristics</td>
<td></td>
</tr>
<tr>
<td><strong>Individual questionnaire – adults (15-64 years)</strong></td>
<td>All rostered and consenting adults</td>
</tr>
<tr>
<td>Respondent background</td>
<td></td>
</tr>
<tr>
<td>Marriage</td>
<td></td>
</tr>
<tr>
<td>Reproduction</td>
<td></td>
</tr>
<tr>
<td>Children</td>
<td>Parents or guardians of children or adolescents (0-14 years) in the household provide information pertaining to the child</td>
</tr>
<tr>
<td>Male circumcision</td>
<td>All men</td>
</tr>
<tr>
<td>Sexual activity</td>
<td></td>
</tr>
<tr>
<td>HIV testing history</td>
<td></td>
</tr>
<tr>
<td>HIV status, care and treatment</td>
<td>All self-reporting HIV-positive adults</td>
</tr>
<tr>
<td>Tuberculosis and other health issues</td>
<td></td>
</tr>
<tr>
<td>Gender norms</td>
<td></td>
</tr>
<tr>
<td><strong>Individual questionnaire – adolescents (10-14 years)</strong></td>
<td>All rostered(^1) and consenting adolescents in every other household (25%)</td>
</tr>
<tr>
<td>Sociodemographic characteristics</td>
<td></td>
</tr>
<tr>
<td>Parental support</td>
<td></td>
</tr>
<tr>
<td>Alcohol and drugs</td>
<td></td>
</tr>
<tr>
<td>Condoms</td>
<td></td>
</tr>
<tr>
<td>Sexual behavior</td>
<td>All adolescents</td>
</tr>
<tr>
<td>HIV knowledge</td>
<td></td>
</tr>
<tr>
<td>HIV risk perception</td>
<td></td>
</tr>
<tr>
<td>HIV testing</td>
<td></td>
</tr>
<tr>
<td>HIV stigma</td>
<td></td>
</tr>
<tr>
<td>Social norms, intention to abstain, self-efficacy and assertiveness</td>
<td></td>
</tr>
</tbody>
</table>

\(^1\) Household members are eligible to be rostered if they were confirmed to have slept in the household the night before the interview.
6. Biomarker Testing

In NAIIS 2018, biomarker testing is offered to all rostered and consenting adults (15-64 years). It is also offered to all rostered adolescents (10-14 years) who provided written assent and children (0-9 years) whose guardians provided consent. Eligibility criteria for receiving tests for specific biomarkers are provided in the table below.

<table>
<thead>
<tr>
<th>Biomarker Test</th>
<th>Eligibility Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>HIV serostatus¹</td>
<td>All participants</td>
</tr>
<tr>
<td>Recency of HIV infection²</td>
<td>All HIV+ participants &gt; 18 months old</td>
</tr>
<tr>
<td>CD4+ cell count</td>
<td>All HIV+ and 2% of HIV- participants</td>
</tr>
<tr>
<td>Antiretroviral (ARV) drug presence</td>
<td>All HIV+ participants</td>
</tr>
<tr>
<td>ARV drug resistance</td>
<td>All HIV+ participants</td>
</tr>
<tr>
<td>Hepatitis B surface antigen</td>
<td>Adults aged 18-64 years and emancipated minors aged 15-17 years: all HIV+ and 5,303 HIV- participants</td>
</tr>
<tr>
<td>Hepatitis C antibody</td>
<td>Adults aged 18-64 years and emancipated minors aged 15-17 years: all HIV+ and 5,303 HIV- participants</td>
</tr>
</tbody>
</table>

¹ HIV serostatus was determined using the Nigerian National Serial HIV Rapid Testing Algorithm that combined results from household-based rapid and confirmatory tests. Appendix B, Figure B.1 and accompanying text in the NAIIS Technical Report provide a detailed description of the algorithm.

² HIV-1 LAg avidity plus viral load and HIV-1 LAg avidity plus viral load and ARV detection were used to distinguish recent from long-term infection.

NAIIS 2018 HIV Testing Algorithm

HIV prevalence testing was conducted in each household using a serological rapid diagnostic testing algorithm based on Nigeria’s National HIV Testing Guidelines, with laboratory confirmation of seropositive specimens using a supplemental assay.

HBTC services, including HIV rapid testing and counseling, HBsAg and HCV rapid testing, point-of-care (POC) CD4 testing and return of results, were carried out in accordance with Nigeria’s National HIV Testing Guidelines. HIV rapid testing was conducted in the field (Figure B.1) using a serial rapid-testing algorithm. Determine™ HIV ½ (Abbott Molecular Inc., Des Plaines, Illinois, United States) was used as a screening test. Uni-Gold™ (Trinity Biotech, plc., Wicklow, Ireland) was used as a confirmatory test. STAT PAK® HIV ½ Assay (Chembio Diagnostic Systems Inc., Medford, New York, United States) was used as a tie-breaker test for discordant screening and confirmatory tests. NAIIS participants with nonreactive results on the screening test were reported as HIV negative; those with a reactive screening test underwent confirmatory testing. Participants with reactive results on both the screening and confirmatory tests were classified as HIV-positive. Participants with a reactive screening test result, followed by a non-reactive confirmatory test result, had the tie-breaker test performed to determine HIV status. Participants with reactive tie-breaker tests were classified as HIV-positive while those with non-reactive tests were classified as HIV-negative.

All HIV-positive specimens were retested at the satellite laboratory using Geenius™ HIV 1/2 Supplemental Assay (Bio-Rad, Hercules, California, United States) as the confirmatory test. Participants who had reactive results on both rapid and Geenius™ HIV 1/2 tests were classified as HIV-positive. Participant specimens with a reactive rapid test result followed by a non-reactive confirmatory test result
at the satellite laboratory were subjected to further QA discrepancy resolution at the central laboratory. Specimens from participants who self-reported being HIV positive with an HIV negative test result at HBT received further testing, including additional HIV serial rapid testing and Geenius™ HIV 1/2 testing in the satellite and central laboratories as well as deoxyribonucleic acid (DNA) polymerase chain reaction (PCR) to resolve discrepancies.

For participants aged 18 months-64 years, the algorithm for classification of final HIV status included results from rapid HIV testing and Geenius™ HIV 1/2 confirmatory testing on all positives. In addition, Western Blot, TNA PCR and VL RNA PCR were done on discrepant results. For participants less than 18 months, the algorithm for classification of final HIV status included results from rapid HIV testing and HIV TNA PCR. Classification of final HIV status was used to determine estimates for HIV prevalence and to inform estimates for HIV incidence.

All infants <18 months were tested for HIV using the Determine™ HIV 1/2 Rapid Test. Infants who were reactive on Determine received IVT/EID testing using prepared DBS. In addition, infants born to mothers of unknown HIV status or HIV-positive mothers were screened using the Determine™ HIV ½ HIV Test and received IVT/EID testing using prepared DBS. HIV TNA PCR using COBAS® TaqMan® HIV-1 Qualitative Test (Roche Molecular Systems, Branchburg, NJ, USA) United States analyzer was conducted at the central laboratory. Specimens with HIV-negative results were categorized as HIV negative while specimens with HIV-positive results were reported as HIV-positive. Results were returned to the infant’s parent or guardian at the household within two weeks of specimen collection.
7. Data Confidentiality

As noted in the NAIIS Data Use Manual, various risk mitigation actions were used to protect the privacy and confidentiality of respondents in the public use data. Some of these actions apply to all PHIA surveys, while other actions are data-driven decisions motivated by various risk disclosure concerns. These concerns include small counts as a result of certain combinations of variables and values which may introduce individual disclosure risk concerns. This section outlines the variables that have been identified for disclosure risk remediation and the specific data action taken to address the risk concern.

The following date variables were redacted for all PHIA surveys prior to public release:

<table>
<thead>
<tr>
<th>Dataset(s)</th>
<th>Variable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>dieddated_01-dieddated_05</td>
</tr>
<tr>
<td>Household</td>
<td>dieddatem1-dieddatem3</td>
</tr>
<tr>
<td>Adult individual</td>
<td>surveystday</td>
</tr>
<tr>
<td>Adult individual</td>
<td>birthday</td>
</tr>
<tr>
<td>Adult individual</td>
<td>birthmon</td>
</tr>
<tr>
<td>Child individual</td>
<td>surveystday</td>
</tr>
<tr>
<td>Child individual</td>
<td>ch_birthday</td>
</tr>
<tr>
<td>Child individual</td>
<td>ch_birthmon</td>
</tr>
</tbody>
</table>

Top-coding is the process of re-coding values above an upper bound to the value of the upper bound. Age for all respondents was top coded at 80. There was also top-coding to collapse small counts with nearby values, in which the data were re-coded so that the highest category contains at least 25 cases. Variables that underwent top-coding are listed below:

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Variable</th>
<th>Top-coding upper bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult individual</td>
<td>age</td>
<td>80</td>
</tr>
<tr>
<td>Adult individual</td>
<td>agemar</td>
<td>45</td>
</tr>
<tr>
<td>Adult individual</td>
<td>childa2015</td>
<td>5</td>
</tr>
<tr>
<td>Adult individual</td>
<td>husnwif</td>
<td>5</td>
</tr>
<tr>
<td>Adult individual</td>
<td>numwif</td>
<td>5</td>
</tr>
<tr>
<td>Adult individual</td>
<td>partage1-partage3</td>
<td>75</td>
</tr>
<tr>
<td>Adult individual</td>
<td>pregnum</td>
<td>15</td>
</tr>
<tr>
<td>Adult individual</td>
<td>prgtwina</td>
<td>3</td>
</tr>
<tr>
<td>Adult individual</td>
<td>wifliveew</td>
<td>5</td>
</tr>
<tr>
<td>Child Biomarker</td>
<td>momage</td>
<td>55</td>
</tr>
<tr>
<td>Child individual</td>
<td>adcurgrd</td>
<td>6</td>
</tr>
<tr>
<td>Child individual</td>
<td>adhigrade</td>
<td>6</td>
</tr>
<tr>
<td>Child individual</td>
<td>adlstryrgd</td>
<td>7</td>
</tr>
<tr>
<td>Child individual</td>
<td>adlvlsch</td>
<td>3</td>
</tr>
<tr>
<td>Child individual</td>
<td>ch_education_ng</td>
<td>3</td>
</tr>
</tbody>
</table>
### Variables that underwent top-coding, NAIIS 2018 (continued)

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Variable</th>
<th>Top-coding upper bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child individual</td>
<td>momage</td>
<td>55</td>
</tr>
<tr>
<td>Child individual</td>
<td>mompregnm</td>
<td>5</td>
</tr>
<tr>
<td>Child individual</td>
<td>mompregnum</td>
<td>15</td>
</tr>
<tr>
<td>Household</td>
<td>ah0_5_ng</td>
<td>6</td>
</tr>
<tr>
<td>Household</td>
<td>ah10_14_ng</td>
<td>5</td>
</tr>
<tr>
<td>Household</td>
<td>ah6_14_ng</td>
<td>7</td>
</tr>
<tr>
<td>Household</td>
<td>bloodtestcount</td>
<td>15</td>
</tr>
<tr>
<td>Household</td>
<td>childcount</td>
<td>15</td>
</tr>
<tr>
<td>Household</td>
<td>childcountdefacto</td>
<td>15</td>
</tr>
<tr>
<td>Household</td>
<td>hhrespondent</td>
<td>5</td>
</tr>
<tr>
<td>Household</td>
<td>menrostercount_ng</td>
<td>10</td>
</tr>
<tr>
<td>Household</td>
<td>owncamel_ng</td>
<td>8</td>
</tr>
<tr>
<td>Household</td>
<td>ownchikn</td>
<td>95</td>
</tr>
<tr>
<td>Household</td>
<td>owncow</td>
<td>50</td>
</tr>
<tr>
<td>Household</td>
<td>owndog_ng</td>
<td>10</td>
</tr>
<tr>
<td>Household</td>
<td>owngoat</td>
<td>60</td>
</tr>
<tr>
<td>Household</td>
<td>ownhorsedm</td>
<td>10</td>
</tr>
<tr>
<td>Household</td>
<td>ownlandnum_ng</td>
<td>95</td>
</tr>
<tr>
<td>Household</td>
<td>ownlivest</td>
<td>30</td>
</tr>
<tr>
<td>Household</td>
<td>ownothercattle_ng</td>
<td>50</td>
</tr>
<tr>
<td>Household</td>
<td>ownpig</td>
<td>30</td>
</tr>
<tr>
<td>Household</td>
<td>ownsheep</td>
<td>60</td>
</tr>
<tr>
<td>Household</td>
<td>roomsleep</td>
<td>10</td>
</tr>
<tr>
<td>Household</td>
<td>rostercount</td>
<td>20</td>
</tr>
<tr>
<td>Household</td>
<td>rostercountdefacto</td>
<td>20</td>
</tr>
<tr>
<td>Household</td>
<td>womenrostercount_ng</td>
<td>10</td>
</tr>
</tbody>
</table>

Bottom-coding is the process of re-coding values below a lower bound to the value of the lower bound. Bottom-coding was used collapse small counts with nearby values, in which the data were re-coded so that the bottom coded value contains at least 25 cases. Variables that underwent bottom-coding are listed below:

### Variables that underwent bottom-coding, NAIIS 2018

<table>
<thead>
<tr>
<th>Dataset</th>
<th>Variable</th>
<th>Bottom-coding lower bound</th>
</tr>
</thead>
<tbody>
<tr>
<td>Adult individual</td>
<td>arvfty</td>
<td>2004</td>
</tr>
<tr>
<td>Adult individual</td>
<td>partage1-partage3</td>
<td>12</td>
</tr>
<tr>
<td>Household</td>
<td>ownlandnum_ng</td>
<td>0.8</td>
</tr>
</tbody>
</table>
The following variables and values were combined with the code for “other” due to small counts or percentages:

**Variables and values collapsed in to the “other” classification, NAIIS 2018**

<table>
<thead>
<tr>
<th>Dataset(s)</th>
<th>Variable</th>
<th>Small Cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household</td>
<td>staffidhh</td>
<td>761</td>
</tr>
<tr>
<td>Household</td>
<td>cookingfuel</td>
<td>10</td>
</tr>
<tr>
<td>Household</td>
<td>matexwalls</td>
<td>25</td>
</tr>
<tr>
<td>Household</td>
<td>matfloor</td>
<td>31</td>
</tr>
<tr>
<td>Household</td>
<td>owncamel_ng</td>
<td>3,4,5,6,7</td>
</tr>
<tr>
<td>Household</td>
<td>owncikn</td>
<td>46 small cells</td>
</tr>
<tr>
<td>Household</td>
<td>owncow</td>
<td>29 small cells</td>
</tr>
<tr>
<td>Household</td>
<td>owndog_ng</td>
<td>8,9</td>
</tr>
<tr>
<td>Household</td>
<td>owngoat</td>
<td>27 small cells</td>
</tr>
<tr>
<td>Household</td>
<td>ownhorsedm</td>
<td>4,6,7,9</td>
</tr>
<tr>
<td>Household</td>
<td>ownlandnum_ng</td>
<td>65 small cells</td>
</tr>
<tr>
<td>Household</td>
<td>ownlivest</td>
<td>9,11-14,16-19,22-25,27,28</td>
</tr>
<tr>
<td>Household</td>
<td>ownothercattle_ng</td>
<td>28 small cells</td>
</tr>
<tr>
<td>Household</td>
<td>ownpig</td>
<td>11,12,13,14,15,16,17,18,20,21,22,23,24,25,27</td>
</tr>
<tr>
<td>Household</td>
<td>ownsheep</td>
<td>27 small cells</td>
</tr>
</tbody>
</table>
8. Dataset Specifications

<table>
<thead>
<tr>
<th>Dataset (filename)</th>
<th>Number of Observations</th>
<th>Number of Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household (NAIIS2018hh)</td>
<td>101,267</td>
<td>102</td>
</tr>
<tr>
<td>Adult individual (NAIIS2018adultind)</td>
<td>229,762</td>
<td>296</td>
</tr>
<tr>
<td>Adult biomarker (NAIIS2018adultbio)</td>
<td>177,026</td>
<td>51</td>
</tr>
<tr>
<td>Child individual (NAIIS2018childind)</td>
<td>158,491</td>
<td>255</td>
</tr>
<tr>
<td>Child biomarker (NAIIS2018childbio)</td>
<td>35,171</td>
<td>41</td>
</tr>
</tbody>
</table>

**Other details**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Two-letter country code prefix for ID variables</td>
</tr>
<tr>
<td>Survey weighting variables</td>
</tr>
<tr>
<td>Survey weights provided (variable prefix)</td>
</tr>
<tr>
<td>Household Weight (hhwt0)</td>
</tr>
<tr>
<td>Interview Weight (Adolescent and Adult) (intwt0)</td>
</tr>
<tr>
<td>Blood Test Final Weight (btwt0)</td>
</tr>
<tr>
<td>Child Weight (chmodfwt0)</td>
</tr>
<tr>
<td>Hepatitis Weight (hepwgt)</td>
</tr>
</tbody>
</table>

**Selected variable parameters**

<table>
<thead>
<tr>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Household characteristics used for wealth index construction</td>
</tr>
<tr>
<td>See next section</td>
</tr>
<tr>
<td>Mean duration recent infection used for HIV incidence estimation</td>
</tr>
<tr>
<td>130 days (95% CI 118-142 days)</td>
</tr>
</tbody>
</table>
9. Wealth Index

The NAIIS 2018 Wealth Index was constructed following the latest Demographic and Health Survey (DHS) approach\(^1,2,3,4\). Household characteristics, asset ownership variables, services and amenities that are present in both urban and rural surveyed areas are selected. These variables are assumed to be good indicators of economic status.

Categorical items (such as type of water supply) are recoded into indicator variables (has, does not have), and along with continuous variables (such as number of persons per sleeping room) are then fit in a one-factor principal components analysis (PCA). The resulted single PCA factor is considered as underlying index of wealth and then used to score each household using the PCA weights.

For the NAIIS 2018 Wealth Index computation, three indexes were constructed: a common index, an urban-specific index, and a rural-specific index. Then using regression, mappings were made between urban index and the national index, and then between the rural index and the national index.

Summary Results:

The first principal component accounts for as much of the variability in the data as possible and is used to represent the Wealth Index for all three models.

Figures 1, 2 and 3 show scores of the most influential variables for each model.

<table>
<thead>
<tr>
<th>Table 1. Common Model: Component Score Coefficient Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Variable</strong></td>
</tr>
<tr>
<td>------------------------------------------</td>
</tr>
<tr>
<td>havefan Fan</td>
</tr>
<tr>
<td>havetele Television</td>
</tr>
<tr>
<td>havelectiron_ng Electric iron</td>
</tr>
<tr>
<td>haveelect Electricity</td>
</tr>
<tr>
<td>havecongrid_ng Connected to the national grid</td>
</tr>
<tr>
<td>ownbankacc Bank account</td>
</tr>
<tr>
<td>cookingfuel Type of cooking fuel: Firewood</td>
</tr>
<tr>
<td>havererefrig Refrigerator</td>
</tr>
<tr>
<td>matfloor Main floor material: Earth/sand</td>
</tr>
<tr>
<td>havegen_ng Generator</td>
</tr>
<tr>
<td>matexwalls Main wall material: Mud</td>
</tr>
<tr>
<td>havetable Table</td>
</tr>
</tbody>
</table>
Table 2. Urban Model: Component Score Coefficient Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>havefan Fan</td>
<td>.090</td>
</tr>
<tr>
<td>havetele Television</td>
<td>.086</td>
</tr>
<tr>
<td>haveelectiron_ng Electric iron</td>
<td>.084</td>
</tr>
<tr>
<td>haverefrig Refrigerator</td>
<td>.077</td>
</tr>
<tr>
<td>ownbankacc Bank account</td>
<td>.076</td>
</tr>
<tr>
<td>haveelect Electricity</td>
<td>.075</td>
</tr>
<tr>
<td>havecongrid_ng Connected to the national grid</td>
<td>.071</td>
</tr>
<tr>
<td>havegen_ng Generator</td>
<td>.066</td>
</tr>
<tr>
<td>havetable Table</td>
<td>.062</td>
</tr>
<tr>
<td>ownwatch Watch</td>
<td>.061</td>
</tr>
<tr>
<td>toilettype Type of toilet facility: Flush to septic tank</td>
<td>.052</td>
</tr>
<tr>
<td>cookingfuel Type of cooking fuel: Liquid propane gas</td>
<td>.051</td>
</tr>
</tbody>
</table>

Table 3. Rural Component Score Coefficient Matrix

<table>
<thead>
<tr>
<th>Variable</th>
<th>Component</th>
</tr>
</thead>
<tbody>
<tr>
<td>havefan Fan</td>
<td>.092</td>
</tr>
<tr>
<td>havetele Television</td>
<td>.087</td>
</tr>
<tr>
<td>haveelect Electricity</td>
<td>.078</td>
</tr>
<tr>
<td>havecongrid_ng Connected to the national grid</td>
<td>.077</td>
</tr>
<tr>
<td>matfloor Main floor material: Earth/sand</td>
<td>-.077</td>
</tr>
<tr>
<td>haveelectiron_ng Electric iron</td>
<td>.076</td>
</tr>
<tr>
<td>ownbankacc Bank account</td>
<td>.071</td>
</tr>
<tr>
<td>havegen_ng Generator</td>
<td>.071</td>
</tr>
<tr>
<td>haverefrig Refrigerator</td>
<td>.069</td>
</tr>
<tr>
<td>havetable Table</td>
<td>.068</td>
</tr>
<tr>
<td>matexwalls Main wall material: Mud</td>
<td>-.062</td>
</tr>
<tr>
<td>cookingfuel Type of cooking fuel: Firewood</td>
<td>-.057</td>
</tr>
</tbody>
</table>

As expected, Electricity and major appliances along with furniture are the highest-scored variables in the model for all three models.
The Wealth Index calculated for the entire national survey as well as the Common Model are given in Table 4 below.

**Table 4. NAIIS 2018 National Wealth Index Distribution**

<table>
<thead>
<tr>
<th></th>
<th>combscor Combined national wealth score</th>
<th>comscore Common wealth score</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Valid</td>
<td>40126</td>
<td>40126</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Mean</td>
<td>.0376565</td>
<td>.0426321</td>
</tr>
<tr>
<td>Std. Deviation</td>
<td>1.01513442</td>
<td>1.01541500</td>
</tr>
<tr>
<td>Minimum</td>
<td>-2.26759</td>
<td>-1.97441</td>
</tr>
<tr>
<td>Maximum</td>
<td>2.31011</td>
<td>2.41407</td>
</tr>
<tr>
<td>Percentiles</td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>-1.0175941</td>
<td>-1.0062824</td>
</tr>
<tr>
<td>40</td>
<td>-.3373665</td>
<td>-.3453848</td>
</tr>
<tr>
<td>60</td>
<td>.4097625</td>
<td>.4005045</td>
</tr>
<tr>
<td>80</td>
<td>1.0592796</td>
<td>1.0559611</td>
</tr>
</tbody>
</table>

Note that statistics in the above table are based on the household population of the survey rather than the households themselves; which explains why the mean value of the Index is slightly different from exactly zero, and the standard deviation from exactly one.

Figure 1 below shows a histogram distribution of the national **NAIIS 2018** Wealth Index. We can clearly observe the bi-modality shape of the distribution (i.e. has two major peaks) due to the combination of the two unimodal distributions of the rural and urban areas.


IV. CONSORT Diagrams for Analytic Variables

This section contains CONSORT diagrams for analytic variables provided in NAIIS 2018 datasets. These diagrams are designed to facilitate use of analytic variables by illustrating which source variables are incorporated into each analytic variable and how participants are categorized based on data from these variables.

<table>
<thead>
<tr>
<th>Variable name</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>anclastchild</td>
<td>Attended antenatal care visit at last pregnancy</td>
<td>19</td>
</tr>
<tr>
<td>art</td>
<td>Indicator of whether on art combining self-report and ARV testing</td>
<td>20</td>
</tr>
<tr>
<td>artduration</td>
<td>Duration of time on art</td>
<td>21</td>
</tr>
<tr>
<td>artinitiated12months</td>
<td>Art initiated in last 12 months</td>
<td>22</td>
</tr>
<tr>
<td>artselfreported</td>
<td>Indicator whether individual is on art among adults age 15-64</td>
<td>23</td>
</tr>
<tr>
<td>arvscurrent_ng</td>
<td>Currently on ARVs (self-report)</td>
<td>24</td>
</tr>
<tr>
<td>arvcurrent12months_ng</td>
<td>Currently on ARVs combined with ART initiated in past 12 months</td>
<td>25</td>
</tr>
<tr>
<td>arvspregnancydetail</td>
<td>ARV status last pregnancy</td>
<td>26</td>
</tr>
<tr>
<td>arvstatus</td>
<td>Indicator of whether ARVs were detected</td>
<td>27</td>
</tr>
<tr>
<td>aware</td>
<td>Awareness combining self-report and ARV testing among adults 15-64</td>
<td>28</td>
</tr>
<tr>
<td>awareselfreported</td>
<td>Indicator of whether individual is self-reported as aware of their HIV seropositive status</td>
<td>29</td>
</tr>
<tr>
<td>breastfedlastchild</td>
<td>Breastfeeding outcome of last birth</td>
<td>30</td>
</tr>
<tr>
<td>brthwhr_ng</td>
<td>Location of last birth</td>
<td>31</td>
</tr>
<tr>
<td>bt_status</td>
<td>Did lab blood test have definitive result?</td>
<td>32</td>
</tr>
<tr>
<td>Variable</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------------</td>
<td>------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>cd4cat</td>
<td>CD4 categories</td>
<td>33</td>
</tr>
<tr>
<td>ch_education_ng</td>
<td>Child education level</td>
<td>34</td>
</tr>
<tr>
<td>condomlastsex12months</td>
<td>Condom used at last sex in past 12 months</td>
<td>35</td>
</tr>
<tr>
<td>delivered3years</td>
<td>Delivered in the last 3 years</td>
<td>36</td>
</tr>
<tr>
<td>delivered12months</td>
<td>Delivered in last 12 months</td>
<td>37</td>
</tr>
<tr>
<td>diagnosedtb_ng</td>
<td>Diagnosed with TB</td>
<td>38</td>
</tr>
<tr>
<td>education</td>
<td>Education level</td>
<td>39</td>
</tr>
<tr>
<td>evertested</td>
<td>Ever Tested for HIV</td>
<td>40</td>
</tr>
<tr>
<td>firstsxage</td>
<td>How old were you when you had vaginal sex for the very first time?</td>
<td>41</td>
</tr>
<tr>
<td>hhstatus</td>
<td>Household Response Status</td>
<td>42</td>
</tr>
<tr>
<td>hivstatuslastpregnancy</td>
<td>HIV status last pregnancy</td>
<td>43</td>
</tr>
<tr>
<td>indstatus</td>
<td>Indicator of individual eligibility and response status</td>
<td>44</td>
</tr>
<tr>
<td>maritalstatus</td>
<td>Marital Status</td>
<td>46</td>
</tr>
<tr>
<td>mcwho_ng</td>
<td>Male circumcision</td>
<td>47</td>
</tr>
<tr>
<td>mother</td>
<td>Individual is a mother</td>
<td>48</td>
</tr>
<tr>
<td>motherawarehiv_ng</td>
<td>Knew HIV+ prior to giving birth</td>
<td>49</td>
</tr>
<tr>
<td>noofpregnancies_ng</td>
<td>Number of pregnancies</td>
<td>50</td>
</tr>
<tr>
<td>part12monumcat_ng</td>
<td>Number of sexual partners in past 12 months (categorized)</td>
<td>51</td>
</tr>
<tr>
<td>pedart</td>
<td>Indicator of whether child is on art combining parent-report and ARV testing</td>
<td>52</td>
</tr>
<tr>
<td>pedartparentreported</td>
<td>Indicator of whether parent reports the child age 0-14 is on ART</td>
<td>53</td>
</tr>
<tr>
<td>pedaware</td>
<td>Pediatric awareness combining parent-report and ARV testing</td>
<td>54</td>
</tr>
<tr>
<td>Field</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>------------------------</td>
<td>-----------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>pedawareparentreported</td>
<td>Indicator of whether parent is aware of child’s HIV seropositive status, among children age 0-14</td>
<td>55</td>
</tr>
<tr>
<td>pedtri90</td>
<td>Analysis flag for age 0-14 90-90-90 with ARV data</td>
<td>56</td>
</tr>
<tr>
<td>pedtri90art</td>
<td>ART recode for age 0-14 90-90-90 with ARV data</td>
<td>57</td>
</tr>
<tr>
<td>pedtri90aware</td>
<td>Aware recode for age 0-14 90-90-90 with ARV data</td>
<td>58</td>
</tr>
<tr>
<td>pedtri90vls</td>
<td>VLS recode for age 0-14 90-90-90 with ARV data</td>
<td>59</td>
</tr>
<tr>
<td>pregnancystatus</td>
<td>Pregnancy Status</td>
<td>60</td>
</tr>
<tr>
<td>receivedresult_ng</td>
<td>Ever received HIV test result</td>
<td>61</td>
</tr>
<tr>
<td>receivedresult12months_ng</td>
<td>Received HIV test result in past 12 months</td>
<td>62</td>
</tr>
<tr>
<td>sexcohabpart_ng</td>
<td>Sex with non-marital, non-cohabiting partner in past 12 months</td>
<td>63</td>
</tr>
<tr>
<td>testedpregnancy_ng</td>
<td>Tested for HIV at ANC visit</td>
<td>64</td>
</tr>
<tr>
<td>Treatedfortb_ng</td>
<td>Treated for TB</td>
<td>65</td>
</tr>
<tr>
<td>tri90</td>
<td>Flag for inclusion in 90-90-90 analysis</td>
<td>66</td>
</tr>
<tr>
<td>tri90art</td>
<td>Indicator of whether individual is on ART, for 90-90-90 analysis</td>
<td>67</td>
</tr>
<tr>
<td>tri90aware</td>
<td>Indicator of whether individual is aware of their HIV seropositive status for 90-90-90 analysis</td>
<td>68</td>
</tr>
<tr>
<td>tri90vls</td>
<td>Indicator of whether individual has suppressed viral load, for 90-90-90 analysis</td>
<td>69</td>
</tr>
<tr>
<td>uniontype</td>
<td>Union type</td>
<td>70</td>
</tr>
<tr>
<td>Visitedtbclinic_ng</td>
<td>Ever Visited TB Clinic</td>
<td>71</td>
</tr>
</tbody>
</table>
Age 15-49, de facto eligible (15 \leq \text{age} \leq 49 \text{ and indstatus} = 1) \quad N = 157,762

Female (gender = 2) \quad N = 88,593

Delivered in past 3 years (delivered3years = 1) \quad N = 23,612

Visited antenatal care facility during last pregnancy that resulted in a live birth (prgcare = 1) \quad N = 18,029

Visited antenatal care facility (anclastchild = 1) \quad N = 18,029

Did not visit antenatal care facility during last pregnancy that resulted in a live birth (prgcare = 2) \quad N = 5,572

Did not visit antenatal care facility (anclastchild = 2) \quad N = 5,572

Don’t know, refused or missing (prgcare in (-8,-9,)) \quad N = 11

Missing (anclastchild = 99) \quad N = 134,161

Male (gender = 1) \quad N = 69,169

Did not deliver in past 3 years, or missing (delivered3years in (2, 3, 99)) \quad N = 64,981
Age 15-64, de facto eligible, HIV+ (age >= 15 and hivstatusfinal* = 1 and bt_status* = 1) N = 2,739

Positive blood test for ARVs (arvstatus* = 1) N = 1,287

Self reported unaware of HIV+ status (awareselfreported* = 2) N = 1,339

Self reported on ART (artselfreported* = 1) N = 35

Self reported not on ART (artselfreported* = 2) N = 44

On ART (art = 1) N = 1,322

Not on ART (art = 2) N = 1,383

Missing self reported ART information (artselfreported* = 99) N = 34

Negative blood test for ARVs or missing result (arvstatus* = 2 or 99) N = 1,452

Self reported aware of HIV+ status or missing self-reported awareness (awareselfreported* = 1 or 99) N = 113

On ART (art = 1) N = 1,322

Not on ART (art = 2) N = 1,383

Missing ART Status (art = 99) N = 34

Variable: art
Found in NAIIS 2018 dataset: Adult Biomarker
Variable: artduration
Found in NAIIS 2018 dataset: Adult Biomarker

De facto eligible and age 15 +
(bt_status* = 1 and age >= 15)
N = 173,716

HIV Positive
(hivstatusfinal* = 1)
N = 2,739

Missing or inconclusive information on current ARV use
(arvscurrent = -8, -9, and none of arvscurrent, arvstakenev, artselfreported, awareselfreported equal to 2)
N = 83

Not currently taking ARVs, never taken ARVs, or unaware of positive status
(arvscurrent = 2 or arvstakenev = 2 or artselfreported = 2 or awareselfreported = 2)
N = 1,917

Currently taking ARVs
(arvscurrent = 1)
N = 739

HIV Negative
(hivstatusfinal* = 2)
N = 170,977

Valid month and year of starting ART available
(arvftm > 0 and arvfty > 0)
N=545

Missing month of starting ART, but non-missing year of starting ART
(arvftm = . and arvfty > 0)
N=181

Missing month and year of starting ART
(arvftm and arvfty = .)
N=13

Year not equal to survey date year but < 3 years different
N=24

Took ARVs during labor and continued to take ARVs after labor
(arvtklb = 1 and arvcntn = 1)
N=0

Did not take ARVs during labor or did not continue to take ARVs after labor
(arvtklb ne 1 and arvcntn ne 1)
N=83

Valid month and date of last birth available
N=0

Missing month of last birth but non-missing year
N=0

Difference in months between ART start date and survey date ≥ 24
N=370

Difference in months between ART start date and survey date between 12 and 24
N=64

Difference in months between ART start date and survey date < 12
N=111

Difference in years ART start date and survey date ≥ 3
N=143

ART start date year equal to survey date year
N=14

Year of last birth equal to survey date year
N=0

Missing information on date of last birth, or missing month of last birth and year of birth not equal to survey year but < 3 years different
N=0

On ART for ≥ 24 months
(artduration = 1)
N = 513

On ART for 12-23 months
(artduration = 2)
N = 64

On ART for < 12 months
(artduration = 3)
N = 125

Not on ART
(artduration = 4)
N = 1,917

Missing duration of time on ART
(artduration = 99)
N = 171,097

On ART for ≥ 24 months
(artduration = 1)
N = 513

On ART for 12-23 months
(artduration = 2)
N = 64

On ART for < 12 months
(artduration = 3)
N = 125

Not on ART
(artduration = 4)
N = 1,917

Missing duration of time on ART
(artduration = 99)
N = 171,097

Difference in months between date of last birth and survey date ≥ 24
N = 0

Difference in months between date of last birth and survey date < 12
N = 0

Difference in months between date of last birth and survey date < 12
N = 0

Difference in years between year of last birth and survey date ≥ 3
N = 0

Year of last birth equal to survey date year
N=0

Year not equal to survey date year but < 3 years different
N=24

Missing information on date of last birth, or missing month of last birth and year of birth not equal to survey year but < 3 years different
N=0

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Age 15-64, de facto eligible (15 ≤ age ≤ 64, indstatus = 1 and hivstatusfinal = 1 or 2) N = 173,716

Tested positive for HIV (hivstatusfinal = 1) N = 170,977

Have taken ARVs (ever) (arvstakenev = 1) N = 778

Initiated ART prior to 2017 (arvfty in (1900:2016)) N = 555

Initiated ART in 2017, not within past 12 months (arvfty=2017 and (surveystdt – [ARV start date*]) > 365) N = 51

Initiated ART over 12 months ago (artinitiated12months = 1) N = 606

Initiated ART within past 12 months (artinitiated12months = 2) N = 158

Initiated ART in 2017, within past 12 months (arvfty=2017 and (surveystdt – [ARV start date*]) ≤ 365) N = 24

Initiated ART in 2018 (arvfty=2018) N = 134

Initiated ART within past 12 months (artinitiated12months = 2) N = 158

Don’t know or refused if ever taken ARVs (arvstakenev in (-8, -9, *)) N = 1,950

Have never taken ARVs (arvstakenev = 2) N = 11

Don’t know or refused ART start date (arvftm in (-8, -9) or arvftm in (-8, -9)) N = 14

Missing (artinitiated12months = 99) N = 172,952

Tested negative for HIV (hivstatusfinal = 2) N = 2,739

Have never taken ARVs (arvstakenev = 2) N = 11

Don’t know if ever taken ARVs (arvstakenev in (-8, -9, *)) N = 1,950

Variable: artinitiated12months
Found in NAIIS 2018 dataset: Adult Interview

*ARV start date derived from arvftm (month when ARV treatment began) and arvfty (year when ART treatment began). A value of 15 was imputed for day when ART treatment began, as this information was not captured.
Variable: artselfreported
Found in NAIIS 2018 dataset:
Adult Interview

Age 15+, de facto eligible, and aware of HIV+ status
(age >= 15 and and bt_status* = 1 and awareselfreported* = 1 and hivstatusfinal* = 1)
N = 849

- Has taken ARVs (arvstakenev = 1)
  N = 778
- Has never taken ARVs (arvstakenev = 2)
  N = 11
- Missing Information on ARVs (arvstakenev = .)
  N = 49
- Don’t know if ARVs ever taken or refused answer (arvstakenev = -8,-9)
  N = 11

- Currently on ARVs (arvscurrent = 1)
  N = 739
  - Currently in care (hivcare = 1)
    N = 4
  - Never had a CD4 test (cd4testever = 2)
    N = 25
- Currently not on ARVs (arvscurrent = 2)
  N = 35
- Don’t know (arvscurrent = -8)
  N = 4

- Not in care (hivcare = 2)
  N = 38
  - Not in care (hivcare = 2)
    N = 1
  - Never had a CD4 test (cd4testever = 2)
    N = 25
- Don’t know or missing if in care (hivcare = -8,-9,.)
  N = 10

- Self-reported on ART (artselfreported = 1)
  N = 743
  - Had a CD4 test (cd4testever = 1)
    N = 9
- Self-reported not on ART (artselfreported = 2)
  N = 73
  - Never had a CD4 test (cd4testever = 2)
    N = 25
- Missing self-reported ART status (artselfreported = 99)
  N = 33

- ARVs taken during Labor (arvoflb = 1)
  N = 1
- Continued taking ARVs after delivery (arvcntn = 1)
  N = 1
- Not in care (hivcare = 2)
  N = 38
  - Not in care (hivcare = 2)
    N = 1
  - Never had a CD4 test (cd4testever = 2)
    N = 25
- Don’t know if had CD4 test (cd4testever = -8,.)
  N = 8

- Missing info on ARVs during labor (arvoflb = .)
  N = 48
Age 15-64, de facto eligible, tested for HIV (15 ≤ age ≤ 64, indstatus = 1 and hivstatusfinal = 1 or 2) N = 173,716

Tested positive for HIV (hivstatusfinal = 1) N = 2,739

Previously tested for HIV (hivtsteve = 1) N = 1,625

Previously tested positive for HIV (hivtstrslt = 1) N = 842

Have taken ARVs (ever) (arvstakenev = 1) N = 778

Currently taking ARVs (arvscurrent = 1) N = 739

Not currently taking ARVs (arvscurrent = 2) N = 1,788

Currently taking ARVs (arvscurrent_ng = 1) N = 739

Not currently taking ARVs (arvscurrent_ng = 2) N = 1,788

Tested negative for HIV (hivstatusfinal = 2) N = 170,977

Don’t know or refused if ever tested (hivtsteve in (-8, -9)) N = 48

Don’t know or refused last HIV test result (hivtstrslt in (3, 4, -8, -9)) N = 107

Don’t know or refused if ever taken ARVs (arvstakenev in (-8, -9, 1)) N = 53

Don’t know or refused if currently taking ARVs (arvscurrent in (-8, -9)) N = 4

Missing (arvscurrent_ng = 99) N = 171,189

Variable: arvscurrent_ng Found in NAIIS 2018 dataset: Adult Interview
Variable: arvcurrent12months_ng
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64, de facto eligible, tested for HIV
(15 ≤ age ≤ 64, indstatus = 1,
hivstatusfinal = 1 or 2)
N = 173,716

Tested positive for HIV
(hivstatusfinal = 1)
N = 2,739

Tested negative for HIV
(hivstatusfinal = 2)
N = 170,977

Currently on ARVs
(arvcurrent_ng = 1)
N = 739

Not currently on ARVs
(arvcurrent_ng = 2)
N = 1,788

Initiated ART over 12 months ago
(artinitiated12months = 1)
N = 579

Initiated ART within past 12 months
(artinitiated12months = 2)
N = 147

On ART, initiated over 12 months ago
(arvcurrent12months_ng = 1)
N = 579

On ART, initiated within past 12 months
(arvcurrent12months_ng = 2)
N = 147

Not currently on ART
(arvcurrent12months_ng = 3)
N = 1,788

Missing ART initiation date
(artinitiated12months = 99)
N = 13

Missing if currently on ARVs
(arvcurrent_ng = 99)
N = 212

Missing
(arvcurrent12months_ng = 99)
N = 171,202
Variable: arvstatus
Found in NAIIS 2018 datasets:
  Adult Biomarker
  Child Biomarker

All ages, de facto eligible, and HIV+
(0 <= age <= 64 and bt_status* = 1 and hivstatusfinal* = 1)
N = 2,790

Atazanavir detected in blood
(arvatv = 1)
N = 24

Atazanavir not detected in blood or not tested
(arvatv = 2 or .)
N = 2,760

Missing data on ARV detection
(arvatv =. and arvevf = . and arvlpv = .)
N = 6

Efavirenz detected in blood
(arvefv = 1)
N = 822

Efavirenz not detected in blood
(arvefv = 2)
N = 1,938

Lopinavir detected in blood
(arvlpv = 1)
N = 45

Lopinavir not detected in blood
(arvlpv = 2)
N = 1,893

Nevirapine detected in blood
(arvnvp = 1)
N = 413

Nevirapine not detected in blood
(arvnvp = 2)
N = 1,480

ARVS detected
(arvstatus = 1)
(N = 1304)

ARVS not detected
(arvstatus = 2)
(N = 1480)

Missing information on ARV detection
(arvstatus = 99)
(N = 6)

Age 0-14
0 <= Age <= 14
N = 17

Age 15-64
15 <= Age <= 64
N = 1,287

Age 0-14
1 <= Age <= 14
N = 34

Age 15-64
15 <= Age <= 64
N = 1,446

Age 0-14
0 <= Age <= 14
N = 0

Age 15-64
15 <= Age <= 64
N = 6
Variable: `aware`
Found in NAIIS 2018 dataset:
Adult Biomarker

Age 15+, de facto eligible, and HIV+
(age >= 15 and `bt_status*` = 1 and `hivstatusfinal*` = 1)
N = 2,739

- **ARVs Detected in Blood**
  (arvstatus* = 1)
  N = 1,287
  - Self reported aware of seropositive status
    (awareselfreported* = 1)
    N = 85
    - Aware of HIV Positive Status
      (aware = 1)
      N = 1,372
    - Self reported unaware of seropositive status
      (awareselfreported* = 2)
      N = 1,339
  - Negative blood test for ARVs or missing result
    (arvstatus* = 2 or 99)
    N = 1,452
    - Missing data on self reported awareness
      (awareselfreported* = 99)
      N = 28

- Negative blood test for ARVs or missing result
  (arvstatus* = 2 or 99)
  N = 1,452

- Missing data on self reported awareness
  (awareselfreported* = 99)
  N = 28

Unaware of Positive HIV status
(aware = 2)
N = 1,339
Age 15-64, de facto eligible, and HIV+
(15 ≤ age ≤ 64 and indstatus* = 1 and hivstatusfinal* = 1)
N = 2,739

Stated HIV positive
(known_hiv_status* = 1)
N = 849

Stated HIV negative
(known_hiv_status* = 2)
N = 686

Never tested
(known_hiv_status* = 3)
N = 1,066

Don’t Know/Refused/Unknown/Result not Received
(known_hiv_status* = 99)
N = 138

Don’t know/Refused
(hivtstever = -8, -9, or .)
N = 45

Has been tested for HIV
(hivtstever = 1)
N = 93

Result of the last HIV test was unknown
(hivtstrslt = 3)
N = 14

Never received the result of the last HIV test
(hivtstrslt = 4)
N = 50

Don’t know the result of last HIV test
(hivtstrslt = -8)
N = 28

Missing information on the result of the last test
(hivtstrslt = .)
N = 0

Refused to provide the result of the last test
(hivtstrslt = -9)
N = 1

Result of the last HIV test was unknown
(hivtstrslt = 3)
N = 14

Unaware of Positive HIV status
(awareselfreported = 2)
N = 1,844

Missing Information
(awareselfreported = 99)
N = 46
Age 15-49, de facto eligible (15 ≤ age ≤ 49 and indstatus = 1) N = 157,762

Female (gender = 2) N = 88,593

Has been pregnant (1 ≤ pregnum ≤ 97) N = 66,154

Has had pregnancy resulting in a live birth (liveb = 1) N = 52,395

Gave birth to one or more children since Jan 2015 (1 ≤ childa2015 ≤ 97) N = 27,348

Gave birth at health facility (brthwhr = 2) N = 13,182

Gave birth at health facility (brthwhr_ng = 1) N = 13,182

Don't know or refused if ever pregnant (pregnum in (-8, -9)) N = 299

Don't know or refused if ever had live birth (liveb in (-8, -9)) N = 89

Don't know or refused if ever had live birth (liveb = 2) N = 13,670

Has not had live birth (liveb = 2) N = 13,670

Gave birth at home (brthwhr = 1) N = 13,026

Gave birth at home (brthwhr_ng = 2) N = 13,026

Gave birth elsewhere (brthwhr in (3, 6]) N = 1,069

Gave birth elsewhere (brthwhr_ng = 2) N = 1,069

Don't know, refused, or missing birthplace (brthwhr in (-8, -9,]) N = 71

Don't know or refused number of live births since Jan 2015 (childa2015 in (-8, -9)) N = 82

Has never been pregnant (pregnum = 0) N = 22,140

Has not lived birth (liveb = 2) N = 13,670

Gave birth to no children since Jan 2015 (childa2015 = 0) N = 24,965

Gave birth at health facility (brthwhr = 1) N = 13,026

Gave birth at home (brthwhr = 1) N = 13,026

Gave birth elsewhere (brthwhr in (3, 6]) N = 1,069

Gave birth elsewhere (brthwhr_ng = 3) N = 1,069

Don't know, refused, or missing birthplace (brthwhr in (-8, -9,]) N = 71

Missing (brthwhr_ng = 99) N = 130,485
Variable: bt_status
Found in NAIIS 2018 datasets:
Adult Biomarker
Child Biomarker

Ages 0-64
(N = 212,197)

Provided blood and had a final HIV status determined
(hivstatusfinal* = 1 or 2)
N = 207,233

Did not provide blood or did not have a final HIV status determined
(hivstatusfinal* ne 1 or 2)
N = 4,964

De facto eligible
(sleephere = 1)
N = 206,214

Not de facto eligible
(sleephere = 2)
N = 1,019

Lab blood test had a definite result
(bt_status = 1)
N = 206,214

Lab blood test had a definite result non de facto participants
(bt_status = 99)
N = 1,019

Lab blood test did not have a definite result
(bt_status = 2)
N = 4,964
De facto eligible, Age 0-64, HIV+
\(0 \leq age \leq 64 \text{ and } bt\_status^* = 1 \text{ and } hivstatusfinal^* = 1\)  
\(N = 2,790\)

CD4 Count available  
\(\{cd4count \neq .\}\)  
\(N = 2,750\)

- \(0 < cd4count < 100\)  
  \(N = 91\)

- \(100 \leq cd4count < 200\)  
  \(N = 192\)

- \(200 \leq cd4count < 350\)  
  \(N = 499\)

- \(350 \leq cd4count < 500\)  
  \(N = 554\)

- \(500 \leq cd4count\)  
  \(N = 1,414\)

No CD4 Count available  
\(\{cd4count = .\}\)  
\(N = 40\)

- \(0 < cd4count < 100\)  
  \(\{cd4cat = 1\}\)  
  \(N = 91\)

- \(100 \leq cd4count < 200\)  
  \(\{cd4cat = 2\}\)  
  \(N = 192\)

- \(200 \leq cd4count < 350\)  
  \(\{cd4cat = 3\}\)  
  \(N = 499\)

- \(350 \leq cd4count < 500\)  
  \(\{cd4cat = 4\}\)  
  \(N = 554\)

- \(500 \leq cd4count\)  
  \(\{cd4cat = 5\}\)  
  \(N = 1,414\)

- cd4count missing  
  \(\{cd4cat = 99\}\)  
  \(N = 40\)

Variable: cd4cat  
Found in NAIIS 2018 datasets:  
Adult Biomarker  
Child Biomarker
Variable: ch_education_ng
Found in NAIIS 2018 dataset:
Child Interview

Age 10-14, de facto eligible
(10 \leq \text{age} \leq 14, \text{indstatus} = 1)
N = 10,665

Currently enrolled in school
(adensch=1)
N = 9,300

Not currently enrolled in school, don’t know,
or refused (adensch in (2, -8, -9))
N = 1,365

Never attended school
(ch_education_ng = 1)
N = 1,052

Never attended school
(adatndsch = 2)
N = 1,052

Don’t know or refused if previously attended school
(adatndsch in (-8, -9))
N = 12

Have previously attended school
(adatndsch = 1)
N = 301

Attended primary school
(adlvlsch = 1)
N = 5,598

Primary school
(ch_education_ng = 2)
N = 5,854

Attended primary school
(adhigrd = 1)
N = 256

Attended secondary school or higher
(adlvlsch in (2, 3))
3,392

Secondary school or Quranic/religious school*
(ch_education_ng = 3)
N = 3,726

Attended secondary school
(adhigrd in (2, 3))
N = 23

Attended quranic/religious school
(adlvlsch = 8)
N = 294

Attended quranic/religious school
(adhigrd = 8)
N = 17

Don’t know or refused highest level of school attended
(adlvlsch in (-8, -9))
N = 16

Missing highest level of school attended
(ch_education_ng = 99)
N = 33

Don’t know or refused highest level of school attended
(adhigrd in (-8, -9))
N = 5

Attended secondary school or Quranic/religious school*

*Quranic/religious school and secondary school categories were combined to protect participant confidentiality
Age 15-64, de facto eligible
(15 ≤ age ≤ 64, indstatus = 1)
N = 186,405

Has had vaginal sex
(everhadsex_ng = 1)
N = 151,570

Has never had vaginal sex
(everhadsex_ng = 2)
N = 34,014

Don’t know or refused or missing if had vaginal sex
(everhadsex_ng in (-8,-9,))
N = 821

Used condom at last vaginal sex
(partlastcndm1 = 1)
N = 11,017

Did not use condom at last vaginal sex
(partlastcndm1 = 2)
N = 107,330

Missing
(condomlastsex12months = 99)
N = 68,058

Had 0 partners in past 12 months
(part12monum = 0)
N = 32,156
Age 15-64
(indstatus* =1 and 15 ≤ age ≤ 64)
N = 186,405

Female
(gender = 2)
N = 103,065

Woman is a mother
(mother* = 1)
N = 64,432

Gave birth to 1 or more children since 2015
(childa2015 > 0)
N = 27,544

Difference, in days,
between date of survey
and child's birthdate is <=
1,096
N = 23,695

Mother gave birth 3 years
preceding survey
(delivered3years = 1)
N = 23,695

Difference, in days,
between date of survey
and child's birthdate is >
1,096
N = 3,285

Mother did not give birth
3 years preceding survey
(delivered3years = 2)
N = 3,285

Mothers missing data
on last delivery
(delivered3years=3)
N = 37,452

Child’s Birth Year is missing or it is 2015
and Child’s Birth Month is missing
N = 564

Missing information on how many children she gave birth to since 2015
(childa2015 in -8,-9, or .)
N = 211

Gave birth to 0 children since 2015
(childa2015 = 0)
N = 36,677

 Difference, in days,
between date of survey
and child’s birthdate is <=
1,096
N = 23,695

Woman is not a mother or missing information
(mother* = 2 or 99)
N = 38,633

Men and non-mothers
(delivered3years = 99)
N = 121,973

Male
(gender = 1)
N = 83,340

Mother gave birth 3 years preceding survey
(delivered3years = 1)
N = 23,695

Mother did not give birth 3 years preceding survey
(delivered3years = 2)
N = 3,285

Mothers missing data on last delivery
(delivered3years=3)
N = 37,452

Variable: delivered3years
Found in NAIIS 2018 dataset:
Adult Interview
Variable: diagnosedtb
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64
(indstatus = 1 and
15 <= age <= 64 and visitedtbclinic* = 1)
N = 3,407

Has not been diagnosed with tuberculosis
(tbdiagn = 2)
N = 2,435

Has been diagnosed with tuberculosis
(tbdiagn = 1)
N = 918

Has been diagnosed with tuberculosis
(diagnosedtb = 1)
N = 918

Has not been diagnosed with tuberculosis
(diagnosedtb = 2)
N = 2,435

Missing information about having been diagnosed with tuberculosis
(tbdiagn = -8 or -9 or .)
N = 54

Missing information about having been diagnosed with tuberculosis
(diagnosedtb = 99)
N = 54
Variable: education
Found in NAIIS 2018 dataset: Adult Interview

Age 15-64
(indstatus* = 1 and 15 <= age <= 64)
N = 186,405

Never attended school
(schlat = 2)
N = 37,754

Attended Primary School
(schlhi = 1)
N = 34,666

Did not know, refused, or missing
(schlat = -8,-9, .)
N = 48

Attended Secondary School
(schlhi = 2,3)
N = 73,993

Attended Tertiary School
(schlhi = 4,5,6)
N = 27,801

Attended Quaranic or Adult Literacy School
(schlhi = 7, 8)
N = 12,004

Attended Other
(education = 5)
N = 12,004

No Education
(education=1)
N = 37,754

Missed Education
(education = 99)
N = 187

Attended Higher Than Secondary School
(education=4)
N = 27,801

Attended Secondary School
(education=3)
N = 73,993

Attended Primary School
(education=2)
N = 34,666

Attended Secondary School
(education=3)
N = 73,993

Attended Primary School
(education=2)
N = 34,666

Ever Attended School
(schlat = 1)
N = 148,603

Attended Primary School
(education=2)
N = 34,666

Attended Secondary School
(education=3)
N = 73,993

Attended Tertiary School
(education=4)
N = 27,801

Attended Quaranic or Adult Literacy School
(education=5)
N = 12,004

Attended Other
(education = 5)
N = 12,004
Variable: evertested
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64
(indstatus* = 1 and 15 <= age <= 64)
N = 186,405

Ever tested for HIV
(hivtstever = 1)
N = 61,263

Not tested or unknown
(hivtstever = 2, -8, -9,)
N = 125,142

Tested before pregnancy
(hivtsbp = 1)
N = 203

Not tested before pregnancy or unknown
(hivtsbp = 2, -8, -9,)
N = 124,939

Tested during pregnancy
(hivtrprg = 1)
N = 109

Not tested during pregnancy or unknown
(hivtrprg = 2, -8, -9,)
N = 124,830

Tested during labor
(hivttlb = 1)
N = 11

Not tested during labor or unknown
(hivttlb = 2, -8, -9,)
N = 124,819

Not tested
(hivtstever = 2)
N = 120,498

Not tested during pregnancy
(hivtrprg = 2)
N = 197

Not tested during labor
(hivttlb = 2)
N = 104

Unknown if tested
(hivtstever = -8, -9,)
N = 4,321

Unknown if tested during pregnancy
(hivtrprg = -8, -9,)
N = 4,124

Unknown if tested during labor
(hivttlb = -8, -9,)
N = 4,020

Ever tested for HIV
(evertested = 1)
N = 61,586

Never tested for HIV
(evertested = 2)
N = 120,799

Missing
(evertested = 99)
N = 4,020
Variable: firstsxage_ng
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64, de facto eligible
(15 ≤ age ≤ 64, indstatus = 1)
N = 186,405

Has had vaginal sex
(everhadsex_ng = 1)
N = 151,570

Has never had vaginal sex
(everhadsex_ng = 2)
N = 34,014

Don’t know or refused if had vaginal sex
(everhadsex_ng in (-8, -9, .))
N = 821

0-14 years of age at first vaginal sex
(0 ≤ firstsxage ≤ 14)
N = 15,017

15-19 years of age at first vaginal sex
(15 ≤ firstsxage ≤ 19)
N = 68,428

20-24 years of age at first vaginal sex
(20 ≤ firstsxage ≤ 24)
N = 38,619

25+ years of age at first vaginal sex
(25 ≤ firstsxage ≤ 97)
N = 18,728

Don’t know/ refused age at first vaginal sex
(firstsxage in (-8, -9))
N = 10,778

Missing
(firstsxage_ng = 99)
N = 45,613

0-14 years of age at first vaginal sex
(firstsxage_ng = 1)
N = 15,017

15-19 years of age at first vaginal sex
(firstsxage_ng = 2)
N = 68,428

20-24 years of age at first vaginal sex
(firstsxage_ng = 3)
N = 38,619

25+ years of age at first vaginal sex
(firstsxage_ng = 4)
N = 18,728

Missing
(firstsxage_ng = 99)
N = 45,613
Variable: hhstatus
Found in NAIIS 2018 dataset:
NAIIS Households

All selected households
(N = 101,267)

Completed household interviews
(ahstatus = 1)
N = 83,909

- Eligible responding households
  (hhstatus = 1)
  N = 83,909

- Eligible non-responding households
  (hhstatus = 2)
  N = 5,436

Refusals, breaks, non-contacts
(ahstatus = 2, 4, 5)
N = 5,436

- Dwellings inaccessible or not found
  (ahstatus = 0, 8, 9)
  N = 5,199

- Households of unknown eligibility
  (hhstatus = 3)
  N = 5,199

Dwellings vacant or destroyed
(ahstatus = 3, 6, 7)
N = 6,723

- Ineligible households
  (hhstatus = 4)
  N = 6,723

Completed household interviews
(ahstatus = 1)
N = 83,909

- Eligible responding households
  (hhstatus = 1)
  N = 83,909

- Eligible non-responding households
  (hhstatus = 2)
  N = 5,436

Refusals, breaks, non-contacts
(ahstatus = 2, 4, 5)
N = 5,436

- Dwellings inaccessible or not found
  (ahstatus = 0, 8, 9)
  N = 5,199

- Households of unknown eligibility
  (hhstatus = 3)
  N = 5,199

Dwellings vacant or destroyed
(ahstatus = 3, 6, 7)
N = 6,723

- Ineligible households
  (hhstatus = 4)
  N = 6,723
Variable: hivstatuslastpregnancy
Found in NAIIS 2018 dataset:
Adult Interview

Female respondents age 15-64
(indstatus* = 1 and gender = 2 and 15 <= age <= 64)
N = 103,065

Any children born during the last 3 years
(delivered3years* = 1)
N = 23,695

HIV+ before pregnancy
(hivpsbp = 1)
N = 106

HIV+ during pregnancy
(hivrptg = 1)
N = 22

HIV+ during labor
(hivrslr = 1)
N = 0

HIV+ during last pregnancy/labor
(hivstatuslastpregnancy = 1)
N = 128

HIV- before pregnancy
(hivpsbp = 2)
N = 7,099

HIV- during pregnancy
(hivrptg = 2)
N = 3,062

HIV- during labor
(hivrslr = 2)
N = 72

HIV- during last pregnancy/labor
(hivstatuslastpregnancy = 2)
N = 10,233

HIV-/unknown before pregnancy
(hivpsbp ne 1)
N = 23,589

HIV-/unknown during pregnancy
(hivrptg ne 1)
N = 13,406

HIV-/unknown during labor
(hivrslr ne 1)
N = 13,334

HIV-/unknown during last pregnancy/labor
(hivstatuslastpregnancy = 99)
N = 92,704

No children born during the last 3 years
(delivered3years* = 2,3)
N = 40,737

HIV-/unknown before pregnancy
(hivpsbp ne 1)
N = 23,589

HIV-/unknown during pregnancy
(hivrptg ne 1)
N = 13,406

HIV-/unknown during labor
(hivrslr ne 1)
N = 13,334

HIV-/unknown during last pregnancy/labor
(hivstatuslastpregnancy = 99)
N = 92,704

Unknown if any children born during the last 3 years
(delivered3years* = 99)
N = 38,633

HIV- before pregnancy
(hivpsbp = 2)
N = 7,099

HIV- during pregnancy
(hivrptg = 2)
N = 3,062

HIV- during labor
(hivrslr = 2)
N = 72

HIV- during last pregnancy/labor
(hivstatuslastpregnancy = 2)
N = 10,233

Unknown HIV status before pregnancy
(hivpsbp ne 1,2)
N = 16,468

Unknown HIV status during pregnancy
(hivrptg ne 1,2)
N = 13,406

Unknown HIV status during labor
(hivrslr ne 1,2)
N = 13,334

Unknown HIV status during last pregnancy/labor
(hivstatuslastpregnancy ne 1,2)
N = 92,704
found "result", Eligible, Eligible, Slept questions

Household Variable:

Eligible, de facto respondent (indstatus = 1)
N = 32,983

Parent responded to questions about the child
(chmod_status = 1)
N = 32,983

Parent did respond to questions about the child
(chmod_status = 2)
N = 154

Eligible non-resident
(indstatus = 2)
N = 154

Not sampled
(indstatus = 8)
N = 80,592

Non-de facto participant
(indstatus = 9)
N = 775

* A1Q015 variable not included in public use datasets

Children aged 10-14 years
(10 <= age <= 14)
N = 43,987

Slept in the household last night
(sleephere = 1)
N = 43,588

Did not sleep in the household last night
(sleephere = 2)
N = 399

Completed individual interview
(aresult* = 1)
N = 10,665

Did not complete individual interview
(aresult* = 2, 4, 5, 6, 7, 8, 9, .)
N = 32,923

Eligible for survey
(A1Q015* = 1)
N = 1,660

Eligible non-resident
(indstatus = 2)
N = 1,660

Ineligible for survey
(A1Q015* = 2)
N = 31,263

Not sampled
(indstatus = 8)
N = 31,263

Non-de facto participant
(indstatus = 9)
N = 399

*aresult, A1Q015 variables not included in public use datasets
Variable: maritalstatus
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64
(indstatus* = 1 and 15 <= age <= 64)
N = 186,405

Never Married
(evermar = 2)
N = 58,496

Ever Married Lived Together
(evermar = 1)
N = 127,759

Did not know, refused, or missing
(evermar = -8,-9, .)
N = 150

Married or Living Together
(curmar = 1,2)
N = 114,461

Divorced or Separated
(curmar = 4,5)
N = 4,635

Widowed
(curmar = 3)
N = 8,558

Did not know, refused or missing
(curmar = -8,-9, .)
N = 105

Never Married
(maritalstatus = 1)
N = 58,496

Married or Living Together
(maritalstatus = 2)
N = 114,461

Divorced or Separated
(maritalstatus = 3)
N = 4,635

Widowed
(maritalstatus = 4)
N = 8,558

Missing
(maritalstatus = 99)
N = 255
Age 15-64, de facto eligible, male (15 < age < 64, indstatus = 1, gender = 1) N = 83,340

Circumcised (mcstatus = 1) N = 81,078

- Circumcised by doctor, clinical officer, nurse, or midwife (mcwho in (1,3)) N = 23,411
  - Circumcised, medical circumcision (mcwho_ng= 1) N = 23,411
- Circumcised by traditional practitioner or other person (mcwho in (2,6)) N = 48,399
  - Circumcised, non-medical circumcision (mcwho_ng= 2) N = 48,399
  - Circumcised, method unknown (mcwho_ng= 3) N = 9,268
- Don't know or refused method of circumcision (mcwho in (-8,-9)) N = 9,268
  - Circumcised, medical circumcision (mcwho_ng= 1) N = 23,411
  - Circumcised, non-medical circumcision (mcwho_ng= 2) N = 48,399
  - Circumcised, method unknown (mcwho_ng= 3) N = 9,268
  - Uncircumcised (mcwho_ng= 4) N = 1,380
  - Missing (mcwho_ng= 5) N = 882

Uncircumcised (mcstatus = 2) N = 1,380

Don't know or refused if circumcised (mcstatus in (-8,-9)) N = 882

Variable: mcwho_ng
Found in NAIIS 2018 dataset: Adult Interview
Variable: mother
Found in NAIIS 2018 dataset: Adult Interview

Age 15-64
(indstatus* = 1 and 15 <= age <= 64)
N = 186,405

Female
(gender = 2)
N = 103,065

Woman has been pregnant more than 0 times
(pregnum = 1-97)
N = 80,157

Pregnancy resulted in a livebirth
(liveb = 1)
N = 64,316

Mother
(mother = 1)
N = 64,432

Does not know, refused to respond, or response missing
(liveb = -8, -9, or .)
N = 116

Not a mother
(mother = 2)
N = 38,257

Woman has never been pregnant
(pregnum = 0)
N = 22,532

Does not know, refused to respond, or response missing
(pregnum = -8, -9, or .)
N = 376

Pregnancy did not result in a livebirth
(liveb = 2)
N = 15,725

Missing
(mother = 99)
N = 83,716

Male
(gender = 1)
N = 83,340
Variable: motherawarehiv_ng
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-49, de facto eligible (15 ≤ age ≤ 49, indstatus = 1)
N = 157,762

Female (gender = 2)
N = 88,593

Male (gender = 1)
N = 69,169

Delivered in past 12 months (delivered12months = 1)
N = 23,612

Did not deliver in past 3 years, or don’t know / refused (delivered3years in [2, 3, 99])
N = 64,981

Tested positive for HIV prior to pregnancy (hivtsbp = 1 and hivpsbp = 1)
N = 106

Not tested, or not tested positive prior to pregnancy (hivtsbp in [2, -8, -9] or hivpsbp in [2, -8, -9])
N = 17,923

Tested for HIV during antenatal care (hivtrprg = 1)
N = 10,119

Not tested for HIV during antenatal care (hivtrprg = 2)
N = 5,825

Tested positive for HIV during antenatal care (hivptg = 1)
N = 22

Tested negative for HIV during antenatal care (hivptg = 2)
N = 9,225

Unknown HIV status (testedpregnancy_ng in {3, 4})
N = 601

Don’t know / refused if tested for HIV during antenatal care (hivtrprg in [-8, -9])
N = 271

Did not receive test result, or was indeterminate (hivptg in [3,4])
N = 11,998

Missing (testedpregnancy_ng = 99)
N = 136,411

Tested positive for HIV prior to pregnancy (testedpregnancy_ng = 1)
N = 22

Tested negative for HIV prior to pregnancy (testedpregnancy_ng = 2)
N = 9,225

Tested positive for HIV prior to pregnancy (testedpregnancy_ng = 3)
N = 106

Unaware of HIV status prior to giving birth (motherawarehiv_ng = 2)
N = 11,998

Missing (motherawarehiv_ng = 99)
N = 136,411

Aware of HIV status prior to giving birth (motherawarehiv_ng = 1)
N = 9,353

Don’t know / refused if visited ANC facility during pregnancy (prgcare in [-8, -9])
N = 11

Visited ANC facility during pregnancy (prgcare = 1)
N = 18,029

Did not visit ANC facility during pregnancy (prgcare = 2)
N = 5,572

Tested positive for HIV during antenatal care (testedpregnancy_ng = 1)
N = 22

Tested negative for HIV during antenatal care (testedpregnancy_ng = 2)
N = 9,225

Tested positive for HIV during antenatal care (testedpregnancy_ng = 3)
N = 106

Missed (testedpregnancy_ng = 99)
N = 136,411

Unaware of HIV status prior to giving birth (motherawarehiv_ng = 2)
N = 11,998

Missing (motherawarehiv_ng = 99)
N = 136,411

Tested positive for HIV during antenatal care (testedpregnancy_ng = 3)
N = 106

Missed (testedpregnancy_ng = 99)
N = 136,411

Tested negative for HIV during antenatal care (testedpregnancy_ng = 2)
N = 9,225

Tested positive for HIV during antenatal care (testedpregnancy_ng = 1)
N = 22

Tested negative for HIV during antenatal care (testedpregnancy_ng = 2)
N = 9,225

Tested positive for HIV prior to pregnancy (testedpregnancy_ng = 3)
N = 106

Unaware of HIV status prior to giving birth (motherawarehiv_ng = 2)
N = 11,998

Missing (motherawarehiv_ng = 99)
N = 136,411

Aware of HIV status prior to giving birth (motherawarehiv_ng = 1)
N = 9,353

Don’t know / refused if visited ANC facility during pregnancy (prgcare in [-8, -9])
N = 11

Visited ANC facility during pregnancy (prgcare = 1)
N = 18,029

Did not visit ANC facility during pregnancy (prgcare = 2)
N = 5,572

Tested positive for HIV during antenatal care (testedpregnancy_ng = 1)
N = 22

Tested negative for HIV during antenatal care (testedpregnancy_ng = 2)
N = 9,225

Tested positive for HIV prior to pregnancy (testedpregnancy_ng = 3)
N = 106

Missed (testedpregnancy_ng = 99)
N = 136,411

Unaware of HIV status prior to giving birth (motherawarehiv_ng = 2)
N = 11,998

Missing (motherawarehiv_ng = 99)
N = 136,411

Tested positive for HIV during antenatal care (testedpregnancy_ng = 3)
N = 106

Missed (testedpregnancy_ng = 99)
N = 136,411

Tested negative for HIV during antenatal care (testedpregnancy_ng = 2)
N = 9,225

Tested positive for HIV prior to pregnancy (testedpregnancy_ng = 3)
N = 106

Unaware of HIV status prior to giving birth (motherawarehiv_ng = 2)
N = 11,998

Missing (motherawarehiv_ng = 99)
N = 136,411

Aware of HIV status prior to giving birth (motherawarehiv_ng = 1)
N = 9,353
Variable:
noofpregnancies_ng
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64, de facto eligible
(15 ≤ age ≤ 64, ind_status = 1)
N = 186,405

Female
(gender = 2)
N = 103,065

Male
(gender = 1)
N = 83,340

0 pregnancies
(pregnum = 0)
N = 22,532

1 pregnancy
(pregnum = 1)
N = 10,124

2 - 5 pregnancies
(2 ≤ pregnum ≤ 5)
N = 43,291

6+ pregnancies
(6 ≤ pregnum ≤ 97)
N = 26,742

Don't know or refused
number of pregnancies
(pregnum in {-8, -9})
N = 376

0 pregnancies
(noofpregnancies_ng = 1)
N = 22,532

1 pregnancy
(noofpregnancies_ng = 2)
N = 10,124

2 - 5 pregnancies
(noofpregnancies_ng = 3)
N = 43,291

6+ pregnancies
(noofpregnancies_ng = 4)
N = 26,742

Missing
(noofpregnancies_ng = 99)
N = 83,716
Age 15-64, de facto eligible (15 ≤ age ≤ 64, indstatus = 1)
N = 186,405

Has had vaginal sex (everhadsex_ng = 1)
N = 151,570

Has never had vaginal sex (everhadsex_ng = 2)
N = 34,014

Don’t know, refused or missing if had vaginal sex (everhadsex_ng in (-8, -9, .))
N = 821

Had 2 or more partners in past 12 months (part12monum <= 100)
N = 18,238

Had 1 partner in past 12 months (part12monum = 1)
N = 100,639

Had 0 partners in past 12 months (part12monum = 0)
N = 32,156

Had 2 or more partners in past 12 months (part12monumcat_ng = 3)
N = 18,238

Had 1 partner in past 12 months (part12monumcat_ng= 2)
N = 100,639

Had 0 partners in past 12 months (part12monumcat_ng= 1)
N = 66,170

Don’t know or refused number of partners in past 12 months
(part12monumcat_ng in (-8, -9))
N = 537

Missing (part12monumcat_ng= 99)
N = 1,358

Variable:
part12monumcat_ng
Found in NAIIS 2018 dataset:
Adult Interview
Variable: pedart
Found in NAIIS 2018 dataset: Child Biomarker

Age 0-14, de facto eligible and HIV+ (0 <= age <= 14 and hivstatusfinal* = 1 and bt_status* = 1 )
N = 51

ARVs detected in blood (arvstatus* = 1)
N = 17

Negative blood test for ARVs or missing result (arvstatus* =2 or 99)
N = 34

Parent reported unaware of child’s seropositive status (pedawareparentreported* = 2)
N = 33

Parent reported aware of child’s seropositive status (pedawareparentreported* = 1)
N = 1

Parent reported child on ART (pedartparentreported* = 1)
N = 0

Parent reported child not on art (pedartparentreported* =2)
N = 1

Missing parent ART information (pedartparentreported* =99)
N = 0

On ART (pedart = 1)
N=17

Not on ART (pedart = 2)
N = 34

Missing ART status (pedart = 99)
N = 0
**Variable:** 
pedartparentreported 

**Found in NAIIS 2018 dataset:** 
Child Biomarker

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**Age 0-14, de facto eligible and HIV+**

\(0 \leq \text{age} \leq 14 \text{ and } \text{hivstatusfinal}^* = 1 \text{ and } \text{indstatus}^* = 1\)

\(N = 51\)

---

**Parent reported aware of child’s seropositive status**

\(\text{pedawareparentreported}^* = 1\)

\(N = 6\)

---

**Parent reported unaware of child’s seropositive status**

\(\text{pedawareparentreported}^* = 2\)

\(N = 45\)

---

**Missing data on parent’s awareness**

\(\text{pedawareparentreported}^* = 99\)

\(N = 0\)

---

**Parent reported child ever taken ARVs**

\(\text{ch_kidarvs} = 1\)

\(N = 6\)

---

**Parent reported child has never taken ARVs**

\(\text{ch_kidarvs} = 2\)

\(N = 0\)

---

**Missing information on ARVs**

\(\text{ch_kidarvs} = .\)

\(N = 0\)

---

**Parent reported child currently taking ARVs**

\(\text{ch_kidarvsnow} = 1\)

\(N = 5\)

---

**Parent reported child not currently taking ARVs**

\(\text{ch_kidarvsnow} = 2\)

\(N = 1\)

---

**Parent reports child on ARVs**

\(\text{pedartparentreported} = 1\)

\(N = 5\)

---

**Parent reported child is not on ARVs**

\(\text{pedartparentreported} = 2\)

\(N = 1\)

---

**Missing information**

\(\text{pedartparentreported} = 99\)

\(N = 45\)
Variable: pedaware
Found in NAIIS 2018 dataset: Child Biomarker

Age 0-14, de facto eligible and HIV+
(0 <= age <= 14 and hivstatusfinal * = 1 and bt_status* = 1)
N = 51

ARVs detected in blood (arvstatus* = 1)
N = 17

Negative blood test for ARVs or missing result (arvstatus* = 2 or 99)
N = 34

Parent reported aware of child’s seropositive status (pedawareparentreported * = 1)
N = 1

Parent reported unaware of child’s seropositive status (pedawareparentreported* = 2)
N = 33

Missing data on parent’s awareness (pedawareparentreported* = 99)
N = 0

Parent aware of child’s HIV seropositive status (pedaware = 1)
N = 18

Parent unaware of child’s HIV seropositive status (pedaware = 2)
N = 33

Missing information on parent’s awareness (pedaware = 99)
N = 0
Age 0-14, de facto eligible, and HIV+ (0 ≤ age ≤ 14 and indstatus* = 1 and hivstatusfinal* = 1) 
N=51

Parent reported that child had an HIV test ever (ch_kidhivtestevr = 1) 
N = 10

Parent reported child never had an HIV test (ch_kidhivtestevr = 2) 
N = 39

Parent does not know or refused an answer if child ever had an HIV test (ch_kidhivtestevr = -8 or -9) 
N = 2

Missing information on child HIV test (ch_kidhivtestevr = .) 
N = 0

Parent reported child’s last HIV test was positive (ch_kidhivlastresult = 1) 
N = 6

Missing information on last HIV test result is missing (ch_kidhivlastresult = .) 
N = 0

Parent reported child’s last HIV test was negative (ch_kidhivlastresult = 2) 
N = 3

Parent does not know or refused to answer if child’s last HIV test result is positive (ch_kidhivlastresult = -8 or -9) 
N = 1

Parent aware of child’s HIV positive status (pedawareparentreported = 1) 
N = 6

Parent aware of child’s HIV - status or unaware of child’s HIV+ status (pedawareparentreported = 2) 
N = 45

Missing parent awareness information (pedawareparentreported = 99) 
N = 0
Variable: pedtri90
Found in NAIS 2018 dataset: Child Biomarker

Age 0-14, de facto eligible and HIV+
(0 <= age <= 14 and hivstatusfinal* = 1 and bt_status* = 1)
N = 51

ARVs detected in blood (arvstatus* = 1)
N = 17

Negative blood test for ARVs or missing result (arvstatus* = 2 or 99)
N = 34

Parent reported unaware of child’s seropositive status (pedawareparentreported* = 2)
N = 33

Parent reported aware of child’s seropositive status (pedawareparentreported* = 1)
N = 1

Parent awareness of child’s HIV+ status is missing (pedawareparentreported* = 99)
N = 0

Parent reported child not on ART (pedartparentreported* = 2)
N = 1

Parent reported child on ART (pedartparentreported* = 1)
N = 0

Missing parent ART information (pedartparentreported* = 99)
N = 0

Viral Load Suppressed (vls* = 1)
N = 6

Viral Load not suppressed (vls* = 2)
N = 11

Missing Viral Load (vls* = 99)
N = 0

Viral Load Suppressed (vls* = 1)
N = 0

Viral Load not Suppressed (vls* = 2)
N = 0

Missing Viral Load (vls* = 99)
N = 0

Included in 90-90-90 (pedtri90 = 1)
N = 51

Excluded from 90-90-90 (pedtri90 = 2)
N = 0
Variable: pedtri90art
Found in NAIIS 2018 dataset:
Child Biomarker

Age 0-14, de facto eligible and HIV+
(0 <= age <= 14 and hivstatusfinal* = 1 and bt_status* = 1 )
N = 51

Included in 90-90-90 (pedtri90* = 1)
N = 51

Excluded from 90-90-90 (pedtri90* = 2)
N = 0

ARVs detected in blood (arvstatus* = 1)
N = 17

Negative blood test for ARVs or missing result (arvstatus* = 2 or 99)
N = 34

Parent reported aware of child’s seropositive status (pedawareparentreported* = 1)
N = 1

Parent reported unaware of child’s seropositive status (pedawareparentreported* = 2)
N = 33

Parent self-reported child on ART (pedartparentreported* = 1)
N = 0

Parent self-reported child not on ART (pedartparentreported* = 2)
N = 1

On ART (pedtri90art = 1) Included in 90-90-90
N = 17

Not on ART (pedtri90art = 2) Included in 90-90-90
N = 33

Implied not on ART (pedtri90art = 3)
Included in 90-90-90
N = 1

Incomplete data (pedtri90art = 99)
Excluded from 90-90-90
N = 0
Variable: pedtr90aware
Found in NAIIS 2018 dataset:
Child Biomarker

Age 0-14, de facto eligible and HIV+
($0 \leq age \leq 14$ and hivstatusfinal* = 1 and bt_status* = 1)
N = 51

Included in 90-90-90 ($pedtr90* = 1$)
N = 51

Excluded from 90-90-90 ($pedtr90* = 2$)
N = 0

ARVs detected in blood ($arvstatus* = 1$)
N = 17

Negative blood test for ARVs or missing result ($arvstatus* = 2$ or 99)
N = 34

Parent reported aware of child’s seropositive status ($pedawareparentreported* = 1$)
N = 1

Parent reported unaware of child’s seropositive status ($pedawareparentreported* = 2$)
N = 33

Parent aware ($pedtr90aware = 1$)
Included in 90-90-90
N = 18

Parent unaware ($pedtr90aware = 2$)
Included in 90-90-90
N = 33

Incomplete data ($pedtr90aware = 99$)
Excluded from 90-90-90
N = 0
Variable: pedtri90vls
Found in NAIIS 2018 dataset:
Child Biomarker

Age 0-14, de facto eligible and HIV+
\((0 \leq \text{age} \leq 14 \text{ and } \text{hivstatusfinal}^* = 1 \text{ and } \text{bt_status}^* = 1)\)
\(N = 51\)

On ART
\((\text{pedtri90art}^* = 1)\)
Included in 90-90-90
\(N = 17\)

Viral Load Suppressed
\((\text{vls}^* = 1)\)
\(N = 6\)

Viral Load not Suppressed
\((\text{vls}^* = 2)\)
\(N = 11\)

Not on ART
\((\text{pedtri90art}^* = 2)\)
Included in 90-90-90
\(N = 1\)

Viral Load Suppressed
\((\text{vls}^* = 1)\)
\(N = 0\)

Viral Load not Suppressed
\((\text{vls}^* = 2)\)
\(N = 1\)

Implied not on ART
\((\text{pedtri90art}^* = 3)\)
Included in 90-90-90
\(N = 33\)

Viral Load Suppressed
\((\text{vls}^* = 1)\)
\(N = 5\)

Viral Load not Suppressed
\((\text{vls}^* = 2)\)
\(N = 28\)

Incomplete data
\((\text{pedtri90art}^* = 99)\)
Excluded from 90-90-90
\(N = 0\)

Missing Viral Load
\((\text{vls}^* = 99)\)
\(N = 0\)

Viral Load suppressed
\((\text{pedtri90vls} = 1)\)
Included in 90-90-90
\(N = 6\)

Viral Load not suppressed
\((\text{pedtri90vls} = 2)\)
Included in 90-90-90
\(N = 40\)

Recode as Viral Load not suppressed
\((\text{pedtri90vls} = 3)\)
Included in 90-90-90
\(N = 5\)

Incomplete data
\((\text{pedtri90vls} = 99)\)
Excluded from 90-90-90
\(N = 0\)
Variable: pregnancystatus
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64
(\text{indstatus}^* = 1 \text{ and } 15 \leq \text{age} \leq 64)
N = 186,405

Female
\text{Gender} = 2
N = 103,065

- **Currently Pregnant** (\text{pregnant} = 1)
  N = 7,678

- **Not Currently Pregnant** (\text{pregnant} = 2)
  N = 71,528

- **Do not know, missing, or refused** (\text{pregnant} = -8, -9, or .)
  N = 23,859

Male
\text{Gender} = 1
N = 83,340

- **Currently Pregnant** (\text{pregnancystatus} = 1)
  N = 7,678

- **Not Currently Pregnant** (\text{pregnancystatus} = 2)
  N = 94,060

- **Missing** (\text{pregnancystatus} = 99)
  N = 84,667

- **Has never been pregnant** (\text{pregnum} = 0)
  N = 22,532

- **Has been pregnant more than 0 times** (\text{pregnum} = 1-97)
  N = 951

- **Do not know, missing, or refused** (\text{pregnum} = -8,-9, or .)
  N = 376
Variable: receivedresult_ng  
Found in NAIIS 2018 dataset: Adult Interview

Tested for HIV (evertested = 1)  
N = 61,586

Never tested for HIV (evertested = 2)  
N = 120,799

Don’t know or refused if tested for HIV (evertested = 99)  
N = 4,020

Age 15+, de facto eligible  
(15 ≤ age ≤ 64 and indstatus = 1)  
N = 186,405

N = 186,405

Never tested  
(evertested = 2)  
N = 120,799

Tested  
(evertested = 1)

Don’t know or refused if tested for HIV (evertested = 99)  
N = 4,020

Received result from last HIV test  
(hivtstrslt in (1:3))  
N = 58,229

Tested positive before last pregnancy  
(hivpsbp=1)  
N = 7

Tested during labor and received result  
(hivtti in (1:3))  
N = 14

Don’t know/ refused if received last test result  
(hivtstrslt in (-8,-9))  
N = 1,092

Don’t know/ refused if received result during pregnancy  
(hivrptg in (-8,-9))  
N = 62

Don’t know/ refused if tested during labor or if received result  
(hivtibin [-8,-9] or hivrsr in [-8,-9])  
N = 54

Did not test positive before last pregnancy, or don’t know/ refused  
(hivpsbp in (2,8,-9))  
N = 70

Missing  
(receivedresult_ng=99)  
N = 5,298

Received HIV test result  
(receivedresult_ng=1)  
N = 58,584

Received test result during last pregnancy  
(hivrptg in (1:3))  
N = 334

Did not receive last result  
(hivtstrslt=4)  
N = 1,710

Did not receive result from test during pregnancy  
(hivrptg=4)  
N = 14

Did not receive result from test during labor  
(hivrslr =4)  
N = 0

Did not receive HIV test result  
(receivedresult_ng=2)  
N = 122,523

Received HIV test result  
(receivedresult_ng=1)  
N = 58,584

Received test result during last pregnancy  
(hivrptg in (1:3))  
N = 334
Variable:
receivedresult12months_ng
Found in NAIIS 2018 dataset:
Adult Interview

Ever received HIV test result (receivedresult_ng=1) N = 58,584

Never received HIV test result (receivedresult_ng=2) N = 122,523

Missing if ever received HIV test result (receivedresult_ng=99) N = 5,298

Don't know or refused if received last HIV test result (hivstrslt in [-8,-9]) N = 3

Don't know or refused year of last test (hivtesty in [-8,-9]) N = 1,597

Don't know or refused month of last test (hivtestm in [-8,-9]) N = 3,854

Age 15-64, de facto eligible (15 ≤ age ≤ 64, ind_status = 1)
N = 186,405

Last test in 2018 and received result (hivtesty=2018 and hivstrslt in [1:3]) N = 16,517

Last test in 2017 and not missing month (hivtesty= 2017 and hivtestm not in (-8,-9)) N = 10,806

Last test during or prior to 2016 (1900 <= hivtesty<= 2016) N = 25,761

Tested during labor (hivttlb=1) N = 4

Not tested during labor (hivttlb=2) N = 8

Did not give birth within past 12 months (delivered12month=1) N = 19

Gave birth within past 12 months (delivered12month=1) N = 30

Don't know/ refused if tested during labor (hivttlb in [-8,-9]) N = 0

Don't know/ refused if tested during labor (hivttlb in [-8,-9]) N = 1

Received result of test during labor (hivrlr in [1:3]) N = 2

Did not receive result of test during labor (hivrlr =4) N = 1

Received HIV test result in past 12 months (receivedresult12months_ng=1) N = 19,163

Did not receive HIV test result in past 12 months (receivedresult12months_ng=2) N = 156,488

Missing if received HIV test result in past 12 months (receivedresult12months_ng=99) N = 10,754

Received HIV test result (hivtesty=2018) N = 122,523

Never received HIV test result (receivedresult_ng=2) N = 122,523

Last test not within 12 months (surveyestdt-[Date of last HIV test]*<365 and hivstrslt in [1:3]) N = 8,156

Tested during labor (hivttlb=1) N = 4

Not tested during labor (hivttlb=2) N = 8

Did not give birth within past 12 months (delivered12month=1) N = 19

Gave birth within past 12 months (delivered12month=1) N = 30

Don't know/ refused if tested during labor (hivttlb in [-8,-9]) N = 0

Don't know/ refused if tested during labor (hivttlb in [-8,-9]) N = 1

Received result of test during labor (hivrlr in [1:3]) N = 2

Did not receive result of test during labor (hivrlr =4) N = 1

Received HIV test result in past 12 months (receivedresult12months_ng=1) N = 19,163

Did not receive HIV test result in past 12 months (receivedresult12months_ng=2) N = 156,488

Missing if received HIV test result in past 12 months (receivedresult12months_ng=99) N = 10,754

*Date of last HIV test derived from hivtestm (month of last HIV test) and hivtesty (year of last HIV test). A value of 15 was imputed for day of last HIV test, as this information was not captured.
Variable: sexcohabpart_ng
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64, de facto eligible
(15 ≤ age ≤ 64, indstatus = 1)
N = 186,405

Has had vaginal sex (everhadsex_ng = 1)
N = 151,570

Has never had vaginal sex (everhadsex_ng = 2)
N = 34,014

Don't know, refused or missing if had vaginal sex
(everhadsex_ng in (-8, -9, ))
N = 821

Did not have sex with non-marital, non-cohabitating partner
(sexcohabpart_ng = 1)
N = 25,251

Missed
(sexcohabpart_ng = 99)
N = 67,177

Had 0 partners in past 12 months
(part12monum = 0)
N = 32,156

Had sex with non-marital, non-cohabitating partner
(partrelation1 in (3:96) or partrelation2 in (3:96) or partrelation3 in (3:96))
N = 25,251

Did not have sex with non-marital, non-cohabitating partner
(partrelation1 in (1, 2) or partrelation2 in (1, 2) or partrelation3 in (1, 2))
N = 93,977

Don't know or refused if had sex with non-marital, non-cohabitating partner
(partrelation1 in (-8, -9) or partrelation2 in (-8, -9) or partrelation3 in (-8, -9))
N = 186

Did not have sex with non-marital, non-cohabitating partner
(sexcohabpart_ng = 2)
N = 93,977
Variable: treatedfortb
Found in NAIIS 2018 dataset: Adult Interview

Age 15-64
(indstatus* = 1 and 15 <= age <= 64 and diagnosedtb* = 1)
N = 918

Has been treated for tuberculosis (tbtreated = 1)
N = 840

Has not been treated for tuberculosis (tbtreated = 2)
N = 78

Missing information about having been treated for tuberculosis (tbtreated = -8 or -9 or .)
N = 0

Has been treated for tuberculosis (treatedfortb = 1)
N = 840

Has not been treated for tuberculosis (treatedfortb = 2)
N = 78

Missing information about having been treated for tuberculosis (treatedfortb = 99)
N = 0
Variable: tri90
Found in NAIIS dataset:
Adult Biomarker

Age 15-64, de facto eligible, and HIV+
\((15 \leq \text{age} \leq 64 \text{ and } \text{bt\_status}^* = 1 \text{ and } \text{hivstatusfinal}^* = 1)\)
\(N = 2,739\)

ARVs detected
\((\text{arvstatus}^* = 1)\)
\(N = 1287\)

ARVs not detected or missing
\((\text{arvstatus}^* = 2 \text{ or } 99)\)
\(N = 1452\)

Self reported unaware of HIV seropositive status
\((\text{awareselfreported}^* = 2)\)
\(N = 1,339\)

Self reported aware of HIV seropositive status
\((\text{awareselfreported}^* = 1)\)
\(N = 85\)

Self reported missing information on awareness
\((\text{awareselfreported}^* = 99)\)
\(N = 28\)

Self reported not on ART
\((\text{artselfreported}^* = 2)\)
\(N = 44\)

Self reported on ART
\((\text{artselfreported}^* = 1)\)
\(N = 35\)

Self reported missing information on ART
\((\text{artselfreported}^* = 99)\)
\(N = 6\)

Viral Load suppressed
\((\text{vls}^* = 1)\)
\(N = 1050\)

Viral Load unsuppressed
\((\text{vls}^* = 2)\)
\(N = 237\)

Missing Viral Load suppression information
\((\text{vls}^* = 99)\)
\(N = 0\)

Included in 90-90-90
\((\text{tri90} = 1)\)
\(N = 2,705\)

Not included in 90-90-90
\((\text{tri90} = 2)\)
\(N = 34\)
Age 15-64, de facto eligible, and HIV+ (15 ≤ age ≤ 64 and bt_status* = 1 and hivstatusfinal* = 1) 
N = 2,739

Included in 90-90-90 (tri90* = 1) 
N = 2,705

Excluded from 90-90-90 (tri90* = 2) 
N = 34

ARVs detected (arvstatus* = 1) 
N = 1,287

ARVs not detected (arvstatus* = 2 or 99) 
N = 1,418

Self-reported Aware of HIV status (awareselfreported* = 1) 
N = 79

Self-reported Unaware of HIV Status (awareselfreported* = 2) 
N = 1,339

Self reported on ART (artselfreported* = 1) 
N = 35

Self reported not on ART (artselfreported* = 2) 
N = 44

On ART and included in 90-90-90 (tri90art = 1) 
N = 1,322

Not on ART and included in 90-90-90 (tri90art = 2) 
N = 44

Unaware, not on ART, And included in 90-90-90 (tri90art = 3) 
N = 1,339

Incomplete 90-90-90 information (tri90art = 99) 
N = 34

Variable: tri90art
Found in NAIIS dataset: Adult Biomarker
Age 15-64, de facto eligible, and HIV+ (15 ≤ age ≤ 64 and bt_status* = 1 and hivstatusfinal* = 1) 
N = 2,739

Included in 90-90-90 (tri90* = 1) 
N = 2,705

Excluded from 90-90-90 (tri90* = 2) 
N = 34

ARVs detected (arvstatus* = 1) 
N = 1,287

ARVs not detected (arvstatus* = 2 or 99) 
N = 1,418

Aware of HIV status (awareselfreported* = 1) 
N = 79

Unaware of HIV Status (awareselfreported* = 2) 
N = 1,339

Aware and included in 90-90-90 (tri90aware = 1) 
N = 1,366

Unaware and included in 90-90-90 (tri90aware = 2) 
N = 1,339

Incomplete 90-90-90 information (tri90aware = 99) 
N = 34
Variable: tri90vls
Found in NAIIS 2018 dataset:
Adult Biomarker

Age 15-64, de facto eligible, and HIV+
\((15 \leq \text{age} \leq 64 \text{ and } \text{bt\_status}^* = 1 \text{ and } \text{hivstatusfinal}^* = 1)\)
\(N = 2,739\)

Included in 90-90-90
\((\text{tri90}^* = 1)\)
\(N = 2,705\)

Excluded from 90-90-90
\((\text{tri90}^* = 2)\)
\(N = 34\)

ARVs detected
\((\text{arvstatus}^* = 1)\)
\(N = 1,287\)

ARVs not detected
\((\text{arvstatus}^* = 2 \text{ or } 99)\)
\(N = 1,418\)

Self-reported Aware of HIV status
\((\text{awareselfreported}^* = 1)\)
\(N = 79\)

Self-reported Unaware of HIV Status
\((\text{awareselfreported}^* = 2)\)
\(N = 1,339\)

Self reported on ART
\((\text{artselfreported}^* = 1)\)
\(N = 35\)

Self reported not on ART
\((\text{artselfreported}^* = 2)\)
\(N = 44\)

On ART and included in 90-90-90
\((\text{tri90art}^* = 1)\)
\(N = 1,322\)

Not on ART and included in 90-90-90
\((\text{tri90art}^* = 2)\)
\(N = 44\)

Unaware, not on ART, And included in 90-90-90
\((\text{tri90art}^* = 3)\)
\(N = 1,339\)

Viral load suppressed
\((\text{vls}^* = 1)\)
\(N = 1,066\)

Viral load not suppressed
\((\text{vls}^* = 2)\)
\(N = 256\)

Viral load suppressed
\((\text{vls}^* = 1)\)
\(N = 7\)

Viral load not suppressed
\((\text{vls}^* = 2)\)
\(N = 37\)

Missing Viral load
\((\text{vls}^* = 99)\)
\(N = 0\)

Viral load suppressed
\((\text{vls}^* = 1)\)
\(N = 164\)

Viral load not suppressed
\((\text{vls}^* = 2)\)
\(N = 1175\)

Missing Viral load
\((\text{vls}^* = 99)\)
\(N = 0\)

Viral load suppresed
\((\text{tri90vls} = 1)\)
\(N = 1,066\)

Viral load not suppresed
\((\text{tri90vls} = 2)\)
\(N = 256\)

Recoded as viral load not suppresed
\((\text{tri90vls} = 3)\)
\(N = 171\)

Incomplete 90-90-90 information
\((\text{tri90art} = 99)\)
\(N = 34\)
Variable: uniontype
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64
(indstatus* = 1 and 15 <= age <= 64)
N = 186,405

- Never Married (evermar = 2)
  N = 58,496

  - Did not know, refused, or missing (evermar = -8,-9,-)
    N = 150

- Ever Married Lived Together (evermar = 1)
  N = 127,759

  - Divorced or Separated (curmar = 4,5)
    N = 4,635

  - Widowed (curmar = 3)
    N = 8,558

  - Married or Living Together (curmar = 1,2)
    N = 114,461

  - Did not know, refused or missing (curmar = -8,-9,-)
    N = 105

- Did not know, refused, or missing (evermar = -8,-9,-)
  N = 105

- Not Currently in Union (uniontype=3)
  N=71,689

  - Not in Polygynous Union (numwif = 1)
    N = 38,139

  - Not in Polygynous Union (husotwif = 2)
    N = 43,889

  - In Polygynous Union (numwif /= 1,-8,-9,-)
    N = 8,611

  - In Polygynous Union (husotwif = 1)
    N = 31,652

  - Did not know, refused, or missing (numwif = -8,-9,-)
    N = 329

  - Did not know, refused, or missing (husotwif = -8,-9,-)
    N = 452

  - Missing uniontype=99
    N=1,036
Variable: visitedtbclinic
Found in NAIIS 2018 dataset:
Adult Interview

Age 15-64
(indstatus* = 1 and 15 <= age <= 64)
N = 186,405

Ever visited a clinic for tuberculosis evaluation
(tbclinvisit = 1)
N = 3,407

Never visited a clinic for tuberculosis evaluation
(tbclinvisit = 2)
N = 181,005

Missing information on visiting a clinic for tuberculosis evaluation
(tbclinvisit = -8 or -9 or .)
N = 1,993

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Ever visited a clinic for tuberculosis evaluation
(visitedtbclinic = 1)
N = 3,407

Never visited a clinic for tuberculosis evaluation
(visitedtbclinic = 2)
N = 181,005

Missing information on visiting a clinic for tuberculosis evaluation
(visitedtbclinic = 99)
N = 1,993