

# GLOBAL ADULT TOBACCO SURVEY SOUTH AFRICA

## IMPLEMENTATION PROCESS

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ISSUP Webinar Series – Part I  
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# BACKGROUND

- Tobacco use is a major preventable cause of premature death and disease globally
  - 8 million+ people die annually due to tobacco-related illnesses
- About 1.4 billion people aged 15+ years use tobacco in various forms
- Through MPOWER, the WHO has provided demand-reducing measures to scale back tobacco use
- Tobacco use surveillance and monitoring forms an important function of the demand-reducing measures



**Monitor tobacco use & prevention policies**

**Protect people from tobacco smoke**

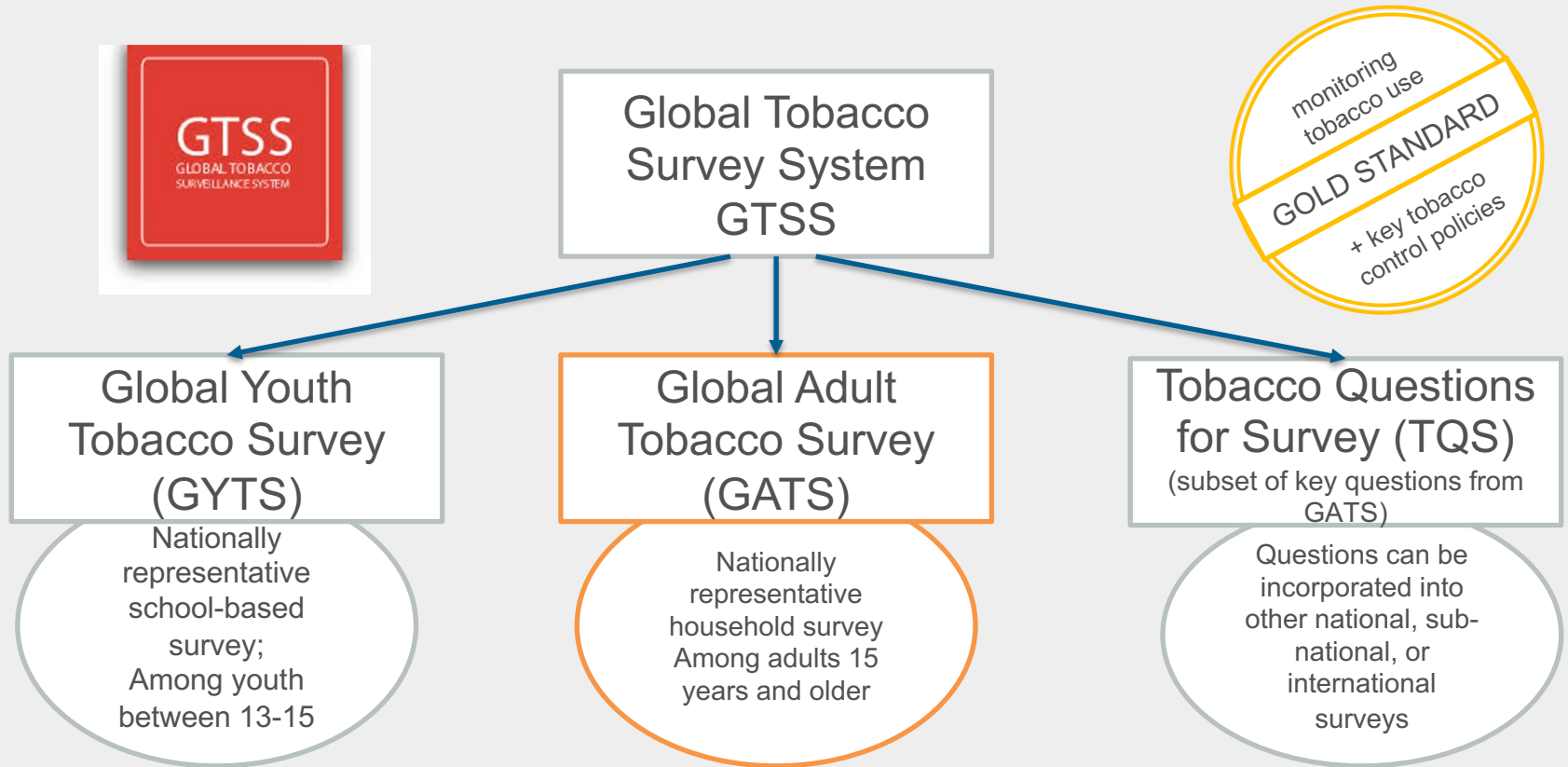
**Offer help to quit tobacco use**

**Warn about the dangers of tobacco**

**Enforce bans on tobacco advertising, promotion, & sponsorship**

**Raise taxes on tobacco**

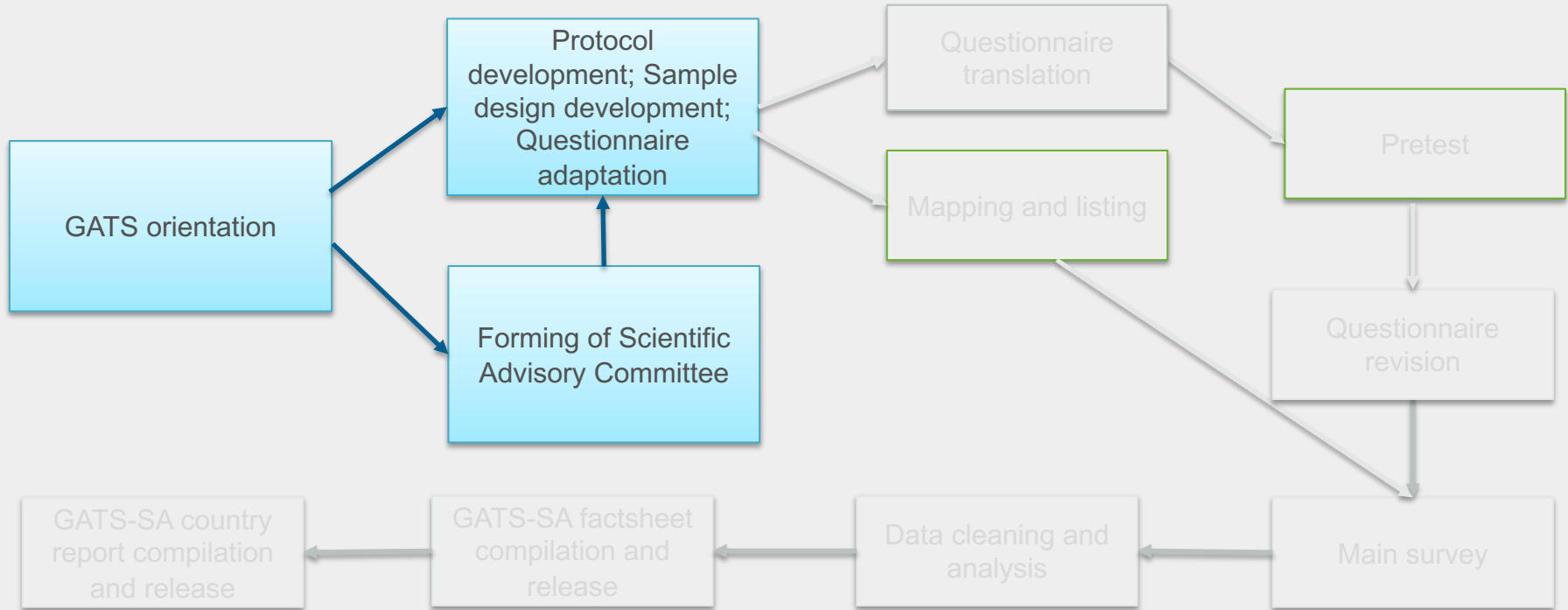
# GLOBAL TOBACCO SURVEILLANCE SYSTEM



# GATS IMPLEMENTING COUNTRIES (N=34)

Africa	Asia	Americas	Europe
<ul style="list-style-type: none"><li>• Botswana</li><li>• Cameroon</li><li>• Egypt</li><li>• Ethiopia</li><li>• Kenya</li><li>• Nigeria</li><li>• Senegal</li><li>• <b>South Africa</b></li><li>• Tanzania</li><li>• Uganda</li></ul>	<ul style="list-style-type: none"><li>• Bangladesh</li><li>• China</li><li>• Kazakhstan</li><li>• India</li><li>• Indonesia</li><li>• Malaysia</li><li>• Pakistan</li><li>• Panama</li><li>• Philippines</li><li>• Qatar</li><li>• Saudi Arabia</li><li>• Thailand</li><li>• Türkiye</li><li>• Viet Nam</li></ul>	<ul style="list-style-type: none"><li>• Argentina</li><li>• Brazil</li><li>• Costa Rica</li><li>• Mexico</li><li>• Uruguay</li></ul>	<ul style="list-style-type: none"><li>• Greece</li><li>• Poland</li><li>• Romania</li><li>• Russian Federation</li><li>• Ukraine</li></ul>

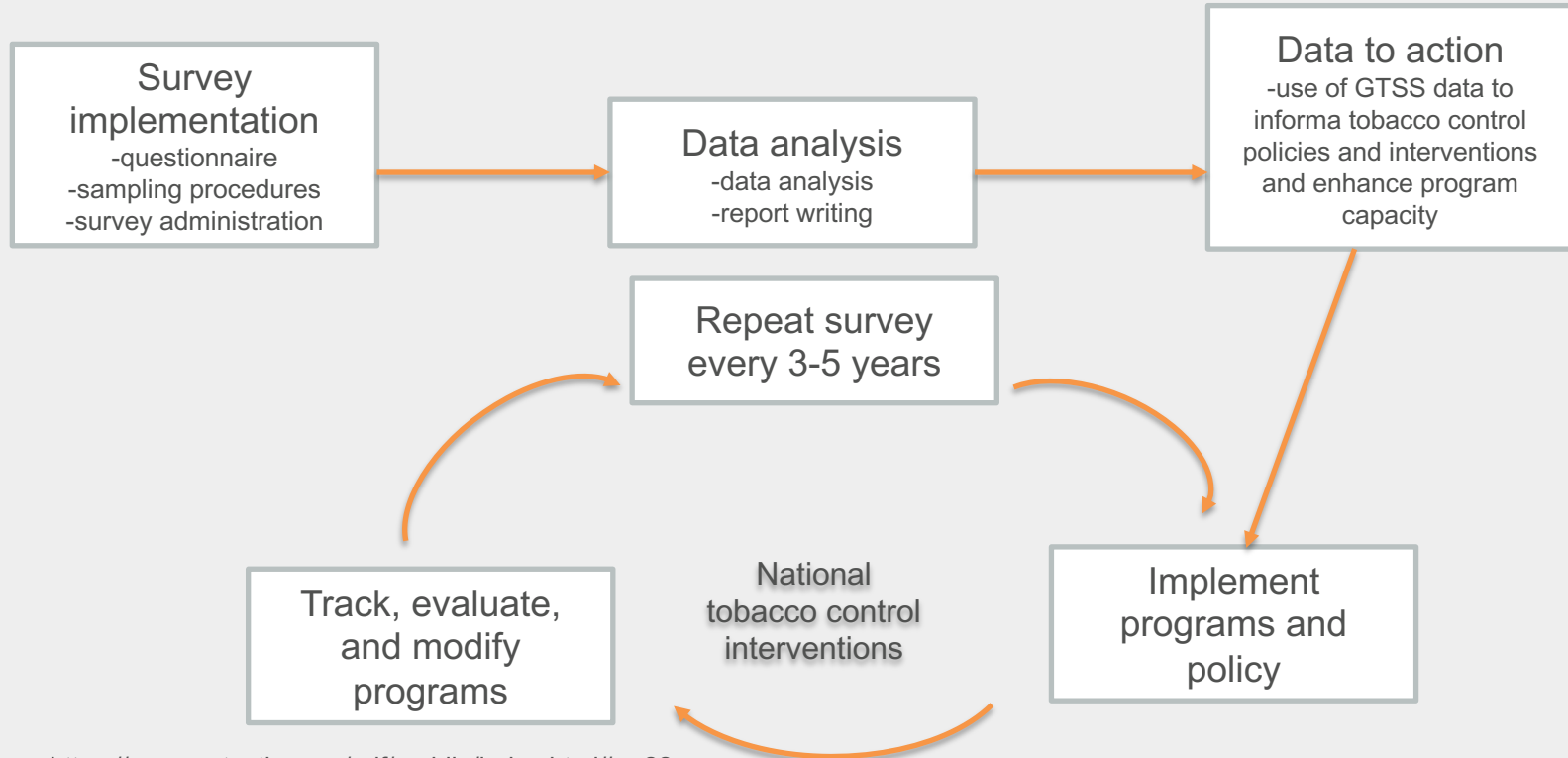
# GATS-SA IMPLEMENTATION FLOW – PART 1



# GATS ORIENTATION

- Attended by SAMRC, NDOH, WHO country office
- Presentations
  - Introduction to GTSS and GATS
  - Country tobacco policies – presentation by country
  - GATS questionnaire, processes, and manuals
- Data management training
- Country discussions
  - Sample design
  - Questionnaire review
  - funding

# GTSS PLAN AT A GLANCE



Source: <https://www.gatsatlas.org/pdf/mobile/index.html#p=22>

# GATS ORIENTATION





# GATS-SA LEADING AND COLLABORATING ORGANISATIONS

- Leading organisations
  - South Africa Medical Research Council (SAMRC)
  - The National Department of Health (NDOH)
  - StatsSA provided key population level materials
- Collaborating organisations
  - US Centers for Disease Control and Prevention (CDC)
  - World Health Organisation (WHO)
  - Research Triangle international (RTI)
- GeoSpace International Pty (Ltd) was appointed to conduct the fieldwork for the study

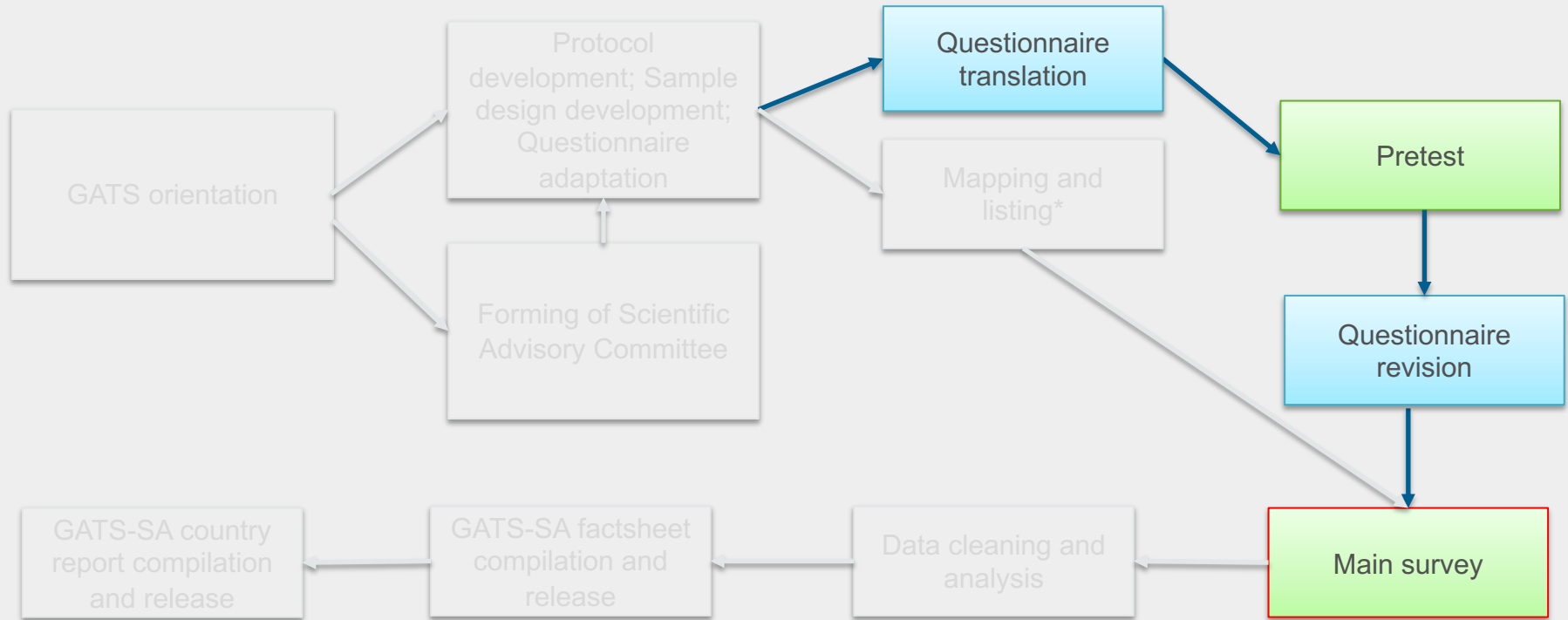
# PROTOCOL REVIEW

- GATS review committees
  - Protocol review committee
  - Sample design review committee
  - Questionnaire review committee
- SAMRC scientific review process
- SAMRC human ethics research committee

# SCIENTIFIC ADVISORY COMMITTEE

Institution	N members
South African Medical Research Council	3 (including chairperson)
Africa Centre for Tobacco Industry Monitoring and Policy Research	1
Statistics South Africa	2
Research Unit on the Economics of Excisable Products	2
National Department of Health	1
World Health Organisation Country Office	1

# GATS-SA IMPLEMENTATION FLOW – PART 2



# QUESTIONNAIRE CONTENT

Questionnaire topics	MPOWER
Prevalence: current tobacco use, tobacco smoking, use of novel nicotine and tobacco products Age of initiation	Monitor use and policies
Exposure to second-hand smoke in public places, workplace, home	Protect from second-hand smoking
First of the day, intention to quit, attempts to quit, advice from HCPs	Offer help to quit
Beliefs about dangers, impact of health warnings, impact of anti-cigarette and anti-tobacco advertisement	Warn of dangers
Advertising and promotion of tobacco and nicotine products	Enforce marketing bans
Cost and affordability of cigarettes and tobacco, expenditure on cigarettes and tobacco	Raise prices

# QUESTIONNAIRE TRANSLATION

- English to 10 other official languages – backtranslated
- English and translated versions loaded on GTSS system
- Virtual translation review sessions between translators and RTI

\*written participant information sheet and consent forms were also translated and backtranslated

# PRETEST

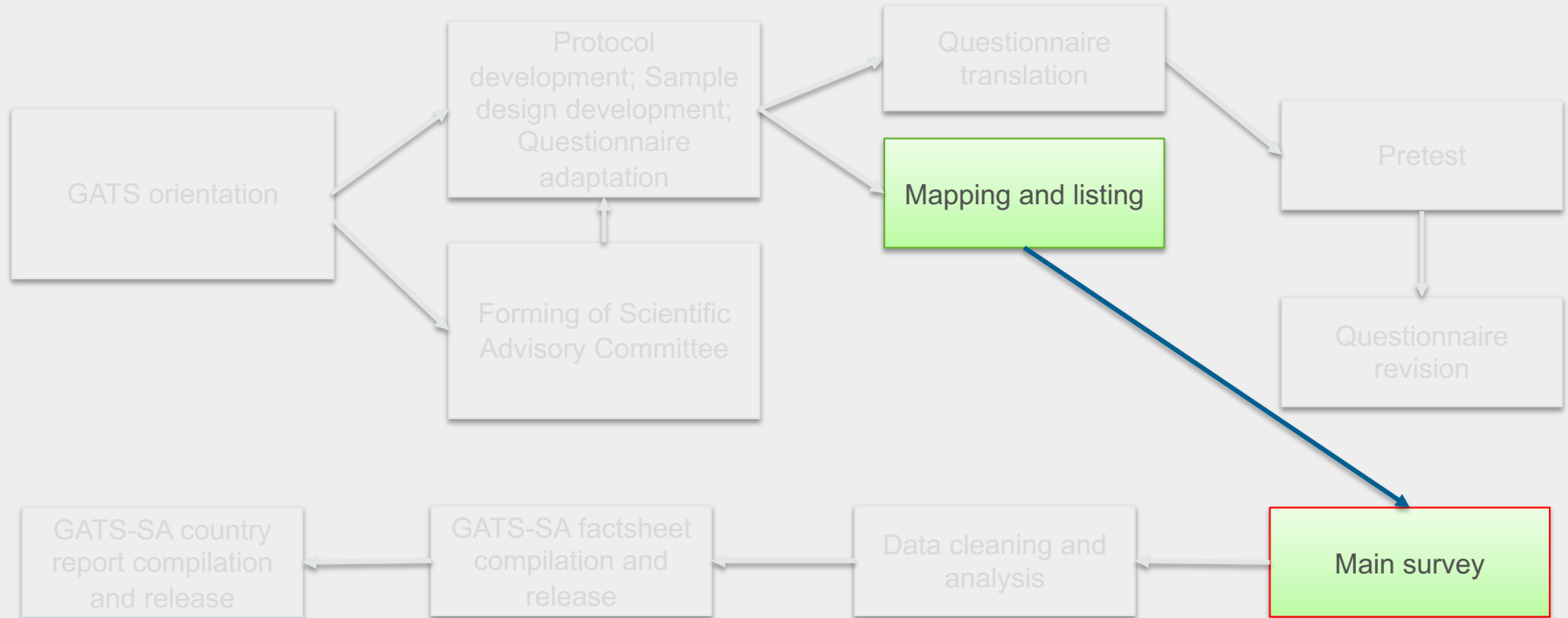
AIM: To test survey procedures and questionnaire and its translated versions

# PRETEST: METHODS, TRAINING, DATA COLLECTION

- Purposive sample of 122 dwelling units in Gauteng
- Recruited and trained fieldworkers
  - Didactic and roleplay methods
- Debriefing session with fieldworkers post completion of interviews
- Lessons learned informed revisions to procedures and questionnaire
  - Syncing of data
    - need to spend more time on this aspect at training
    - need to verify successful syncing of interviews - put an alert mechanism for data manager when an interview has been submitted to server
  - Translated questionnaires
    - identified and implemented needed changes to capture cultural nuance in languages
- Data manager received virtual training on GTSS system



# GATS-SA IMPLEMENTATION FLOW – PART 3



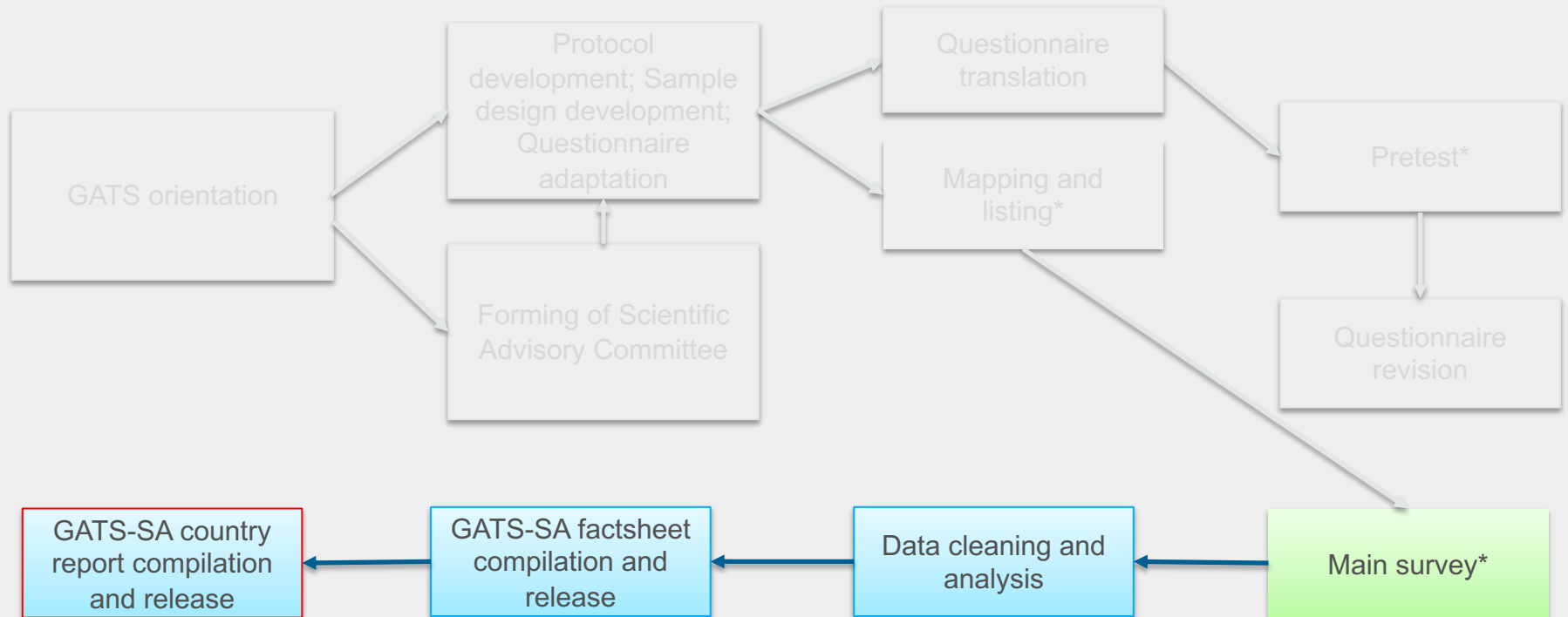
# MAPPING & LISTING

AIM: To generate a list of dwelling units to be sampled for main survey

# METHODS, TRAINING, DATA COLLECTION

- Obtained Master Sampling Frame (MSF) from StatsSA
- Selected primary sampling units (PSUs) from each of 9 provinces
- Recruited and trained fieldworkers
  - Didactic and roleplay methods
  - Practice session in area near training venue
- Fieldworkers visited all selected PSUs
- Data collected using handheld devices
- All structures given a classification code – e.g. school, hospital, dwelling unit etc.
- Structures that met inclusion criteria were included in the sample

# GATS-SA IMPLEMENTATION FLOW – PART 4



## MAIN SURVEY

AIM: To generate rural-urban and nationally representative data on adult tobacco use and key tobacco control measures that can be compared with those of other GATS implementing countries

# METHODS

- Cross-sectional design
- National, household survey
- Multi-stage stratified sampling procedure
- Target Population
  - Adults- i.e. aged 15 years+
  - Non-institutionalised
  - Usual residents in the country (S.A. resident  $\geq 6$  of past 12 months)
  - Usual residents in the household (HH resident  $\geq 6$  of past 12 months)

# SAMPLING DESIGN

1

- selection of primary sampling units (PSUs)
- Probability proportionate to size

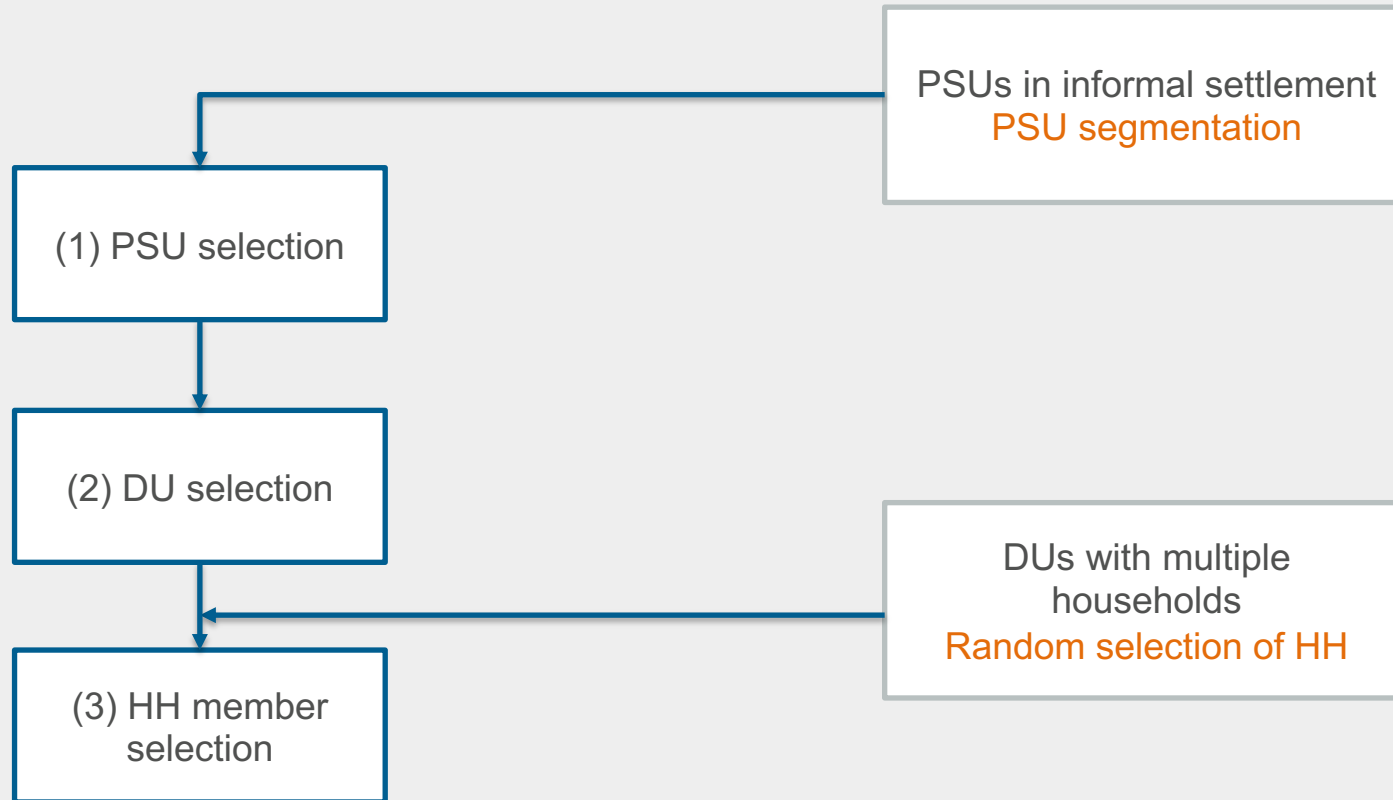
2

- Selection of dwelling units within selected PSUs - systematic sampling

3

- random selection of one adult household member (age  $\geq 15$  years) after household screening

# SAMPLING DESIGN (CONDITIONAL) MODIFICATION





# SAMPLE SIZE

	Target	Actual
PSUs	121	120
Urban	55	55
Rural	66	65
Household	7245	6424
Individual		6311

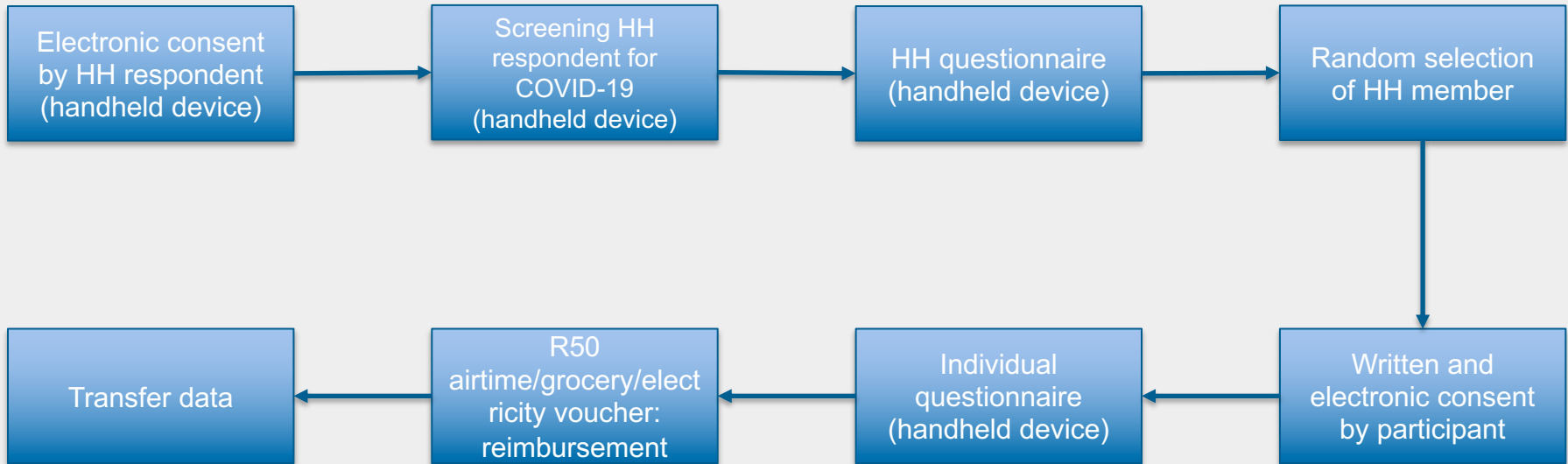
# FIELDWORKER TRAINING

- Conducted by
  - SAMRC team (with assistance from GeoSpace)
  - and National Department of Health
  - with support from the CDC and WHO AFRO and country office
- Five-day, face-to-face, with strict compliance to COVID-19 protocol
- Gauteng province (Pretoria)
- Combined didactic and role play methods
- Mock interviews in English and local languages.

# FIELDWORK TRAINING



# DATA COLLECTION FLOW



# DATA COLLECTION

- Facilitated by GeoSpace International
- Conducted by 44 trained fieldworkers (33 field interviewers and 11 field supervisors)
- Data were collected using handheld devices (tablets)
- Tablets were programmed with:
  - GTSS software: DU details, random selection of HH member, and questionnaire
  - M.Appenterprise: to monitor data collection
  - KOBO software: random selection HHs where >1 HH
  - FLASH software: airtime and grocery voucher purchase
- Data collection took place over ~3.5-month period (17th May to 1st September 2021)
  - Face-to-face interviews at each selected HH using tablets
- Data were transferred from the handheld devices to the central database daily in line with data transmission protocol
- Full time data manager monitored the collected data on a daily basis

# DATA COLLECTION



# COVID-19 PROTOCOL

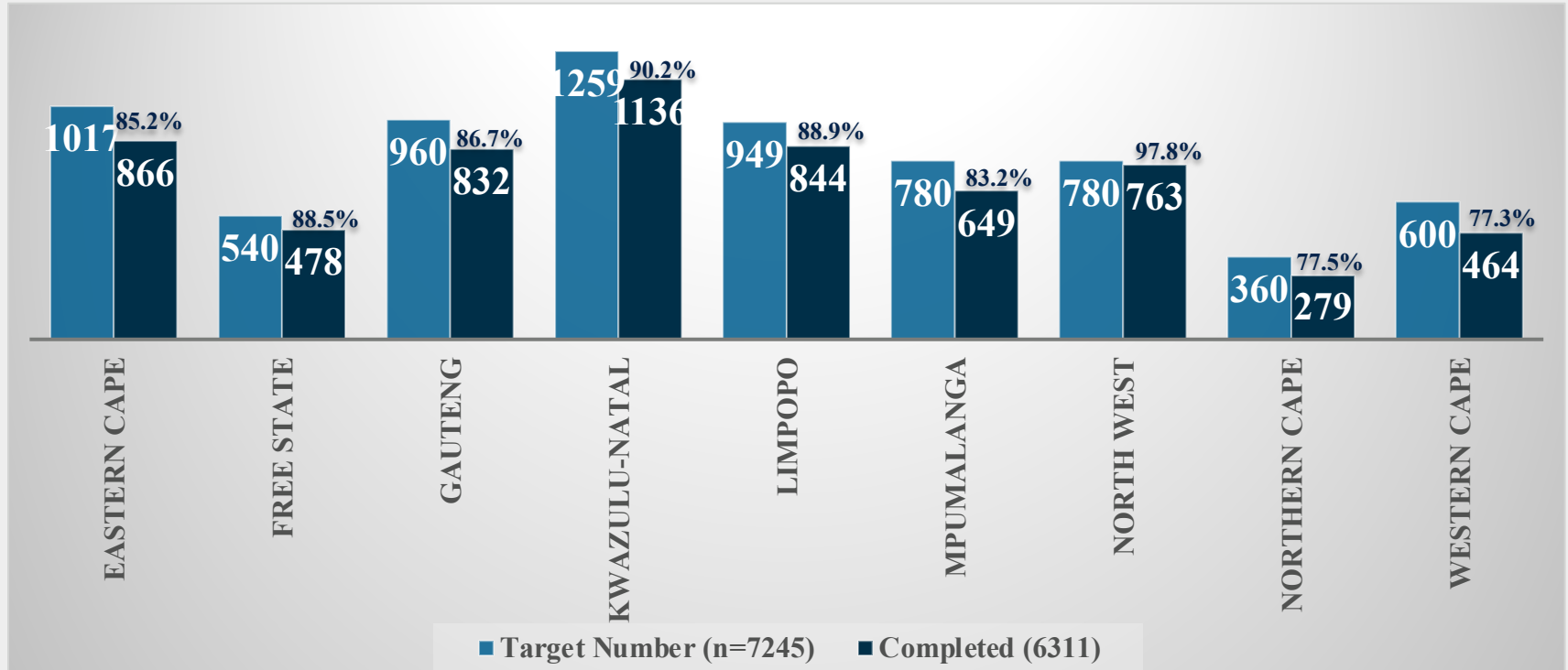
- FWs self-screened every morning (temperature check, symptom check, risk exposure)
- FWs wore facemasks throughout fieldwork
- Participants were provided facemasks
- FWs sanitized cars before fieldwork daily
- FWs sanitized and screened interview respondents
- Respondent positive screen: revisited 10 days later (compliance monitored closely)

# QUALITY ASSURANCE

- Use of software to monitor data collection (e.g. location)
- FWs provided comments for all non-completed interview visit outcomes
- FWs provided photos for vacant buildings/land for verification
- Access to GTSS system codes for opening cases in certain conditions restricted to data manager
- Monthly meetings with fieldworkers to pick up on field challenges, troubleshoot, and provide support
- Daily checks of data on the server conducted by data manager
- Weekly meeting by project team to review data collection
  - Review weekly report from data manager



# % COMPLETED INTERVIEWS PER PROVINCE

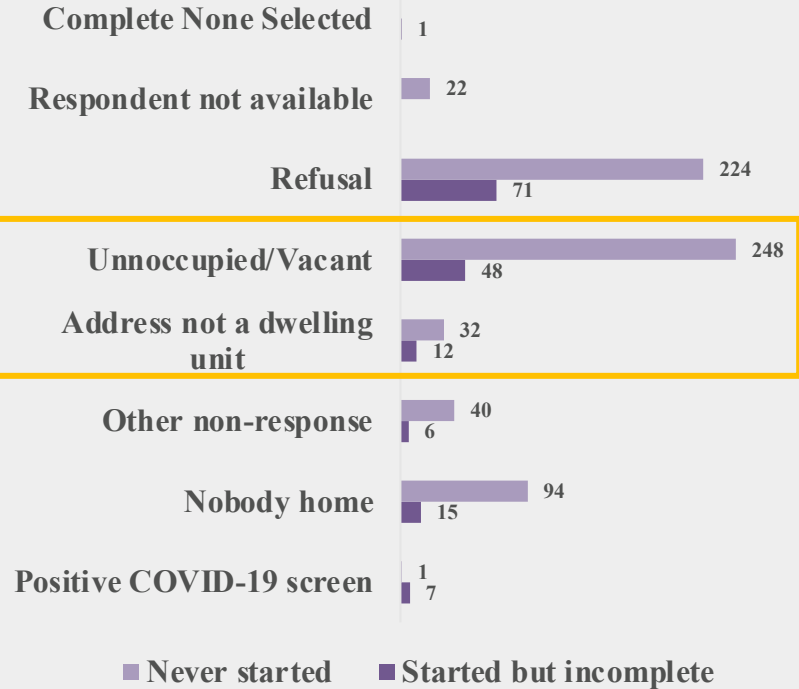
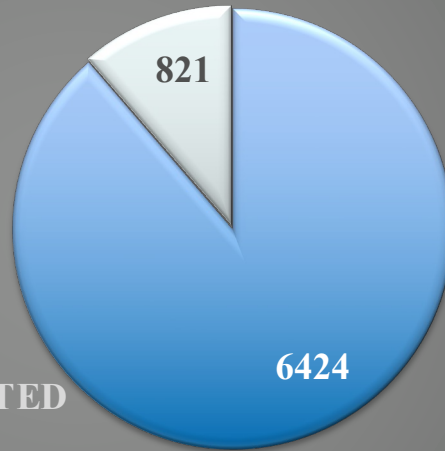


# HH INTERVIEW OUTCOMES

Response rate  
(HRR): 93.0%

■ COMPLETED

■ NOT COMPLETED

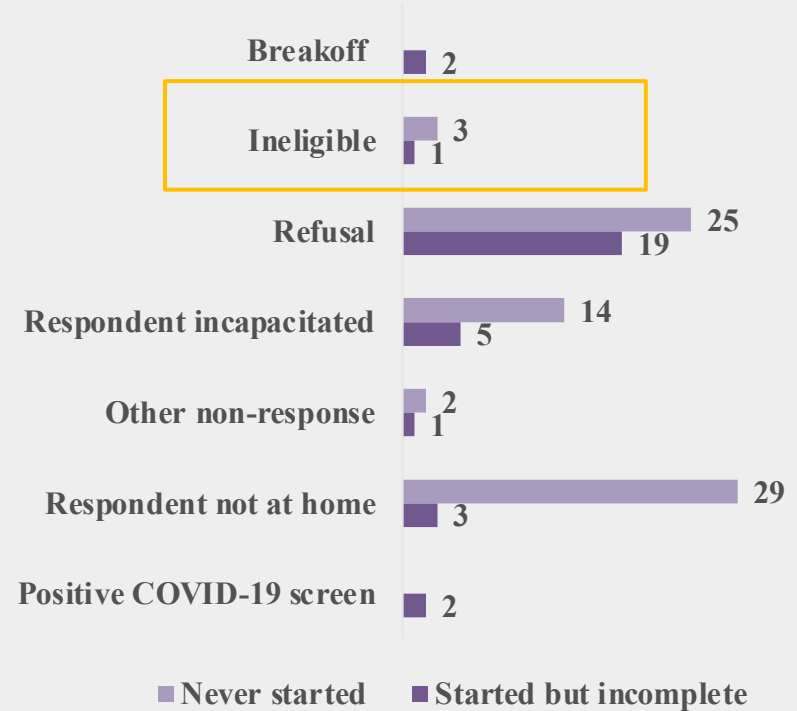
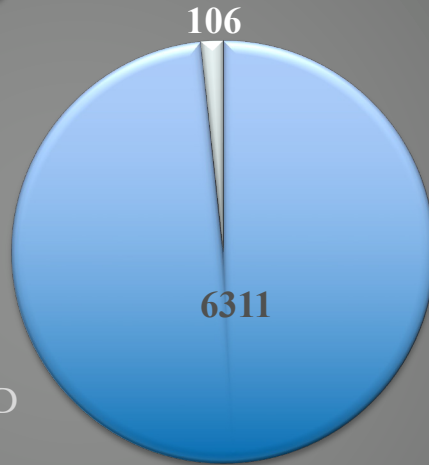


# INDIVIDUAL INTERVIEW OUTCOMES

Response rate  
(PRR): 98.4%

COMPLETED

NOT COMPLETED



Overall response rate =  $HRR * PRR = 91.5\%$

# CHALLENGES

- Lengthy process to gain access to PSUs
- COVID-19 prevented access at a food farm – fear of contamination
- Potential respondents' fear of signing informed consent forms
- Reimbursement for participants in remote areas
- GTSS software for questionnaire – syncing, preassigned DUs
- Suspension of fieldwork due to COVID-19 third wave (mainly Gauteng) and protests (KZN)
- Extension of fieldwork – required additional resources

# SUCCESSSES

- Overall response rate = 91.6%
- Gained access to all except 1 PSU
- Generally good reception at HHs, including high-walled areas
- Completed fieldwork without reported incidences of
  - COVID-19 among fieldworkers
  - Crime-related or other victimization of teams

# ACKNOWLEDGEMENTS

- Funder: CDC Foundation & Bloomberg Philanthropies
- National Department of Health
- Collaborating/supporting organisations: CDC, WHO (AFRO and SA offices), Statistics South Africa, Research Triangle International (RTI)
- Participants and gatekeeping authorities for willingness to participate and granting access/permissions, respectively
- Scientific Advisory committee members from SAMRC, SMU/UP, UCT, WHO, NDoH, StatsSA
- GeoSpace International (Pty) and all the dedicated fieldworkers
- SAMRC Team: Catherine Egbe (Lead investigator), Samuel Manda (Statistician), Sebenzile Nkosi (Project Manager) and Mukhethwa Londani (Data Manager) Phindile Ngobese (Research Assistant)

Thank you