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COVID-19 DATA ANALYSIS AND ADVICE  
GROUP

TECHNICAL ADVICE DOCUMENT:  
TEMPORARY SCREENING FACILITY

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## 2 INTRODUCTION

Based on our experience as the Governments Assessment Team to Sierra Leone during the Ebola outbreak, guidelines are given and these same concepts were also tested in detail during the Avian Wind Scenario Exercise in Germany (United States European Command, 2006) in preparation for the H5N1 Avian Influenza outbreak in June 2006 with 14 countries participating. These recommendations are also mirrored against the current experiences in China, Italy, Spain, the UK and USA.

This technical advice document must be read along with the Plan to Manage COVID-19: Spatial Response Strategy for the Epidemic (Republic of South Africa, 2020).

## 3 PLANNING SCREENING FACILITIES

The TEMPORARY screening facilities is an integral part of an overall approach to testing (Republic of South Africa, 2020).

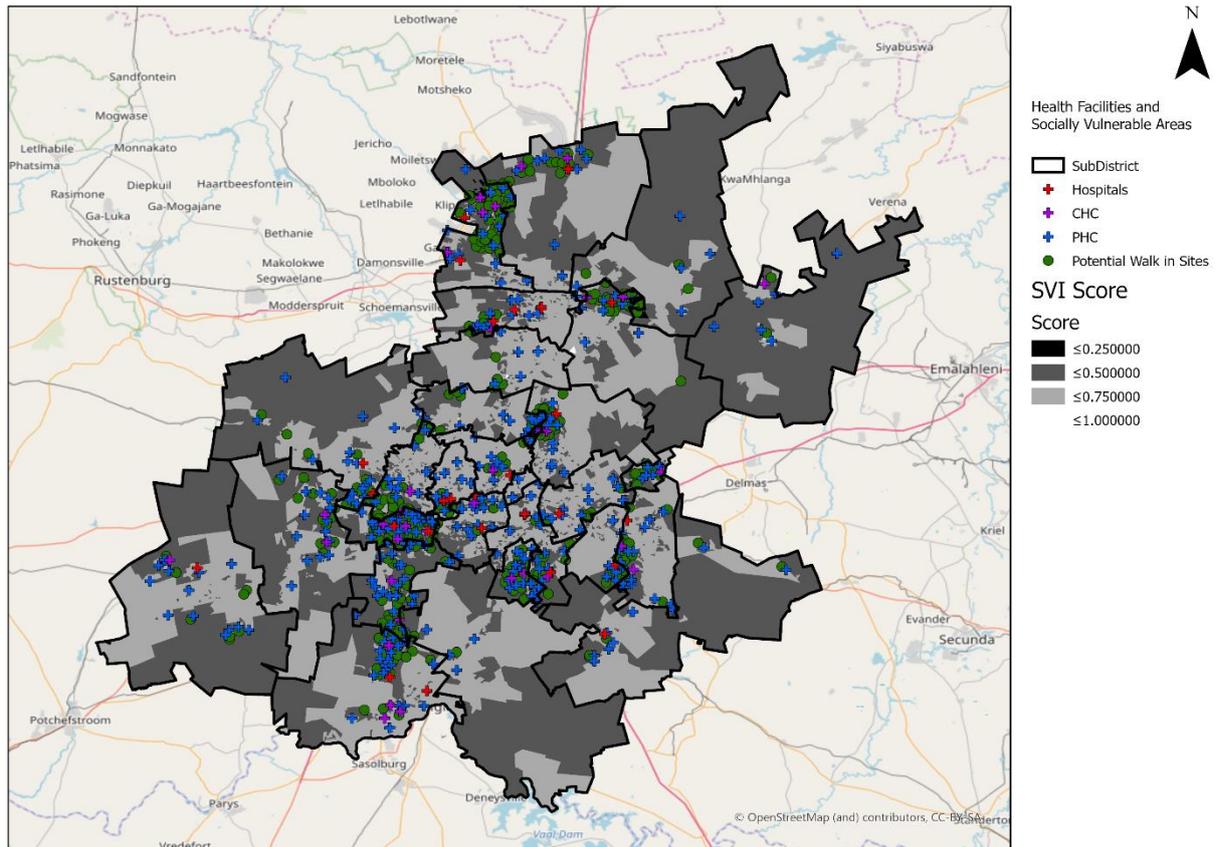
Testing will be conducted by:

- Health facility screening and testing at clinics and other facilities
- Triage points at hospitals
- Door-to-door screening and testing
- Drive-through screening and testing
- Walk-through screening and testing

Where facilities are not available this TECHNICAL ADVICE DOCUMENT gives guidelines for setting-up tented temporary test facilities.

### 3.1 POSITIONING OF SCREENING AND TEST SITES

Placement of these screening and test sites need to be positioned based on the GIS analysis of social vulnerability, placement and location of current health care facilities and availability of epidemiology analysis.



**Figure 1: Map of potential walk-in/drive through facilities utilising social vulnerability concepts**

Within lower income zones the testing facilities should be within walking distance, therefore in the above positioning recommendations, polling station positions were used as indicators.

### 3.2 SCREENING AND TESTING STATION FLOW

To ensure maximum preventative measures a logical outlay and flow is essential.

## TESTING AND SCREENING FACILITY FLOW

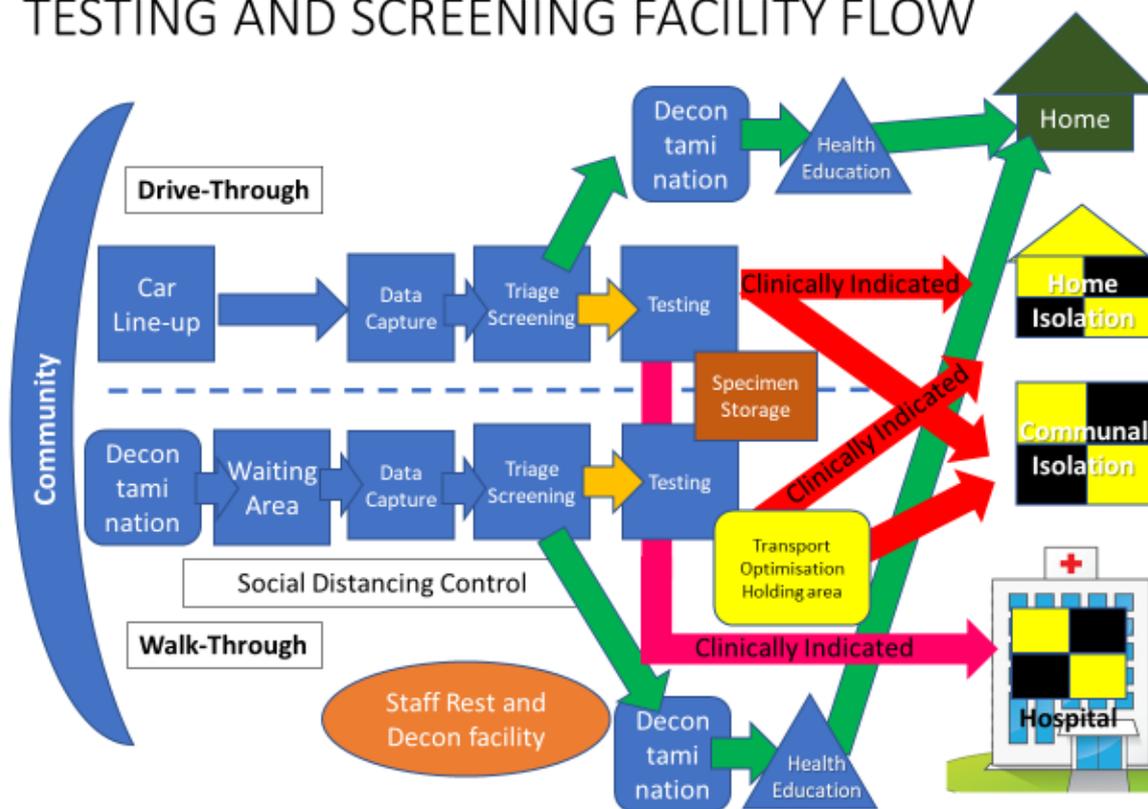


Figure 2: Flow at Screening and Testing Capability

Some critical points are highlighted:

- Decontamination of hands on arrival is a critical interphase. This can ideally be done by handwashing under supervision or less ideal hand sanitation under supervision.
- Adequate waiting space with enforced social distancing is critical.
- Data capturing is essential for tracing and laboratory feedback.
- Screening is done based on clinical criteria. An exit stream from screening is indicated if applicable based on formal guidelines from the NICD. If mass testing is rolled out this exit stream will NOT be utilised.
- Testing includes current swab-taking procedure, with handwashing facilities for health care workers.
- Specimen storage is limited to cool boxes and a logistical train of collection.
- Based on the screening interview, based on social situation – exit will be to:
  - Home isolation in social circumstances that can support the concept.
  - Communal isolation facilities.
  - Hospitalisation for clinically indicated cases.
- To optimise transport to communal isolation facilities a holding area with enforced social distancing may be indicated.
- Patients clinically indicated for admission should be transferred as soon as possible, by ambulance, to the identified hospital facility.
- If patients are discharged due to screening criteria, health education should be provided especially on symptoms and the process to re-report if indicated.

- Due to the current laboratory testing process number, final decision will be available at the screening and testing facility, and final confirmation will only be available after specimen was tested. If an improved testing capability becomes available an immediate result may be available.

This outlay can be adapted based on physical layout restrictions.

### 3.3 TENTED FACILITIES

To meet the requirements an example outlay as well as examples of the available tented facilities in South Africa is provided.

The concept of very basic tents is recommended:

- A tent used for decontamination on arrival and handwashing/sanitation.
- Screening and testing tent
- Staff rest area and storage of both specimens and PPE.
- Waiting area for transport (Please note social distancing)
- Drive-through gazebo

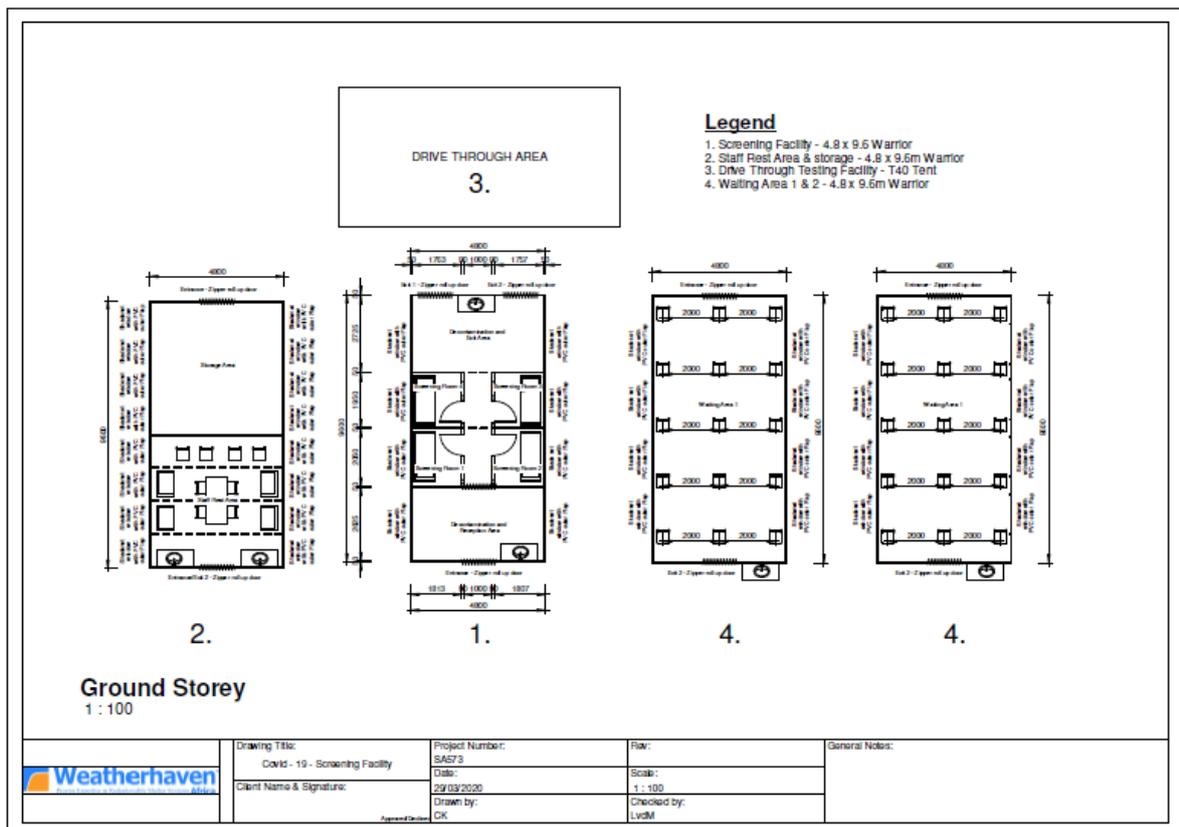


Figure 3: Example of Tents to be used (Sequence may change)



Figure 4: Example of simple tent designs (Soft partitions between areas not included)

#### 4 BIBLIOGRAPHY

Burman, J., 1971. *Disaster struck South Africa*, Cape Town: C. Struik.

Ciotone, G. R. ( a., 2006. *Disaster Medicine*, Philadelphia: Mosby.

ICRC, n.d. *Hospitals for War-Wounded*, Geneva: ICRC.

ICRC, n.d. *War and Public Health*, Geneva: ICRC.

Ligthelm, T., 2014. *High Security Bio-Safety Isolation*. Second ed. Johannesburg: Right to Care.

Medecins Sans Frontieres, 1997. *Refugee Health* , Oxford: Macmillan Education.

Powers, R. & Daily, E., 2010. *International Disaster Nursing*, Cambridge: Cambridge University Press.

Republic of South Africa, 2020. *Plan to Manage the COVID-19*, Pretoria: Dept of Health.

United States European Command, 2006. *Anian Wind 2006*, Stuttgart: United States European Command.

US Aid, n.d. *Field Operations Guide*, s.l.: US Aid.

Wallis, L. & Smith, W., 2011. *Disaster Medicine*, Cape Town: Juta.