Republic of Botswana

MINISTRY OF HEALTH & WELLNESS

Botswana COVID-19 Guideline 3: Preparing a healthcare facility in Botswana for COVID-19

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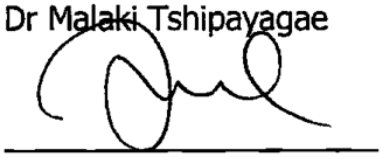
Foreword

On January 30, 2020, the International Health Regulations Emergency Committee of the World Health Organization (WHO) declared the Severe Acute Respiratory Syndrome due to novel coronavirus (SARS CoV-2) outbreak a "Public Health Emergency of International Concern" (PHEIC) and the WHO declared the outbreak of Coronavirus Disease (COVID-19) a pandemic on 12th March 2020.

Botswana announced the first positive case in the country on 30th March and the first death the following day on 31st March 2020. This document serves to aid healthcare facilities as they prepare themselves to screen individuals for COVID-19 as well as outlining how to handle suspected and confirmed cases.

Dr Malaki Tshipayagae



Director of Health Services

Ministry of Health and Wellness

What has changed in this version?

Version 1.0, 6th April 2020	First version
Version 2.0, 1st May 2020	Updated case definitions Updated figures 1 and 2, combining to figure 1. Discharge and de-isolation criteria updated

Abbreviations and acronyms

COVID-19	Coronavirus disease-19
DHMT	District Health Management Team
HIV	Human Immunodeficiency Virus
ICU	Intensive Care Unit
IPC	Infection Prevention and Control
MoHW	Ministry of Health and Wellness
PPE	Personal Protective Equipment
RT-PCR	Reverse Transcriptase Polymerase Chain Reaction
SARS-CoV-2	Severe Acute Respiratory Syndrome Coronarvirus-2
UTM	Universal Transport Medium
WHO	World Health Organization

1. Background

COVID-19 poses a serious threat to Botswana and it is the responsibility of all individuals and organisations to be prepared to mitigate the extent of an outbreak. This is particularly true in healthcare facilities where the spread of infection could be devastating both to those with underlying health conditions but also to healthcare workers who are a precious resource.

At the time of writing all confirmed COVID-19 cases are to be treated at Sir Ketumile Masire Teaching Hospital in Gaborone but there remains a need for all healthcare facilities to be prepared to handle this outbreak.

This will involve:

1. **SCREENING** of all admissions as well as all visitors and staff for symptoms of COVID-19.
2. Those individuals who screen positive will then need to be placed in **ISOLATION AND TRIAGE.**
3. Once in isolation they will be assessed and, if determined to be a suspected case, undergo **TESTING**.
4. After testing, cases need to be triaged to **DETERMINE SEVERITY**.
5. Well patients can be managed in an **ISOLATION FACILITY.**
6. Unwell patients need **ADMISSION TO A SUSPECTED COVID-19 COHORT AREA.**
7. Inpatients who test positive will then need **TRANSFER TO A CONFIRMED COVID-19 COHORT AREA.**
8. Patients who recover will then undergo **DISCHARGE AND DEISOLATION.**

This document outlines the necessary steps to prepare a healthcare facility to carry out each of the above processes. Depending on the size and resources of the healthcare facility it may be appropriate to refer patients to a larger centre during this process.

Please see Figure 1 (below) for a summary of this guidance.

Please also follow the guidance in Table 1 concerning which personal protective equipment (PPE) to wear in different scenarios, being mindful to preserve limited stocks. Refer to Guideline 2: Personal Protective Equipment for further detail.

Figure 1: Screening for COVID-19 at all health facilities and services

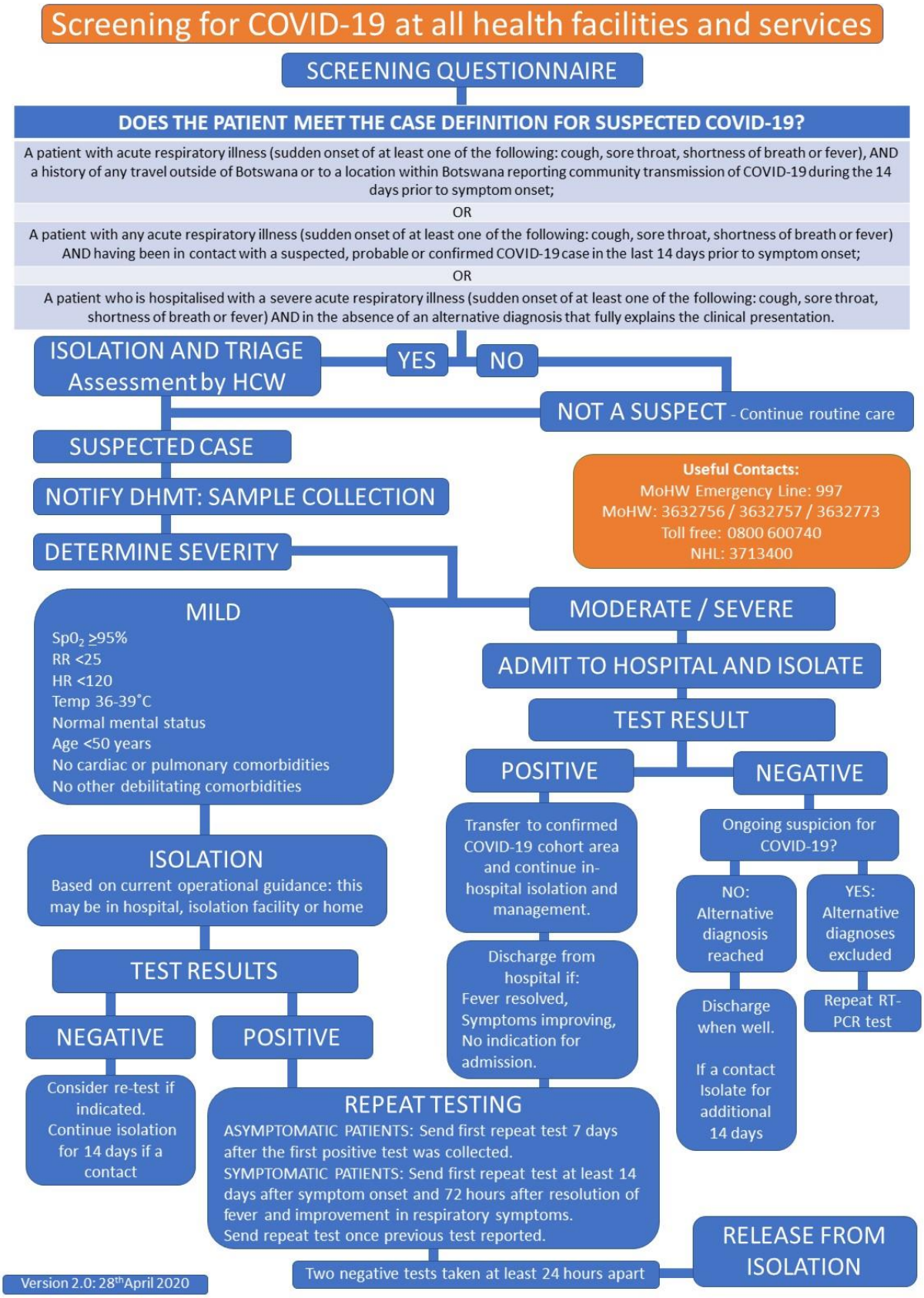
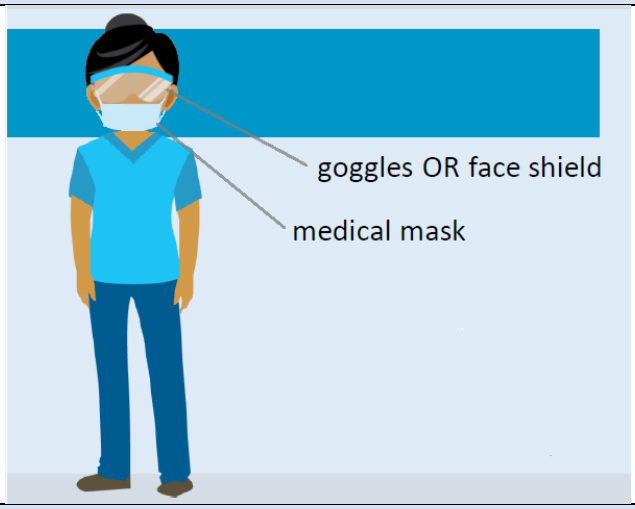
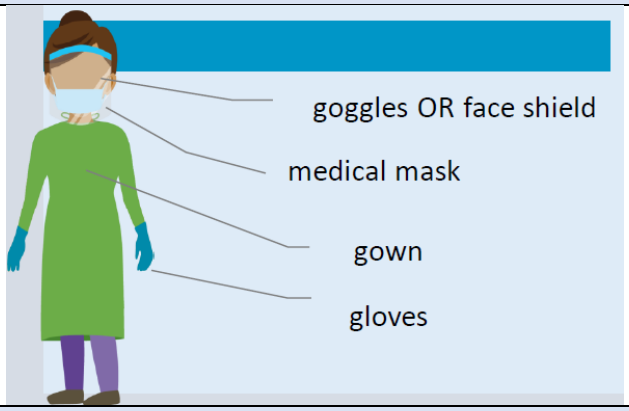
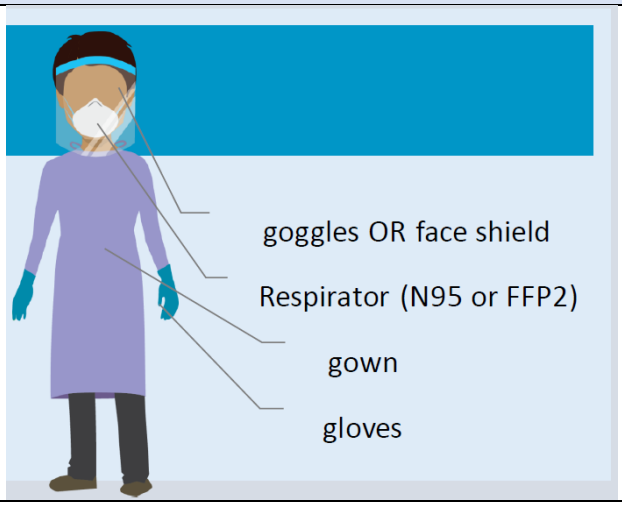


Table 1: Recommended PPE for healthcare workers

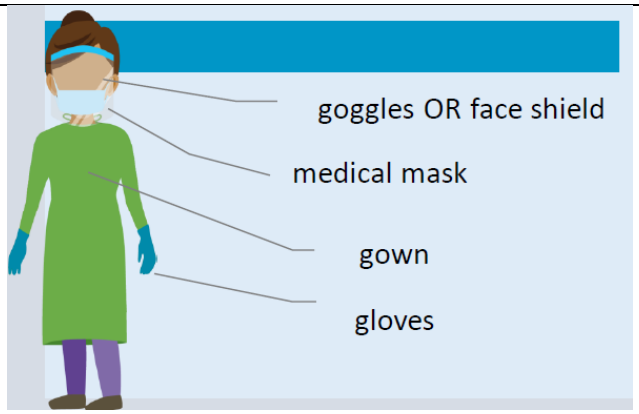
PATIENT SCREENING 
COLLECTING RESPIRATORY SAMPLES, CARING FOR OR TRANSPORTING A SUSPECTED OR CONFIRMED CASE 
CARING FOR A SUSPECTED OR CONFIRMED CASE USING AEROSOLISED PROCEDURES 

2. Screening

Who needs to be screened (and when)?
EVERYONE: All new admissions (upon admission) All individuals coming for outpatient appointments (upon arrival) All visitors (once per day) All staff (once per day)
Where do they need to be screened?
At first point of access to the healthcare system and before entering any department i.e. outside. Ideally, the WHO advise to build glass/plastic screens to create a barrier between health workers and patients. The feasibility of this depends on the local context. Under a shaded area (e.g. tent). Ensure social distancing of at least 2 metres between individuals waiting for screening.
Who will they be screened by?
Any trained member of staff can screen individuals, they do not need to be a nurse or clinician.
What personal protective equipment is required?
Individuals who are screening are required to wear a medical/surgical face mask and eye protection. Additional surgical face masks will be required for those who screen positive.
How will they be screened?
All individuals will be asked to complete a screening form (see appendix 1). Individuals will also have their temperature checked using an infra-red thermometer.
What happens to the positive screens?
Positive screens: Select YES to either of the options in the case definition Have a temperature $\geq$ 37.5°C (i.e. 37.5°C or more) Give them a surgical mask to wear Ask them to proceed to the isolation area for further assessment
What happens to the negative screens?
Negative screens will have their forms stamped with an official stamp bearing the current date. These individuals may proceed into the healthcare facility. They must retain their screening form for the duration of the day and present them to security/staff upon request. All efforts should be made to minimise the number of people touching these forms
What equipment do I need?
Shaded area, table, chairs, screening forms, pens, infra-red thermometer, official stamp, hand hygiene station, surgical face masks, eye protection, disinfectant

3. Isolation and Triage

Who needs to go into isolation?
Positive screens: Select YES to either of the options in the case definition Have a temperature $\geq$ 37.5°C (i.e. 37.5°C or more) These individuals should be wearing a medical/surgical face mask and ideally be unaccompanied unless it is a minor or a very sick individual.
Where should they be isolated?
In a separate, dedicated area that is well ventilated. Somewhere close to the screening area to minimise movement through the healthcare facility: this could be a separate shaded area or a dedicated outpatient waiting area or room where patients or members of staff are not regularly passing through. This area needs to be thoroughly disinfected in-between each use.
What happens here?
A trained healthcare worker (e.g. nurse or clinician) will assess the individual to determine if they meet the suspected case definition: 1. A patient with acute respiratory illness (sudden onset of at least one of the following: cough, sore throat, shortness of breath or fever) AND a history of any travel outside of Botswana or to a location within Botswana reporting community transmission of COVID-19* during the 14 days prior to symptom onset; OR 2. A patient with any acute respiratory illness (sudden onset of at least one of the following: cough, sore throat, shortness of breath or fever) AND having been in contact with a suspected, probable or confirmed COVID-19 case (see definition of contact) in the last 14 days prior to symptom onset; OR 3. A patient who is hospitalised with a severe acute respiratory illness (sudden onset of at least one of the following: cough, sore throat, shortness of breath or fever) AND in the absence of an alternative diagnosis that fully explains the clinical presentation. This can be ascertained primarily through a detailed history and risk assessment, paying close attention to rule out any other causes of fever.
What happens if they meet the suspected case definition?
The individual needs to remain isolated and undergo sample collection for COVID-19 testing. Notify a senior member of staff and the relevant DHMT. It is essential that immediate notification of **all** suspected cases is made in order to ensure rapid contact tracing can occur.
What happens if they do not meet the suspected case definition?
They may proceed into the healthcare facility with a stamped, dated screening form.

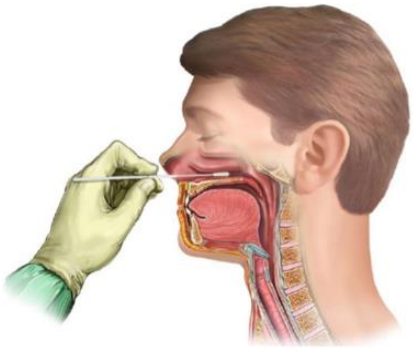
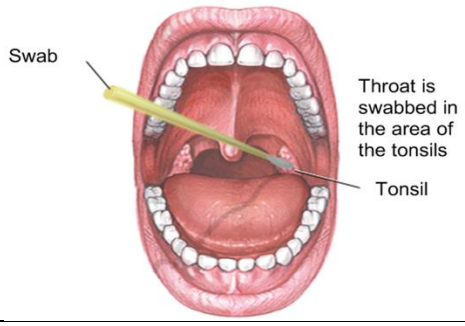
What PPE is required for the healthcare worker?
 All staff and patients are to perform regular hand hygiene at moments including; before and after touching another person; before engaging in clean/aseptic procedures; after body fluid exposure; after touching patient surroundings. Continue to maintain a 2m distance from the patient and minimise contact. Minimise the use of stethoscopes and other clinical equipment, disinfecting after use.
What equipment do I need?
A dedicated isolation area with examination facilities, hand hygiene facilities, PPE as outlined above, official stamp.

*Locations within Botswana reporting community transmission of COVID-19 will change as the epidemic evolves. Updates will be provided by the Ministry of Health and Wellness. At present, given the uncertain epidemiology of COVID-19 transmission in Botswana, all regions are considered to have possible community transmission.

ALL SUSPECTED CASES MUST BE NOTIFIED IMMEDIATELY TO THE DHMT SO THAT RAPID CONTACT TRACING CAN TAKE PLACE TO STOP ONWARD TRANSMISSION OF COVID-19. SEE GUIDELINE 6: CONTACT TRACING FOR MORE DETAIL.

4. Sample Collection for COVID-19 Testing

Table 2: How to collect an upper respiratory tract sample

EQUIPMENT REQUIRED	
• Specimen submission form • Nasopharyngeal (NP) and oropharyngeal (OP) flocked swabs: do not use cotton swabs • Tube containing universal transport medium (UTM) with patient's details written on in advance • Tongue depressor • Gloves, surgical mask, eye protection and gown • Biohazard bag for disposal of non-sharp materials • Tissue for patient to wipe their nose after sample collection • Cooler box and cooled ice packs • Biopack for shipping	
OBTAINING A NASOPHARYNGEAL SWAB	
• Put on (don) PPE • Open a sterile dacron/polyester flocked swab at the plastic shaft • Ask the patient to tilt their head back. Estimate the distance from the patient's nose to the ear: this is how far the swab should be inserted • Insert the swab into the nostril and back (not upwards) until slight resistance is met • Rotate swab 2-3 times over 10-15 seconds • If resistance is met, try with another nostril • Slowly withdraw swab and put into specified transport medium • Break plastic shaft at break point and close the tube	
OBTAINING AN OROPHARYNGEAL SWAB	
• Keep the same gloves on and take a second swab • Ask the patient to tilt their head back and open their mouth wide • Hold the tongue down with a depressor and ask them to say 'aah' • Swab each tonsil and then the posterior pharynx in a figure 8 movement • Avoid the soft palate and tongue to avoid a gag reflex • Place the swab into the same tube and break the plastic shaft at the break point	
COMPLETING THE PROCESS	
• Tightly close the tube • Place the closed tube in the Biopack or in a cooler box with cooled ice packs • Multiple samples can be stored together • Take off (doff) PPE • Wash hands with soap and water • Arrange transport to testing facility	

5. Determining the severity of a suspected case

Depending on the current operational guidance, some individuals may be suitable to be managed at an isolation facility or at home. An assessment therefore needs to be made to determine the severity of the case. See Guideline 4: Interim clinical guidance for the management of COVID-19 in Botswana for further guidance on this, or brief details in Figure 1.

Those who could be managed out of hospital, depending on current operational guidance, should meet all the following criteria:

1. **Mild disease as defined by ALL of the below:**
    a. $Sp0_2$ ≥95%
    b. Respiratory rate <25
    c. Heart Rate <120
    d. Temperature 36-39˚C
    e. Normal mental status

2. **Able to safely isolate outside of hospital**
    a. Separate bedroom with private bathroom available
    b. Patient able to contact and return to healthcare facility if becomes unwell

3. **Not at high risk of deterioration defined by ALL of the below**:
    a. Age <50 years
    b. No cardiac or pulmonary comorbidities
    c. No other debilitating comorbidities (e.g. cancer)

Individuals who meet all of the above criteria can be managed out of hospital at an isolation facility or at home, as determined locally.

Individuals who do not meet all of the above criteria should be admitted to hospital in the suspected COVID-19 cohort area.

6. Admission to a suspected COVID-19 cohort area

Each individual facility needs to determine if they have the infrastructure and capacity to admit suspected cases of COVID-19, this includes for general ward care and for intensive care.

A healthcare facility readiness assessment should be completed for each facility.

If a facility does not have the capacity to admit suspected cases then a referral pathway needs to be in place for them to be safely transferred to another facility.

Where patients are admitted please ensure the following:

- A clinical space should be dedicated to the care of these patients
- A dedicated clinical team are responsible for these patients
- No visitors are allowed
- PPE must be available for all staff caring for patients: Surgical mask, gloves, gown/apron and face protection (goggles or face shield).
- Respirator masks (N95 or equivalent) are required for aerosol generating procedures
- Adequate healthcare professionals are available to care for patients
- Adequate cleaning staff and equipment, including waste disposal
- Oxygen must be available in all health facilities caring for patients with moderate or severe COVID-19.

If a facility does not have capacity for intensive care, then referral criteria and a pathway needs to be in place for patients to be safely transferred to another facility.

7. Transfer to a confirmed COVID-19 cohort area

Upon receipt of a positive RT-PCR result patients need to be transferred to a dedicated cohort area for confirmed cases of COVID-19.

This clinical area must be separate from the suspected COVID-19 cohort area but must be managed in accordance with the same principles.

8. Discharge from suspected and confirmed COVID-19 cohort areas

The decision to discharge a patient with confirmed COVID-19 from hospital is a medical one which is described in detail in Guideline 4: Interim clinical guidance for the management of patients with Coronavirus disease 2019 (COVID-19) in Botswana. Patients who have recovered and had two negative PCR tests taken at least 24 hours apart can be discharged home. Patients who have recovered but not yet had two negative PCR tests taken at least 24 hours apart can be discharged to an isolation facility.

Patients who are admitted with suspected COVID-19 and managed in a suspected cohort area but test negative for COVID-19 can be discharged from hospital providing:

- Their fever has resolved.
- Their symptoms are improving.
- There is no other indication for admission.

All patients who have been admitted to a suspected COVID-19 area who are discharged must be treated on the assumption that they have had contact with COVID-19 cases and must remain in facility or home isolation for a further 14 days after discharge.

9. Appendix 1: Healthcare facility screening form

MINISTRY OF HEALTH & WELLNESS

COVID-19 Screening

This form is to be completed by all persons entering this healthcare facility.

Please confirm whether you are:	**TICK**
A patient for admission	
A visitor/customer ☐ Area you are visiting: ……..	
An employee	

In the interest of protecting the health of our patients, our employees and the community kindly answer the questions below:

Please complete your personal details below:	
First Name:	
Surname:	
Contact Number:	
ID/Passport Number:	
Date:	

Please tick YES or NO	**YES**	**NO**
Have you travelled outside the borders of Botswana in the past 14 days?		
Have you travelled to an area in Botswana where community transmission of COVID-19 has been reported in the past 14 days?		
Have you been in contact with a suspected, probable or confirmed COVID-19 case in the past 14 days?		
Have you recently had any of the following symptoms:		
Fever		
Cough		
Shortness of breath		
Sore throat		

If you answered YES to any of the questions you will be directed to the isolation and triage area.