

Republic of South Sudan



Ministry of Health

Standard Operating Procedure for Contact Tracing for Novel Corona Virus Disease 2019 in South Sudan

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South Sudan COVID-19 Preparedness
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Abbreviations

IDU	Infectious Disease Unit
COVID-19	COVID-19 Virus Disease
MOH	Ministry of Health
NGO	Non-Governmental Organization
PPE	Personal Protective Equipment
RRT	Rapid Response Team
PCR	Polymerase chain reaction
SDB	Safe and Dignified Burial
SOP	Standard Operating Procedure

1. Introduction

A person with signs and symptoms of Novel Corona Virus Disease 2019 (COVID-19) can spread the COVID-19 virus to others; therefore, it is critical to identify and isolate symptomatic persons immediately to stop the disease from spreading.

Contact tracing is the identification and monitoring of people who have been exposed to a disease to prevent onward transmission. During a confirmed COVID-19 outbreak, people who may have been exposed to COVID-19 should be followed daily for 14 days (the incubation period for the disease) from the last date of contact. This process allows for the rapid identification of people who become symptomatic. Identifying and promptly quarantining contacts reduces transmission to other persons and prevents subsequent infections. Finally, contact tracing provides direct benefit to individuals by supporting access to available health services.

Contact tracing is a critical tool for controlling a COVID-19 outbreak but represents only one aspect of a multifaceted control strategy for COVID-19 outbreaks. Contact tracing is intricately connected to surveillance activities, including rapid response and case investigation, ambulance services, case management, psycho-social support, and community engagement efforts.

1.1 Purpose of the document

This standard operating procedure (SOP) describes the structure and implementation of an effective and efficient COVID-19 contact tracing program. It may be applied during both COVID-19 preparedness and response in the event of a confirmed COVID-19 outbreak. Activities that need to be conducted only during response to a confirmed COVID-19 case will be specified. The SOP provides standardized guidance for contact tracing activities in South Sudan including training materials for contact tracers and supervisors.

1.2 Target audience

This guide is intended for surveillance officers, rapid response teams (RRTs), contact tracing teams, and other key responders at the national, state, county, payam and boma levels.

1.3 Definitions

Effective contact tracing requires the strict application of definitions for what defines a “contact” and an COVID-19 “case” to promptly identify all contacts and COVID-19 cases (see Annex 1). Failure to apply correct definitions can result in ongoing transmission.

Suspect COVID-19 case: A verified alert that meets the suspect COVID-19 case definition listed in the current Community-Based Surveillance Standard Operating Procedures.

Confirmed COVID-19 case: a suspect case that is confirmed positive by laboratory diagnosis (polymerase chain reaction [PCR]).

Contact:

- **A contact is a person who experiences any one of the following exposures during the 2 days before and 14 days after the onset of symptoms of a probable or confirmed case:**
 - Face-to-face contact with a probable or confirmed case within 1 meter and for more than 15 minutes;
 - Direct physical contact with a probable or confirmed case;
 - Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment; OR

- Other situations as indicated by local risk assessments.

Note: This should include healthcare workers, employees, and volunteers at health centers (including those involved in medical care, cleaning, waste management, laboratory technicians, mortuary staff, Ambulance team etc.)

1.4 Responsible Authorities

Contact Tracers and Supervisors, regardless of affiliation, fall under the authority of the Ministry of Health (MOH) but work collaboratively with the managing COVID-19 preparedness or response coordination structure.

2. Contact Tracing Activities

Contact tracing is broken down into three major activities: contact identification, contact listing, and contact follow-up. These activities are described below.

Contact Identification:

An investigation to identify all contacts of suspected and confirmed cases of COVID-19, including deaths potentially attributable to COVID-19. These contacts can be identified by the case themselves, family members, friends, community members, and/or healthcare providers.

Contact Listing:

All individuals who qualify as a COVID-19 contact should be listed on a designated form (Annex 2). Efforts should be made to physically identify and interview each listed contact to inform them of their status as an COVID-19 contact, educate them on the risks of transmission, determine if they are symptomatic, explain contact tracing procedures, provide psychosocial support, and explain the benefits of physical distancing and other protective measures and early illness detection for their health.

Contact Follow-up:

Each identified and asymptomatic contact of a confirmed case must be followed daily to ensure that they do not develop COVID-19. A team will visit the contact every day for 14 days since last contact to monitor for signs and symptoms of illness and will record this information on the Contact Tracing Form (Annex 3). The contact follow-up period is extended if the contact has a qualifying new COVID-19 exposure during the initial 14-day period. If the contact develops signs and symptoms of COVID-19 during follow-up, they will be counseled on sample collection and home isolation.

When to conduct contact tracing activities based on the COVID-19 risk level declared by the MoH:

Activity	No elevated risk	High risk location: Preparedness Phase	COVID-19 Outbreak Confirmed
Contact identification	No	Yes	Yes
Contact listing	No	Yes	Yes
Contact follow-up	No	No	Yes

3. Roles of Key Team Members

Roles and responsibilities of key team members are listed as follows, with additional details provided in Annex 4.

Rapid Response Teams (RRT) Epidemiologist & Communications Officer – responsible for contact identification and listing

Contact identification and contact listing should be completed by the RRT Epidemiologist and Communications team members (or trained designee) for all suspected and confirmed COVID-19 cases. The RRT Epidemiologist needs to be well-trained in identifying potential COVID-19 exposure risks, including physical contact with the case, recent healthcare seeking, sexual contact, family structure and social networks, participation in burial rituals, etc.). The Communications Officer will be trained in providing supportive counseling to family and friends of the case and to identified contacts. If at all possible, RRTs should also be provided with an updated list of districts and national hot spots to determine if cases have travelled recently to these places.

Contact Tracers – responsible for daily monitoring of contacts

Contact tracers are only activated when a COVID-19 outbreak is confirmed. These individuals are identified and trained by multiple implementing partner non-governmental organizations (NGOs), ideally in advance as a preparedness measure. Contact tracers' main activity is to conduct daily visits to contact houses or follow-up via telephone if possible. They need to be trained on how to safely conduct contact tracing and the importance of quickly reporting all identified ill contacts. Enough contact tracers are needed to conduct daily visits and/or phone calls to all listed contacts, often requiring rapid activation and recruitment in the early phase of an outbreak. They are key to breaking transmission of COVID-19.

Contact Tracing Supervisors – responsible for supervision of contact tracers

Contact Tracing Supervisors are only activated when an COVID-19 outbreak is confirmed. Supervisors should be pre-identified and trained as a preparedness measure. Supervisors are responsible for reporting contact tracing team resource needs, daily communication with the contact tracers on the number of contacts they see, explanations of the whereabouts of contacts they were unable to see, and the number of contacts that are symptomatic. The supervisor will compile this information each day for submission to the designated MOH surveillance officer.

Supervisors should be supported to travel on a daily basis to conduct daily monitoring and reporting. To ensure proper management, supervisors should follow between 15-20 contact tracers in urban areas and 10 in rural areas. The number of supervisors should therefore be increased based on the current number of contact tracers, and continue to increase as new cases are confirmed and more contacts need to be monitored.

MOH Surveillance Officers

MOH Surveillance Officers will work with the Contact Tracing Supervisors to monitor tracing efforts in their administrative locations and are responsible for the daily supervisions and management of the Contact Tracing Supervisors. They will compile data on contact tracing activities in their administrative location on a daily and weekly basis. MOH Surveillance Officers will also identify monitors (potentially implementing partners) to provide quality assurance.

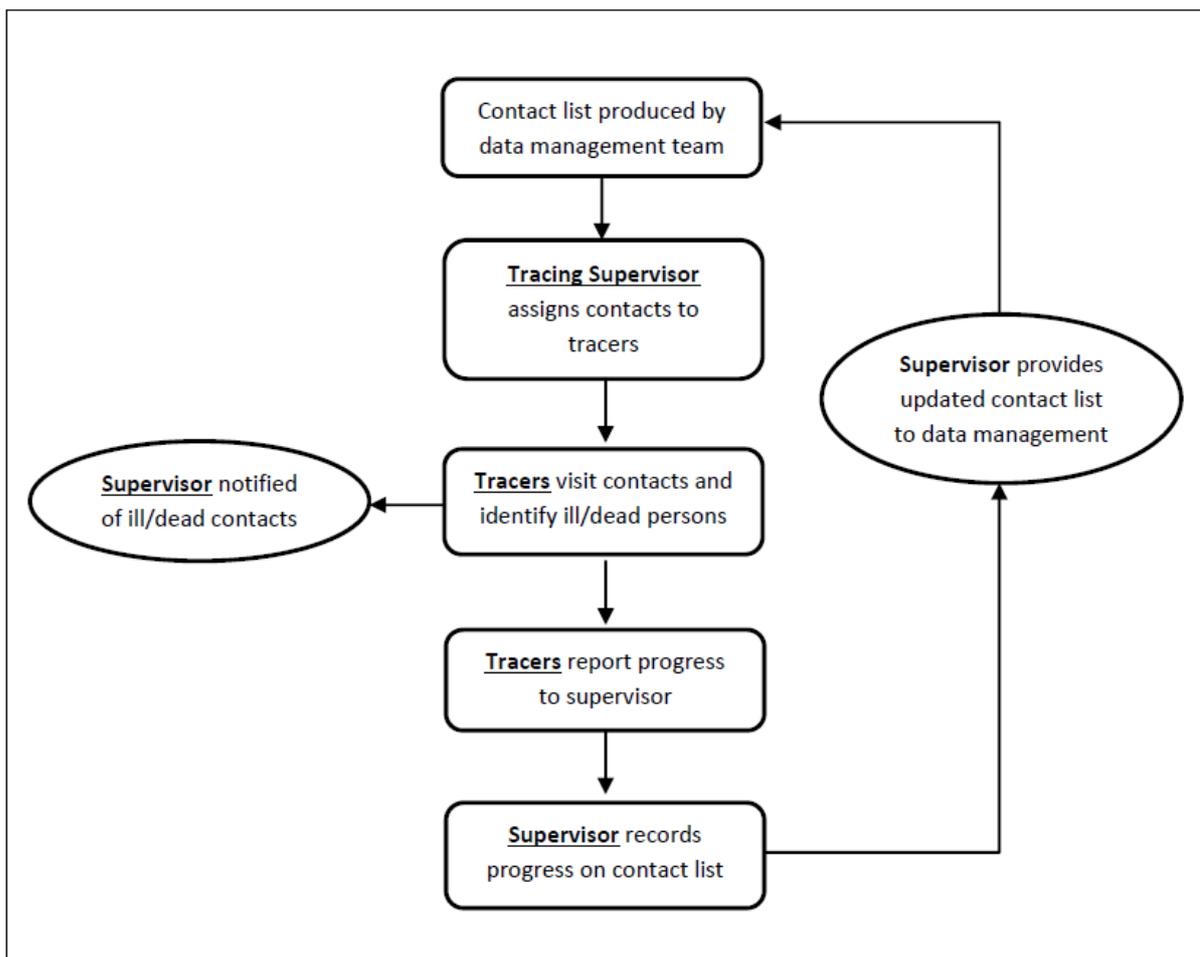
Independent Monitoring of Contacts Traced

To independently verify that all contacts of COVID-19 cases are monitored for the required period, the following procedures will be carried out under the guidance of the MOH when a COVID-19 outbreak is confirmed:

- Surveillance pillar will update and forward the line listed contacts to monitoring body (i.e. implementing partner) daily
- All line listed contacts will be called or seen by the independent monitors every week to verify that they have been visited by a contact tracer
- The monitoring body will compile and submit weekly reports to the surveillance pillar

4. Contact Tracing Procedure

4.1 Overview of the Contact Tracing Process



4.2 Contact Tracing and Confidentiality

For contact tracing to work, the public must have complete faith that their personal information will remain private and confidential and that it will not be misused or shared inappropriately.

Contact tracing is a key public health strategy. Health organizations around the world agree that contact tracing is a critical tool to combat the spread of COVID-19. The hope is that contact tracers will stem the spread of COVID-19 by identifying and contacting individuals who have been exposed to the virus and giving them the information and resources they need to get tested and to self-quarantine. In order to be effective, contact tracing requires

widespread participation. The health benefits of contact tracing increase as more people participate, and if participation falls below a certain threshold, contact tracing will not be effective. Optimally, everyone will participate. Community trust is key to effective contact tracing. If individuals fear that participating in contact tracing will expose them or stigmatize them, they will simply choose not to participate. Contact tracing asks us to provide public health officials with the most intimate details about our lives. Participation means that a person must share their location information, associations, and health information. If there is any risk that this information can be made public, many will refuse to cooperate with contact tracers.

You should remind the contacts that you are bound by the same guidelines that the Ministry of Health uses that help identify contacts of cases, isolate (and sometimes test) contact with all types of diseases already. You should not share the name of the case they may have been exposed to. Let them know that you won't ask for personal information like national ID number. Remind them that you are following up with them as a contact to a case because it helps prevent spread of disease throughout the family and the community.

4.3 Procedures for Contact Identification

Contact tracing can only break the chain of COVID-19 transmission if it is implemented immediately upon identification of a COVID-19 case, including suspected and confirmed COVID-19 cases. *Laboratory confirmation should not delay the initiation of contact tracing.*

When a verified alert of a suspected COVID-19 case is first detected, the RRT should be immediately mobilized to investigate. The contact identification and listing team will consist of the Epidemiologist and Communications Officer within the RRT. This team will begin contact identification using the following steps:

- The Epidemiologist and Communications Officer should interview the suspected or confirmed COVID-19 case (according to investigation protocol), systematically identifying all potential contacts since symptom onset. If the case is well enough to talk, the case should be interviewed directly. If the case is unable to talk or has died, the team should interview people who were likely involved in the case's routine activities and in the events leading up to their identification as a case.
- The team should interview family and other contacts regardless of whether the case is alive or dead. Sometimes a case may forget or deliberately not name contacts. Sometimes they might be too sick to provide an accurate list.
- The team should gather information from people who cared for or had geographic proximity to the case, including healthcare workers, family and neighbours, and funeral attendees (if applicable). The team must visit the household of each case and any health facilities visited by the case. If the case traveled to health facilities or other locations while ill, the team should make arrangements for conducting additional case identification at these locations.
- The team should conduct several interviews and visit places that the case went to after they started to have symptoms to get the names of contacts that the case does not know or remember.

4.4 Procedures for Contact Listing

Any person considered to have had a potential COVID-19 exposure and meeting the contact definition criteria should be listed as a contact by the Epidemiologist, by documenting all requested information in the Contact Listing Form [Annex 2] or electronic data entry based on guidance from the surveillance pillar.

Every effort should be made to personally identify and interview every listed contact. The following steps should be followed:

- To protect patient privacy, contacts are only informed that they may have been exposed to a patient with the infection. They are not told the identity of the patient who may have exposed them.
- Verify last interaction with the confirmed case based on information from the case as well as the contact
- Consider the most recent day since symptom onset to determine the start date for the 14 days monitoring of the contact
- Inform individual of their status as a contact of a suspected COVID-19 case and the plan for follow up once confirmed
- Educate the contacts on the signs and symptoms of COVID-19 and the importance of receiving care early and self-isolation if they happen to develop COVID-19 symptoms.
- Share phone numbers to reach Contact Tracing Team with contacts and their relatives/friends
- List of contacts should be shared with the MOH Surveillance Officer.

NB: If no risk of exposure is established, counsel the individual that they are not a contact and remove them from the contact tracing list.

Key Considerations

- Contact identification and listing should be done for all verified and suspected COVID-19 cases. Laboratory confirmation should not delay this process.
- Case and contact interviews should be conducted in a safe and conducive environment to establish trust and rapport between the team, case, family and community.
- The RRT Epidemiologist should verify and double check the exposure information for consistency and completeness during re-interview in later visits to ensure that all contacts and potential chains of transmission are identified. Failure to identify even a single contact may lead to ongoing COVID-19 transmission.

4.5 Procedures for Contact Tracing Supervisors (Confirmed Outbreak Only)

- Obtain a daily contact list from contact tracers: The contact tracing supervisor, referred to hereafter as the supervisor, will review the list of all contacts (Annex 1) that require follow up with the data management team or Surveillance Officer.
- Assign contacts to tracers: The supervisor will assign contacts to tracers. The supervisor should assign 5-10 contacts per tracer in urban areas and ~10 in rural areas and make every attempt to minimize the distance between tracers and contacts. The supervisor calls each tracer and provides each tracer's list using dedicated contact tracing cellphones.
- Provide assistance to deployed tracers: Supervisors will be available throughout the workday to provide assistance and advice to tracers when questions or concerns arise. Supervisors should be prepared to assist in the following situations:

If a contact refuses to be interviewed:

- Contact the MOH Surveillance Officer

- Request assistance from psychosocial support/community engagement team who knows the community and can build trust with the contact

If a contact cannot be found:

- Consult with the data management team to see if there is additional location information in the database
- Direct the tracer to ask community members about the contact's likely whereabouts
- If the contact cannot be found, note this on the contact listing form (Annex 1)

If a contact is ill:

- If the contact's illness appears unrelated to COVID-19 and does not have a fever or *history of fever*, recommend that the contact seek care at the community health clinic.
- If the contact has any signs or symptoms suggestive of COVID-19, notify the RRT. Direct the tracer to maintain a safe distance from the contact but remain in the area until the RRT arrives.

- Review contact tracing progress: At the end of the workday, the supervisor will, either in person or over the phone, review list of contacts assigned for the day with each tracer. The supervisor will note where each contact was seen and confirm that the contact appeared ill or well.
- Review safety and security concerns: The supervisor will also inquire about any situations that placed the tracer's health or safety at risk during the workday:

If a tracer is ill:

- The supervisor will remove the contact tracer from his or her work duties, and instruct them to isolate him or herself at home. If the contact tracer meets the case definition, the supervisor will call the RRT for investigation and possible transfer to isolation and/or treatment facilities.

If a tracer encounters resistance or hostility in the community:

- Note where and when incidents happen and make a determination about whether the tracer should continue work in the community. Serious concerns should be reported to the MOH Surveillance Officer, and a community engagement team should be activated.

- Provide progress report to data management team: The supervisor will provide updates about all contacts to the MOH Surveillance Officer, who will then provide this information to the data management team to update the database.
- Meet in-person with tracers at least once per day: Supervisors will arrange to meet all contact tracers at least one time per day **in person** to discuss problems and challenges that are encountered during the tracing process. Supervisors will obtain copies of all completed contact follow-up forms (Annex 2)

4.6 Procedures for Contact Tracers (Confirmed Outbreak Only)

- Review contact list with supervisor: Every morning, either in person or over the phone, the contact tracer will speak with his or her supervisor to review the list of contacts for the day. Add new contacts to the active contact follow-up form(s) (Annex 3) held by each contact tracer. Review checklist of equipment and materials required for the field (Section 4.9).
 - Meet supervisors at least once a day in person
 - Supervisors can assign contacts as they are listed
 - During the week, communicate by phone
- Travel to work area and locate contacts: When meeting contacts, contact tracers should observe local customs of greeting with following exceptions:
 - **Do not make physical contact** like shaking hands or hugging. Explain this is to prevent the spread of COVID-19.
 - If offered to sit, **remain standing** and politely explain that you will not be staying long and will perform the interviews quickly.
 - You can conduct contact tracing visits wearing a mask but should avoid overly obvious PPE.
- Explain the purpose of the interview to the contact or head of household. Carefully explain that you will:
 - Ask several questions regarding the health of persons who had close contact with a COVID-19 case.

If one or more contacts decline to be interviewed:

- Explain that your visit is to ensure the health of the community and to help ill persons to receive medical treatment.
- If the contact still refuses to be interviewed, thank them for their time and leave immediately. Note that the contact refused interview on the contact tracing form (Annex 3).

If the contact cannot be found:

- If family members of the contact are available, inquire about the contact's whereabouts.
- Seek the contact nearby
- If needed, arrange a time to interview the contact later in the day.
- If the contact has been reported to travel to another location, obtain the location details.
- If unable to locate and interview the contact, notify the supervisor the same day.

- Interview each contact in the following sequence:

- Ask the contact: "How are you feeling?"
- Ask the contact: "Have you had any fever?"
- Observe contact for any signs of illness.
- Record whether the contact has fever or any hemorrhagic symptoms on the contact tracing form by marking an X for yes and an O for no

If the contact has a fever or is ill:

- The contact tracer should **notify the tracing supervisor immediately**
- Provide reassurance to the contact and urge them to remain in the home until further assessment can be performed.

- Counsel family members to practice physical distancing. Encourage them to wash hands with soap and water regularly.

If the contact is well:

- Record this on the contact tracing form.
- Inquire if there are any persons in the house who are **not** on the contact list who are ill. If there are other ill persons in the house, notify your contact tracing supervisor.
- Thank the contact for his or her time and explain that you will be visiting daily for 14 days.
- Perform hand hygiene: Tracers will cleanse hands by washing with soap and water. If soap and water are not available, tracers will use an alcohol-based hand sanitizer that is carried with them at all times.
- Complete daily visits with all contacts on assigned Contact Follow-up list.
- Communicate and collaborate with the vaccination team as directed by the supervisor.
- Communicate (in person or by phone) with contact supervisor upon completion of interviews each day and provide information on the health status of all contacts interviewed. Keep copies of Contact Follow-up forms and provide these to the supervisor once per day when meeting in person.

Key Considerations

- Asymptomatic contacts are assumed to be contagious and should self-quarantine for 14 days.
- Engage community leaders about the importance of the follow-up process and ask for their support.
- Work with psychosocial workers and Social Mobilization Teams so that they can provide mental and psychosocial support.

4.7 Procedure for Managing contacts who develop COVID-19 symptoms

- In the event of the contact developing signs and symptoms which fit the COVID-19 case definition, the Contact Tracing Team should immediately communicate with the Supervisor. The Supervisor should alert the MOH Surveillance Officer who will then activate the RRT to determine if the contact meets the suspected COVID-19 case definition.
- If the contact fits the case definition of an COVID-19 suspected case, the MOH Surveillance Officer will coordinate swabbing the contact and completing a case investigation form.
- The suspected COVID-19 case should be transported to the nearest health facility if swabbing at the residence is not possible.

- During this time, the RRT Epidemiologist will begin contact identification and listing for this new suspected COVID-19 case as described above.

Key Considerations

- If the contact-turned-suspected COVID-19 case tests negative for COVID-19, the suspected COVID-19 case can 14-day follow-up process, as they now return to being a contact.
- If the suspected COVID-19 case tests positive for COVID-19, the patient is considered a confirmed COVID-19 case and should be evaluated by case management team.

4.8.Contact Discharge

- Contacts should be seen and interviewed on the 14th day of follow-up since last contact with a suspected or confirmed COVID-19 case and, in the absence of any symptoms compatible with COVID-19, the contacts can be discharged from the contact follow-up process.
- Contacts who have not been seen on day 14 require priority follow-up daily until they are found. No contact can be discharged from follow-up without having been seen and evaluated on the 14th day or later.
- Contacts may also be discharged at any time in the 14-day period if during the follow-up process, it is discovered and verified (by the MOH Surveillance Officer) that the individual did not have an COVID-19 exposure and was erroneously listed as a contact.

Key Considerations

- Any contact re-exposed to another case of COVID-19 must restart their 14 days of follow-up from the last date of the most recent COVID-19 exposure.
- Community education should emphasize that discharged contacts do not pose a risk of transmitting disease.
- The contact's employer may request an official letter declaring the end of contact follow-up. This should be provided by administrative support within the surveillance pillar.

4.9Database management

Respiratory outbreak responses comprise many components, each generating and relying on different but interrelated data sets. Case investigation involves completing a case investigation form (CIF) on every person meeting the case definition, with data collected on patient demographic characteristics, clinical signs and symptoms, hospitalization, possible sources of virus exposure, and final outcome. Laboratory diagnostic testing either confirms or rules out infection, and results must be used to update case classifications assigned during initial case investigation, from "suspected" or "probable" to either "confirmed" (for positive test results) or "not a case" (for negative results), and to inform management of patients and their contacts. Case management teams, providing clinical care to patients, record clinical information and final outcome.

Contact tracing, which helps rapidly identify and isolate new cases and interrupt virus transmission, requires listing all persons exposed to cases and then following them and recording their health status on a daily basis for the duration of the virus's maximum incubation period.

High-quality and reliable case, contact, and laboratory data are required to drive, evaluate, and maximize the effectiveness of the outbreak response. These data must be efficiently communicated among all response components and also be compiled in a centralized database for analysis and situational reporting. As each response component depends on information from the others, data-communication gaps can lead to serious response lapses, such as insufficient contact listing and tracing, leading to delayed identification and isolation of new cases and avoidable virus transmission.

To effectively and efficiently manage cases and their respective contacts, an electronic database is a necessity. In addition to being able to register information about cases and contacts, an electronic database will allow staff to produce daily reports, export data for analysis, geographically map contacts, and visually represent the chains of transmission. Whatever database is used, we must assure that it is compatible with MoH DHIS2 or other data-capture tools used by the MoH.

If sufficient resources and infrastructure exist, electronic data collection in the field should be considered. This would require providing mobile data collection devices (such as smartphones or tablet computers) to personnel completing forms in this SOP so the data can be entered directly in the field.

If an electronic database cannot be used it is essential that standardized forms are created and strictly enforced, so that data are uniform and complete.

4.10 Materials and tools

Contact tracing teams in the field should be equipped with the following materials:

- Contact Listing and Follow-Up Forms (Paper forms or electronic forms on phone/tablet)
- Clipboard
- Pens
- Thermoscan thermometers
- Alcohol-based rub solutions
- COVID-19 fact sheets and posters
- List of important phone numbers (supervisor, MOH Surveillance Officer, PHEOC, COVID-19 hotline)
- Disposable gloves
- Mobile phones with sufficient airtime

4.11 Safety Precautions for Contact Tracing Teams

It is important for the contact tracers to take measures to protect themselves during follow-up. The teams should abide by the following precautionary measures during visits to contacts:

- Avoid direct physical contact like shaking hands or hugging
- Avoid sitting in chairs in the contact's home
- Avoid touching or leaning against objects in the contact's home
- Do not eat or drink anything offered by the contact or their neighbors
- Put on disposable gloves if you take the contact's temperature
- Wear other personal protective equipment like masks during contact tracing

Additional details are found in Annex 5

Annex 1: COVID-19 standard case definition for use at health facility level

<p>Routine surveillance</p>	<p>Suspect case A patient with acute respiratory illness (fever- 38°C), and at least one sign/symptom of respiratory disease (e.g. cough or shortness of breath), AND a history of travel to or residence in a location reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset</p> <p>OR</p> <p>A patient with any acute respiratory illness AND having been in contact with a confirmed or probable COVID-19 case (see definition of contact) in the last 14 days prior to onset of symptoms</p> <p>OR</p> <p>A patient with severe acute respiratory infection (fever and at least one sign/symptom of respiratory disease e.g., cough, shortness of breath) AND requiring hospitalization AND in the absence of an alternative diagnosis that that fully explains the clinical presentation.</p>
	<p>Confirmed case A person with laboratory confirmation of COVID-19 infection, irrespective of clinical signs and symptoms</p>

Annex 4: Contact Tracing Team

Team Member and Quantity	Background/Experience	Responsibilities
<p>Contact Tracing Team Lead/Coordinator <i>At least one person at the National level.</i></p>	<ul style="list-style-type: none"> • Should be a senior level epidemiologist with experience in outbreak response, contact tracing, and surveillance. • The Lead Epidemiologist coordinates efforts with other pillars in the overall COVID-19 response 	<ul style="list-style-type: none"> • Overseeing all Contact Tracers. • Informing and updating other pillar leads in the Incident Management Framework regarding surveillance and contact tracing activities. • Overseeing operations, monitoring completeness of investigations and training, and mobilizing resources. • Liaising with the laboratory to confirm and track status of all suspected or probable COVID-19 cases.
<p>State or County Surveillance Officer <i>At least one person in each affected state or county</i></p>	<ul style="list-style-type: none"> • Trained in outbreak response, including outbreak investigation and contact tracing, the Field Epidemiologists should be at the district level and oversee all Supervisors. • This person should be highly organized and detail-oriented. • They need to be able to commit full- time to contact tracing during an 	<ul style="list-style-type: none"> • Deciding which contacts should continue to be followed, which contacts are priorities, and which contacts can be discharged from follow-up. • Communicating with other teams, such as the Case Management Team and Logistics Team, when a contact becomes a suspected COVID-19 case. • Overseeing operations, monitoring completeness of investigations and training, and mobilizing resources.
<p>Data Manager <i>At least one Data Manager in each affected district.</i> <i>If multiple districts are involved, there should be an additional Data Manager appointed to the National level.</i></p>	<ul style="list-style-type: none"> • Someone with prior data management experience and proficient computer skills. • If using an electronic database to manage the daily follow-up of contacts, the person should be well trained on how to use the database. • If multiple districts become involved, a Data Manager at the National level should supervise and coordinate all the data coming in from the districts. 	<ul style="list-style-type: none"> • Making sure that all data are entered electronically and for sending reports to the Field and Lead Epidemiologist, as well as to other reporting authorities. • Providing accurate, up-to-date lists of all contacts to be followed to the Supervisors (daily or every time the list is modified). • Analysing contact tracing data to identify problems in contact tracing (e.g., contacts who haven't been followed successfully, cases with unrealistically low number of contacts, etc.). • Supervising activities of any additional staff used for data entry • Performing data quality checks.

Team Member and Quantity	Background/Experience	Responsibilities
<p>Rapid Response Team Epidemiologist and Communications Officer</p> <p><i>At least two people for each Investigation Team.</i></p>	<ul style="list-style-type: none"> • Trained on COVID-19 exposure risk, respectful interview skills with affected families, ability to conduct contact identification and listing. • Work cooperatively with other RRT team members, contact tracers, and community engagement teams. • Should have experience and training in asking probing contact tracing questions. • The MOH Surveillance Officer may identify a smaller group of investigators that are on call to deploy 24 hours a day when a case is reported. 	<ul style="list-style-type: none"> • Interviewing any alert or potential case (or proxies if the person is dead) to determine if the person meets an COVID-19 case definition • Generating initial list of contacts from the case. • Identifying and interviewing all possible contacts of a case (suspected or confirmed). • Assessing symptomatic contacts to determine they should be considered a case. • Listing all contacts on the Contact Listing Form.
<p>Supervisor</p> <p><i>One Supervisor for every 5 to 10 Contact Follow-up Teams, taking geography into consideration.</i></p> <p><i>A Supervisor will typically oversee 1 to 2 villages or urban neighbourhoods as is logistically feasible.</i></p>	<ul style="list-style-type: none"> • An epidemiologist or other healthcare staff with prior contact tracing experience, if possible. • Highly organized and detail-oriented. • Able to commit full- time to contact tracing during an outbreak. • Speak the national language and the local language of the area in which they work. 	<ul style="list-style-type: none"> • Assigning Contact Follow-up Teams to contacts • Handling challenges and questions that arise in the field • Alerting the Field Epidemiologist if there is a symptomatic contact • Identifying and tracking contacts that miss follow-up • Assessing quality assurance measures • Collecting data on current tracing efforts to report to the Data Manager and Field Epidemiologist
<p>Contact Follow-up Team</p> <p><i>Ideally, at least two people should be assigned to work together on each Contact Follow-up Team.</i></p> <p><i>The number of contacts assigned to each Contact Follow-up Team will vary.</i></p> <p><i>Should be organized by geographic area</i></p>	<ul style="list-style-type: none"> • Have undergone contact tracing training. • Include healthcare providers, community health workers, and community members. These individuals should be reliable and responsible, and aware of local culture and customs. • People who are known and respected in the local communities so that contacts will talk to them and be honest about their symptoms. • Able to read and write in the language that the rest of the Contact Tracing Team is using, as well as speak the local language. • In addition, using Contact Follow-up Teams from specific or nearby communities may increase acceptability of contact tracing activities among community residents. 	<ul style="list-style-type: none"> • Initial community and family engagement • Visiting contacts every day for 14 days. During this time, are responsible for: <ul style="list-style-type: none"> - Interviewing and asking about the health status of the contact - Providing daily reporting of follow- up activities - Verifying the contact list - Notifying the Supervisor when a contact is ill. • Alerting Supervisors of any problems in the villages (such as community resistance or potential cases among people who were not known contacts) and also continuing to try to identify additional contacts for each case (sometimes people were initially reluctant to admit they were contacts, or simply forgot they'd had contacts until a few days later).

Annex 5: Health and safety precautions for contact tracing teams

Maintaining the health of the staff is essential so that they can fulfil their duties.

Because asymptomatic contacts may be contagious, Contact Tracing Teams must adhere to the following safety measures while interacting with contacts in situations where a contact may be hiding their symptoms, or the symptoms have not yet been recognized. The following measures should be strictly enforced:

- Avoid direct physical contact with all persons
- Always maintain a distance of at least 1 meter (about a broom length) from the contact.
- Do not enter a contact's home.
- Do not sit on chairs in or near the contact's home.
- Do not share or accept a meal or drink with the contact. Try to have a good breakfast before home visits to avoid the temptation of eating or drinking while visiting contacts.
- Personal protective equipment (PPE) beyond masks is not needed for Contact Follow-up Teams and should not be worn. It can be very alarming for communities if Contact Follow-up Teams show up wearing PPE; the community may interpret that they need PPE as well and there's a risk of further stigmatizing the contacts.
- Maintain standard infection prevention and control measures.

Safety of staff is essential. The following should be communicated to staff and strictly enforced:

- Do not enter communities that seem hostile, aggressive, or unwelcoming.
- Do not try to stop contacts or cases who are trying to flee.
- The Supervisor should be immediately contacted if there are any problems so that the appropriate support and resources can be provided to the affected staff member. The Supervisor also needs to communicate with other appropriate teams to try to resolve the problem that occurred in the community.

In certain circumstances, engaging local law enforcement, police, or military may be necessary, to protect contact tracing staff but this should NOT be routinely employed to perform contact tracing; contact tracing is not a law enforcement measure. It should be noted that if security professionals interact with any COVID-19 cases, they themselves may become contacts and require follow-up.

It may be important to involve community members or liaisons before arrival in certain jurisdictions to ensure local customs, practices, and attributes are acknowledged and respected, which will help increase the likelihood of being welcomed into the community, reduce community resistance, and improve safety.

Annex 6: List of Training modules

The following training modules are necessary for staff to be ready to implement contact tracing immediately. Although other emergency response staff may not be directly involved in contact tracing, everyone involved in the emergency response should be aware of the general contact tracing process and its importance, including members of logistics, case management (such as healthcare workers), and social mobilization groups.

Training Module	Description
Contact Tracing training module	This 1-day training course should be administered to the Contact Follow-up Teams and Supervisors. The objective of the module is to understand COVID-19, how COVID-19 is spread, infection prevention and control, the contact tracing procedure (specific to the Contact Follow-up Teams), safety, and how to deal with common challenges in
Contact Tracing Implementation and Management module	This 3-day training course should be administered to epidemiologists and Supervisors. The course covers the implementation and coordination of the contact tracing process, highlighting common challenges of implementation and ongoing management.
Infection prevention and control training	This training is essential for all personnel who will be involved with the COVID-19 response. In addition to basic understanding of infection prevention and control, the training covers procedures that are specific to COVID-19, such as proper use of PPE. There are no formal training courses at this time but guidelines are available from WHO and CDC.
Community engagement module	This training course should be administered to all persons involved in the COVID-19 response. The objective of the module is to understand the importance of community engagement and cover the key principles for effective communication for education to control COVID-19 in communities.

Annex 7: Flow of information and communication

The following information is shared with Partners by the MOH Surveillance Officer Lead Epidemiologist:

- Daily reports including:
 - Cumulative number of contacts
 - Number of contacts under surveillance
 - % number of contacts evaluated in the reporting period
 - Number of contacts not seen during the reporting period
 - Reason why contact was not seen
 - Number of contacts presenting with symptoms
 - Number of contacts meeting suspect case criteria
 - Areas for improvement
- Weekly reports including:
 - Percentage of contacts being traced daily
 - Percentage of contacts followed for all 14 days
 - Percentage of cases that were a known contact successfully under follow-up

Annex 8: Checklist for Contact Identification and Listing

1. Interview the suspected case and their family, friends, medical staff, or anyone else that had interacted with the suspected COVID-19 case to determine all possible contacts of the case.
2. List all possible contacts of suspected case on Contact Listing Form. Include the following information:
 - Relationship to case
 - Date of last contact
 - Type of contact
 - Address or location information
 - Telephone number
 - Whether they are a health worker
3. Meet in-person with all identified contacts and confirm their contact with the case and associated information
 - If no risk or exposure is identified, the person is no longer considered a contact and will not need follow-up
4. Inform all contacts of their risk status and the plan for 14-day follow-up incorporating psychosocial support
5. Provide phone number for Contact Tracing Team and Hotline
6. Instruct contact to self-isolate and notify the team if they develop symptoms

Annex 9: Checklist for Supervisors

1. Receive contact list from investigation team
2. Activate contact tracing follow-up team
 - Conduct a 1-day training or refresher if necessary
3. Assign contacts to tracers
 - 5-10 contacts per tracer in urban area
 - 10 contact per tracer in rural area
4. Monitor tracers throughout workday (daily)
 - Provide advice and assistance by phone
 - Follow designated procedures if contact is missing, refuses, or is ill
5. Review contact tracing progress at end of day with each tracer (daily)
6. Review safety and security concerns (daily)
7. Provide contact tracing data report to data management team and PHEOC (daily)
8. Meet with contact tracers in person for quality assurance and control (weekly)
9. Conduct spot-checks in field with contact tracers (weekly)

Annex 10: Checklist for Contact Tracers

1. Review contact list with supervisor (daily)
2. Prepare contact tracing form for each contact (daily)
3. Review checklist of equipment (daily)
4. Travel to field and locate contacts (daily)
 - Do not make physical contact or shake hands
 - Do not sit in the contact's house
5. Explain the purpose of the interview to contact or head of household (first meeting)
 - If contact refuses, note this on the contact tracing form
 - If contact cannot be found, notify supervisor and try to arrange another time
6. Interview each contact in the following order: ask if contact if they have a fever or are ill, then observe contact for any signs of illness (daily for each contact)
 - If the contact is **well**, record this on the contact tracing form
 - If the contact is **ill**, record this on the contact tracing form and notify the supervisor immediately. Ask the contact to remain at home until further assessment is done
7. Inquire if there are any people in the house not on the contact list who are ill (daily for each contact)
 - If yes, notify the supervisor
8. Thank the contact for their time (daily for each contact)
9. Perform hand hygiene using soap and water, or hand sanitizer if not available (daily for each contact)
10. Meet by phone with supervisor upon completion of interviews, and communicate health status of all contacts (daily)
11. Meet in-person with supervisor once per week to provide copies of all forms (weekly)

Annex 11: Response Plan for Contacts who Develop Symptoms

If a contact of a suspected COVID-19 case is symptomatic during contact tracing, the following steps will be taken by various teams:

1. The **contact tracing follow-up team** will immediately inform the supervisor
2. The **supervisor** will activate the RRT
3. The **RRT** will respond to the field and determine if the contact fits the case definition
4. If the contact meets the case definition, the **RRT** will:
 - Complete the case investigation form
 - Collect samples
 - Pack and transport samples
 - Activate the ambulance to transport the patient
 - Active burial and/or decontamination teams
 - Conduct contact listing and active case finding for the new suspected case
 - Identify additional cases
5. If the contact tests negative:
 - The contact can return home and will RESUME their 14-day follow-up process
 - If the contact had exposures while in isolation, their 14-day follow-up will start over
6. If the contact tests positive:
 - The patient is considered a confirmed COVID-19 case and should be transported to the designated isolation location (home or isolation center)