

GUIDANCE: CONTACT TRACING FOR COVID-19



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Guidance:

Contact Tracing for COVID-19

This document has been developed to assist National Societies in deciding if and how they may wish to assist their government's strategy for contact tracing as part of their response plan for COVID-19. Given the complexity of COVID-19, its global scope, national priorities and National Society capacities, contact tracing may be one option to include in the response plan. This document provides guidance on deciding whether assisting with contact tracing is appropriate, as well as considerations to include within contact tracing initiatives. A discussion and resources on using new technologies for Contact Tracing and proximity notification is also included.¹

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¹ Please see section titled “New technologies, proximity applications and Contact Tracing” under “General Considerations for Contact Tracing” for definitions and more details on new information technology tools.

Contact tracing: Who, What and Why

Contact tracing is the process of identifying, assessing, and supporting people who may have been exposed to COVID-19 to prevent onward transmission. People who may have been exposed to COVID-19 are systematically followed (usually daily) for 14 days from the date of the most recent exposure. *Please note that 14 days is suggested by WHO, but some governments may have their own requirements.* Please ensure your National Society follows the requirements of the National government and health officials.

This process allows for the rapid identification of people who become symptomatic by following those most likely to develop symptoms of the illness (close contacts). Identifying people at the onset of symptoms and isolating them reduces exposure to other persons, preventing subsequent infections. Prompt isolation and admission of the symptomatic person to a community health or treatment facility decreases the delay to supportive treatment, which may improve the likelihood of survival. Contact tracing should be used as part of a comprehensive strategy including case identification, isolation and support/treatment of cases, testing, and quarantine and support of contacts all of which are critical activities to reduce transmission and control the epidemic.² Contact tracing should be paired with health communication and engagement approaches as well as psycho-social support provided to the community.

Contact tracing compared to other forms of public health surveillance:

There are many ways to include various forms of surveillance and case detection within NS activities, and contact tracing is only one of them.

Process	Purpose	Who	How
Contact Tracing	The identification and follow-up of persons who may have come into close contact with an infected person with COVID-19	Trained volunteer health workers (VHWs), or community health workers (CHWs), or NS volunteers (as requested from Ministries of Health), with training from National or local government / health authorities	Close contacts to be quarantined (at home or in a facility) and/or monitored daily for 14 days following potential exposure. This entails: 1. Finding people who meet the definition of a close contact, and 2. Following-up on whether contacts develop symptoms (daily by phone if possible)

² [WHO Contact tracing in the context of COVID-19](#)

Proximity Tracking Applications	To notify individuals when they have been in close contact with someone who self-reportedly tested positive for COVID-19	General public	Mobile application available to download to individuals' mobile devices. Once downloaded, the application uses Bluetooth proximity technology to notify individuals when they have been in close proximity to another individual with the application downloaded to their device who self-reported as COVID-19 positive.
Active Case Finding	Systematic searching and screening for COVID-19 within targeted groups or locations believed to be at risk	Epidemiologists, CHWs or others based on the health system capacity	Requires rapid diagnostic testing capabilities and human resources, may include checkpoints, door-to-door, or searching within hospitals wards for people who may have been misdiagnosed
Point of Entry (POE) Screening	Screenings that are put in place at points of entry or points of control to assess whether symptoms are present in travelers	Government officials (HWs, army, police, etc.), based on mandate can also be RCRC volunteers	Based on National government requirements. Typically screening for symptoms aligned with WHO or National case definition
Community-based surveillance (CBS)	Immediate reporting of observed health risks that meet the COVID-19 criteria as trained during health promotion activities that match selected criteria	Trained CBS volunteers within the NS	Volunteers can report health risks matching COVID-19
Reporting Hotline	Communication network allowing community members to call and report if they believe COVID-19 is an issue in their community and provide information on symptoms for follow-up	Community members, health facility workers, RCRC Volunteers	Requires a national or local hotline established and maintained with referral connections

Who is a contact?

The [WHO definition](#) of “who a contact is” described below should be used and/or modified based on MoH specific requirements if they differ.

A contact is a person who experienced any one of the following exposures to COVID-19 from 2 days before to 14 days after the onset of symptoms of a probable or confirmed case:

1. Being within 1 metre of a COVID-19 case for more than 15 minutes;
2. Direct physical contact with a probable or confirmed COVID-19 case;
3. Direct care for a patient with probable or confirmed COVID-19 disease without using proper personal protective equipment (PPE); OR
4. Other definitions as indicated by local risk assessments³.

Note: for confirmed asymptomatic cases, the period of contact is measured as the 2 days before through 14 days after the date on which the positive sample was taken.

General considerations for contact tracing⁴:

Contact tracing relies on active participation and cooperation from the affected communities in order to be effective. To develop a relationship of trust, every effort should be made to engage communities, explain the purpose and process clearly and answer any questions or concerns people may have. Affected communities should have the confidence to cooperate with contact tracing teams, and ideally community networks and individuals should be informed or trained appropriately to be part of the teams that are conducting contact tracing.

Contact tracing is best undertaken when appropriate, accurate and culturally sensitive two-way communication approaches exist. Identification and enrolment of contacts relies on a community's understanding, trust, and willingness to be followed, and when the main process is understood and involves communities with the technical support of CHWs and VHWs. Communities may be more or less willing to participate in contact tracing based on their risk perception and understanding of COVID-19, the potential associated with being a contact (from peers, family, or the community), and how they feel overall about COVID-19. People also may fear being identified if this represents to be put in isolation and not able to go back to work, school or meeting others.⁵ Moreover, people may not want to report other contacts because of this stigma and potential retaliation that this would represent. Public misinterpretations and perceptions of contact lists as a list of people who are likely to die may lead to community resistance and impede contact tracing. Therefore, the health communication and engagement approaches as well as psycho-social support provided to the community are critical. The following measures may enhance community adherence to contact tracing and avoid stigma:

³ See [WHO COVID-19 Contact tracing guidance](#) for additional contextual guidance

⁴ [Modified from: Emergency Guideline: Implementation and Management of contact tracing for Ebola virus disease](#) (WHO, CDC)

⁵ For additional guidance on how to handle stigma related to COVID-19 see “[A Guide to preventing and addressing social stigma](#)” developed by IFRC, UNICEF and WHO.

- Engage and educate community leaders and existing networks regarding COVID-19 infection, transmission, and the steps communities can take to combat it, including the importance of contact tracing (i.e. health committees, women's groups, students and universities groups, local media, etc.)
- Enable accessible and culturally tailored capacity building on the technological side of contact tracing Apps when context requires it. The use of Apps may suppose a barrier or a solution depending on the communities we work with. Engage religious centres, such as churches and mosques, to engage community in two-way dialogues (if open and sanctioned by MoH) including explaining why contact tracing benefits the whole community.
- Use early health communication and education efforts, if possible, before the first introduction of COVID-19.
- Listen and respond to community feedback, including any fears and concerns people have about contact tracing, and make sure these are logged, analyzed and responded to. Adapt contact tracing to meet communities' expressed needs, while maintaining the reach and effectiveness of contact tracing.
- Use early psychosocial support to overcome the fear associated with COVID-19.
- Educate the media on the importance of confidentiality for cases and contacts.
- There are a number of risk communication and community engagement, as well as community engagement and accountability (RCCE/CEA) tools which can help with the above actions, including training resources, feedback tools, a community worker and stigma guide. You can access all of these tools [here and on the CEA Hub](#).
- Be inclusive with gender, vulnerable and marginalized groups. Adapt your communication approaches to all literacy and language levels.
- Be discreet when entering the community and ensure previous consultations with community leaders or gatekeepers are in place. This will prevent to increase stigma they may be already there against health workers or volunteers.

Successful contact tracing requires skills in the assessment of COVID-19 symptoms, interviewing techniques, and counselling. Volunteers need to be flexible and empathic with cases, contacts, and their families in order to build trust and good community relations.

The implementation of contact tracing activities may vary with the burden of disease and the local context. The number of cases and contacts traced daily may cover wide geographical areas and extend into defined pockets such as densely populated urban areas, posing logistical challenges to locating and tracing all those who have been in contact with a case, but also to diverse population groups such as migrants and refugees that may reject being traced as result of fear and mistrust. In such instances, comprehensive and systematic contact tracing activities need to be enhanced through robust and context-specific community engagement approaches and through intensified safe social mobilization.⁶

Data Protection Consideration and Resources

Ethics of public health and data protection principles must be adhered to through all steps of contact tracing activities.

Before RCVs engage in contact tracing with local or national authorities, it is important to review any existing volunteer statements or agreements to ensure they include a clause prohibiting disclosure of personal, confidential or other sensitive information. A signature record should exist for all volunteers participating

⁶ Interagency [resources](#) for Safe Community Engagement during COVID-19

in contact tracing. It should be made clear in training that disclosure of personal, confidential or other sensitive information, especially with respect to contact tracing, work puts individuals' safety at risk and is therefore strictly forbidden. Additionally, it should be made clear from government officials whether RCVs may be exposed to any liability during the process of contact tracing. Volunteers should also be informed that they may be required to sign additional confidentiality statements if working directly with the MOH or government authorities.

Additionally, data safeguards should be put in place to guarantee privacy and data protection in accordance with the legal frameworks of the countries where systems are implemented, and how data will be handled, stored, and used needs to be communicated to those concerned in a clear and transparent manner. This is important for buy-in and engagement as well as to avoid misperceptions that could jeopardize the effectiveness of a contact tracing programme.⁷

For more information on data protection in humanitarian actions, please take a look at the [ICRC's Handbook on data protection in humanitarian action](#).

New technologies, proximity applications and contact tracing

While new information technology tools are not required for contact tracing, they can facilitate the process. Digital tools may include the WHO Go.data software application, self-reporting symptom tracker applications, proximity applications, or other digital tracking forms. Digital tools used in contact tracing efforts should be assessed for data protection and privacy standards in alignment with national requirements before starting to use them. Minimum information needed to appropriately conduct contact tracing is suggested in the *Implementation of Contact Tracing for COVID-19* below.

'Proximity tracking' uses Bluetooth technology to measure the distance between two smartphones to determine whether two people were in close enough contact for long enough for the virus to spread from an infected person to an uninfected person. This is one of the most common information technology applications used to inform people who may have come into contact with a positively confirmed case of COVID-19 and notifies individuals in case of exposure risk. While proximity tracking is often discussed interchangeably as 'contact tracing,' it should be understood as one potential method that can be used as a *part of* contact tracing, and must be integrated into the existing public health system to be effective. It cannot replace traditional line-listing of contacts or over-the-phone or person-to-person outreach, and needs to be paired with the proper personnel, testing services and support system for people who have been notified that they may have been exposed to the virus.

There are [several options](#) that exist for proximity tracking applications if this is a strategy the MoH and National Society would like to explore. Both the Austrian Red Cross and Swiss Red Cross have supported the development of proximity tracking applications based off of the Apple-Android exposure notification [open source](#) software, while other National governments have developed their own applications.

⁷ [WHO Contact Tracing for COVID-19](#)

'Location Tracing' primarily uses aggregate GIS data from people's mobile devices to see whether, as a population, they are following physical distancing measures recommended by respective governments. Some other technologies that may be used in location tracing efforts include social media tracking and facial recognition. While location tracing can be applied at the individual level to ensure quarantine protocol is followed, it is most commonly used at the population level to better understand population dynamics during the outbreak.

While digital applications offer potential advantages to reducing the spread of the epidemic, they also come with risks. In an analysis of contact tracing applications the IFRC and ICRC have produced a [blog post](#) in Humanitarian Law & Policy stating:

States should assess whether a mobile-based contact tracing app could be an appropriate, effective, ethical and safe component of the COVID-19 response in their particular context to save lives. If a State determines that it would be, it should undertake a careful balancing of the benefits and risks to use a decentralized protocol such as DP-3T, and to incorporate 'data protection by design' and up-to-date scientific, ethical and legal standards in its responses.⁸

Additional Resources:

The WHO have described ethical considerations that should be taken into account prior to engaging in the use of proximity tracking technology during contact tracing in their guidance note: [Ethical considerations to guide the use of digital proximity tracking technologies for COVID-19 contact tracing](#)

UNICEF has developed a 3-page specific guidelines regarding the ethical considerations of children in contact tracing and surveillance to ensure the surveillance effort is purpose-driven, proportional, professionally accountable, participatory, protective of children's rights, and that prevention of harm throughout the data cycle is considered: [Digital contact tracing and surveillance during COVID-19 General and Child-specific Ethical Issues](#).

Case definition for COVID-19

The suggested [case definition from WHO](#)⁹ described below should be compared and adjusted in each country to match MoH requirements (if it exists).

A suspected case is:

A. A patient with acute respiratory illness (fever and at least one sign/symptom of respiratory disease, e.g., cough, shortness of breath), AND a history of travel to or residence in a location

⁸ Staehelin, Balthasar; Aptel, Cécile. [COVID-19 and contact tracing: a call for digital diligence](#). Humanitarian Law and Policy. 13 May 2020.

⁹ **Please note** that the case definitions for suspected, probable, and clinical (confirmed) case of COVID-19 are **expected to be revised the week of July 12th, 2020 by WHO**. For the most up-to-date case definitions please always visit the WHO guidance through the [link provided](#).

reporting community transmission of COVID-19 disease during the 14 days prior to symptom onset;

OR

B. A patient with any acute respiratory illness AND who has been in contact with a confirmed or probable COVID-19 case (see the definition of contact below) in the 14 days prior to the onset of symptoms

OR

C. A patient with severe acute respiratory infection (that is, fever and at least one sign or symptom of respiratory disease, for example, cough or shortness breath AND requiring hospitalization) AND in the absence of an alternative diagnosis that fully explains the clinical presentation.

A **Probable case** is:

- A.** A suspect case for whom testing for the COVID-19 virus is inconclusive;
- OR
- B.** A suspect case for whom testing could not be performed for any reason.

A **Confirmed case** is:

A person with laboratory confirmation of COVID-19 infection, with or without clinical signs and symptoms.

Implementation of contact tracing for COVID-19

Contact tracers work to identify all social, familial, work, and health care worker contacts who have had contact with a confirmed case from 2 days before the person began to experience symptoms and up to 14 days after their symptom onset, or for asymptomatic positive cases, 2 days before and 14 days after positive COVID-19 test. Contact tracers create a line list of each contact of the ill person (confirmed or probable case). This line list includes the name of the contact; demographic information (e.g. age, sex); the date of first and last common exposure or date of contact with the confirmed or probable case; and if the contact develops a fever or respiratory symptoms, the date that those symptoms began. The common exposures and type of contact with the confirmed or probable case should be thoroughly documented for any contacts who become infected with COVID-19, as per national MoH guidance and procedures.

For contacts of a suspected COVID-19 case, at a minimum, RCVs need to encourage respiratory and hand hygiene and may encourage – depending on the epidemiological context and resources available, as well

as national MoH policy – self-monitoring for symptoms, physical distancing, or quarantine (at home or in a designated facility).

Key information to include in contact tracing forms

Red Cross Red Crescent National Societies should work alongside national efforts in contact tracing and use the MOH-recommended contact-tracing forms when available. When not available, the WHO has recommended the following types of information to be included on any contact tracing form:

Type of information Minimum data required	Type of information Minimum data required
Contact identification (entered once)	• Contact (unique) ID • Linked source Case ID or Event ID (the ID number of the COVID-19 positive “source” case, or event the contact was identified in relation to) • Full name of the contact • Address (and geolocation, where possible) • Phone number and/or other contact details • Alternative contact details (important in settings with variable telecommunications reception)
Demographic information (entered once)	• Date of birth (or age, when not known) • Sex • Occupation (to identify health care workers, transport workers, other at-risk occupations) • Relationship with the source case • Language (in settings with diverse populations)
Type of contact (entered once)	• Type of contact (household, workplace, community, health facility, other) • Date of last contact with the COVID-19 case • Exposure frequency and duration (this may be used to classify contacts into high and low risk / exposure, in case resources are too limited, and only high-risk contacts are traced) • Factors influencing contact vulnerability (risk factors such as age and co-morbidities)
Daily follow-up of signs and symptoms (data entered daily after each follow-up with the contact)	• Fever (perceived or measured, and reported or observed) • Other signs and symptoms: sore throat, cough, runny nose or nasal congestion, shortness of breath or difficulty breathing, muscle pain, loss of smell or taste, or diarrhoea
Absence or loss to follow-up (in cases where the contact cannot be reached or is not contacted)	• Reasons for non-reporting of daily signs and symptoms (contacts are unavailable, relocated, lost to follow-up) • New address (if known)
Actions taken if symptomatic (entered once)	• Date of symptom onset • Referral criteria (based on clinical severity and presence of vulnerability factors)

	• Contact' s location (self-isolation at home, other self-isolation facility, hospital) • Whether a sample has been taken, date of collection
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Table taken from WHO's guidance note: [Contact tracing in the context of COVID-19: Interim Guidance](#) (p.4)

Suggested Methods

To better determine the scope and need for contact tracing for COVID-19 please ensure you discuss with your MoH focal point. The MoH will have specific protocols that align with WHO guidance and suggested methods below but adapted to meet the needs within their specific context. Volunteer safety is essential and should be addressed in the MoH protocol. Some suggestions are listed below along with general logistics and HR resource considerations.

General Set-up and Logistics Requirements

Category	Suggested Considerations	Yes/ Feasible	No/ Not currently feasible
Contact Tracing Planning/ Processes	1. Contact tracing protocol planned with partners/ MoH, relevant stakeholders 2. Roles and responsibilities for RCVs clearly defined 3. RCCE and PSS strategy considered in planning process 4. Review Volunteer confidentiality agreements and ensure they are appropriate and up to date for the context of Contact Tracing		
Suggested Human Resources	1 District (or equivalent) Officer per area 1 Volunteer supervisor per 20-30 volunteers (Supervisors may be MoH staff, CHWs, or part of RCRC) 1 Volunteer per 20-30 contacts		
Logistics Considerations	Transport/ Community Access if needed in local context Security situation in locations of interest • Volunteers able to move within communities and conduct activities, OR Contact reachable by phone • Supervision visits possible • Contact tracing is accepted by the community Paper-based contact tracing system: • Printed forms for volunteers • Reporting books for supervisors Digital App-based Technologies • Smartphones and network available for supervisors based on contact tracing plan Hygiene • All volunteers conducting contact tracing should have access to hand sanitizer and/ or handwashing		

Recommended Trainings	Volunteer training per location • Location supervisor to lead • Recommended not to exceed 25 2-4 days for Volunteer training on contact tracing, including RCCE.¹⁰ Refresher trainings as needed		
Monitoring, Evaluation & Feedback Mechanism	• Core indicators considered and can be captured given expected resources • Community Feedback mechanism included to capture and analyse peoples' perceptions, fears, questions and suggestions about contact tracing and COVID-19 more generally. If feedback is also being collect through other activities such as social mobilization, this should be included here with one feedback system overall for the National Society.		

Volunteer Safety

If possible, it is suggested to conduct contact tracing by phone. This allows for the maximum amount of protection from potential transmission as well as personal privacy. However, in many contexts follow-up by phone is not possible. If follow-up in person is required, the below recommendations are suggested as best practice.

All volunteers, in contexts at every level of transmission should have access to hand sanitizer after every in-person visit. It is recommended that **volunteers keep a 1-2 metres distance** from community members during discussions and **no physical contact** should take place. If possible, discussions should take place over the phone, outside through a window or in an open space and between a healthy member of the family/ community member and volunteer rather than the ill person themselves.

If contact tracing is conducted by CHVs who have been trained to provide additional health support, they should follow any additional PPE measures that pertain to those activities and government requirements.

Volunteers conducting contact tracing activities should follow MoH guidance to wear appropriate PPE for contact tracing and other community engagement activities, please adhere to their guidance and make

¹⁰ Training tools include: [ECV and RCCE training package developed for Africa Region](#); [RCCE one-day rapid training for COVID-19](#); [ToT Webinar on RCCE](#)

sure to receive PPE stocks from MoH supply lines. It is suggested that if in-person visits are made, volunteers should wear a cloth mask at all times when a 2 metre distance cannot be maintained for the duration of the volunteer's activity in the community.

Available training resources

Johns Hopkins Bloomberg School of Public Health has partnered with Coursera to develop a [free online course on contact tracing for COVID-19](#) which has already been used by many globally, including WHO affiliates. Course topics include:

- Background, clinical signs and risk factors of COVID-19
- Basics of Contact Tracing for COVID-19, steps for case investigation
- Ethics of contact tracing, technology and tools
- Effective communication

Training for contact tracing should always follow national protocol.

Dos and Don'ts of Contact Tracing

DO

- Practice physical distancing and call when possible to complete contact tracing
- Be empathetic, listen and respond to the concerns of those you are contacting and use your knowledge on RCCE, PSS and other support measures from volunteer trainings
- Collect and respond to community feedback using IFRC RCCE guidance [and tools](#). Speak to your National Society RCCE and CEA focal point.
- Wash your hands with soap and water, or use hand sanitizer after each visit
- Reach out to your supervisor if you are uncertain or feel unsafe at any time.
- Follow all security procedures put in place by the National Society and the Government.

DON'T

- Stigmatize people or make them feel ashamed for needing to be followed
- Share discuss the names or information of contacts outside of the CT efforts
- Enter homes while conducting contact tracing activities, volunteers SHOULD speak with people outside or through a window, maintaining a 1-2 metre distance.
- Do not touch or be closer than 2 metres with anyone.
- Get frustrated, Volunteers SHOULD be patient and listen to concerns and provide correct information to counter misinformation or rumours.

Suggested Indicators for Monitoring and Evaluating your contact tracing implementation

Suggested Indicator	Calculations/ Details	Purpose
% of targeted number of contacts visited/ contacted per day	Daily # of contacts visited, or contacted / Target # of contacts visited/ contacted	Monitoring
% of suspected or confirmed cases in target areas referred and captured through RCV contact tracing activities	# of confirmed cases referred through RCV contact tracing to authorities / Total # of cases confirmed by authorities in target areas	Impact
Proportion of contacts lost to follow-up (not reachable for >2 days)	# contacts not seen for >2 consecutive days / I # contacts to follow (preferably organized by geographic region and/or type of contact)	Monitor coverage
Proportion of contacts followed who become suspected cases	# new suspect cases/ # contracts followed	Monitor quality, track outbreak dynamics
% of trained community volunteers active in contact tracing activities	# of trained volunteers submitting reports as required/ # of trained volunteers in contact tracing	Program monitoring

Total Number of Trainers (ToT/ Master trainers) trained in contact tracing and Total number of Volunteers trained in contact tracing	<i>No calculation required</i>	Needed for program monitoring calculations and follow-up
# of people reached through risk communication and community engagement for health and hygiene promotion activities	<i>No calculation required</i>	Program Monitoring

ADDITIONAL TOOLS & GUIDANCE

1. [Community Engagement and Accountability Hub](#)
2. ICRC Humanitarian Law and Policy. [COVID-19 and contact tracing: a call for digital diligence](#)
3. [ICRC Handbook on Data Protection in humanitarian action](#)
4. [IFRC COVID-19 Health Help Desk](#) for the latest guidance on Coronavirus disease (COVID-19) including community health guidance
5. [RCCE tools and training, including for feedback collection and analysis, can be access through the matrix of resources](#)
6. [Social Stigma Associated with COVID-19: A guide to preventing and addressing social stigma.](#) (IFRC, WHO, UNICEF)
7. [WHO Contact Tracing in the context of COVID-19](#)
8. [WHO Considerations in the investigation of cases and clusters of COVID-19](#)
9. [WHO Early detection and Identification of COVID-19](#)
10. [WHO Ethical considerations to guide the use of digital proximity tracking technologies for COVID-19 contact tracing](#)