Contact Tracing by Community Health Workers in Low-Resource, Non-US Settings

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Document Purpose. This document provides information on how community health workers (CHWs) can support contact tracing efforts related to COVID-19 in low resource and resource-limited non-U.S. settings. The considerations provided can be adapted to follow national or local guidelines and account for local context.

Intended Audience. This document is intended for CDC country offices, Ministries of Health (MoH), subnational public health authorities, and other implementing partners in low resource and limited-resource non-U.S. settings. Local stakeholders can be engaged in the planning and decision-making process by providing feedback on proposed roles for CHWs.

What Is Contact Tracing?

Contact tracing involves interviewing people who have probable or confirmed COVID-19. During these case investigation interviews, persons with confirmed or probable COVID-19 are asked to name other individuals or groups they have come in close contact with (contacts) during the period of infectiousness. The *period of infectiousness* for a case is defined as two days before illness onset if they had symptoms, or two days before specimen collection if they did not have symptoms, until the time they were isolated. Individuals with a probable or confirmed case of COVID-19 infection are asked to isolate at home or at a community isolation center for at least 10 days after the onset of symptoms and until 24 hours after they last had a fever and their symptoms have improved. This is the infectious period. For the purpose of this document, fever is defined as subjective fever (feeling feverish) or a measured temperature of 100.4°F (38°C) or higher.

Contacts are defined as individuals coming within 2 meters of a person with COVID-19 for more than 15 total minutes during the infectious period. Certain types of contact may place a person at higher risk for exposure and should be considered. For example, monitoring of close contacts can be prioritized. However, all contacts are asked to quarantine for 14 days and to monitor themselves for any signs or symptoms of COVID-19, or as required by local authorities. Taken together, isolating people with COVID-19 and quarantining their contacts can help prevent COVID-19 from spreading within the community.

In many low-resource and resource-limited settings, CHWs deliver a range of frontline public health services within the community, including reproductive health, maternal and newborn health, immunization and other child health services, and prevention and management support for both infectious (e.g. malaria, HIV/AIDS, tuberculosis) and noncommunicable diseases (e.g. hypertension, diabetes). CHWs are generally recruited from their own community and thus bring a deep understanding of the culture and context of the people they serve. As such, they can act as an important liaison between the community and healthcare facilities.

Defining the Role of CHWs in Contact Tracing for COVID-19

It is important that policy and program planners clearly define the role of and provide adequate training for CHWs in the context of the COVID-19 response to maximize their effectiveness. As part of the planning process, current CHWs can be identified, along with unemployed and retired health workers who could support contact tracing efforts in communities with COVID-19 cases. If resources allow, additional CHWs can be hired and trained to support COVID-19 mitigation efforts. Ensuring that mechanisms are in place to pay contact tracers is an important issue to address as part of the planning process. Resources might also be needed to pay current CHWs for additional work they do to support contact tracing activities for COVID-19.

Program planners might consider re-assigning older CHWs and workers with high-risk conditions (e.g., hypertension, diabetes, respiratory conditions) to duties that may put them at less risk for exposure to COVID-19. For example, these workers can potentially be considered for roles that minimize direct exposure with cases such as conducting phone interviews or other monitoring activities.

Program planners might consider four levels of engagement, or scenarios, for CHW involvement in the COVID-19 response, depending on available resources, CHWs' skills and willingness to participate in various activities, and the scale of the epidemic:

1. **Scenario 1: CHW is fully engaged in COVID-19 contact tracing activities.** CHW is hired and specifically trained to conduct contact tracing in the community.
2. **Scenario 2: CHW has moderate engagement in COVID-19 contact tracing activities.** The CHW does not conduct contact elicitation or tracing but instead supports a separate team of contact tracers (see **How CHWs Can Support Contact Tracing for COVID-19,** below). This allows the CHW to continue providing essential health services and prevents duplication of effort.
3. **Scenario 3: CHW may assist with some COVID-19 contact tracing activities.** The CHW provides some community education and sensitization about contact tracing but is primarily focused on delivering their usual health services.
4. **Scenario 4: CHW is not engaged in COVID-19 contact tracing activities.** This may be a CHW who is engaging in non-COVID-19 activities, such as management of chronic illnesses or health promotion. These activities might have been adapted or reduced in response to the COVID-19 pandemic.

How CHWs Can Support Contact Tracing for COVID-19

Below are examples of ways CHWs can support contact tracing:

- **Educate and engage the community about contact tracing.** Trained CHWs play an important role in communicating information about COVID-19 to the community. CHWs can mobilize communities to support contact tracing by educating and sensitizing community members on how they can prevent COVID-19 transmission. They can also educate community members about what people with COVID-19 and their contacts can expect to happen during the case investigation and contact tracing processes. CHWs can also discuss the need for people with COVID-19 and their close contacts to isolate and self-quarantine, respectively, and engage the community to identify ways they can support community members who are in isolation or quarantine. Finally, they can address any myths or misconceptions that could hamper contact tracing efforts.
- **Elicitation of household members.** Contact tracing teams may ask CHWs for help with elicitation of household members and other contacts. This information can then be provided to the contact tracing team for follow-up. CHWs can also inform household contacts about the importance of self-quarantine for 14 days after their last exposure to a potentially infectious household member.
- **Provide data for surveillance.** In collaboration with contact tracing programs, and in adherence to appropriate confidentiality standards, CHWs can collect data on individuals newly identified as being infected with COVID-19 and their contacts to inform response efforts and strengthen community-based surveillance systems. These data can include geographic information, demographic and health information about people with COVID-19 and their household contacts —including comorbidities and symptoms experienced—and outcomes of contact tracing efforts (e.g., number of household contacts who develop symptoms, number of individuals with COVID-19 who recover or are hospitalized). These data can be entered into health information systems and used to identify COVID-19 clusters and hotspots, guide decisions related to community deployment of rapid response teams and contact tracing services, and inform epidemiologic models to shape the response at the national and subnational levels.

Resources To Help CHWs Support Contact Tracing

- Program planners should determine a compensation approach for CHWs carrying out contact tracing activities. This might include determining what, if any, supplementary resources will be needed for CHWs to do additional work in support of contact tracing. Additional resources might also include compensation for cell phone airtime or other costs related to this additional work.
- Formal training programs for contact tracing and confidentiality are needed for CHWs expected to carry out these duties. CHWs also need training on protecting themselves and others from COVID-19 during interactions with COVID-19 patients and their contacts, including how to practice physical distancing (e.g., staying 2 meters away from patients and their

contacts and staying outside of the homes of patients and their contacts), the importance of wearing masks and their proper use, and the importance of hand hygiene and cough etiquette. Personal protective equipment can be used to protect CHWs when physical distancing cannot be maintained. Other training topics for CHWs include how to monitor for signs and symptoms of COVID-19; this might include instruction on using remote sensing thermometers if they are expected to take temperatures as part of the symptom-monitoring process for household contacts. Finally, CHWs should be trained on using the community-based surveillance systems they will be supporting.

- Supportive supervision. Support from supervisors can help ensure the quality of CHWs' work and prevent burnout. Supportive supervision includes receiving daily reports on people with COVID-19 and their household contacts from CHWs, verifying that data collection forms are completed fully and correctly, and providing on-the-job training and mentoring on core tasks, such as effective communication and rapport-building skills. This supportive supervision can be done through weekly check-in calls or through instant messaging applications and other virtual platforms by any number of local health or public health staff (e.g., local surveillance officers, health office staff). Supervisors can also provide a forum for CHWs to share best practices with each other to foster learning and skill development.
- CHWs should be provided with supplies to reduce the risk of becoming infected with COVID-19. These supplies may include masks, gloves and alcohol-based hand sanitizer with 60-90% alcohol. Additional supplies may include means of official identification and mobile telephone, as needed.