Operational Considerations for Adapting a Contact Tracing Program to Respond to the COVID-19 Pandemic in non-US

COVID-19

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Summary of Recent Changes

Updates as of June 22, 2021   ⌃

- Inclusion of information on how to use community Health Workers (CHWs) to support contact tracing processes.
- How to use case investigation and source investigation to optimize contact tracing programs.
- Update on options to reduce quarantine periods for probable or confirmed positive cases of COVID-19.
- The definition of a cluster.

Key Points

- Comprehensive contact tracing measures are often feasible when there is one case or even a cluster of cases but may not be feasible once hundreds or thousands of new cases are reported a day.
- When necessary, contact tracing programs should be adapted to aim for optimal results based on local context and resources.
- It is important to assess the country's current epidemiological situation prior to adapting contact tracing programs.
- Using case investigation and source investigation can offer many benefits to contact tracing including locating places and events of COVID-19 transmission.

Document Rationale

Contact tracing, including case and source investigation, is a key component of controlling transmission of infectious diseases. Contact tracing for the current COVID-19 pandemic, however, is distinct from that undertaken for other diseases (e.g., Ebola, HIV, TB) because in nearly all countries the number of cases and contacts has outpaced the capacity of the public health system to quickly notify and quarantine all contacts and isolate all cases. Contact tracing works to help contain an outbreak when integrated into a robust response that includes isolation of cases and testing and implementation of community mitigation measures (including but not limited to maintaining physical distancing in public places, limiting outings, avoiding large gatherings, wearing face masks, washing hands often, and cleaning high-touch surfaces routinely).

Contact tracing programs will need to prioritize activities to ensure that human and financial resources are utilized most effectively. Necessary adaptations will depend on the setting and will also need to adapt over time to best suit the current epidemiology of the outbreak, especially in settings with low vaccination coverage. Comprehensive measures are feasible

when there is one case or even one cluster of cases but may not be feasible once hundreds or thousands of new cases are reported a day. This document outlines considerations for public health organizations to adapt contact tracing programs with a goal of efficiently using available resources for maximum impact under different conditions.

Adaptations to contact tracing programs are grouped into the four categories below. The ideal approach when resources are adequate for current transmission rates is described here, and the remainder of this document will address adaptations in each of these areas to better utilize limited resources

1. **Workforce Adaptations** (i.e., who will do the case investigations and contact tracing): Ideally existing staff from the public health agency in country (e.g., Ministry of Health, National Centers for Disease Control, Field Epidemiology Training Program) would be able to implement these efforts. This document addresses ways to expand the workforce if this is not feasible with current staff.

2. **Epidemiologic Adaptations** (e.g., which contacts will be followed): Ideally all cases will be investigated to identify contacts and prevent further spread of SARS-CoV-2 by people exposed to the case-patient. This document discusses ways to adapt contact tracing programs to efficiently use resources when following the ideal procedures is not feasible.

3. **System Adaptations** (e.g., how will cases and contacts be notified and monitored): Ideally all cases and contacts will be contacted directly by public health officers, either in person or by phone. This document addresses ways to improve the process if this is not feasible.

4. **Financial, Logistical, and Operational Adaptations** (e.g., what resources will be available to support the system designed): Ideally, financial, human, and logistical resources for contact tracing would need to be sufficient to meet the need. This document supports decision makers to prioritize limited resources available for contact tracing efforts.

Key Terms

A **contact** is someone who had any contact with an infected person (probable or confirmed COVID-19 case) anytime between the beginning of the infectious period until the time the patient is isolated or until the end of the infectious period. The infectious period is defined as starting 2 days before illness onset or, for asymptomatic clients, 2 days prior to positive specimen collection.

A close contact is defined by CDC as **someone who was within 2 meters of an infected person for at least 15 minutes within a 24-hour period** starting from 2 days before illness onset (or, for asymptomatic cases 2 days prior to positive specimen collection) until the time the patient is isolated.

- Examples of people who could potentially be defined as close contacts:
    - Household contacts living, sleeping, or eating in the same home
    - Sexual partners of a person with COVID-19
    - Healthcare workers who have not worn appropriate PPE while exposed to a person with COVID-19 (either directly, with bodily fluids, or with a laboratory specimen)
    - People in closed settings, such as long-term living facilities, and other high-risk settings (e.g., correctional or detention facilities, shelters, hostels, schools, migrant camps) where a person with COVID-19 has been identified
    - Known contacts of a person with COVID-19 in other group settings (places of worship, indoor workplaces, private social events)
    - Passengers on an aircraft sitting within 2 seats (in any direction) of a person with COVID-19, travel companions, anyone providing care, or crew members working in the same section
    - People who used other public or shared transportation with a person with COVID-19

A close contact is defined by the World Health Organization (WHO) as anyone with the following exposures to a probable or confirmed COVID-19 case, from 2 days before and ten days after the person's onset of illness (plus three additional days without symptoms if the case-patient is symptomatic). If confirmed cases are asymptomatic, their contacts should be managed in the same way: anyone with an exposure period from 2 days before the case-patient received a positive test result, to 10 days after:

- Face-to-face contact with a person with COVID-19 within **1 meter for ≥15 minutes**
- Direct physical contact with a person with COVID-19

A **Cluster** is an aggregation of cases in a given area over a particular period without regard to whether the number of cases is more than expected.

Isolation is a strategy used to **separate people** *infected* **with the SARS-CoV-2 virus** (those with and without symptoms) **from people who are not infected**. The term is used here to refer to people who are isolated at home, an isolation shelter, or a health facility. See guidance on how to take care of sick people at home.

Quarantine is a strategy used to keep someone who might have been *exposed* to COVID-19, but does not know if he or she is infected, away from others. Quarantine helps prevent spread of disease that can occur before a person knows whether he or she is infected and is awaiting test results.

Case Investigation is the process of confirming that the person with COVID-19 knows their positive test result or diagnosis, and encouraging self-isolation and providing guidance. Case investigation also involves interviewing the case-patient to elicit the names and locating information for close contacts, and assessing needs and making referrals for medical care, medical monitoring, social and other support services during isolation.

Contact Tracing is the process of notifying contacts of exposure, addressing questions and concerns, referring for SARS-CoV-2 testing, encouraging self-quarantine, monitoring of symptoms, and assessing the need for additional supportive services during the quarantine period (typically 14 days from last exposure).

Source Investigation (also known as backward or reverse contact tracing) is the process of identifying events or gatherings attended by a person with COVID-19 in the **2-*14 days prior to symptom onset*** to identify the source of infection.[1] When conducted, source investigation most often occurs as part of case investigation.

- Standard case investigation and contact tracing can be pursued regardless of whether source investigation identifies a large event as a potential source of infection for a case of COVID-19.
- Any adaptations from the ideal process have trade-offs. Under some circumstances, contact tracing may not be sufficient to contain transmission, especially during widespread community transmission. In such a context, national or sub-national stay-at-home orders may need to be reissued, such that the whole population will be asked to quarantine (except for essential workers).
- The CDC COVID Tracer is a useful tool to determine modeled trajectory of COVID-19 cases under different contact tracing scale-up scenarios to help determine appropriate contact tracing efforts.

Workforce Adaptations

Ideally existing staff from the public health agency in country (e.g., Ministry of Health, National Centers for Disease Control, Field Epidemiology Training Program) would be able to implement these efforts. However, the human resource demands of contact tracing in the context of the COVID-19 pandemic may outstrip the capacity of existing staff. If this is the case, *evaluate current capacity against projected need*. This will involve reviewing staff rosters to determine how many staff are currently available and using calculators to determine how many staff will be needed, given the current outbreak epidemiology (see Workforce Calculators in the Additional Resources section).

If the currently available staff are insufficient, staff roles can be re-evaluated to fill gaps. One of the quickest adaptations may be to repurpose existing staff or shift their tasks – from contact tracing efforts for other disease control programs, or community outreach roles that are not currently being performed or prioritized.

Tips for Recruiting or Repurposing Staff

- Ensure all staff are used to their full capacity. Someone who originally had just one role as a contact tracing team supervisor may also need to do other activities such as daily follow-ups with contacts.
- If you find that the highest priority activities (i.e., identifying contacts and notifying them) are taking too long, you may have to reassign roles from contact monitoring to these higher priority activities. This shift may require some retraining of contact tracers.
- Recruitment of additional staff can be streamlined by focusing on the kinds of workers with the right skills, such as
  - Community health workers

- Medical or nursing students
- Teachers, high school or university students
- Faith and community leaders
- Social workers

- Contact tracers should be recruited from their own community and be adept at engaging the local community to create and maintain buy-in for the contact tracing program.

- Contact tracing staff should have high emotional intelligence (i.e., be sympathetic and able to emotionally connect with contacts), be culturally respectful, and speak local languages.

- Consider recruiting from lower risk groups, (i.e., people who are less likely to become seriously ill if they get infected), or people who are fully vaccinated.

- If additional support is needed, consider staff to be deployed (or remotely reassigned) from other localities, if feasible. Consider the minimum number of staff required as well as surge support plans. In many places, staff maintained at the national or regional levels can be deployed (or remotely reassigned) as surge support.

Can additional staff be quickly trained? Training will be necessary for newly recruited contact tracing staff. These staff will need to receive specialized training to provide them with basic principles of epidemiology, surveillance, and risk communication. For example, new staff would need:

- Training to identify resources produced by others that can improve quality and efficiency of training.

- Periodic refresher training, particularly as new guidance and recommendations are released, is recommended.

A contact tracing team supervisor may also want to know how well their tracing team members are doing in daily follow-ups and track any issues for continuous quality improvement. Systems may be needed to track progress in identifying, interviewing, and quarantining contacts as well as to monitor the performance of contact tracing staff, such understanding how many contacts each staff member is able to assess each day.

Use of Community Health Workers (CHWs) in Contact Tracing

In many low-resource and resource-limited settings, CHWs deliver a range of frontline public health services within the community. 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.

Role of CHWs in Contact Tracing

Policy and program planners should clearly define the role of CHWs and provide adequate training in the context of the COVID-19 response to maximize their effectiveness. Program planners should consider various levels of engagement for CHW involvement in the COVID-19 response such as the CHWs' skills and willingness to participate in various activities, and the scale of the pandemic.

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 about preventing COVID-19 transmission and the case investigation and contact tracing processes.
  - CHWs can address any myths or misconceptions that could hamper contact tracing efforts.

- Seek out 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
  - 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 be 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.

Epidemiologic Adaptations

Contact tracing programs must prioritize approaches, populations and procedures for implementation based on the current epidemiology of the pandemic in the local area, as well as resource availability. Additionally, adaptations to contact tracing programs should consider relevant cultural and social factors, as well as other equity considerations. The seven epidemiological scenarios ⧉ for the pandemic proposed by WHO are as follows, but scenarios may be different within a country:

- **Scenario 1**: no cases;
- **Scenario 2**: sporadic cases;
- **Scenario 3**: isolated clusters;
- **Scenarios 4-7**: community transmission (4 subcategories – low, moderate, high, and very high incidence)
  - **Scenario 4:** Low incidence of locally acquired, widely dispersed cases detected in the past 14 days, with many of the cases not linked to specific clusters; transmission may be focused in certain population sub-groups. Low risk of infection for the general population.
  - **Scenario 5**: Moderate incidence of locally acquired, widely dispersed cases detected in the past 14 days; transmission less focused in certain population subgroups. Moderate risk of infection for the general population.
  - **Scenario 6**: High incidence of locally acquired, widely dispersed cases in the past 14 days; transmission widespread and not focused in population sub-groups. High risk of infection for the general population.
  - **Scenario 7**: Very high incidence of locally acquired, widely dispersed cases in the past 14 days. Very high risk of infection for the general population.[,5]

Evaluate whether it is currently possible to interview all cases, list all contacts, notify all contacts, and monitor all contacts throughout their quarantine. In most settings, contact tracing programs have been able to perform all these functions during epidemiological Scenario 2 of the pandemic, however adaptations may be required in many settings such as those in Scenarios 3 and 4. As case counts increase, and more clusters are confirmed, resources may become strained. It may be necessary to *prioritize activities to optimize use of resources*. To help ensure available resources are used to interrupt as many transmission chains as feasible with available resources:

- Review current surveillance data to assess whether adapting a contact tracing program is possible with currently available staff.
- Plans to adapt contact tracing programs should be put in place during Scenarios 2 and 3 prior to widespread community transmission.
- When widespread local transmission is reported (i.e., Scenarios 4-7), consider focusing on the highest priority cases and contacts, such as those in institutionalized settings, health care settings, or other settings with the potential to be super-spreader events.
- Cases should be encouraged to self-notify household members and other close contacts of their positive test result and encourage the close contacts to quarantine and get tested if they develop symptoms (see "*Can case-driven notification be used*" below).

If it is not possible to list, notify, and monitor all contacts, consider the following adaptations:

- **Consider** source investigation (also known as "backward contact tracing") by working through the network of interactions and activities of a person diagnosed with COVID-19, to identify potential sources of infection (e.g., people, places, events). Source investigation is most useful when cases decline significantly and the focus shifts to identify the remaining cases or sources of transmission.

Investigators may ask infected persons if they attended any events or gatherings in the 14 days before symptom onset or specimen collection, *prioritizing 2-7 days beforehand*. If such events or gatherings are identified, it may be possible to identify others who attended the same events or gatherings. If other attendees have been diagnosed with SARS-CoV-2, the event can be identified as a potential source of infection.

Figure 1. Summary of Source Investigation
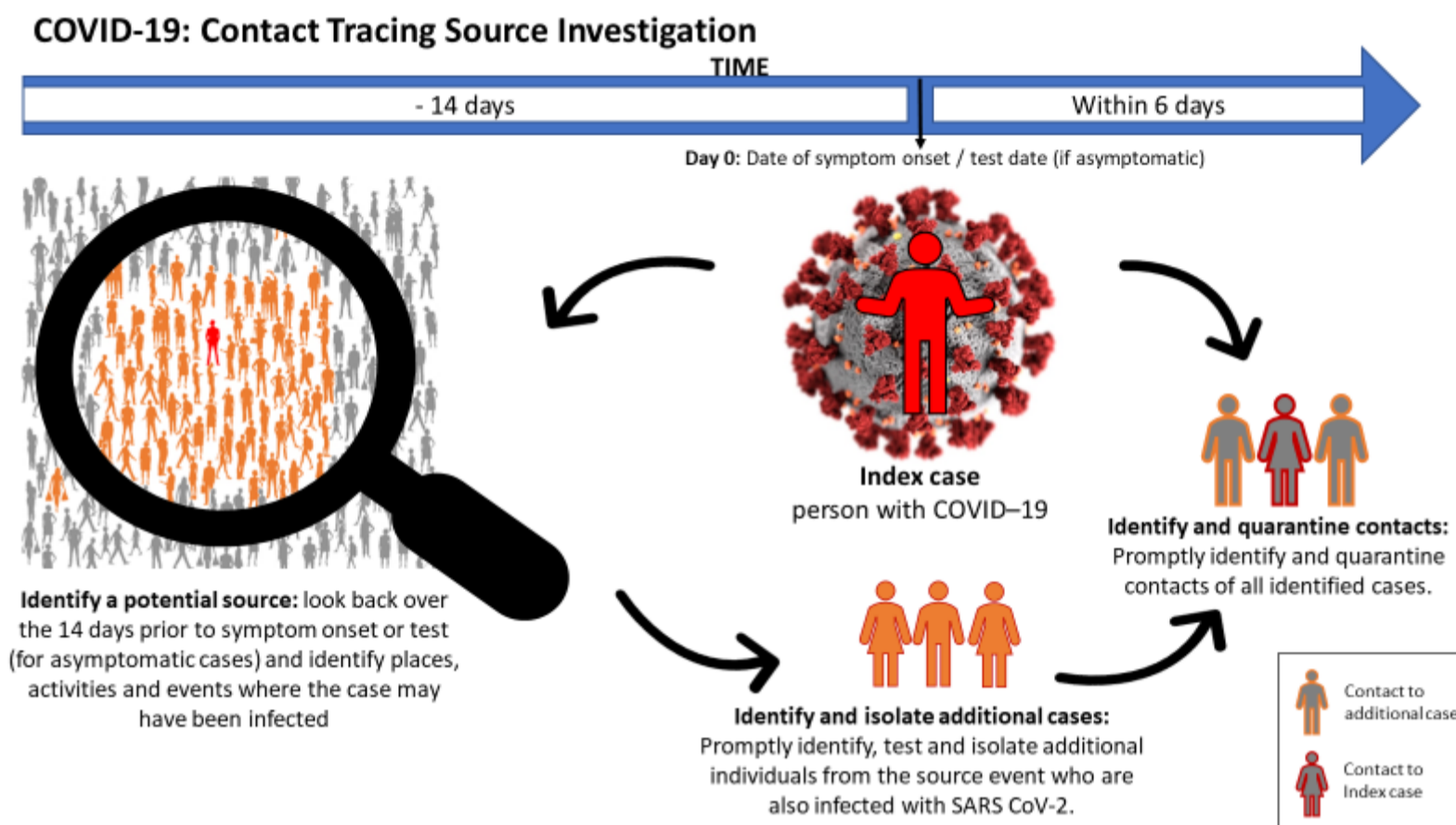
⤢ View Larger

- **Prioritize cases for investigation.** Data from case or laboratory reports may be used to prioritize investigation of cases for which the expected benefits of contact tracing are greatest. This includes situations when the individual:
  - Has been diagnosed within the last six days
  - Has the potential for transmission to many people or is part of an outbreak in a congregate setting
  - Are at risk for severe illness

The following variables that can provide this information include:

- **Date of symptom onset** can facilitate identification of persons whose contacts may have recently been infected.
- **Occupation** can facilitate identification of geographic clustering of persons whose contacts spend time in a congregate setting.
- **Presence of underlying conditions** can indicate people at risk of severe illness who may need linkage to home-based care, pulse oximetry services, field hospitals, or higher-level care.
- **Prioritize exposure-based contact tracing elicitation and notification.** If all cases and contacts are being identified and notified, but there is insufficient capacity to monitor all contacts, it may be necessary to prioritize contacts for follow-up. To maximize the potential for reducing community transmission, prioritize the following types of close contacts:
  - Contacts exposed to a person with COVID-19 within the prior six days from the date of the case investigation interview. This will offer a greater opportunity to prevent transmission with quarantine than contacts exposed greater than 6 days before the interview
  - Contacts exposed in the household setting
  - Persons exposed at group gatherings and those connected to an outbreak
  - People who are at increased risk for severe illness (older adults, people with certain medical conditions, and people who may need to take extra precautions against COVID-19) and are known to be contacts to a confirmed case
  - Contacts **in high-risk settings** (e.g., healthcare personnel, correctional and detention facilities, densely populated settings, refugee camps, nursing homes, migrant agricultural worker camps) or areas with newly confirmed transmission

- **Prioritize higher-impact activities** Contact tracing involves several different activities that are not equivalent in terms of their anticipated impact on mitigating transmission. Ideally, all of these activities are part of a robust contact tracing

program. However, when that is not feasible due to resource limitations, governments should prioritize the following (in order):

1. Notification, isolation, and case and/or source investigation of cases with symptom onset or diagnosis within the last six days

2. Notification and isolation of cases in institutional or congregate settings

3. Notification and isolation of other cases (those not in institutional or congregate settings)

4. Notification and quarantine of close contacts, with priority given to those contacts exposed within six days of the case investigation interview

5. Notification of contacts who are at increased risk for severe illness

6. Notification and quarantine of all other contacts

7. Monitoring of close contacts daily for 14 days

- **Contact trace persons in a household unit together.** Consider the household as a single unit such that one contact tracer is assigned to monitor all household members. It may be valuable to align the quarantine period for all household members. If the date of last contact with the case-patient differs by a few days, consider use of the most recent date of contact with any household member. Ensure that the household has enough food, water, hygiene materials, and other essential goods for the entire quarantine period.

- **Modify the testing strategy for contacts.** Testing of contacts has large implications for laboratory as well as contact tracing resources. If resources permit, all close contacts should be tested for SARS-CoV-2. Where resources exist, testing should be performed as soon as symptoms develop.
  - If *positive*, the contact should begin isolating
  - If *negative*, contacts should continue to self-quarantine for a full 14 days after last exposure and follow all recommendations of jurisdictional public health authorities
  - Options to reduce quarantine time may include after 10 days from last exposure without testing, or after 7 days with a negative specimen collected and tested on or after day 5 (in both cases symptom monitoring should continue for 14 days)

> Increased transmission from **variant strains of SARS-CoV-2** may outweigh personal and community benefit of shortened quarantine periods, and local public health authorities must determine the best approach for their jurisdictions based on current scientific evidence.

System Adaptations

Determine whether it is possible for contact tracing program staff to contact all cases and contacts directly or whether the **use of apps and other automation can be used to ensure follow-up.** Community context needs to be considered when determining how to adapt the contact tracing system to best meet the community's needs. Adaptations to contact tracing programs should consider relevant cultural and social factors, as well as other equity considerations. Additional communications resources can be found here.

Questions to answer include:

- Are there adequate staff to visit or call all cases and contacts?
- If in-person visits are necessary because of limited connectivity or cultural preferences, are resources sufficient to support transportation and any recommended PPE for staff?
- If phone calls are being used, are there sufficient phones and phone credit?

In answering these questions, consider what method of notification is preferred and most likely to be accepted by the local community. Regardless of contact tracing infrastructure and local epidemiological scenario, cases should still be encouraged to:

- Self-notify household members and other close contacts of their positive test result
- Have close contacts follow local quarantine recommendations and get tested if they develop symptoms

If it is not possible for public health officers to contact all cases and contacts directly either in person or by phone:

- **Use case-driven notification or self-notification of contacts.** The experiences of contact tracing programs suggest that many people are hesitant to share the name of their contacts with case or source investigators. Case-patients may feel more at ease informing contacts on their own as opposed to providing information to an outside source. Case-driven notification can address these barriers by empowering cases to notify their contacts of their diagnosis. If properly implemented, case-driven notification can drastically reduce the burden on public health programs.

- **Contact tracing programs can develop scripts** to guide cases in notifying their contacts. Scripts can contain information to communicate the exposure, quarantine procedures, testing, and prevention measures.

- **Use text messages, apps, or other technologies to support remote follow-up.** It may be more appropriate to use a contact tracing app, messaging software such as WhatsApp or SMS, for some steps of the process (e.g., in-person contact for initial contact notification and then app/SMS for daily monitoring). This may allow contact tracing personnel to follow more contacts and limit their own exposure risks.

- **Self-monitoring** may be an option if the approach is culturally acceptable and the population has appropriate literacy levels and access to mobile phones or computers. Using this approach, a public health officer would still follow-up with contacts who report symptoms or fail to report symptoms. Such an approach would require a data system and data manager.

- **Use digital tools** 📄 to improve efficiency of other components of the contact tracing process. Many software programs ↗ have been developed to improve the efficiency of case investigation and contact tracing. In considering software options, consider the capacity of the ministry of health to maintain the system, capacity, and connectivity of staff to use the system, and capacity and connectivity of the end users.

Financial, Logistical, and Operational Adaptations

Evaluate whether it is possible to provide all financial, logistical, and operational support to the program envisioned. Review your budget and other appropriated funds to evaluate what financial resources are available to support adaptation activities for contact tracing. Also, consider determining what transportation, supplies (e.g., tablets, phones, computers) and other logistical support may be needed and evaluate whether these items are currently available or can be procured.

Consider the following types of costs:

- The operational costs to create and maintain a contact tracing database, provide software for staff, and operate phone lines

- Transportation for contact tracing teams and supplies for printing materials

- Physical office space for training contact tracers and allowing them to operate phone-based contact tracing programs while physically distancing from one another

- Cost for supplies and social support services for isolated and quarantined people

- Costs for hiring, training, managing, and paying contact tracing and support staff

- Costs for PPE supplies (i.e. face masks, eye protection, gowns, and gloves)

If available financial resources are insufficient, consider the following adaptations:

- **Leverage existing infrastructure for improved cost-efficiency**—servers used for routine surveillance; a call center hosted by the MoH; and staff, facilities, and technology that the Emergency Operations Center (EOC) or MoH already has on hand.

- **Assigning contract tracers to their home communities** to minimize costs while also increasing acceptability and understanding of community contexts. Travel can present some of the highest expenses associated with contact tracing. Transitioning to remote methods of contact tracing (as discussed under 'System Adaptations' above) may also help reduce costs.

Sufficient logistical and operational support for contact tracers. It is critical that logistical and operational support is adequate for planned contact tracing activities. Some jurisdictions may need to conduct in-person follow up, and other jurisdictions may not need or have the capacity to do so.

Ensure contact tracers and isolated or quarantined people have the right supplies.

- For contact tracers doing in-person follow up, consider what transportation is needed.

- For people doing mobile follow-ups with cases and contacts, internet access will likely be necessary. Use of paper forms or tablets should be reviewed.
    - If paper forms are used, systems need to be in place to compile and archive the completed investigation forms.
    - If electronic methods are used, systems need to be in place to ensure data security in transmitting and storing information.
- **Logistical and operational support for isolated and quarantined people.** Supplies for people under isolation or quarantine are important to a successful contact tracing program. Asking people to isolate or quarantine without providing related supportive social services will be ineffective.
    - Consider providing these home-based care items for cases in isolation. If the full household is in quarantine or the person under isolation lives alone, food, water, financial support, and other hygiene or sanitation tools may be needed.
    - Identify opportunities to work with local communities, faith-based organizations, or non-governmental organizations for additional support.
    - Consider whether locations for isolation and quarantine will be available for people who cannot safely isolate away from household members or who may live in institutional settings (e.g., prisons or homeless shelters).
- **Work with local organizations and networks who support the government public health authority.** For some contacts, such as those linked to a religious gathering or place of employment, it may be appropriate to work with faith leaders, event organizers, or supervisors to educate cases and contacts about COVID-19. Public health workers should still do the initial notification and contact tracing. Such collaboration can help reduce the workload for contact tracers.

Balancing Adaptations

The most appropriate adaptations to contact tracing will differ by jurisdiction and may change over time as the pandemic progresses. Certain adaptations may have a greater impact on the resource demands of a contact tracing program. Select adaptions are anticipated to have the greatest impact on resource requirements:

- Deciding to trace all *high-risk* contacts (rather than all contacts) will likely dramatically reduce the total number of contacts requiring tracing.
- Deciding to focus on *notification of contacts*. Deprioritizing monitoring could allow for self-monitoring (potentially supported by technology), follow-up monitoring by phone or text message, and reducing the frequency or duration of follow-up.
- **Case-driven contact notification** or **self-notification of contacts**. If cases are coached to notify their own contacts, this can reduce the workload for the contact tracing team.

Monitoring and Evaluation

Interruption of transmission requires that all steps in the process – from when an index case becomes infectious through to when their contacts and their source contacts are successfully quarantined for the required timeframe – happen efficiently and effectively. As this document focuses on case identification, contact notification, and quarantine of contacts, it is focused on evaluation indicators for those same steps.

Key evaluation indicators 📄 include impact, process, and outcome level indicators. Research is ongoing about which indicators best reveal whether contact tracing is effective at stopping or limiting the spread of COVID-19. These key indicators have been used in response to other large-scale outbreaks to help measure aspects of a contact tracing program: whether contacts are not only known and registered, but also notified, quarantined, and monitored. The goal of a successful contact-tracing program is to ensure new cases come from registered contacts.

Additional Resources

Contact Tracing Guidance and Training
WHO Contact Tracing in the Context of COVID-19 ↗
WHO GOARN COVID-19 Knowledge Hub | Contact Tracing ↗
CDC Contract Tracing Resources
CDC COVID-19 Contact Tracing Training Resources
CDC Notification of Exposure: A Contact Tracer's Guide for COVID-19

Africa CDC: Guidance on Contact Tracing for COVID-19 Pandemic 🔗

John Hopkins University – COVID-19 Contact Tracing Training 🔗

Contact Tracing Workforce

WHO Operational Planning Guidelines to Support Country Preparedness and Response 📄 🔗

CDC Scaling Up Staffing Roles in Case Investigation and Contact Tracing

CDC COVID Tracer

George Washington University Contact Tracing Workforce Estimator 🔗

'Prevent Epidemics' Contact Tracing Workforce Estimator 🔗

Data Use & Digital Tools for Contact Tracing

CDC Data Management for Assigning and Managing Investigations

CDC Guidance on use of Digital Contact Tracing Tools

WHO Digital tools for COVID-19 contact tracing 🔗

WHO Introduction to Go. Data: Field Data Collection, Chains of Transmission and Contact Follow-up 🔗

JHU Digital Contact Tracing for Pandemic Response: Ethics and Governance Guidance 🔗

Monitoring and Evaluation

Prevent Epidemics: Measures to Improve COVID-19 Response 📄 🔗

Key Indicators for Evaluating Contact Tracing Programs for COVID-19 in Low- and Middle-Income Countries 📄

References

[1]Cevik M et al. (2020) "SARS-CoV-2, SARS-CoV, and MERS-CoV viral load dynamics, duration of viral shedding, and infectiousness: a systematic review and meta-analysis." The Lancet Microbe, ISSN 2666-5247, (https://doi.org/10.1016/S2666-5247(20)30172-5 🔗).