



## COVID-19

# Prioritizing Case Investigation and Contact Tracing for COVID-19

Updated Feb. 28, 2022

## Audience

These recommendations are intended to assist state, tribal, local, and territorial (STLT) health departments prioritize COVID-19 case investigation and contact tracing activities.

## Key Points

- Universal case investigation and contact tracing are not recommended for COVID-19.
- Health department jurisdictions should prioritize specific settings and groups at increased risk.
- Case investigation and contact tracing are separate processes with distinct benefits and goals; decisions to initiate either should be made separately.
- Investigations should focus on COVID-19 cases and close contacts with onsets and exposures in the previous 5 days for those settings and groups at increased risk.
- STLT health departments should consult with schools, businesses, and organizations that provide essential services to help them implement appropriate COVID-19 prevention measures and support broad-based efforts to notify people of a potential exposure.
- STLT health departments should support public education to encourage people with COVID-19 to [isolate](#) and [inform close contacts](#) about their potential exposure so close contacts can [quarantine](#), get [tested](#), [wear well-fitting masks](#), [take travel precautions](#), and [seek treatment](#) as appropriate.
- STLT health departments should offer COVID-19 [vaccinations](#) and other proven prevention strategies as part of their case investigation and contact tracing activities.
- STLT health departments have the authority to determine how case investigation and contact tracing should be implemented locally in response to each jurisdiction's needs, context, priorities, and resources.

## Rationale

At the onset of the pandemic, STLT health departments aimed to investigate and contact trace every case of COVID-19. The goal was to reduce transmission of COVID-19 by (1) identifying each case and rapidly isolating the infected person; and (2) reaching out and recommending quarantine to every person who had been in close contact with the case.

The impact of case investigation and contact tracing for COVID-19 is influenced by the following factors:

- High level of [infection- or vaccine-induced immunity](#)
- Availability of safe and effective vaccines and other proven tools to prevent transmission and mitigate illness
- Decreased participation of people with COVID-19 and their close contacts in case investigation and contact tracing activities
- Increased use of [self-tests](#) which allows people with COVID-19 to quickly notify their own close contacts (positive self-

- Increased use of [self-tests](#), which allows people with COVID-19 to quickly identify their own close contacts (positive self-test results may also not be reported to health departments)
- Emergence of [variants](#) with shorter incubation periods and rapid transmission
- Significant numbers of asymptomatic or mild cases of COVID-19
- High volume of [reported cases](#)

Health departments should focus their efforts on (1) case investigation and contact tracing in specific settings and groups at increased risk, and (2) promotion of proven [prevention strategies](#) to reduce transmission of COVID-19 in the community. Decisions to increase or redirect case investigation and contact tracing in the context of the factors listed above should be made in consultation with federal, state, and local health officials.

## Recommendations for Health Departments

Case investigation and contact tracing are separate processes that have distinct benefits and outcomes. Implementation of each activity should be considered separately. Not all cases that are investigated will result in the elicitation and notification of [close contacts](#). It is important to prioritize investigation of COVID-19 cases with symptom onset or positive viral test within the previous 5 days. Notification of close contacts should occur within 5 days of their last known exposure to someone with COVID-19. This time-based strategy will have the greatest impact on onward transmission and ensure priority cases and their priority close contacts can be reached in sufficient time follow recommended [isolation and quarantine guidance](#) and seek [treatment](#) as appropriate.

### Case Investigation Recommendations

**Case investigation** can be an effective stand-alone activity to identify and understand cases, clusters, and outbreaks that require health department intervention, and to inform the need for further epidemiologic studies.

Health departments should prioritize investigation of COVID-19 cases, clusters, and outbreaks involving:

- High-risk congregate settings such as [long-term care facilities](#), [correctional facilities](#), and [homeless shelters](#).<sup>[1]</sup> Investigations should focus on cases with symptom onset or positive test in the preceding 5 days. Cases in these settings should be prioritized to prevent large-scale transmission and severe health outcomes. Case investigation may complement other strategies such as broad-based notification of potential exposure, and support [testing](#) and [vaccination](#).
- Unusual clusters of cases, especially if the transmission dynamics, disease course, and disease severity are concerning and not fully understood.
- STLT health department-led case investigation may also be warranted for novel or emerging [variants](#) that may pose significant risks for severe disease, hospitalization, or death.

### Contact Tracing Recommendations

**Contact tracing** can be used to interrupt transmission and identify at-risk people for notification and referral to supportive services.

Health departments should prioritize elicitation and notification of close contacts with exposure in the previous 5 days who are identified during the priority investigations listed above, if such information is available, especially:

- People recommended for [quarantine](#) (for example those not [up to date](#) with COVID-19 vaccines or unvaccinated)
- People at increased risk of severe health outcomes and death, such as those with [underlying health conditions](#), [pregnant people](#), and [older adults](#), as well as those who are in [disproportionately affected communities](#) for whom [testing](#) and [treatment](#) may be indicated

Contact tracing in some of these settings can be challenging. Other strategies such as broad-based notification of potential exposure and [testing](#) may be more effective for responding to outbreaks and controlling transmission.

### Additional Recommendations

STIT health departments should support public education to encourage people with COVID-19 to follow [isolation](#) guidance

STLT health departments should support public education to encourage people with COVID-19 to follow [isolation](#) guidelines and [inform close contacts](#) about their potential exposure so close contacts can [quarantine](#), get [tested](#), wear [well-fitting masks](#), take [precautions when traveling](#), and consider [treatments](#) as appropriate. People who test positive for SARS-CoV-2, the virus that causes COVID-19, using a self-test can rapidly notify their own close contacts since the results of the self-test may not be reported to the health department. [Automated text/call-based notification](#) (such as exposure notification systems) can also assist with rapidly alerting close contacts and educating people about [how to protect themselves and others](#).

STLT health departments should promote [vaccination](#) and other proven prevention strategies to help people [protect themselves and others](#). In addition, masking is a critical public health tool to prevent spread of COVID-19. Access to and use of [personal protection equipment](#) (PPE) in healthcare settings, and other appropriate [masks](#) in high-risk settings such as [long-term care facilities](#), [correctional facilities](#), and [homeless shelters](#), is an important strategy to prevent transmission. People with COVID-19 and their close contacts should use a well-fitting mask to protect others.

**To complement health department-led case investigation and contact tracing activities, STLT health departments should:**

- Offer [vaccination](#) and [testing](#) as part of case investigation and contact tracing activities.
  - Recommend vaccination for cases and close contacts who are unvaccinated or not [up to date](#) with COVID-19 vaccines.
  - Implement [testing strategies](#) once an outbreak is identified in a high-risk setting or priority group.
- Connect people with COVID-19 who are [at risk for severe health outcomes](#) to antiviral and other treatments.
- Encourage people with COVID-19 to [notify their own close contacts](#).
- Expand use of [digital tools](#) such as exposure notification apps and electronic surveys for elicitation of case investigation data and for automated notification of close contacts.
- Promote the use of [well-fitting masks](#) and physical distancing in community settings.
- Promote the benefits of being [up to date](#) on COVID-19 vaccination.

## Staffing Considerations

As case investigation and contact tracing priorities shift, health departments may need to adjust [staffing levels](#) accordingly. For case investigation and contact tracing staff who were hired and trained during the pandemic response, health departments can consider re-directing case investigation and contact tracing staff to assist with other critical COVID-19 response activities such as connecting people with supportive services and [treatments](#) when indicated. Staff can also assist with expanding public education and outreach, conducting testing, and promoting and providing vaccination — including scheduling and booster reminders. COVID-19 case investigation and contact tracing staff can be cross-trained to support other public health investigation activities such as sexually transmitted infection and HIV partner services, foodborne outbreak response, tuberculosis investigations, and other programs that can benefit from the skills of this [highly-trained workforce](#). Changes in staffing should adhere to funding guidelines and requirements.

## Opportunities for Community Collaboration

Because universal case investigation and contact tracing are not recommended, STLT health departments should coordinate with settings such as [K-12 schools](#), [institutions of higher education](#) (IHEs), [early care and education](#) programs (ECEs)/child care centers, and businesses and organizations that provide essential services to develop alternative processes to prevent transmission. This would include (1) assuring that appropriate [prevention measures](#) are in place and (2) planning for appropriate internal management and notification of cases and close contacts with exposure in their setting. STLT health departments should also provide timely outbreak response support to K-12 schools, ECEs, IHEs, and businesses and organizations that provide essential services if they report large-scale outbreaks.

STLT health departments should support K-12 schools, ECEs, IHEs, and other organizations that provide essential services – even if they are not performing full-scale case investigation and/or contact tracing – to continue to engage in case and contact notification to ensure that those who are infected or have potentially been exposed know what actions they should take to remain safe and reduce transmission. Specifically, STLT health departments should provide technical assistance to these settings to develop mechanisms to actively monitor cases to ensure that people with COVID-19 [isolate](#) away from others, and people who may be a [close contact](#) of someone with COVID-19 are notified of a potential exposure so they can follow [CDC](#)

[guidance](#). In lieu of case investigation and contact tracing, broad-based notification in these settings may include a timely

guidance. Instead of case investigation and contact tracing, broad-based notification in these settings may include a timely notification via phone, email, [exposure notification applications](#) , or letter to families, students, employees, customers, or consumers about potential exposure once a case is identified. STLT health departments should provide technical assistance and communication messaging, and assist with interpretation of [isolation guidance](#) and recommendations for [close contacts](#), including [quarantine](#), [testing](#), wearing a [well-fitting mask](#), and [taking travel precautions](#).

STLT health departments may still provide technical assistance and support to K-12 schools and districts that choose to continue with case investigation and contact tracing, particularly if they are implementing [test to stay \(TTS\)](#) strategies. While universal case investigation and contact tracing are not recommended, they are important components of test to stay (TTS) programs that allow those who would otherwise need to quarantine to remain in an educational setting for in-person learning. Test to stay combines contact tracing and frequent testing to allow those who have been exposed to attend school in-person. CDC continues to recommend test to stay as an important strategy schools should consider in order to support in-person learning. STLT health departments should provide technical assistance on timely management of cases and contact notification to local educational institutions implementing TTS programs. Educational settings that elect to conduct case investigation and contact tracing to identify TTS participants should ensure that investigations and contact notifications focus on COVID-19 cases and close contacts with onsets and exposures in the previous 5 days to have a greater impact on transmission.

High-risk congregate settings, such as long-term care facilities, correctional facilities, and homeless shelters, that are prioritized for case investigation should actively report cases, clusters, and outbreaks to STLT health departments in accordance with state and local regulations. This will facilitate more timely identification of priority cases, clusters, and outbreaks and allow for more rapid intervention and prevention of transmission.

## Additional Resources

[How To Talk To Your Close Contacts | CDC](#)

[How to Determine a Close Contact for COVID-19 | CDC](#)

[Guidance for COVID-19 Prevention in K-12 Schools | CDC](#)

[Guidance for Institutions of Higher Education \(IHEs\) | CDC](#)

[COVID-19 Guidance for Operating Early Care and Education/Child Care Programs \(cdc.gov\)](#)

[Guidance on Management of Coronavirus Disease 2019 \(COVID-19\) in Correctional and Detention Facilities | CDC](#)

[Nursing Homes and Long-Term Care Facilities | CDC](#)

[Interim Guidance for Homeless Service Providers to Plan and Respond to Coronavirus Disease 2019 \(COVID-19\) | CDC](#)

## Footnotes

1. Cruise ships should continue to follow CDC recommendations for [Mitigation of COVID-19 Among Cruise Ship Crew](#).

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