

State and Territorial Issue Brief: Case Investigation and Contact Tracing

Background

Case investigation and contact tracing (CI/CT) have been cornerstones of infectious disease control in the United States for decades, and health agencies have extensive experience in implementing these strategies to prevent the spread of both endemic and emerging infectious diseases. While these public health interventions are not new, the COVID-19 pandemic has required health agencies to carry out CI/CT at an unprecedented scale and speed. As health agencies work to rapidly expand and operationalize their COVID-19 CI/CT programs, surges of infection, testing delays, shortages of testing supplies and personal protective equipment, and challenges with public acceptance of disease investigation have strained program capacity and posed implementation challenges.

Issues and Considerations

- During periods of widespread COVID-19 community transmission, high caseloads may overwhelm local, state, and territorial CI/CT capacity. Testing delays and shortages can also negatively impact CI/CT effectiveness. Surge capacity and support for sustained expansion of the local, state, and territorial disease investigation workforce is essential to conduct effective CI/CT.
- Lack of public awareness and trust have resulted in low participation in CI/CT efforts in many communities (e.g., low response rates to contact tracer calls, unwillingness to provide information on contacts). A best practice to address this issue is to hire community-based disease investigation specialists who know their communities and will have sustained contact over time.
- A dramatically expanded public health workforce is required to address COVID-19 CI/CT needs, representing a significant investment for health agencies in the recruitment, training, and retention of new personnel, in addition to accompanying equipment and infrastructure. Unfortunately, governmental procurement systems can create significant bottlenecks in efforts to quickly hire or procure staff and supplies.
- An individual's ability to work from home or take paid work leave, a lack of access to child or adult care alternatives, and other factors may make it difficult for individuals to adhere to public health recommendations for isolation or quarantine.

Solutions and Ideas for Improvement

- CI/CT should be implemented as part of a larger national disease investigation and response strategy that includes sustainable testing and community mitigation approaches, while being responsive to local circumstances, and scalable based on transmission patterns within communities (prioritization schemes).
- A federally coordinated, state and territorially implemented, and locally customizable communications strategy should be developed to build awareness and trust in CI/CT efforts and the entire public health response. One example is Massachusetts' [Answer the Call](#) campaign. However, resources are not easily tailored to the specific needs of communities.

- Sustained investment in the disease investigation workforce expansion—including training and technology supports—is needed. Workforce development should build on existing health agency infrastructure and prioritize recruitment from communities most impacted by COVID-19.
- Federal resources are needed to help local, state, and territorial health agencies provide social supports and incentives to promote adherence with isolation and quarantine guidance. Workforce shortages in essentials workforce areas have meant individuals infected with COVID-19 have had to go to work, raising the risk of infections at essential businesses and facilities.

Further Resources

- [A National Plan to Enable Comprehensive COVID-19 Case Finding and Contact Tracing in the US](#)
- [A Coordinated, National Approach to Scaling Public Health Capacity for Contact Tracing and Disease Investigation](#)
- [COVID-19 Case Investigation and Contact Tracing: Considerations for Using Digital Technologies](#)
- [Making Contact: A Training for COVID-19 Contact Tracers](#)
- [State and Territorial Contact Tracing Legislation](#)

Contact

For more information, contact ASTHO’s preparedness team at preparedness@astho.org.