## Contents

I. Purpose ............................................................................................................................................. 2
II. Responsibility and Mandate ........................................................................................................... 2
III. Mission ........................................................................................................................................... 2
IV. Goals of Contact Tracing .............................................................................................................. 3
V. Introduction ....................................................................................................................................... 3
VI. Community Engagement and Education ....................................................................................... 4
VII. Staffing Models ............................................................................................................................ 5
VIII. Contact Tracing Elements .......................................................................................................... 7
IX. Outbreaks ....................................................................................................................................... 13
X. Special Considerations .................................................................................................................. 13
XI. Data Management .......................................................................................................................... 15
XII. Confidentiality and Consent ......................................................................................................... 16
XIII. Support Services to Consider ...................................................................................................... 16
XIV. Digital Contact Tracing Tools .................................................................................................... 17
XV. Evaluation ....................................................................................................................................... 17
XVI. Resources ...................................................................................................................................... 18

APPENDIX I: Florida COVID-19 Contact Tracing Training Plan ....................................................... 19

APPENDIX II: Job Expectations and KSAs for COVID-19 Case Investigators, Contact Tracers and Contact Investigator/Tracer Supervisors ............................................................. 23
I. Purpose

Coronavirus disease (COVID-19) is a highly infectious disease and respiratory illness caused by the severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Illness ranges from mild to severe with symptoms including but not limited to, fever, cough, and shortness of breath, with many patients having pneumonia in both lungs. COVID-19 is spread easily from person to person through droplet and contact transmission\(^1\). In order to break the chain of transmission within the population, a comprehensive approach to identifying and isolating persons with COVID-19, quarantining close primary contacts, and linking persons to essential support services including testing is needed.

The purpose of this document is to provide guidance to local county health departments (CHDs), the state health office (SHO), and surge contact tracing partners working directly with the Florida Department of Health (Department) on how to conduct contact tracing activities in Florida. This guidance is in alignment with the five priority areas and associated goals of the Department’s Contact Tracing Plan.

II. Responsibility and Mandate

As an integrated public health department, the Department operates through the SHO that creates statewide programs and policies, which are largely implemented at the local level through CHDs in each of Florida’s 67 counties. Contact tracing is a core competency and function of public health. Sections 381.003 and 381.0031, Florida Statutes, and Florida Administrative Code (F.A.C.) Rule 64D-3.041 gives the Department the authority to conduct epidemiological investigations including contact tracing. Confirmed and probable cases of COVID-19 are immediately reportable by practitioners and laboratories under 64D-3.029 F.A.C., where all results should be reported and accompanied by any testing conducted (positive and negative results). For laboratories reporting electronic laboratory reporting as described in 64D-3.031(5) F.A.C., all test results (positive and negative) are to be submitted.

III. Mission

The Department’s mission is to protect, promote and improve the health of all people in Florida through integrated state, county and community efforts. Contact tracing supports this mission by:

- Protecting the health and safety of all Floridians.
- Preventing the spread and transmission of COVID-19.
- Identifying new infections in a timely manner.
- Alerting close contacts of exposure.
- Offering testing and linkage to support services.

IV. Goals of Contact Tracing

The goals of contact tracing are to:

- Rapidly identify all persons with close contact to a confirmed or probable COVID-19 positive case.
- Ensure all close contacts identified are notified and directed to self-quarantine and monitor for symptoms.
- Provide information and linkage to support services and refer or provide access to testing as appropriate.

V. Introduction

Contact tracing and case investigation are vital components in the overall strategy of containing and stopping transmission of COVID-19 in Florida and beyond. Contact tracing for COVID-19 includes identifying, assessing, and managing people who may have been exposed to the disease to prevent onward transmission essential for containing and controlling infectious disease outbreaks. Case investigation and contact tracing are fundamental public health activities that require collaborating with patients diagnosed with an infectious disease to identify and provide support to persons who may have been infected through exposure to confirmed cases of COVID-19. This process prevents further transmission of disease by separating people who have (or may go on to develop) an infectious disease from people who do not. It is a core communicable disease control measure employed by the Department for decades to interrupt transmission of sexually transmitted diseases (STDs), HIV, tuberculosis, Zika virus infections, and other communicable diseases.

The effectiveness of this process has made it a standard public health approach to prevent further spread of COVID-19 and other infectious diseases. It has proven to be a key element in supporting patients and informing contacts of potential exposure to prevent continued transmission. Given the magnitude of the COVID-19 pandemic and the lack of a vaccine at this time, contact tracing is especially relevant. Further, timely and accessible testing must be available for contact tracing to be effective. Testing and contact tracing strategies also focus on specific at-risk settings with vulnerable individuals.²

Figure 1 below provides a visual representation of the contact tracing process in Florida.

---

VI. Community Engagement and Education

Preventing and controlling COVID-19 in communities across Florida requires strong collaboration between CHDs, SHO, and the many partners involved, directly or indirectly, with impacting public health outcomes. Contact tracing centers around community engagement, through the provision of education and communication to increase public awareness of how to protect individuals and their communities, as well as providing awareness of how to stop disease transmission. Contact tracing activities should be inclusive of all populations and available to all communities.

CHDs will establish strong and trusting relationships with key community partners to prevent and control the spread of COVID-19. CHDs will provide ongoing and intensive outreach and education about COVID-19 to the following priority entities in their community who are also priority for case and outbreak investigations:

- Hospitalized patients
- Health care personnel
- First responders (e.g., Emergency Medical Services (EMS), law enforcement, and firefighters)
- Individuals living in, working at, or visiting acute care, skilled nursing, mental health, and long-term care facilities (LTCF)
- Individuals living in, working at, or visiting community congregate settings, such as correctional facilities, homeless shelters, educational institutions, mass gatherings, and crowded workplaces (e.g., production plants)
- Members of a large household living in close quarters
• Individuals known to live in households with a higher risk individual or to provide care in a household with a higher risk individual

Education provided to these identified entities will minimally include materials about COVID-19 disease information (symptoms, prevention, and epidemiology), disease reporting guidance (practitioners and laboratories), community resources (e.g., acute care hospitals with capacity to care for patients with COVID-19 symptoms, testing locations), and contact information for key CHD staff (CHD Epidemiology Contacts) who may be reached to provide a COVID-19 case report and/or provide technical assistance about COVID-19. CHDs will use educational materials published by the Department or nationally recognized institutions, such as the Centers for Disease Control and Prevention (CDC). CHDs shall use appropriate social distancing measures to provide education and outreach to these entities to avoid any risk of spreading COVID-19.

Current materials can be accessed here (Florida Health COVID-19 Resources).

Education about the types of partners (e.g. academia) and surge contract tracing staff (e.g. CHD FTE, CHD OPS, CHD or SHO contractors) who are conducting these public health functions in conjunction with the Department and their methods of contact (e.g. text, phone, letter) should be included in community communication and engagement efforts.

VII. Staffing Models

The key activities aimed at preventing and controlling COVID-19 are case investigation and contact tracing. To be effective, case investigation and contact tracing requires staff with adequate training, language skills, cultural sensitivity (see Appendix II: Job Expectations and KSAs for COVID-19 Case Investigators, Contact Tracers and Contact Investigator/Tracer Supervisors), supervision, and knowledge of local social and medical support resources that may be used to refer patients and their contacts. CHDs should assess their current case investigating and contact tracing staffing capacity and determine the number and type of staff they may consider hiring to deal with surging COVID-19 cases and outbreaks.

When considering staff needed to conduct contact tracing activities, CHDs should consider the number and type of staff that will be provided access to the state’s reportable disease surveillance system, Merlin, and required oversight and supervisory capacity of those surge staff. Given each patient with COVID-19 will likely have multiple close contacts, CHD staffing plans should include a greater number of contact tracers than case investigators to meet this demand. CHDs should attempt to employ at least a ratio of 2:1 contact tracers for every case investigator.

To scale up surge capacity for case investigation and contact tracing, SHO has contracted with a workforce contractor who will use a customer relationship management software solution (CRM) to conduct contact tracing activities statewide. Access to the CRM will also be available to CHDs. All staff hired must go through Department’s security and confidentiality data protection training, sign a confidentiality attestation form, and complete the required contact tracing trainings. CHDs should consider the training needs of surge contact training staff (see Appendix I: Contact Tracing Training Plan).

CHDs, in coordination with SHO, will ensure the following COVID-19 functions are supported locally by CHD staff, by regional staff, or by staff/contractors at SHO. Table 1 provides examples
of contact tracing staff and associated job functions needed to conduct contact tracing activities. Some staff may overlap certain duties depending on staffing model used.

**Table 1: Examples of Staff Needed to Conduct Contact Tracing Activities**

<table>
<thead>
<tr>
<th>Job Type</th>
<th>Job Duties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case Investigator</td>
<td>Conducts interviews of patients with confirmed or probable COVID-19, with a focus on motivational interviewing and cultural competency. Interviews will be guided by standard protocols and include: providing disease-specific information; assessing signs, symptoms, and underlying health conditions; discussing symptom onset to determine window period for contact elicitation and exposure risk for close contacts; discussing work, social, recreational, and community activities to identify who may have been exposed; eliciting information on close contacts, including names, exposure dates, and locating information; and assessing support needs to maintain health and compliance during self-isolation.</td>
</tr>
<tr>
<td>Contact Tracer</td>
<td>Communicates with contacts to notify them of exposure, provides disease and transmission information, gathers data on demographics, living arrangements, and daily activities. Asks about signs/symptoms and underlying medical conditions. Provides referrals for testing (if appropriate). May conduct home-based specimen collection. Provides recommendations for self-quarantine and reviews daily monitoring procedures. Assesses supports necessary to maintain compliance during self-quarantine. Conversations with contacts will be guided by standard protocols. Conducts follow-up monitoring during self-quarantine—temperature, signs/symptoms, use of fever-reducing medications—reported via electronic tool (e.g., smartphone, case management software) or other designated mechanism, until 14 days after last potential exposure, and provides referral to healthcare if contact becomes symptomatic.</td>
</tr>
<tr>
<td>Surveillance Triage and Support</td>
<td>Processes incoming laboratory and provider reports in surveillance system. Follows-up to obtain relevant medical and demographic information. Acts as a resource for interjurisdictional communication and transfer of patient and contact information. Responsible for gathering relevant locating information (e.g., “people-searches”) for patients and contacts.</td>
</tr>
<tr>
<td>Case investigator/Contract Tracer Supervisor</td>
<td>Directly oversees the work of the Case Investigator and/or Contact Tracer and others who may work as part of a team. Assigns work and oversees the quality of work. Ensures completion of case interviews and contact follow-up according to established standards. Reviews work for missing information, inconsistencies, or areas that need further exploration and directs staff follow-up to seek clarification and obtain additional information. Addresses complex issues with cases or contacts that have been escalated by staff. Uses qualitative (interview audits) and quantitative (review of statistical outputs) methods to review performance and determine areas for formal or informal professional development, training, coaching, and mentoring. When necessary, uses discipline to address performance or personnel conduct issues. Recognizes staff for exceptional and outstanding performance. Maintains employee personnel files.</td>
</tr>
<tr>
<td>Outbreak Response/</td>
<td>Conducts investigation of congregate living facilities (e.g., skilled nursing facilities, hospitals, acute care settings, LTCF, group homes, homeless</td>
</tr>
</tbody>
</table>
Infection Control | shelters, prisons, jails) and workplaces that have a patient (either resident/patient or staff member) with COVID-19 to assess potential exposure of other staff and residents/patients at the site and recommend infection control procedures.

Epidemiologist/ Data Analyst | Analyzes data on cases and contact outcomes in order to identify outbreaks and priority populations and understand disease burden. Monitors and evaluates the response in order to shift program efforts appropriately.

Data Manager | Manages digital infrastructure for surveillance and contact investigation. Abstracts data from surveillance system for import into appropriate contact investigation platform and visa-versa, when automated data synchronization is not available. Assesses and improves data quality and interoperability of data systems. Supports the development and modification of data systems to appropriately capture, integrate, and report multiple data streams necessary to monitor response progress and outcomes.

VIII. Contact Tracing Elements

Steps and Procedures

Contact tracing can be broken down into a number of vital steps. The aim of section is to provide guidance to CHDs and to SHO who may hire FTEs, OPS, or contracted surge staff to carry out the function of contact tracing in Florida. The main steps in this process are listed below.

Step 1: Case Identification, Prioritization, and Surveillance Triage

Most COVID-19 case investigations will be initiated when the Department receives a laboratory report of a positive SARS-CoV-2 test result or a report from a healthcare provider of a patient with a confirmed or probable diagnosis of COVID-19.

Once a COVID-19 laboratory or provider report is received, this information will be entered into the state surveillance system, Merlin, if it has not already been received via electronic laboratory reporting.

CHDs will use a surveillance triage and support system to use any information known about a patient diagnosed with COVID-19, prior to case interview, to delegate the investigation to either a case investigator or special outbreak/infection control staff (Section IX).

Case investigator or support staff will communicate with healthcare facilities by phone when a positive laboratory test is reported to obtain information necessary for triaging.

In addition to identifying potential outbreaks, information to assist in case triaging/prioritization will include a patient’s:

- COVID-19 symptoms
- Underlying health conditions
- Locating information (residence type/location/contact information)
- Workplace role and location
- Confirmation that patient was notified of test result
 Initiation of self-isolation

All confirmed and probable COVID-19 cases will be investigated (COVID-19 Case Definition); however, in the event of limited resources, priorities for who will be investigated are listed below. Priority 1 patients are likely to have exposed a larger number of people and/or are likely to have close contacts who could potentially expose: many people, those at higher risk for severe disease, or selected critical infrastructure workers. Priority 2 patients may be at higher risk for severe disease and will need prompt risk assessment and linkage to any needed medical and support services. Please refer to Table 2 below for prioritizations for all confirmed and probable COVID-19 cases.

Table 2: Case Investigation Prioritization Hierarchy

<table>
<thead>
<tr>
<th>Case Investigation Hierarchy</th>
<th>Priority 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>• Hospitalized patients</td>
</tr>
<tr>
<td></td>
<td>• Healthcare personnel</td>
</tr>
<tr>
<td></td>
<td>• First responders (e.g., EMS personnel, law enforcement, and firefighters)</td>
</tr>
<tr>
<td></td>
<td>• Individuals living in, working at, or visiting acute care, skilled nursing, mental health, and long-term care facilities</td>
</tr>
<tr>
<td></td>
<td>• Individuals living in, working at, or visiting community congregate settings, such as correctional facilities, homeless shelters, educational institutions, mass gatherings, and crowded workplaces (e.g., production plants)</td>
</tr>
<tr>
<td></td>
<td>• Members of a large household living in close quarters</td>
</tr>
<tr>
<td></td>
<td>• Individuals known to live in households with a higher risk individual or to provide care in a household with a higher risk individual</td>
</tr>
<tr>
<td></td>
<td>Priority 2</td>
</tr>
<tr>
<td></td>
<td>• Individuals 65 years of age or older</td>
</tr>
<tr>
<td></td>
<td>• Individuals at higher risk for severe disease</td>
</tr>
<tr>
<td></td>
<td>o People with chronic lung disease or moderate to severe asthma</td>
</tr>
<tr>
<td></td>
<td>o People who have serious heart conditions</td>
</tr>
<tr>
<td></td>
<td>o People who are immunocompromised (e.g., conditions such as cancer treatment, smoking, bone marrow or organ transplantation, immune deficiencies, poorly controlled HIV or AIDS, and prolonged use of corticosteroids and other immune weakening medications)</td>
</tr>
<tr>
<td></td>
<td>o People with severe obesity (body mass index of 40 or higher)</td>
</tr>
<tr>
<td></td>
<td>o People with diabetes</td>
</tr>
<tr>
<td></td>
<td>o People with chronic kidney disease undergoing dialysis</td>
</tr>
<tr>
<td></td>
<td>o People with liver disease</td>
</tr>
<tr>
<td></td>
<td>• Pregnant women</td>
</tr>
<tr>
<td></td>
<td>These workers include:</td>
</tr>
<tr>
<td></td>
<td>o (a) federal, state, and local law enforcement;</td>
</tr>
<tr>
<td></td>
<td>o (b) 911 call center employees;</td>
</tr>
<tr>
<td></td>
<td>o (c) fusion center employees;</td>
</tr>
<tr>
<td></td>
<td>o (d) public and private hazardous material responders;</td>
</tr>
<tr>
<td></td>
<td>o (e) janitorial and custodial staff;</td>
</tr>
<tr>
<td></td>
<td>o (f) workers and contractors in these industries:</td>
</tr>
<tr>
<td></td>
<td>▪ food and agriculture,</td>
</tr>
<tr>
<td></td>
<td>▪ critical manufacturing,</td>
</tr>
<tr>
<td></td>
<td>▪ information technology,</td>
</tr>
<tr>
<td></td>
<td>▪ technology,</td>
</tr>
<tr>
<td></td>
<td>▪ transportation,</td>
</tr>
<tr>
<td></td>
<td>▪ energy,</td>
</tr>
<tr>
<td></td>
<td>▪ government facilities industries.</td>
</tr>
</tbody>
</table>
Priority 3
- Individuals with symptoms who do not meet any of the above categories. Symptoms include:
  - Cough
  - Shortness of breath or difficulty breathing
  - Fever
  - Chills
  - Muscle pain
  - Sore throat
  - New loss of taste or smell
  - Gastrointestinal symptoms, such as nausea, vomiting, or diarrhea

Priority 4
- Individuals without symptoms who do not meet any of the above categories

Step 2: Case Investigation/Case Interview:

Gathering comprehensive information on a patient diagnosed with COVID-19 is the foundation of case investigation and contact tracing. CHDs and associated surge contact tracing staff will work to collect comprehensive information on all patients diagnosed with COVID-19 in their jurisdiction. Examples of data to be collected, but not limited to, are listed below (see also COVID-19 Case Report Form).

- Socio-demographic information
- Date of symptoms onset or date of specimen collection for SARS-CoV-2 testing
- Source of illness (if known)
- List of close contacts and their locating information
- Duration of exposure
- Activity history during the contact elicitation window (when the patient was infectious and not under self-isolation)
- Exposure locations (including events/gatherings with unknown contacts)

CHDs and surge case investigating staff will review case patient information and test results in Merlin or the CRM and will interview and conduct initial outreach to patients diagnosed with COVID-19 via text (Interim Texting Guidance for Case Investigation) or phone within 48 hours of being reported to the CHD or state. Three attempts will be made to contact the case patient, all attempts will be documented within Merlin or the CRM.

CHDs will have first refusal over COVID-19 cases in Merlin and can designate cases to be assigned to contracted surge workforce via the CRM if they are needing assistance or have reached capacity to conduct interviews timely (within 48 hours). Cases that are assigned for investigation to contracted surge staff will only be sent back to the state for redistribution to the county they originated from if no action has been taken by contracted surge staff within 72 hours of case assignment. Contracted surge staff have 48 hours from case assignment to make contact and conduct the case investigation with less than 20 percent of cases assigned being returned to the state without any action.

CHDs will follow the Merlin Data Management Guidance for case investigation (Surveillance and Investigation Guidance). Contracted surge workforce will follow similar protocols and provided scripts for interviews.
A case patient will ideally be interviewed by a trained case investigator who is fluent in their primary language. If this is not possible, CHDs will provide interpretation services (e.g., language line).

Case interviews will primarily be conducted via phone call to ensure the safety of the case investigator and efficient use of CHD resources, while outbreak investigations may require face-to-face investigations. Department and CDC guidance should be followed in these situations.

Some patients will have been notified of their positive SARS-CoV-2 test result or diagnosis by their healthcare provider and already received self-isolation guidance, but case investigators should confirm this with the patient. Regardless, case investigators should conduct the case interview and communicate self-isolation guidance, providing any necessary referrals to resources needed to support safely isolation (e.g., 211 Florida).

Patients will be informed of COVID-19 symptoms to monitor for and be instructed to get medical attention immediately if he/she has any emergency warning signs listed below:

- Trouble breathing
- Persistent pain or pressure in the chest
- New confusion
- Inability to wake or stay awake
- Bluish lips or face

CHDs should identify health care partners that persons can be directed to if they do not have a primary healthcare provider.

CHD and surge case investigation staff will also inform patients of ways to prevent infection among those living in their household. Additional self-isolation guidance will be reviewed with the patient and instructional materials provided. CHD and surge staff will take efforts to provide instructions in a patient’s primary language.

During the interview case investigators will elicit all close contacts and if able, will conduct contact interview on close household contacts, documenting in Merlin or CRM per provided guidance. Depending on staffing model, this may not be possible if contact tracer and case investigator have different skill levels and separate job functions (e.g. contracted staff).

Step 3: Contact Elicitation:

Contact elicitation is a voluntary activity on the part of the COVID-19 case patient but is a critical part of the case interview. CHD or contracted surge case investigators will use information from any reports received by the CHD, along with the patient’s symptom history gathered earlier in the case interview, to determine the contact elicitation window. This is also known as the infectious period. The infectious period is defined as being two days before symptom onset or lab collection data for asymptomatic cases through the discontinuation of self-isolation (see Figure 2 below).
A close contact is defined by being within 6 feet (2 meters) for more than 15 minutes while the case patient is infectious.

For a confirmed or probable COVID-19 case, all close contacts the case had contact with while infectious are entered into Merlin or the CRM by case investigators and these persons are either notified by case investigator or are assigned to a contact tracer for outreach. For contacts out of state, CHDs should follow the guidance provided and are required to coordinate with the Bureau of Epidemiology Monitoring Unit and provide the name, contact information, and date of last exposure for each contact. That info will then be relayed to the other state through Epi-X. For contacts in other counties, CHD staff should enter that data in Merlin and notify the other county via email or phone (see Surveillance and Investigation Guidance; Merlin Data Management Guidance).

Basic contact information for each close contact should be collected and documented in Merlin or CRM per guidance (e.g. first, last name, date of birth, phone numbers, address including street, city, state, and ZIP code).

If the case patient is unwilling to provide contacts, case investigator or contract tracer conducting the interview should inform the case patient of the importance of reducing disease transmission and direct the case patient to immediately notify their contacts and recommend they self-isolate for the 14 days from the date of their last exposure to the case patient.
Step 4: Contact Notification

Contact tracers assigned to perform outreach to each elicited case patient’s close contacts will perform initial outreach via phone or using approved initial text messaging. Each contact will be interviewed within 48 hours of being assigned, using culturally and linguistically appropriate methods. CHDs and surge staff are instructed to use the specific guidance for contact interviews (Surveillance and Investigation Guidance) which includes the use of approved scripts (see Surveillance and Investigation Guidance; Contact Tracing Scripts).

All contact attempts and valid contact information should be documented with Merlin or the CRM, each contact should have at least three contact attempts made, preferably at different times of the day. Contact tracers attempt outreach for a period of at least three days, before considering these efforts unsuccessful.

Following successful contact with a COVID-19 case patient close contact, CHD or contracted surge staff should attempt to document and verify information as per guidance, including if symptomatic or asymptomatic.

Self-quarantine guidance (see self-quarantine guidance) and referrals to testing (COVID-19 Test Sites) will be provided to the close contact by the contact tracing staff. Testing should be considered for those likely infectious and part of a priority population (e.g., living in congregate setting, correctional facility, etc.) (Table 2).

Contact tracers will never, even if asked by a contact, reveal to or confirm with the contact the identity of the COVID-19 patient. Doing so is a breach of patient confidentiality and will result in disciplinary action, possibly including termination of employment with DOH.

Depending on the information elicited during the case investigation, locating information for the contact may be insufficient. CHD contact tracers will use additional resources to obtain missing locating information, such as state Department of Motor Vehicles records, online people search engines, health department records, etc., to locate contacts. Surge staff are not currently advised to do this.

Special consideration will be given to ensure culturally and linguistically appropriate communications. Contact tracers can also provide services to people who are deaf or who have hearing loss.

Step 5: Contact Monitoring

It is recommended that CHDs and surge staff monitor contacts at the end of their 14-day self-quarantine following their contact notification interview. Attempts to follow up should be documented within Merlin or the CRM.

Close contacts who develop symptoms should seek COVID-19 testing and medical care. CHDs should identify partner agencies to provide options to seek care to symptomatic close contacts.

For contacts who report testing, staff will follow up to confirm test results.

- If positive, the contact will automatically be referred to a case investigator.
• If negative, symptomatic contacts will continue to self-quarantine and follow all recommendations of the Department.

IX. Outbreaks

Special investigation teams may be required to assist CHDs with outbreaks as they require expertise and resources beyond typical case investigation and contact tracing efforts. A COVID-19 outbreak indicates potentially extensive transmission within a setting, organization, or population. An outbreak investigation involves several overlapping epidemiologic, case finding, and contact investigations, with a surge in the need for public health resources. More emphasis on active case finding is recommended, which may result in more contacts than usual needing testing and to self-quarantine.

Outbreaks may occur in congregate settings, correctional facilities, workplaces, amongst certain populations (e.g. farm workers), hospitals and other healthcare settings, schools and day cares, and homeless shelters.

The types of information for designating priorities during an outbreak are site and population specific, therefore a customized algorithm may be required for each situation. In some instances, case investigation and contact tracing conducted within facilities will need to be undertaken by specially trained staff (e.g., infection control practitioners, industrial hygienists) in collaboration with facility leadership, occupational health liaisons, and other relevant subject matter experts. Interruption of transmission within the facilities or populations will also require complementary community case investigation and contact tracing efforts, so planning for these activities will be a joint endeavor involving community leadership and other key stakeholders.

CHDs will monitor their investigations closely to quickly identify an outbreak and follow COVID-19 outbreak guidance.

Refer to COVID-19 outbreak guidance for specific settings/populations, guidance is available on CDC website (Infection Control and Outbreaks).

X. Special Considerations

Special Sites Not Under Jurisdiction

Examples of sites that are not under the jurisdiction of the state, territorial, or local health department are those under the jurisdiction of the U.S. Government (e.g., military bases and federal correctional facilities), diplomatic missions, or reservations for American Indian/Alaska Native tribes. If these sites have their own healthcare systems, Department staff can offer technical consultation and can share and request data from case investigations and contact tracing. At sites that do not have healthcare systems, agreements can be made between local infection control officials and the onsite authorities to delegate the public health response to the Department.

Clients Unable to Participate
There may be instances when COVID-19 patients have difficulty recalling close contacts (e.g., substance use or cognitive impairment) or they are unavailable for inquiry (e.g., died before an interview could be conducted, are intubated, unconscious, a minor, mentally incapacitated, or intellectually disabled). Social-network information, setting-based investigations, and proxy interview methods will be needed to supplement the contact list. In lieu of the ability to speak to the patient, details to inform case investigation and contact tracing may be gleaned from healthcare providers or legal proxies as available.

**Culturally and Linguistically Diverse Minority Populations**

Culturally and linguistically diverse minority populations are growing in the United States and Florida. These populations include racial and ethnic minorities, members of tribal nations, immigrants (i.e., those born outside the U.S.) and refugees. They may be at higher risk for COVID-19 or worse health outcomes due to several reasons including living conditions, work circumstances, underlying health conditions, and limited access to care.

It is important that case investigations and contact tracing are conducted in a culturally appropriate manner, which includes meaningfully engaging community representatives from affected communities, collaborating with community-serving organizations, respecting the cultural practices in the community, and taking into consideration the social, economic, and immigration contexts in which these communities live and work.

To help build trust, jurisdictions should try to employ public health staff who are of the same racial and ethnic background as the affected community and are fluent in their preferred language. When that is not possible, it is important to provide interpreters for individuals who have limited English proficiency and consider translating the data collection instruments. Core demographic variables should be included in case investigation and contact tracing forms, including detailed race and ethnicity, as well as preferred language. Finally, given that minority populations experience discrimination and may be stigmatized or otherwise harmed for their participation, it is important to ensure the privacy and confidentiality of data collected and to ensure that the participant is aware of these safeguards.

**Interjurisdictional Case Investigation and Contact Tracing**

Clients diagnosed with COVID-19 may live in one jurisdiction and work in another, so collaboration between jurisdictions to synchronize community messaging can be helpful. Timely and confidential transfer of patient and close contact information to facilitate testing, self-isolation/self-quarantine, and clearance to return to work are essential.

Each jurisdiction will assign a person or team to send and receive reports from other jurisdictions of any clients diagnosed with COVID-19 and close contacts who reside in their jurisdiction. The jurisdiction where the patient resides is responsible for leading the investigation and notifying other health departments of any close contacts and/or congregate settings needing investigation in their area. Bi-directional confidential communication between health departments should include COVID-19 test results related to the investigation and confirmation of clients and contacts being released from self-isolation/self-quarantine.

**Clients with COVID-19 Traveling Within the United States or Internationally**
With people traveling between states and internationally for work and leisure daily, interjurisdictional communication is essential to the success of case investigations and contact tracing spanning multiple jurisdictions. Officials from the health department that initially encounter the patient with a positive SARS-CoV-2 laboratory result or probable diagnosis should interview the patient to gather as much identifying and locating information as possible for the patient, any close contacts visited, and events attended during the patient's travels, as well as information about the mode of travel. These data should be shared with the jurisdictions in which the close contacts are located. For contacts of cases who are in other states, counties send an email to the Monitoring Unit with names and contact information. Epi-X is used to transmit information to other states. If the patient is initially interviewed in a jurisdiction other than his or her residence, information should be transferred between jurisdictions for continuity of case management. ZIP code at time of diagnosis should be updated to transfer to the other county or state. If a person becomes symptomatic after they have returned home from their trip, it will be important to assess whether the flight (or other mode of transportation) was within the contact elicitation window. If so, flight information should be obtained and appropriate authorities informed, and close contacts participating in the journey notified. The jurisdiction where the patient resides is assigned responsibility for managing the overall investigation.

Case investigations and contact tracing for flights arriving in the U.S. or between U.S. states, or cruise ships arriving at a U.S. port, are coordinated by CDC. To initiate case investigation and contact tracing of an aircraft or ship, the health department managing the overall investigation should notify their regional epidemiologist who will communicate with the CDC Miami quarantine station. CDC will obtain identifying and locating information for potentially exposed passengers and provide that information to health departments with jurisdiction for where the contacts reside. These health departments then follow-up with contacts within their jurisdiction and report outcomes to the relevant CDC quarantine station. For international flights departing the U.S., CDC will notify public health authorities at destinations who will be responsible for conducting the aircraft case investigation and contact tracing.

**XI. Data Management**

The development and implementation of a robust data management infrastructure is critical for assigning and managing investigations, linking clients with confirmed and probable COVID-19 to their contacts, and evaluating success and opportunities for improvement in a case investigation and contact tracing program. Merlin, the Department’s notifiable disease registry, is the system of record for COVID-19 case investigations where case investigations will likely be triggered by one of these events:

1. A positive SARS-CoV-2 PCR or antigen laboratory test or
2. Identification of a close contact tracing with symptoms compatible with COVID-19

The Florida CRM is a workflow platform to provide access to essential case and contact data to initiate investigations or contact notification by contracted surge staff without providing access to other sensitive and confidential data housed within Merlin. Bi-directional data sharing exists between Merlin and the CRM to initiate case assignment and investigation.

Ensuring information technology and informatics support is critical. SHO has the responsibility for the maintenance and upkeep of both Merlin and the CRM the system. Data security and confidentiality standards (DOHP 50-10-16 Information Security and Privacy Policy) at the state
and local level should be considered and incorporated into all plans related to case investigation and contact tracing activities.

XII. Confidentiality and Consent

All aspects of case investigation and contact tracing must be voluntary, confidential, and culturally appropriate.

Minimum professional standards for FTE, OPS, or contracted surge staff at both SHO and CHD handling confidential information should include providing employees with appropriate information and/or training regarding confidential guidelines and legal regulations (see Appendix I). All Department security and confidentiality protocols (DOHP 50-10-16 Information Security and Privacy Policy) should be adhered to and policies and procedures surrounding maintaining security and confidentiality during telework are necessary.

All public health staff whether they are FTEs, OPS, or contracted surge staff, involved in case investigation and contact tracing activities with access to secure and confidential information should sign a confidentiality statement acknowledging the legal requirements not to disclose personal identifying information including COVID-19 test result, and interview information and other personal records.

Efforts to locate and communicate with clients and close contacts must be carried out in a manner that preserves the confidentiality and privacy of all involved. This includes never revealing the name of the patient to a close contact unless permission has been given (preferably in writing or through documented verbal consent) and not giving confidential information to third parties (e.g., roommates, neighbors, family members).

Maintaining confidentiality during COVID-19 case investigations and contact tracing can be particularly difficult in congregate settings. Onsite administrators/employers who already know confidential information regarding a patient or contacts can be asked to respect confidentiality if necessary, even if they are not legally bound to do so.

XIII. Support Services to Consider

Significant social support may be necessary to allow clients to safely self-isolate and contacts to safely self-quarantine. CHDs are encouraged to use their community partnerships and local CHD programs to identify any support services that case investigators and contract tracers can make referrals to if needed. At a minimum, availability of testing locations, key health care partners, and referrals to CHD programs should be known and shared when necessary.

Examples of social support services include but are not limited to:

- Basic social support such as food, household supplies, laundry, pharmacy services.
- Health care safety net providers for clinical consultations for persons who do not have a primary healthcare provider.
- Transportation to medical care.
• Health insurance navigation, Medicare/Medicaid assistance, mental health treatment services, and substance abuse and misuse services.
• Childcare and/or dependent adult care services support.

XIV. Digital Contact Tracing Tools

Case investigators and contact tracers, using approved protocols may alert cases by text about a pending phone call from the Department. They may also notify the case or contact about the need for them to call their local CHD. Information is emerging on smartphone-based exposure notifications from proximity and blue-tooth tracking tools that could significantly increase the number of contacts that health departments are alerted to. Currently, the Department has not implemented any of these tools. Guidance will be updated if necessary.

XV. Evaluation

Continuous evaluation of case investigation and contract tracing efforts should be assessed and reviewed routinely to identify areas of concern and make improvements to internal and external processes for CHDs, SHO, and contracted surge staff.

The Department’s performance management system provides the infrastructure for data-driven decision making. Using specific and measurable objectives, the Department monitors and evaluates the effectiveness of the strategies for the state’s contact tracing plan. Performance indicators will be measured from Merlin and from the CRM to track quality and quantity of case investigation and contact tracing activities and provide performance outcomes for the strategic plan goals and objectives.

Objectives related to case investigation and contact tracing fit broadly into four main domains recommended by the CDC³:

• Individual Case Investigation and Contact Tracing Supervision and Management
• Programmatic Process Measures
• Programmatic Outcome Measures
• Ad-Hoc Epidemiologic and Other Public Health Analyses

Examples indicators for CHDs are included in Table 3.

Table 3: Example Case investigation and Contact Tracing Indicators

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Definition</th>
<th>Measurement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proportion of cases investigated</td>
<td>#cases investigated/#cases</td>
<td>To track the ability of the CHD/contractors to investigate cases</td>
</tr>
</tbody>
</table>

Proportion of cases interviewed: For non-LTCF or correctional residents # cases interviewed/# cases reported: To track success of the CHD/contactors in conducting interviews of cases.

Number of close contacts elicited per case: # close contacts elicited/# cases investigated: To understand the investigators ability to elicit contacts.

XVI. Resources
A list of additional resources is provided below to assist with training and operationalizing case investigation and contact tracing efforts in Florida.

Florida COVID-19 Response
Florida COVID-19 Data and Surveillance Dashboard
Florida Division of Emergency Management COVID-19 Response
CDC COVID-19 Support for States, Tribes, Localities and Territories
CDC Principles of Contact Tracing to Stop COVID-19
CDC Sample Contact Tracing Plan
CDC Implementation of Mitigation Strategies for Communities with Local COVID-19 Transmission
A National Plan to Enable Comprehensive COVID-19 Case Finding and Contact Tracing—Johns Hopkins Center for Health Security and Association of State and Territorial Health Officers (ASTHO)
ASTHO COVID-19 Resources—Association of State and Territorial Health Officers
Contact Tracing Overview—Resolve to Save Lives
Contact Tracing Staffing Calculator—George Washington University
APPENDIX I: Florida COVID-19 Contact Tracing Training Plan

INTRODUCTION

Case investigation and contact tracing are fundamental public health activities that require collaborating with patients diagnosed with an infectious disease to identify and provide support to persons who may have been infected through exposure to index patients. This process prevents further transmission of disease by separating people who have (or may have) an infectious disease from people who do not. It is a core communicable disease control measure employed by the Department of Health (DOH) for decades to interrupt transmission of STD/HIV, TB, Zika, and other communicable diseases.

This document provides a summary of steps necessary to identify and implement training designed to produce a competent case investigator and contact tracer workforce. Both functions are required to stop and prevent further spread of COVID-19. Case investigators primarily interview index patients to ascertain enough information about patients’ recent activity to determine who may have been exposed during the infectious period. Contact tracers use a variety of means to locate and communicate with contacts to index patients, provide information regarding exposure, and recommend and assist with, mitigation, such as testing, quarantine, and medical follow-up. During typical disease investigations, public health employees serve in both roles, interviewing index patients and locating and communicating with contacts. During periods of case surges, such as is anticipated with the volume of reported COVID-19 cases, it becomes necessary to train a larger workforce for each individual role, case investigator and contact tracer.

UNDERSTANDING THE COVID-19 CONTACT TRACING TASKS

In preparation for DOH to implement a robust and sustainable contact tracing initiative as part of the state’s overall COVID-19 containment/prevention strategy, those designated to serve as contact tracers must be thoroughly trained to conduct case investigations and contact tracing. To maximize effectiveness, the training plan must be adopted and implemented quickly and will include self-study modules and or/Web-based instruction.

**What is Case Investigation?** – Interviewing patients with COVID-19, eliciting their close contacts, monitoring the patients for COVID-19 symptoms, and connecting patients to resources to support self-isolation.

**What is Contact Tracing?** – Notifying close contacts of their potential exposure, referring them to testing, monitoring them for COVID-19 symptoms, and connecting contacts to resources to support self-quarantine.

**STEPS TO DEVELOP AND IMPLEMENT COVID-19 CONTACT TRACING TRAINING**

**Step 1: Define the Desired Outcome**

DOH will estimate the number of COVID-19 patients who should be interviewed and the number of close contact’s likely to be initiated in a defined time-period (daily, weekly, etc.). Estimates will consider current case counts, rates and trends, and which populations are deemed highest priority for interviewing and contact tracing.
Step 2: Determine Staffing Needs

Once an estimate of workload is established, it must be weighed against current capacity at each county health department (CHD). CHD Directors/Administrators should determine the number of staff available to conduct case investigation and contact tracing. CHDs determined to fall short of the necessary number of available staff for the estimated workload in their respective counties should bring on additional temporary or contracted staff during surge periods. CHD resources should focus on priority populations and facilities, with all remaining investigations and contact tracing diverted to call center staff.

Step 3: Florida DOH Information Security Training

Each DOH staff member or contractor must, at a minimum, have taken the annual DOH Information Security training within the past 12 months before being allowed to access protected health information (PHI). Specific information security training must also be incorporated into data systems and job-specific contact tracing training.

Step 4: Develop Learning/Competency Expectations

In addition to attaining job-specific knowledge, skills and abilities (KSAs), newly hired employees or contractors are required to successfully complete an assessment at the end of each of the four lessons contained within ASTHO’s Making Contact: A Training for COVID-19 Contact Tracers, the required curriculum for all case investigators and contact tracers. Upon completion of the course, each employee or contractor must provide the certificate of completion to their supervisor.

Step 5: Decide on Training Curriculum

A multi-disciplinary team from the Division of Disease Control and Health Protection selected ASTHO’s Making Contact: A Training for COVID-19 Contact Tracers as the official curriculum for all staff involved in contact tracing activities. The curriculum was developed in collaboration with CDC, CSTE, NACCHO, NCSD, and four state departments of health, and can be accessed via the following link: learn.astho.org/p/ContactTracer. Participants must register to begin the training, and the certificate of completion must be provided to each employee’s supervisor and available to the department upon completion. The contact tracing and information security training will be listed, along with associated guidance, in TRAIN Florida. All training must be completed within two days of start date and prior to making any patient contact.

The selected curriculum includes the following topics:

- **The Basics of COVID-19 (approximately 45 minutes):** Provides an overview of coronavirus disease 2019 (COVID-19), including its incubation and infectious period, symptoms, and how to prevent it
- **The Basics of Contact Tracing (approximately 45 minutes):** Provides an overview of the principles that guide work as a Contact Tracer. Opportunity to learn basic definitions of contact tracing, gain an understanding of the steps involved, and become aware of the importance of confidentiality
- **Effective Communication and Interviews (approximately 60 minutes):** Provides information on how to use effective communication techniques, prepare for and conduct an interview, and approach interactions with cultural humility
• **Case Monitoring and Resources (approximately 30 minutes)**: Contact Tracers follow-up and monitor cases (patients under investigation or their contacts) to ensure they are following appropriate isolation or quarantine instructions and to track the development of any potential COVID-19 symptoms. This lesson provides information on the different types of case monitoring and their associated activities.

Because the curriculum was designed for use by any jurisdiction, additional Florida-specific preservice training will be provided, including performance expectations (timeliness, number of contacts elicited, number tested, etc.).

**Step 6: Determine Case/Data Management Application to be used**

DOH will select a case/data management application to direct and capture all contact tracing activities, including patient interviews and attempts, status of contacts, test results, isolation monitoring, etc. The new software application will be available to staff inside and outside of the DOH IT network, and will integrate with Merlin and other DOH systems, and will be designed to be maintained and upgraded with DOH resources. The selected system will likely include tools to automate messaging, phone calls, and provide scripts for the various patient contacting scenarios.

**Step 7: Provide Training on Selected Case Management Application**

All staff involved in COVID-19 contact tracing are required to become proficient with the designated application(s). DOH or contracted staff must complete requisite training tutorials and associated assessments prior to accessing the system(s).

**Step 8: Identify Contact Tracing Training and Oversight Team**

A training coordinator and other subject matter experts should be selected to identify and coordinate required trainings, send students links to modules, invites to Webinars, and administer the post training KSA assessments.

**Step 9: Set Performance Expectations**

To measure the impact of contact tracing, performance measures will be developed to assess timeliness of interviews, number of locatable contacts elicited and assigned for contact tracing, and the number/percent of contacts that are tested for COVID-19. Additional measures will be identified and implemented as necessary. **APPENDIX II** provides details of the job responsibilities and required KSAs for COVID Case Investigators, Contact Tracers, and a Contact Tracing Supervisor. All personnel engaged in contact tracing must be fully aware of their job expectations.

**Step 10: Interview and Contact Tracing Scripts**

To ensure a consistent and thorough approach to conducting case investigations, interviews, and notification of COVID contacts, detailed scripts have been developed with the interview flow matching the data entry format for COVID case management in Merlin. The scripts can be found at **Surveillance and Investigation Guidance; Contact Tracing Scripts.**
Step 11: Training Evaluation

Florida-specific COVID-19 contact tracing training and resulting staff competency will be evaluated and modified as necessary to optimize the effectiveness of the selected curriculum. Evaluation will include identifying trends in high versus lower performers, review of curricula feedback, and process changes’ influence on outcomes.
APPENDIX II: Job Expectations and KSAs for COVID-19 Case Investigators, Contact Tracers and Contact Investigator/Tracer Supervisors

COVID-19 CASE INVESTIGATOR JOB RESPONSIBILITIES

Following the ASTHO Covid-19 Contact Tracing training curriculum, Case Investigators should be able to perform the following:

Conducts interviews of clients with confirmed or probable COVID-19, with a focus on motivational interviewing and cultural competency. Interviews should be guided by standard protocols and include: providing disease-specific information; assessing signs and symptoms, and underlying health conditions; discussing symptom onset to determine window period for contact elicitation and exposure risk for close contacts; discussing work, social, recreational, and community activities to identify who may have been exposed; eliciting information on close contacts, including names, exposure dates, and locating information; and assessing support needs to maintain health and compliance during self-isolation. Referral to health care services and resource care coordination, as indicated. Provides recommendations for self-isolation and review of daily monitoring procedures. Conducts daily monitoring during self-isolation—temperature, signs/symptoms, use of fever reducing medications—via electronic tool (e.g., smartphone app, case management software) or other designated mechanism until patient is no longer infectious.

COVID-19 CONTACT TRACER JOB RESPONSIBILITIES

Following the ASTHO Covid-19 Contact Tracing training curriculum, Contact Tracers should be able to perform the following:

Communicates with contacts to notify them of exposure, provides disease and transmission information, gathers data on demographics, living arrangements, and daily activities. Asks about signs/symptoms and underlying medical conditions. Provides referrals for testing (if appropriate). Provides recommendations for self-quarantine and reviews daily monitoring procedures. Assesses supports necessary to maintain compliance during self-quarantine. Conversations with contacts should be guided by standard protocols. Conducts daily monitoring during self-quarantine—temperature, signs/symptoms, use of fever reducing medications—via electronic tool (e.g., smartphone, case management software) or other designated mechanism, until 14 days after last potential exposure, and referral to health care if contact becomes symptomatic.
COVID-19 CONTACT INVESTIGATOR/TRACER SUPERVISOR JOB RESPONSIBILITIES

Following the ASTHO Covid-19 Contact Tracing training curriculum, Case Investigator/Contact Tracer Supervisors should be able to perform the following:

- Directly oversees the work of the Case Investigator and/or Contact Tracer and others who may work as part of a team. Assigns work and oversees the quality of work. Ensures completion of case interviews and contact follow-up according to established standards. Reviews work for missing information, inconsistencies, or areas that need further exploration and directs staff follow-up to seek clarification and obtain additional information. Addresses complex issues with cases or contacts that have been escalated by staff. Uses qualitative (interview audits) and quantitative (review of statistical outputs) methods to review performance and determine areas for formal or informal professional development, training, coaching, and mentoring. When necessary, uses progressive discipline to address performance or conduct issues. Recognizes staff for exceptional and outstanding performance. Maintains employee personnel files.

KSAs REQUIRED FOR ALL CONTACT TRACING STAFF

KSAs Needed for Case Investigation and Contact Tracing Staff case investigation and contact tracing are specialized skills. Knowledge and skills that staff will need include:

- A keen understanding of the need for patient confidentiality and the ability to conduct case interviews without violating confidentiality and to conduct contact tracing without disclosing the identity of the patient (case).

- Understanding of, and ability to explain, the medical terms associated with COVID-19 and principles of exposure, infection, infectious period, potentially infectious interactions, symptoms of disease, pre-symptomatic and asymptomatic infection, types of tests used to diagnose infection, and available prevention and control interventions (e.g., isolation/quarantine, social distancing, environmental surface cleaning).

- Excellent and tactful interpersonal skills, cultural sensitivity, and language and interviewing skills that allow them to build and maintain trust with clients and contacts.

- Basic skills of crisis counseling and the ability to confidently refer clients and contacts for further care, if needed.

- Resourcefulness in locating and communicating with clients and contacts who may be difficult to reach or reluctant to engage in conversation.

- Awareness of the sensitivities surrounding immigration status and how this can be a barrier to case investigation and contact tracing activities. Understanding that assurances should be made to clients and contacts that all information collected will be used exclusively for public health purposes and not shared with immigration authorities.

- Understanding of when to refer individuals or situations to medical, social, or supervisory resources.
• Ability to conduct environmental assessments of a patient’s or contact’s home, including the need for any social support during self-isolation/self-quarantine.

• Ability to collect basic standardized surveillance data per protocols.

• Understanding of when the use of public health legal authorities may be necessary and how to notify the appropriate public health officer for authorization.

The following cross-cutting knowledge, skills, and abilities support the successful practice of case investigation and contact tracing. Recruitment for case investigators and contact tracers should focus on identifying people with these attributes:

• Ethical and professional conduct

• Active listening

• Open communication

• Critical thinking

• Negotiating skills

• Problem solving

• Cultural humility and competency

• Fluency in non-English languages for communities where English is not the primary language

• Emotional intelligence

• Flexibility and adaptability.

Strong interpersonal skills are important, but the role of the case investigator also requires a higher level of acuity and training. The case investigator must be able to conduct a conversation-based investigation (as opposed to reading a script or data collection form) to obtain information on close contacts and to assess health care and support needs for people diagnosed with COVID-19.