

Contact Tracing: Using Digital Tools

Technology can support case investigation and contact tracing but cannot take the place of the staff who interview, counsel, and provide support for those impacted by COVID-19. There are two key types of technology that can contribute to the contact tracing process: case management tools and proximity tracing/exposure notification tools. This technology guide serves as a companion to the [case investigation workflow](#) and [contact tracing workflow](#).

Types Of Digital Contact Tracing Tools



Case Management

Make the traditional contact tracing process faster and more efficient:

- Streamline the electronic capture and management of data on patients and contacts
- Integrate workflows with surveillance systems or other workforce management tools



Proximity Tracing/Exposure Notification

Identify more contacts than traditional contact tracing alone:

- Use voluntary, opt-in tools in addition to case management tools to augment traditional contact tracing
- Use Bluetooth or GPS technologies to estimate the proximity and duration of an individual's exposure to patients diagnosed with COVID-19

1. Patient Identification & Follow-up



Triage for assignment



Case assigned



Patient interviewed



Patient self-isolation



Patient follow-up daily



Referral for support services



Referral to medical provider if symptoms are severe or worsen

Case management tools can:



- **Provide** workflow support to assign and manage communication and follow-up with patients
- **Notify** patients of a forthcoming call from the health department to increase likelihood of call acceptance
- **Generate** secure, confidential electronic surveys for the patient to fill out to provide a head start on the patient interview
- **Send** daily automated phone, email, or SMS illness or symptom monitoring checks, reducing the phone call burden required by case investigation staff
- **Alert** health systems when referrals and support services are recommended or required



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2. Contact Identification



Case management tools can:

- **Generate** secure, confidential electronic surveys for the patient to self-report recent contacts and their information (can jump-start the contact identification process traditionally conducted during the patient interview)



Exposure notification tools can:

- **Assist** a patient to remember recent events and locations

3. Contact Notification



Case management tools can:

- **Generate** automated notifications to elicited contacts via phone, email, or SMS
- **Manage** the health department's notification workflows (e.g., call log and conversation history with contacts)



Exposure notification tools can:

- **Notify** individuals via smartphone of a potential exposure, and refer them to the health department for follow up

4. Contact Follow-up



Contact self-quarantined



Test if available



Referral for support services



Contact follow-up daily



Referral to medical provider if necessary



Case management tools can:

- **Provide** workflow support to prioritize, assign, and manage the communication and follow-up process with contacts
- **Automate** prioritization based on data collected (e.g., risk level, opt-out, non-response, contact becomes symptomatic)
- **Send** daily automated phone, email, or SMS illness or symptom monitoring checks, reducing the phone call burden required by contact tracing staff
- **Integrate** with other public health systems and services including call centers or test scheduling
- **Alert** health systems when referrals and support services are recommended or required

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