

Considerations for COVID-19 Case Investigation and Contact Tracing Among Healthcare Workers and Patients in Healthcare Settings

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As essential employees, healthcare workers (HCW)* provide patient care and often interact with colleagues for extended periods of time. While personal protective equipment (PPE) recommendations should be adhered to in all healthcare settings, eliminating the risk of disease transmission to and from HCWs is challenging. Some healthcare facilities have internal procedures for assessing exposure risk, tracing close contacts, and applying appropriate interventions, while others may not. The purpose of this guidance is to ensure that healthcare facilities are familiar with Georgia Department of Public Health (DPH) recommended procedures regarding case investigations and contact tracing involving HCWs. Healthcare facilities should conduct case investigations and contact tracing involving HCWs within their facilities whenever possible and communicate patient exposures and outbreaks (definition below) to DPH.

The Centers for Disease Control and Prevention (CDC) recently provided guidance on response to COVID-19 transmission in acute-care settings: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/responding-acute-care-facilities.html>. This guidance outlines information to collect when an infected HCW or patient is identified and provides recommendations on risk assessment, and management and testing of exposed individuals.

DPH Recommendations for Assessing Employee and Patient Exposures to COVID-19 in Healthcare Settings

DPH encourages healthcare facilities alerted to a COVID-19 positive employee or patient to conduct a contact tracing investigation within their facility to determine persons who may be at risk for COVID-19 as a result of a patient or HCW exposure. Healthcare facilities without the resources to conduct an investigation should contact their District Epidemiologist for assistance. More information about CDC's risk assessment criteria can be found at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html> and <https://www.cdc.gov/coronavirus/2019-ncov/hcp/responding-acute-care-facilities.html>

Definition of a close contact

A **close contact** is defined as someone who was within 6 feet of an infected person for a cumulative (not necessarily continuous) total of 15 minutes or more over a 24-hour period, starting from 2 days before illness onset (or, for asymptomatic persons, 2 days prior to test specimen collection) until the time the infected person is isolated. The DPH quarantine guidance lists factors to consider when defining close contact (<https://dph.georgia.gov/contact>).

Exposures linked to a positive HCW

- A HCW who is a close contact of a COVID-19 positive HCW, would **not** be considered an exposure risk if both are wearing (surgical grade) facemasks. To assess HCW exposure risk refer to CDC

guidance for risk assessment for HCW (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>).

- A HCW who is a close contact of an unmasked COVID-19 positive HCW, would **not** be considered an exposure risk, if wearing a (surgical grade) facemask and eye protection.
- Patients who have prolonged, close contact (i.e. within 6 feet for ≥ 15 minutes) to a COVID-19 positive HCW **are considered by CDC to be exposed, regardless of the level of PPE worn by the HCW or the patient.** Even when HCWs are in full PPE, one cannot guarantee full source control and there is still a potential exposure risk. These situations should be assessed on a case-by-case basis to determine the degree of contact the exposed person had with an infected HCW, level of risk, and follow-up actions. Patients with prolonged, close contact with an infected HCW, even one in PPE, should probably be considered exposed and placed in transmission-based precautions for 14 days† if hospitalized, or follow home isolation if discharged. Use the community-related exposure guidance for risk assessment of a patient exposed to an HCW with COVID-19 (<https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html>).

Determination of exposure risk for COVID-19 and considerations for quarantine among HCW and patients in various scenarios can be found in the [Appendix](#).

Facilities may conduct HCW monitoring and symptom checks and facilitate testing and home quarantine as appropriate. For larger facilities with Employee Health programs that require such controls DPH monitoring may be duplicative. However, if a close contact of a patient or another HCW is named during DPH contact investigation, enrollment into DPH symptom monitoring as outlined below will be attempted. In addition, DPH will be enrolling contacts that may have been exposed in the community.

Outbreak Definitions and Reporting

Healthcare facilities should promptly report COVID-19 outbreaks to the District Epidemiology office where the facility is located: <https://dph.georgia.gov/epidemiology/disease-reporting>

A COVID-19 outbreak in the inpatient hospital setting is defined by DPH as:

- Two or more patients with confirmed COVID-19 disease with epi-linkage‡ who developed infection 7 or more days after admission for a non-COVID condition, OR
- Two or more healthcare workers with confirmed COVID-19 disease with epi-linkage; OR
- One patient and 1 HCW with epi-linkage (e.g., transmission within 14 days on the same unit or ward, or in the case of 2 patients, from a shared HCWs contact).

When a facility reports an outbreak, DPH will request the following:

- Basic information on infected patients and staff, including the dates of first and last illness onset, total number ill, total number hospitalized, and total number of deaths.
- Results of any risk assessment and control measures implemented

DPH is available to assist with discussion to determine if additional interventions are needed. A COVID-19 outbreak in this setting is considered ongoing until 28 days have passed from the last illness onset date.

The Role of Healthcare Facilities in Containment of COVID-19

Healthcare facilities can play a key role in containing COVID-19 transmission by reminding HCWs and educating patients on appropriate measures regarding isolation and quarantine. If a patient is identified

as exposed during an investigation and discharge is planned either to home or another facility before the end of the 14-day† quarantine period, DPH should be notified. For printable instructions on home **isolation** to provide staff and patients with COVID-19 infection follow this link <https://dph.georgia.gov/isolation-contact>; for printable instructions on home **quarantine** for patients with a known COVID-19 exposure follow this link <https://dph.georgia.gov/contact>. For further information or questions please call the GA Department of Public Health at 1-866-PUB-HLTH or your District Health Department.

DPH Response to COVID-19 Exposures in the Community

DPH, through its 18 Health Districts, attempts to investigate each laboratory confirmed COVID-19 case reported among Georgia residents. The process for case investigations and contact tracing in the community is as follows:

- The case is interviewed, and a determination is made as to whether the case exposed any contacts while infectious.
- Contacts identified are entered into the DPH Contact Tracing Program for follow up to ensure proper containment of any new COVID-19 infections and to limit transmission.
- Efforts are made by phone to inform persons who meet the DPH definition of a community close contact (a person who was within 6 feet of a confirmed case for a cumulative 15 minutes or longer within a 24 hour period, regardless of PPE usage) that they have been exposed and must self-quarantine for 14 days† from the date of last exposure, although DPH is following CDC recommendations to allow for shortening the quarantine period in if certain criteria are met
- Close contacts are encouraged by contact tracers to enroll in the DPH Symptom Monitoring Program either through a corresponding symptom monitoring cell phone application or by phone call reporting to the contact tracing hotline.
- If a close contact develops symptoms of concern, DPH recommends they obtain a test as soon as possible. If the test results are negative, close contacts must remain in quarantine for the entire 14 days†. If the test results are positive, close contacts must follow [DPH isolation guidelines](#), regardless of symptom status.

DPH Response to COVID-19 Infections and Exposures Among HCWs

Persons who are employed as HCWs and test positive for COVID-19 are identified through case investigation. DPH will only share HCW names with employers as necessary to ensure appropriate control measures.

- DPH investigators will determine place of employment and whether the employer has been notified. DPH will attempt to notify the healthcare facility (Infection Prevention and/or Employee Health) of the positive result, if not already done, on a case by case basis.
- DPH interviewers will instruct the infected HCW to self-isolate according to DPH and CDC guidance – <https://dph.georgia.gov/isolation-contact> - regardless of symptoms.

DPH may also reach out to healthcare facilities if an outbreak of COVID-19 is suspected or if additional follow-up is needed.

- DPH will request information pertaining to interventions that have been made to identify and characterize close contacts and efforts that are in place to ensure HCW monitoring and protection.
- DPH staff will also ensure healthcare facility awareness of DPH and CDC guidance for HCWs returning to work -<https://dph.georgia.gov/document/document/dph-return-work-guidance/download>.

Similarly, HCWs identified by DPH as contacts of a COVID-19 case discovered during case investigation, will be notified of their exposure through the DPH Contact Tracing Program. HCW contacts will be instructed by DPH to quarantine at home for 14 days† from the last date of exposure to the case according to DPH and CDC guidelines - <https://dph.georgia.gov/contact>.

Although DPH is following CDC recommendations to allow for shortening the quarantine period in certain circumstances, HCWs should not return to work until after the full 14 days due to the extensive and close contact with patients required of these individuals. However, when staffing shortages are anticipated, facilities may consider implementing the contingency staffing strategies below. HCWs identified as cases or contacts of a confirmed case should follow DPH and CDC guidance for returning to work - <https://dph.georgia.gov/document/document/dph-return-work-guidance/download>.

Return to Work Considerations for HCWs During Critical Staffing Shortages

HCWs should be made aware of DPH case investigation and contact tracing initiatives but should be directed to their employer's processes and procedures if these differ. For example, in circumstances of critical staffing needs, recommendations for isolation and/or quarantine of HCWs may change. A HCW who is a close contact to a confirmed COVID-19 case while not wearing appropriate PPE, may need to return to work while adhering to specific guidelines (www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html):

- Screen for symptoms before each shift
- Practice universal masking and appropriate hand hygiene
- Restrict from contact with severely immunocompromised patients
- Prioritize performing duties that limit interaction with others
- NOTE: As a last resort, if staffing shortages occur despite all other mitigation strategies, a HCW who tests positive for COVID-19 and remains asymptomatic can return to work earlier than stated in the guidance following the guidelines above. HCWs with confirmed COVID-19 should limit their direct patient care to:
 - Patients with confirmed COVID-19
 - If not possible, then patients with suspected COVID-19
 - As an absolute last recourse, patients without COVID-19

**Healthcare Workers (HCW) refers to persons directly involved in patient care and includes, but is not limited to, emergency medical service personnel, nurses, nursing assistants, physicians, technicians, therapists, phlebotomists, pharmacists, students and trainees. For this guidance, HCW does not include clerical, administrative, billing, laundry, security, engineering and facilities management, or clinical laboratory personnel.*

†Given the need for often extensive and close contact between patients and HCW, a 14-day quarantine period remains the recommended option for patients receiving healthcare and HCW with exposures to SARS-CoV-2 to maximally reduce post-quarantine transmission risk and is the strategy with the greatest collective experience at present (<https://www.cdc.gov/coronavirus/2019-ncov/hcp/faq.html#Infection-Control>). If HCW chose to test out of quarantine early, they should continue to follow the 14 day quarantine regarding returning to the workplace <https://dph.georgia.gov/document/document/dph-return-work-guidance/download>

‡Close contact with a confirmed or probable case of COVID-19 disease; OR member of a risk cohort as defined by public health authorities during an outbreak

Appendix: Determination of COVID-19 Exposure Risk and Need for Quarantine Among HCW and Patient Contacts in Healthcare Settings^{*,†,‡,§}

		Contact				
		HCW not wearing mask	HCW wearing mask	HCW wearing mask and eye protection	HCW wearing all PPE (gown, gloves, eye protection, respirator)	Patient regardless of PPE worn (none, some, or all)
Case	HCW not wearing mask	Quarantine [¶]	Quarantine [¶]	Not Exposed	Not Exposed	Quarantine
	HCW wearing mask	Quarantine [¶]	Not Exposed	Not Exposed	Not Exposed	Quarantine
	Patient not wearing mask	Quarantine [¶]	Quarantine [¶]	Not Exposed	Not Exposed	NA
	Patient wearing mask	Quarantine [¶]	Not Exposed	Not Exposed	Not Exposed	NA
	Patient having aerosol-generating procedure	Quarantine [¶]	Quarantine [¶]	Quarantine [¶]	Not Exposed	NA

*Exposure is considered to be within 6 feet for a duration of ≥ 15 minutes

†Mask refers to a surgical grade facemask but may include N95

‡<https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assesment-hcp.html>

§<https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html>

¶The decision to quarantine HCWs should be determined by the employer based on their processes and procedures. In circumstances of critical staffing needs, recommendations for isolation and/or quarantine of HCW may change. A HCW who is a close contact to a confirmed COVID-19 case while not wearing appropriate PPE, may need to return to work while adhering to specific guidelines (www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html).