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

September 4, 2020

As essential employees, healthcare personnel (HCP)* work closely with colleagues and patients 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 HCP is not possible. 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 HCP. Healthcare facilities should conduct case investigations and contact tracing involving HCP within their facilities whenever possible and communicate patient exposures and outbreaks (definition below) to DPH.

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 a total of 15 minutes or longer, regardless of PPE usage) that they have been exposed and must self-quarantine for 14 days from the date of last exposure.
- 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.
- Close contacts are encouraged to get tested on day 10 of their quarantine period per DPH contact tracing protocol.
- 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 Exposures Among HCP

Persons who work as HCP and test positive for COVID-19 are identified through case investigation. DPH will only share HCP 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 infected HCP 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 HCP monitoring and protection.

• DPH staff will also ensure awareness of DPH return to work criteria.

Similarly, HCP identified by DPH as a contact of a COVID-19 case discovered during case investigation, will be notified of their exposure through the DPH Contact Tracing Program.

• 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.

HCP 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 HCP During Critical Staffing Shortages
HCP 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 HCP may change. A HCP 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
• If staffing shortages occur despite all other mitigation strategies, a HCP who tests positive for COVID-19 and remains asymptomatic can return to work earlier than stated in the guidance following the guidelines above. Additional considerations for HCP with confirmed COVID-19 may allow direct care only for patients with confirmed COVID-19, direct care for patients with suspected COVID-19, or as last resort, direct care for patients without COVID-19.
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 HCP 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-assessment-hcp.html

Definitions

- **A close contact** is defined as a person who has been within 6 feet of a COVID-19 infected person for a total of 15 minutes or longer during their infectious period.
- The **infectious period** is considered to begin 48 hours before symptom onset (or test date/time if the case was asymptomatic).

Exposures linked to a positive HCP

- A HCP who is a close contact of a COVID-19 positive HCP, while both are wearing facemasks, would **not** be considered an exposure risk. To assess HCP exposure risk refer to CDC guidance for risk assessment for HCP (https://www.cdc.gov/coronavirus/2019-ncov/hcp/guidance-risk-assessment-hcp.html).
- Patients who have prolonged, close contact to a COVID-19 positive HCP **are considered by CDC to be exposed, regardless of the level of PPE worn by the HCP or the patient**. Even when HCPs 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 HCP, level of risk, and follow-up actions. Patients with prolonged, close contact with an infected HCP, 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 HCP with COVID-19 (https://www.cdc.gov/coronavirus/2019-ncov/php/public-health-recommendations.html).

Determination of exposure risk for COVID-19 and consideration for quarantine among HCP and patients in various scenarios can be found in the Appendix.

Facilities may conduct monitoring, symptom checks, and facilitate testing and home quarantine as appropriate. For larger facilities with Employee Health programs that may require daily internal monitoring and symptom checks of COVID-19 positive employees and their workplace contacts and facilitate testing of such employees, DPH monitoring may be duplicative. However, if a close contact of a patient or another HCP is named during DPH contact investigation, enrollment into symptom monitoring 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 personnel with confirmed COVID-19 disease with epi–linkage; OR
- One patient and 1 HCP 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 HCP 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 HCP 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](https://dph.georgia.gov/isolation-contact); for printable instructions on home quarantine for staff and patients with a known COVID-19 exposure follow this link [https://dph.georgia.gov/contact](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.

*Healthcare Personnel (HCP) include, but are not limited to, emergency medical service personnel, nurses, nursing assistants, physicians, technicians, therapists, phlebotomists, pharmacists, students and trainees, contractual staff not employed by the healthcare facility, and persons not directly involved in patient care, but who could be exposed to infectious agents that can be transmitted in the healthcare setting (e.g., clerical, dietary, environmental services, laundry, security, engineering and facilities management, administrative, billing, volunteer personnel). For this guidance, HCP does not include clinical laboratory personnel.

†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 HCP and Patient Contacts in Healthcare Settings\(^1,\S\)

<table>
<thead>
<tr>
<th>Case PPE</th>
<th>Contact</th>
<th>HCP wearing mask</th>
<th>HCP wearing mask and eye protection</th>
<th>HCP wearing all PPE (gown, gloves, eye protection, respirator)</th>
<th>Patient regardless of PPE worn (none, some, or all)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact PPE</td>
<td>HCP not wearing mask</td>
<td>Quarantine(|)</td>
<td>Quarantine(|)</td>
<td>Not Exposed</td>
<td>Not Exposed</td>
</tr>
<tr>
<td></td>
<td>HCP wearing mask</td>
<td>Not Exposed</td>
<td>Not Exposed</td>
<td>Not Exposed</td>
<td>Quarantine</td>
</tr>
<tr>
<td></td>
<td>Patient not wearing mask</td>
<td>Quarantine(|)</td>
<td>Quarantine(|)</td>
<td>Not Exposed</td>
<td>Not Exposed</td>
</tr>
<tr>
<td></td>
<td>Patient wearing mask</td>
<td>Quarantine(|)</td>
<td>Not Exposed</td>
<td>Not Exposed</td>
<td>Not Exposed</td>
</tr>
<tr>
<td></td>
<td>Patient having aerosol-generating procedure</td>
<td>Quarantine(|)</td>
<td>Quarantine(|)</td>
<td>Quarantine(|)</td>
<td>Not Exposed</td>
</tr>
</tbody>
</table>


\(^\|\)The decision to quarantine HCP 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 HCP may change. A HCP 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 (https://www.cdc.gov/coronavirus/2019-ncov/hcp/mitigating-staff-shortages.html).