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TO: Health Alert Network
FROM: Rachel Levine, MD, Secretary of Health
SUBJECT: Hospital COVID-19 Outbreak Exposure and Response
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This transmission is a Health Advisory: Provides important information for a specific incident or situation; may require immediate action.

HOSPITALS: PLEASE SHARE WITH ALL MEDICAL, PEDIATRIC, NURSING, PATIENT SAFETY OFFICER, AND LABORATORY STAFF IN YOUR HOSPITAL; EMS COUNCILS: PLEASE DISTRIBUTE AS APPROPRIATE; FQHCs: PLEASE DISTRIBUTE AS APPROPRIATE; LOCAL HEALTH JURISDICTIONS: PLEASE DISTRIBUTE AS APPROPRIATE; PROFESSIONAL ORGANIZATIONS: PLEASE DISTRIBUTE TO YOUR MEMBERSHIP

The Pennsylvania Department of Health is providing guidance for hospitals on how to respond to COVID-19 outbreaks originating within the facility. This guidance should be used to supplement other relevant guidance documents and guide the implementation of public health expectations for hospitals.

Key messages included in the guidance:
- COVID-19 outbreak response in the hospital setting requires implementation of key response tools including cohorting, testing, and patient notification.
- Outbreaks where transmission has occurred without clear epidemiologic links will require more widespread response, whereas smaller outbreaks with clearly defined epidemiologic linkages may be manageable with limited intervention.
- Acute care facilities should have plans to notify exposed HCP, patients and visitors, and offer testing and counseling.

Hospital outbreak definitions and thresholds for reporting, along with instructions for reporting were recently published by the Department in PA-HAN-540. These definitions are intended to expedite facilities' investigation of COVID-19 cases and reporting to public health authorities, thus ensuring early detection of possible outbreaks and timely intervention to prevent the virus' spread.

This advisory outlines the recommended response to hospital outbreaks which should occur in addition to general infection prevention and control recommendations for COVID-19 in PA-HAN-524 and exposure guidance provided in PA-HAN-510. COVID-19 outbreak response in the hospital setting requires implementation of key response tools including cohorting, testing, and patient notification. However, implementation of all the tools may not be appropriate for every outbreak. For example, smaller outbreaks may be manageable with careful contact tracing and targeted intervention. Outbreaks where transmission has occurred without clear epidemiologic links will require more widespread response. Infection prevention and control experts in the hospital environment must execute best practices for reducing transmission that can occur both within the facility and within the community as a result of hospital outbreaks.
1. OUTBREAK EXPOSURE

If an outbreak is identified according to the definitions in PA-HAN-540, contact tracing and interviewing of all cases may reveal the epidemiologic links between cases. Conduct contact tracing to identify exposed HCP per guidance in PA-HAN-510 and identify exposed or potentially exposed patients and visitors as per guidance in PA-HAN-533 should occur. In short, exposure of COVID-19 to patients and visitors generally follows the determination of close contact (within 6 feet for a cumulative total of 15 minutes or more over a 24-hour period.) However, more brief contact between an infected case may also impart risk of exposure. Examples of an exposed person not meeting the definition of close contact could include a patient who received an ocular, oral, or nasal exam from an infectious provider, or a roommate of an infectious patient who was not within 6 feet but shared the same bathroom. Note that the determination of exposure to a patient or visitor from an infectious HCP does not depend on the personal protective equipment (PPE) worn by the HCP. PPE is intended to protect the healthcare personnel wearing it. While it may serve to provide some source control, risk to others is not zero.

For outbreaks where epidemiologic linkages and close contacts are limited and easy to identify (e.g., HCP sharing an office but not providing direct patient care), excluding close contacts and conducting surveillance of other staff working in these areas may be sufficient to prevent additional transmission within the facility.

For outbreaks with unclear transmission pathways or where transmission appears to be spread out over multiple days or multiple units, outbreak response should be conducted by using a unit-based approach. The unit-based approach eliminates the need to analyze each interaction between the infectious person and others via traditional contact tracing methods. Rapid implementation of outbreak response using the unit-based approach is the most aggressive way to reduce transmission and limit the outbreak impact. A unit is best defined as a patient care area where staff are not generally shared with other areas during one shift.

An example of application of the unit-based approach for outbreak response:
An infectious HCP that worked on two different units while infectious:
- Identify all patients of those two units during the HCP’s infectious period, including those who have since been moved to another unit or discharged.
- Identify all HCP working in the two units on the same shift as the HCP. Interview HCP to determine if a high-risk exposure occurred; these HCP should be excluded per PA-HAN-510.
- Identify any visitors to the two units

Using the unit-based approach, those individuals identified above would be included as contacts of the case and considered exposed (see below).

For either approach, conduct a root-cause analysis to identify factors that contributed to transmission, and if appropriate, implement interventions to prevent similar transmission events in the future.

2. OUTBREAK RESPONSE

A. Transmission-based Precautions for COVID-19

HCP should adhere to the use of universal eye protection, in addition to a respirator or facemask, for all patient care encounters. Patients with suspected or confirmed SARS-CoV-2 infection and those patients identified as exposed to COVID-19 should be cared for by using Standard Precautions and Transmission-based Precautions for COVID-19 per PA-HAN-524. Continue precautions for patients with COVID-19 until they have met criteria to discontinue Transmission-based Precautions per PA-HAN-517. Continue precautions for exposed patients for 14 days following last exposure.
Using the unit-based approach, an entire unit should remain under transmission-based precautions for COVID-19 until all patients have been released from their quarantine period or have met criteria to discontinue Transmission-based Precautions per PA-HAN-517.

B. Cohorting of Patients and Staff

Acute care facilities should have a plan to cohort patients with confirmed COVID-19 to a dedicated COVID-19 unit until they have met criteria to discontinue Transmission-based Precautions per PA-HAN-517. For exposed patients who test negative or are not tested following exposure, provide a private room or maintain a roommate with a similar exposure risk (e.g., were both cared for by the same infectious HCP around the same time). Maintain cohorting for exposed patients for 14 days following last exposure.

Using the unit-based approach, patients in the affected unit should remain in place except for those who are known to be positive. Cohort patients with confirmed COVID-19 to a separate dedicated unit, or separate the affected unit so that equipment, supplies, and staffing are not shared between COVID-positive and COVID-exposed areas.

Whenever possible, HCP should be designated to treat only COVID-19 positive residents, COVID-19 exposed residents, or only COVID-19 negative residents. Limiting movement of HCP between these patient care areas (when feasible) is vital to reducing infection spread.

C. Testing

If a patient or HCP has been exposed to a confirmed COVID-19 case, they should be notified of the exposure and tested if any symptoms appear within the quarantine period (14 days). Conduct post-exposure testing for asymptomatic persons no sooner than 2-3 days after exposure.

Using the unit-based approach, test all patients in the unit at one time, and use the results of testing to inform cohorting and patient placement. Testing of exposed patients and staff should occur at least weekly until transmission has stopped.

Do not re-test any patients or staff with a history of SARS-CoV-2 infection within the previous 90 days. Facilities are reminded that all test results, including those from point-of-care testing need to be reported to PA-NEDSS per PA-HAN-534.

D. Notification

Acute care facilities should notify all HCP and patients or their designated care giver directly if they were exposed to a confirmed COVID-19 case.

Using the unit-based approach to outbreak response, all patients in the unit at any point during the outbreak period should be notified of their exposure or potential exposure.

Acute care facilities should develop a plan to notify patients that have already been discharged from their facilities. These patients should be offered testing and counseling following exposure.

DEFINITIONS:

Healthcare personnel (HCP): Include, but are not limited to, emergency medical service personnel, nurses, nursing assistants, physicians, technicians, therapists, phlebotomists, pharmacists, students and trainees, other staff providing direct care, 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, and volunteer personnel).

**Hospital:** This guidance applies to all facilities licensed by the Department’s Bureau of Facility Licensure and Certification, Division of Acute and Ambulatory Care as a hospital and includes general acute care hospitals, critical access hospitals, long term acute care hospitals, children’s hospitals, rehabilitation hospitals and select surgical hospitals. The guidance also applies to psychiatric hospitals (not licensed by the Department) that are subject to MCARE.

**Outbreak Period:** This period begins on the first day that the index case identified as part of the outbreak was present in the facility and was also infectious. The period of infectivity begins two days prior to the symptom onset date or date of positive test. For an index case who was present in the facility during the two days prior to symptom onset or positive test, the outbreak period would start on the first day the infectious person was in the facility. The outbreak period ends when no new cases are identified after 14 days.

If you have questions about this guidance, please contact DOH at 1-877-PA-HEALTH (1-877-724-3258) or your local health department.

Categories of Health Alert messages:
- **Health Alert:** conveys the highest level of importance; warrants immediate action or attention.
- **Health Advisory:** provides important information for a specific incident or situation; may not require immediate action.
- **Health Update:** provides updated information regarding an incident or situation; unlikely to require immediate action.

This information is current as of December 30, 2020 but may be modified in the future. We will continue to post updated information regarding the most common questions about this subject.