

SYNOPSIS

10/26/2020

Review of “COVID-19 in a correctional facility employee following multiple brief exposures to person with COVID-19 – Vermont, July-August 2020”

Article citation: Pringle JC, Leikauskas J, Ransom-Kelley S, Webster B, Santos S, Fox H, et al. COVID-19 in a correctional facility employee following multiple brief exposures to person with COVID-19 – Vermont, July-August 2020. MMWR Morb Mortal Wkly Rep. 2020 Oct 21 [Epub ahead of print].

One-minute summary

- A correctional officer assigned to an 8-hour shift in a correctional facility quarantine unit on July 28, 2020 containing six SARS-CoV-2 positive, asymptomatic detained persons became symptomatic one week later with a subsequent positive polymerase chain reaction (PCR) test result.
- Initial contact tracing did not identify the correctional officer as a close contact due to short exposure times (less than 15 minutes at a time).
- Infection transmission was deduced to be related to 22 short, close proximity encounters (less than or equal to six feet) with the detained persons.
- Review of video surveillance and routines suggested **seven possible types of encounters with varying durations (30-60 seconds at a time) of close proximity exposure**. Only those exposures where there was no barrier (e.g., cell door) were considered as contributing to the total exposure time. For the correctional officer, **seventeen minutes total exposure was estimated** across five of seven types of activities:
 - Allowing access to a recreational facility once daily
 - Collection of soiled linens and clothes
 - Allowing access to shower or recreation once daily
 - Health checks (details of this activity are not provided)
 - Medication dispensing
 - Safety checks (visual through door windows – not considered an exposure)
 - Meal delivery and pickup (through food chutes – not considered an exposure)
- Authors suggest transmission risk implications of **cumulative** exposure time be considered for contact tracing.

Additional information

- Detained persons wore microfiber cloth masks at most times outside of their cell (though not consistently when in recreation room), but not when in their cell.
- The correctional officer wore a microfiber cloth mask, gown and eye protection during all interactions with inconsistent use of gloves.
- No other known exposures of the correctional officer to individuals with COVID-19 outside of work, nor travel outside of the state were reported in the 14 days prior to illness onset. Community rates were considered relatively low (20 cases per 100,000).
- Two contacts of the correctional officer from outside of work were traced, but neither developed COVID-19.
- Of seven employees with exposures to the infected detained persons meeting the contact tracing definition of close contact (less than or equal to six feet and more than 15 minutes at a time), one employee tested positive.
- Of 13 employees with exposures to the infected detained persons not meeting the contact tracing definition of close contact, one employee tested positive (this employee was the focus of this case report).

PHO reviewer's comments

- Details to assess the risk of transmission of each exposure were not described. Further, direct handling without gloves of contaminated materials such as clothing, linens and food trays could suggest fomite transmission.
- There was no report of whether or not the video surveillance included direct observation of the infected correctional officer for compliance with hand hygiene and proper techniques for putting on and removing personal protective equipment.
- No information on ventilation, frequency and adequacy of environmental cleaning was provided.
- No information on other potential sources of infection, e.g., asymptomatic infected visitors to the facility, asymptomatic staff working in the facility were noted.
- In Ontario, the recommended measures for close contact with individuals in quarantine would include the use of a medical mask, rather than a non-medical mask as reported in this article.

Citation

Ontario Agency for Health Protection and Promotion (Public Health Ontario). Review of “COVID-19 in a correctional facility employee following multiple brief exposures to person with COVID-19 – Vermont, July-August 2020”. Toronto, ON: Queen’s Printer for Ontario; 2020.

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