VDH Interim Guidance for Implementing and Defining Roles for Testing Strategies in High-Density Critical Infrastructure Workplaces after a COVID-19 Case is Identified
Revised December 11, 2020

Revisions

Revisions were made on December 11, 2020 to reflect the following:
- Updated language to reflect CDC's revised guidance about quarantine with new options for shortening the quarantine duration.
- Clarified that VDH still recommends that close contacts quarantine (stay home) for 14 days after their last exposure.
- Updated Testing Strategy for Coronavirus (COVID-19) in High-Density Critical Infrastructure Workplaces after a COVID-19 Case is Identified flowchart with the new quarantine guidance.

Revisions were made on November 5, 2020 to reflect the following:
- Updated the close contact definition to account for total exposure time in a 24-hour period (changed from 15 minutes to a total of 15 minutes over a 24-hour period) and added that the use of masks is not factored into the decision of determining if someone is a close contact.
- Clarified that VDH does not consider educational settings to be high-density workplaces and that education workers should follow standard quarantine recommendations (i.e., quarantine for 14 days after exposure).
- Defined a confirmed outbreak and added that to confirm an outbreak, typically 2-5 people are tested by PCR; testing to confirm an outbreak may be conducted at a public health laboratory.
- Updated Testing Strategy for Coronavirus (COVID-19) in High-Density Critical Infrastructure Workplaces after a COVID-19 Case is Identified flowchart

Introduction

Critical infrastructure employers have an obligation to manage the continuation of work in a way that best protects the health of their workers and the public. To ensure the continuity of operations of essential functions, workers in critical infrastructure sectors may be permitted to work after potential exposure to a confirmed case of COVID-19, provided they are asymptomatic and adhere to additional safety precautions, such as measuring the worker's temperature and assessing for symptoms of COVID-19 before each work shift ("pre-screening"), asking the worker to self-monitor for symptoms during their work shift, and asking the worker to wear a mask (also known as cloth face covering) while in the workplace. Allowing exposed, asymptomatic workers to return to work before they have quarantined for 14 days, while discussed in the critical infrastructure guidance, should not be misinterpreted as always being the first or most appropriate option to pursue in managing critical work tasks. If the worker cannot quarantine for 14 days, the worker may end quarantine earlier: counting the date of last exposure as Day 0, after 10 days without testing OR after 7 days with a negative PCR or antigen test performed on or after Day 5. If no quarantine is completed or if the worker ends quarantine early, they should still monitor for symptoms and follow all recommendations (e.g., wear a mask, watch their distance, wash hands often) for the full 14-day period.

For high-density critical infrastructure workplaces, an optional testing strategy, described below, is available for consideration after a COVID-19 case is identified. This testing strategy can be used to aid in identification of other potentially infectious individuals with the goal of reducing further transmission of SARS-CoV-2 in the workplace. Examples of high-density critical infrastructure workplaces include, but

are not limited to meat and poultry processing facilities, correctional and detention facilities, agricultural work sites, and critical manufacturing facilities. These facilities have a large number of workers who are in the workplace for long periods and who may have prolonged close contact with other workers. On August 18, 2020, Cybersecurity and Infrastructure Security Agency (CISA) updated their guidance about defining critical infrastructure workforce to include workers in the education sector. However, VDH does not consider educational settings to be "high density" workplaces; furthermore, VDH recommends that exposed education sector workers with close contact to someone with COVID-19 follow standard quarantine recommendations (i.e., quarantine for 14 days after exposure[1]) and not the modifications allowed for other critical infrastructure workers.

This testing strategy provides a tiered, risk-based approach to testing and implementing restrictions from work for co-workers of a person with confirmed COVID-19 in a high-density work environment. An algorithm outlining this strategy is available in this document. Some facilities may already have testing and work restriction plans in place that this strategy may augment.

General Testing Strategy Considerations

- A testing strategy, using viral tests (e.g., PCR test or antigen test) to diagnose acute infection, should only be implemented if results will lead to specific actions including:
    - Exclusion from work and isolation at home (or alternate location if the home environment cannot facilitate adequate isolation from others) of identified cases.
    - Interviewing and testing of potentially exposed co-workers who are close contacts as soon as possible.
- If available, the occupational health program at the facility should work in collaboration with the local health department (LHD) to assess potentially exposed workers and determine a testing plan.
- Consider the specific facility and operations to aid in the determination of which co-workers to prioritize for testing. Prioritize quickly and discuss the appropriate timeframe for testing after an exposure with the LHD so that testing of co-workers is not delayed.
    - Tier 1 is the highest priority for testing of exposed co-workers, especially those who were close contacts.
        - A close contact is any individual who was within 6 feet of an infected person for a total of 15 minutes or more over a 24-hour period or who had direct exposure to respiratory secretions, starting from 2 days before the person became sick (or 2 days before specimen collection if asymptomatic) until the person was isolated. At this time, VDH does not consider the use of a mask when determining if a person is a close contact or not.
    - Tier 2 is the next highest priority tier for testing.
    - Tier 3 includes workers not in Tiers 1 or 2.
- If employers elect to conduct facility-wide testing, multiple asymptomatic workers with SARS-CoV-2 infection may be identified. **Before facility-wide testing** is initiated, employers should have a plan in place for meeting staffing needs while these persons are out of the workplace per CDC's COVID-19 Critical Infrastructure Sector Response Planning Guidance.

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[1] VDH and CDC recommend that close contacts quarantine (stay home) for 14 days after their last exposure. This is the safest option. If the person is not able to stay home for 14 days and does not have symptoms, they may leave home earlier: Counting the date of last exposure as Day 0, after Day 10 without testing; OR After Day 7 with a negative PCR or antigen test performed on or after Day 5.

- Symptom screening, testing, and contact tracing must be carried out in a way that protects confidentiality and privacy, to the extent possible, and is consistent with applicable laws and regulations. To prevent stigma and discrimination in the workplace, make employee health screenings as private as possible. Follow guidance from the Equal Employment Opportunity Commission regarding confidentiality of medical records from health checks.

Monitoring Exposed Workers

- Workers in Tier 1 identified as close contacts need to be rapidly identified and monitored for signs or symptoms of COVID-19 for 14 days after their last exposure.
  - o The LHD can assist with contact monitoring by enrolling the workers in an automated daily monitoring and symptom tracker program, the VA Sara Alert System, or the occupational health program can opt to perform independent monitoring of workers and report outcomes to the LHD.
  - o If conducting their own daily monitoring, the occupational health program will need to provide updates to the LHD at specified times (at a minimum: beginning of monitoring, immediately if symptoms occur, and end of monitoring).
- Screening all workers and others entering the workplace for symptoms of COVID-19 and measuring body temperature is recommended, as is asking the worker to self-monitor for symptoms during their work shift.
  - o Symptom screening will not identify workers with asymptomatic or pre-symptomatic infections, but may help to keep those with illness out of the workplace.
  - o Symptom screening upon entry to the workplace should be designed so that the screening process is conducted in as private a manner as possible, without a worker's personal information being overheard or communicated inappropriately at any time.
  - o Screening information obtained for those who were not close contacts to an identified case does not need to be provided to the LHD.
- VDH recommends that ALL critical infrastructure/essential personnel, regardless of known exposure, self-monitor for symptoms under the supervision of their employer's occupational health program.
  - o Additional screening guidance is available in the VDH Interim Guidance for Daily COVID-19 Screening of Workers (Non-healthcare Workers).
  - o A VDH monitoring log is available to assist with self-monitoring.
  - o Any worker with signs or symptoms of COVID-19, regardless of tier, should be immediately separated from others and referred for medical evaluation and testing.
  - o Flexible leave policies should be implemented that are in line with public health guidance.

Public Health vs. Workplace Roles for Testing:

- Workplaces should select the testing strategy that works best for their facility.
- Workplaces should develop a plan for how testing of close contacts and other workers might be implemented as part of a broader COVID-19 prevention and control plan.
- Although the LHD might facilitate testing to confirm an outbreak at a facility, the workplace will need to determine options beyond the local health department for additional

specimen collection and testing.
- o To confirm the presence of an outbreak, typically 2-5 people are tested. An outbreak is confirmed if there are two or more laboratory-confirmed cases identified by PCR testing within a 14-day period.
- o Options to consider include an employee health clinic, a healthcare provider engaged by the employer, or local health care facilities.
- o Workplaces are strongly encouraged to work with their LHD to ensure that laboratory services are provided by a laboratory that has been approved by VDH for electronic laboratory reporting (ELR) for the most efficient delivery of test results. Electronic reporting, rather than paper- or fax-based methods, allows VDH to process reports and to more quickly begin the case investigation and contact tracing process.

Baseline Testing

- Tier 1 co-workers identified as close contacts should receive baseline testing.
- Tier 1 co-workers who do not meet the close contact definition, but who had significant risk of potential close contact, such as working during the same shift or overlapping shifts in the same area as the case-patient, may also receive baseline testing.
- Tier 2 and Tier 3 co-workers may also receive baseline testing if capacity exists to perform testing and implement actions based on testing results.
- Workers in any tier who develop signs or symptoms of COVID-19 should be tested.

Return to Work

- No worker in Tier 1, 2, or 3 should work if they are symptomatic or test positive for COVID-19.
- Ideally, asymptomatic workers assessed as being in Tier 1 should quarantine for 14 days after their last exposure and can return to work at the end of those 14 days if they remain healthy. If the worker cannot quarantine for 14 days, the worker may end quarantine earlier: counting the date of last exposure as Day 0, after 10 days without testing OR after 7 days with a negative PCR or antigen test performed on or after Day 5. If no quarantine is completed or if the worker ends quarantine early, they should still monitor for symptoms and follow all recommendations (e.g., wear a mask, watch their distance, wash hands often) for the full 14-day period.
- If critical staffing shortages are impacting the facility, asymptomatic workers in Tier 1 may return to work before the end of their quarantine period, provided additional safety practices, including taking their temperature before work, wearing a mask at all times, and practicing physical distancing in the workplace to the extent possible, are implemented.
- Frequent testing of these workers, as described below in strategies 2 and 3, is recommended to detect infections early and exclude potentially infectious workers from the workplace.
- In selecting a post-exposure return to work testing strategy, employers should consider which strategy appropriately balances maintaining operations with protecting worker safety.
- Serial testing every 3 days as recommended below may not be feasible in all scenarios without point of care testing options. Different testing frequencies may be discussed with the LHD.

Return to Work Testing Strategies for Tier 1 Co-Workers of a Confirmed Case

- Strategy 1: Allow return to work if asymptomatic after quarantining for 14 days, even if baseline test results are negative. This is the safest option. If the worker is not able to stay home for 14 days and does not have symptoms, they may leave home earlier: Counting the date of last exposure as Day 0, after Day 10 without testing; OR after Day 7 with a negative PCR or antigen test performed on or after Day 5.
  - o This strategy reliably excludes workers who are exposed and may become infected, limiting infection of others in the workplace.
  - o This is the preferred strategy if the facility is not facing critical staffing shortages.
- Strategy 2: Test at baseline and re-test on Day 3. Allow return to work if asymptomatic and both baseline testing and Day 3 results are negative.
  - o Continue retesting workers who have returned to work every 3 days until there are no new cases identified in the group of workers tested.
  - o This strategy, involving serial testing, is more likely to identify infected workers than testing at a single point in time.
- Strategy 3: Return to work if asymptomatic after baseline test is obtained, or while results are pending, providing other protections are in place as outlined above.
  - o Exclusion from work is recommended while test results are pending, if possible.
  - o Only consider this strategy for Tier 1 co-workers during critical staffing shortages.
  - o Continue retesting workers who have returned to work every 3 days until there are no new cases identified in the group of workers tested.

Return to Work Testing Strategy for Tier 2 and 3 Co-Workers of a Confirmed Case:
- Tier 2 and 3 co-workers may return to work if asymptomatic and, if tested at baseline, their test is negative. They should self-monitor for symptoms of COVID-19.

If additional cases are identified through testing, worker monitoring, symptom screening, and/or contact tracing efforts, the same steps would be applied to the close contacts of the additional case-patient.

Resources

CDC. Testing Strategy for COVID-19 in High-Density Critical Infrastructure Workplaces after a COVID-19 Case Is Identified
www.cdc.gov/coronavirus/2019-ncov/community/worker-safety-support/hd-testing.html

CDC. Implementing Safety Practice for Critical Infrastructure Workers Who May Have Had Exposure to a Person with Suspected or Confirmed COVID-19
www.cdc.gov/coronavirus/2019-ncov/community/critical-workers/implementing-safety-practices.html

Cybersecurity and Infrastructure Security Agency (CISA). Guidance on the Essential Critical Infrastructure Workforce
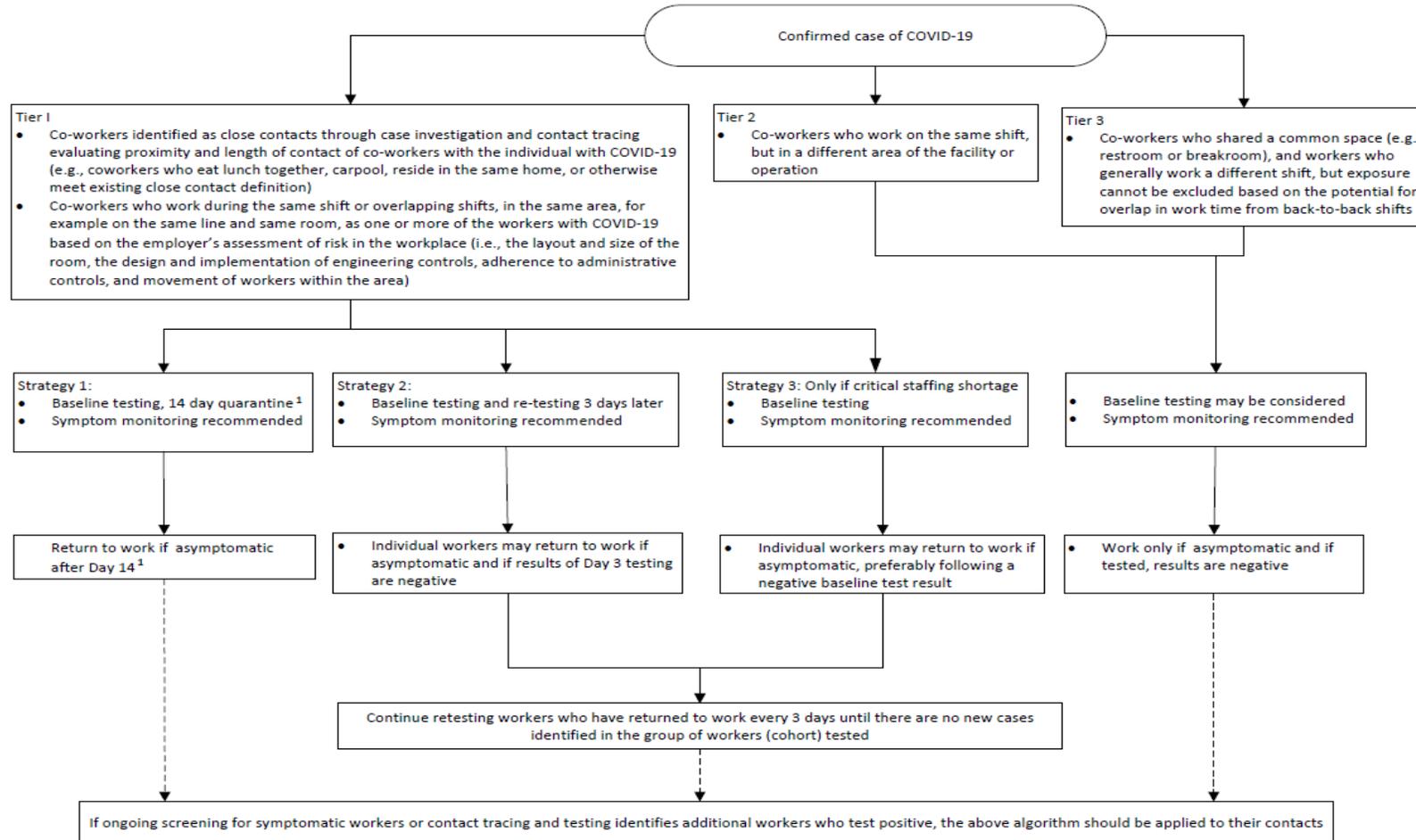www.cisa.gov/publication/guidance-essential-critical-infrastructure-workforce

Additional resources from VDH for businesses in Virginia
www.vdh.virginia.gov/coronavirus/schools-workplaces-community-locations/businesses

Testing Strategy for Coronavirus (COVID-19) in High-Density Critical Infrastructure Workplaces after a COVID-19 Case is Identified
The testing strategy outlined above is an optional one designed to augment existing guidance and measures to reduce transmission in the workplace

Testing and contact tracing should only be implemented if results will lead to specific actions. When symptom screening and subsequent testing identify a confirmed case of COVID-19, interviewing and testing potentially exposed co-workers should occur as soon as possible. Based on the likelihood of exposure, characteristics of the workplace, and results of contact investigations, a progressive tiered approach to testing these co-workers may be applied. In selecting a strategy, employers should consider which strategy appropriately balances maintaining operations with worker safety.

Confirmed case of COVID-19

Tier 1
- Co-workers identified as close contacts through case investigation and contact tracing evaluating proximity and length of contact of co-workers with the individual with COVID-19 (e.g., coworkers who eat lunch together, carpool, reside in the same home, or otherwise meet existing close contact definition)
- Co-workers who work during the same shift or overlapping shifts, in the same area, for example on the same line and same room, as one or more of the workers with COVID-19 based on the employer's assessment of risk in the workplace (i.e., the layout and size of the room, the design and implementation of engineering controls, adherence to administrative controls, and movement of workers within the area)

Tier 2
- Co-workers who work on the same shift, but in a different area of the facility or operation

Tier 3
- Co-workers who shared a common space (e.g. restroom or breakroom), and workers who generally work a different shift, but exposure cannot be excluded based on the potential for overlap in work time from back-to-back shifts

Strategy 1:
- Baseline testing, 14 day quarantine [1]
- Symptom monitoring recommended

Strategy 2:
- Baseline testing and re-testing 3 days later
- Symptom monitoring recommended

Strategy 3: Only if critical staffing shortage
- Baseline testing
- Symptom monitoring recommended

- Baseline testing may be considered
- Symptom monitoring recommended

Return to work if asymptomatic after Day 14 [1]

- Individual workers may return to work if asymptomatic and if results of Day 3 testing are negative

- Individual workers may return to work if asymptomatic, preferably following a negative baseline test result

- Work only if asymptomatic and if tested, results are negative

Continue retesting workers who have returned to work every 3 days until there are no new cases identified in the group of workers (cohort) tested

If ongoing screening for symptomatic workers or contact tracing and testing identifies additional workers who test positive, the above algorithm should be applied to their contacts

Adapted from CDC (as of 12/11/2020): www.cdc.gov/coronavirus/2019-ncov/downloads/community/Testing-Strat-flow-diagram.pdf

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