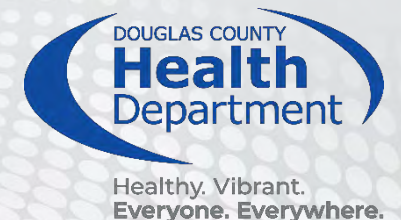


# COVID-19: Workplace Contact Tracing

**Andy Wessel, MPH and Celeste Ehrenberg, MS, CHES**  
DCHD COVID-19 Information Line

*December 9, 2020 Version*



# Objectives

Save lives by slowing and stopping the spread of COVID in our community

Keep your employees healthy and your business able to stay productive and open

# Topics Covered

- Key Concepts:
  - Incubation Period versus Infectious Period
  - Quarantine versus Isolation
- Contact Tracing Basics
- Advanced Situations
  - Options for Shortening Quarantine
  - Living with a COVID-19 Positive Person
  - Symptoms Only – No Test Results Yet
  - Critical/Essential Workers

# Coronavirus Disease (COVID-19) Overview

- Transmission:
  - Easily spreads from person-to-person through respiratory droplets
  - More limited role for aerosols and surface contact
- Prevention (Multiple Layers of Protection):
  - Employees should stay/be sent home when sick
  - Social distancing (6 ft between workers)
  - Masks
  - Handwashing & cleaning
  - Employees tested if exposed or sick

## Added Protection:

- Allowing work from home
- No in-person meetings

### Example of Only One Layer of Protection

At a Wisconsin overnight summer school retreat, students were tested before arrival<sup>1</sup>  
Students didn't stay 6 feet apart or wear masks at the retreat.



1 student tested negative 1 week before retreat but developed symptoms and tested positive shortly after arrival



76% of students/staff were diagnosed with COVID-19 during retreat<sup>2</sup>

Exposed students were quarantined at the retreat to protect their families and communities

<sup>1</sup>Tested negative 7 days before retreat or had evidence of SARS-CoV-2 antibodies

<sup>2</sup>116 cases out of 352 students/staff; 78 confirmed, 38 probable

# Coronavirus Disease (COVID-19) Symptoms

Should isolate at home and get tested with:

At Least ONE of the Following:

- Fever and/or
- New Cough
- New Shortness of Breath or Difficulty Breathing
- New Loss of Taste and/or Smell

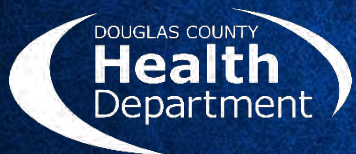
Listed by the State's Directed Health Measure

OR

TWO of the Following:

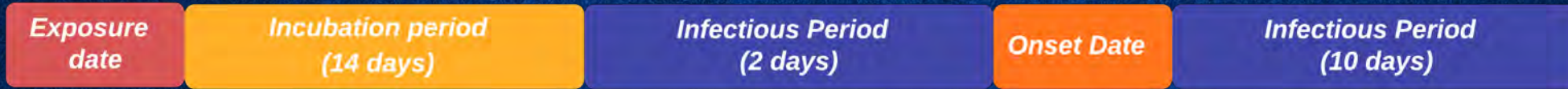
- Chills
- Fatigue
- Muscle or Body Aches
- Headache
- Sore Throat
- Congestion or Runny Nose
- Nausea or Vomiting
- Diarrhea

Additional Symptoms Per CDC



Healthy. Vibrant.  
Everyone. Everywhere.

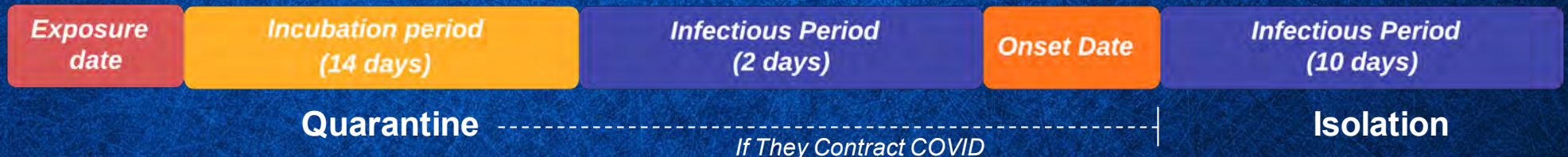
# Coronavirus Disease (COVID-19) Overview



- **Incubation period** – time between exposure to the virus until the person starts showing symptoms.
  - 2 to 14 days (with 5 days being typical)
- **Infectious period** – time when the infected person is able to spread the virus to others.
  - 2 days prior to when symptoms begin though 10 days after symptoms begin. The day symptoms begin is called the “onset date”
  - A person with a positive COVID-19 test but no symptoms is considered to be infectious 2 days before the date of test collection until 10 days after their test collection.

# Coronavirus Disease (COVID-19) Overview

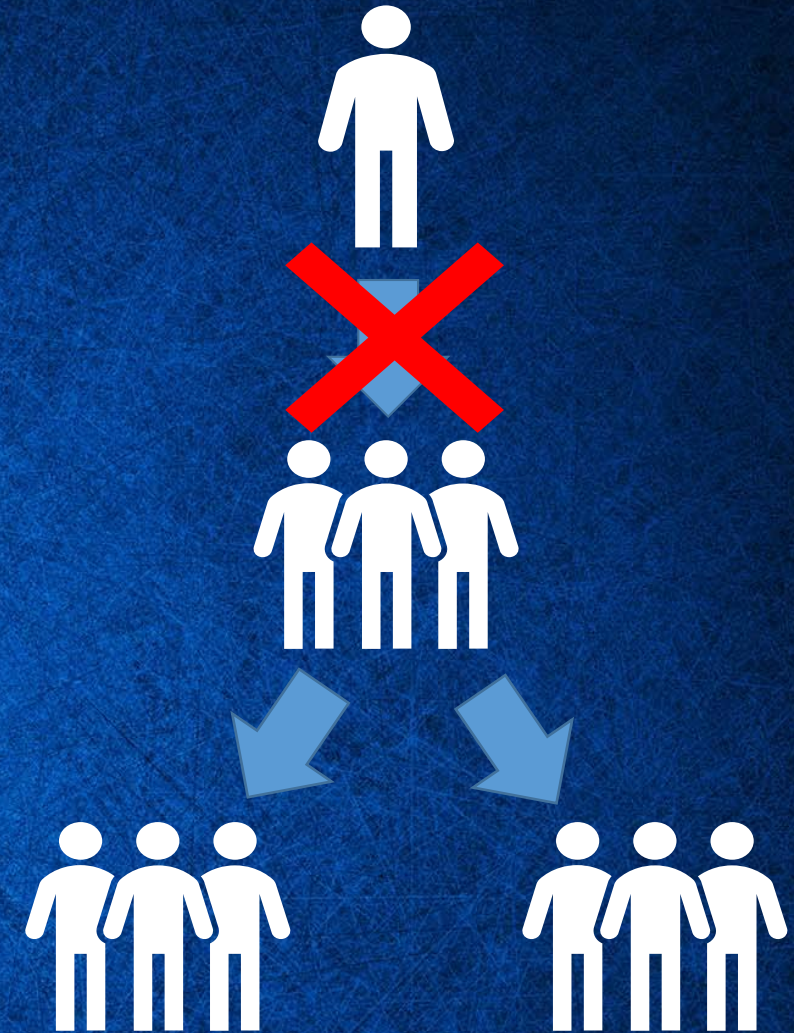
- **Quarantine:** Separates and restricts the movement of people exposed to a contagious disease to see if they become sick
- **Isolation:** Separates sick people with a contagious disease from people who are not sick
- Expectations for quarantine and isolation
  - Stay home
  - Use a separate bedroom & bathroom, if possible
  - Separate from others as much as possible
  - Do not go to work, school, sports, or to any other public areas/spaces



# Contact Tracing

## Stops chain of transmission by:

- Isolating COVID positive individuals so they don't expose anyone else
- Identifying those close contacts who are at risk of becoming infected with COVID
  - “Close contact” – within 6ft for 15+ minutes within 24 hours or having physical contact like a hug or handshake (mask or no mask)
- Quarantining close contacts so that, if they become sick, they do not infect others





# Contact Tracing

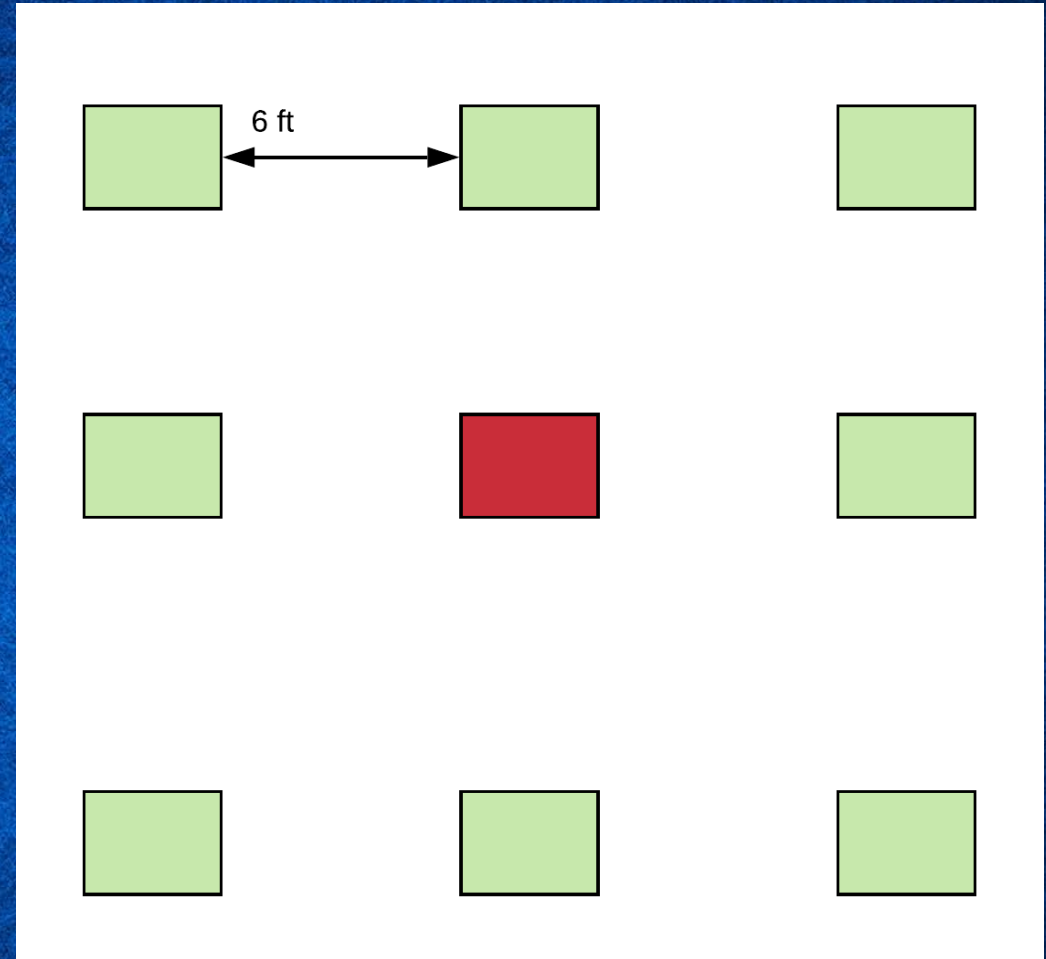


1. Determine when symptoms started (this is called the onset date) and count backwards 48 hours (this is when a person became contagious)
2. Determine all possible ways others could have been exposed to the contagious employee
  - How does the contagious employee get to work (i.e. carpool)?
  - Who works near the contagious employee (i.e. desk/office/station/line)?
  - Are there times they are in a group (i.e. meetings, prep work, projects)?
  - Do they take lunch or breaks with anyone else?
3. Determine for each exposure: Who was in close contact?
  - Close contact = within 6 feet for 15+ minutes over 24 hours OR physical contact like a hug or handshake. (Note: this is true with or without a mask on, indoors or outdoors.)

# Contact Tracing Example

- If positive employee (red box) is placed 6 ft away from others at all times, then everyone (green boxes) self-monitors for 14 days and nobody needs to quarantine

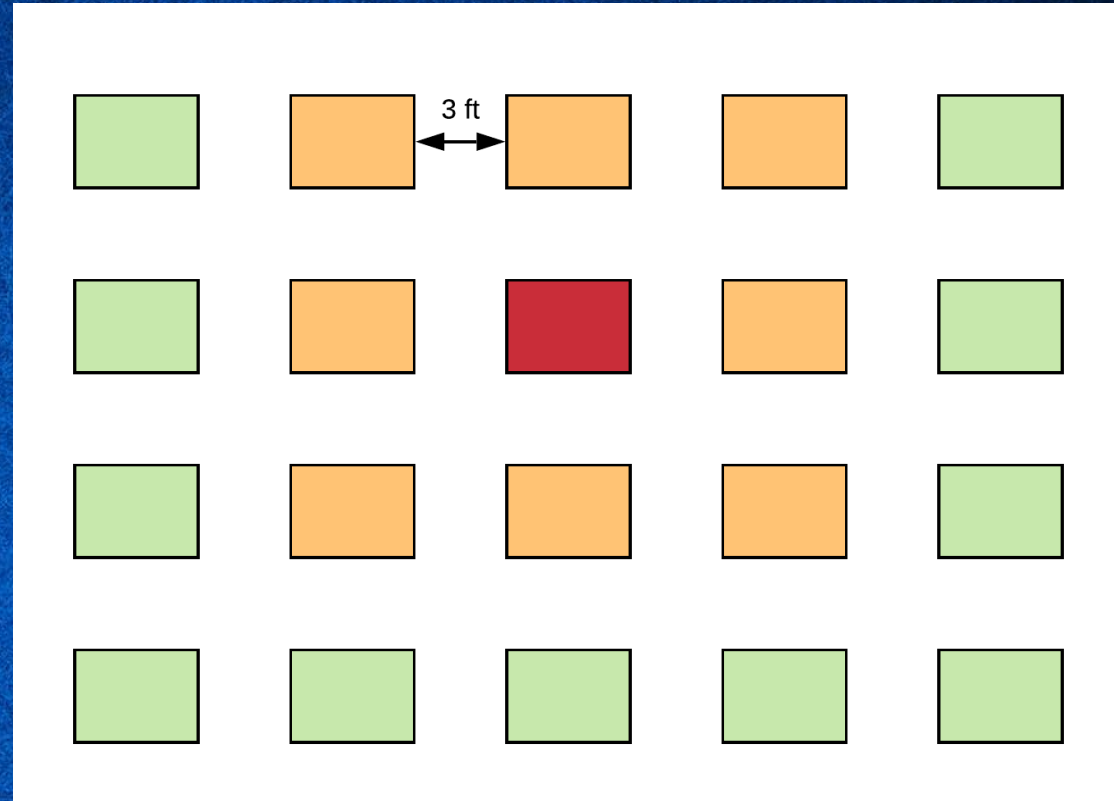
Note: Everyone should be notified to self-monitor without disclosing the name of the positive employee.



# Another Contact Tracing Example

- Positive employee (red box)
- Other employees placed less than 6 ft apart (yellow boxes)
- 8 employees (yellow boxes) need to quarantine
- Everyone else (green boxes) can self-monitor for 14 days

Note: Everyone should be notified of their exposure and need to quarantine or self-monitor without disclosing the name of the positive employee.



## Quarantine Decisions and Masks

- Employees have to quarantine even if everyone is wearing a mask
- Wearing a mask reduces the likelihood of contracting COVID-19 but does not “get you out” of quarantine

# Determining When Someone Can Return to Work (Ending Isolation)

Per CDC at <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/isolation.html>

I think or know I had COVID-19, and I had symptoms

You can be with others after

- At least 10 days since symptoms first appeared **and**
- At least 24 hours with no fever without fever-reducing medication **and**
- Other symptoms of COVID-19 are improving\*\*Loss of taste and smell may persist for weeks or months after recovery and need not delay the end of isolation

I tested positive for COVID-19 but had no symptoms

If you continue to have no symptoms, you can be with others after:

- 10 days have passed since the date you had your positive test

# Determining Full Quarantine (Safest Option)

- Determine the date of last close contact
- Figure out two weeks from that date (for example, Sunday to Sunday two weeks later)
- 14-day full quarantine runs through that full two-week time period
- The following day they can return to work/regular life if they did NOT test positive or develop COVID symptoms.

Note: Encourage employees to inform management if they have been exposed outside of work.



# Two Options for Shortening Quarantine

**7 Day Option with Negative Test:** Quarantine can end after seven (7) days from the last COVID-19 close contact only if all the following conditions have been met:

- The person seeks a COVID-19 test no sooner than day five (5) following their last close contact exposure and the test is negative.
- The person is not experiencing COVID-19 symptoms.
- The person continues to self-monitor for COVID-19 symptoms and wears a mask through day 14.

**10 Day Option:** Quarantine can end after ten (10) days from the last COVID-19 close contact without a negative test only if all the following conditions have been met:

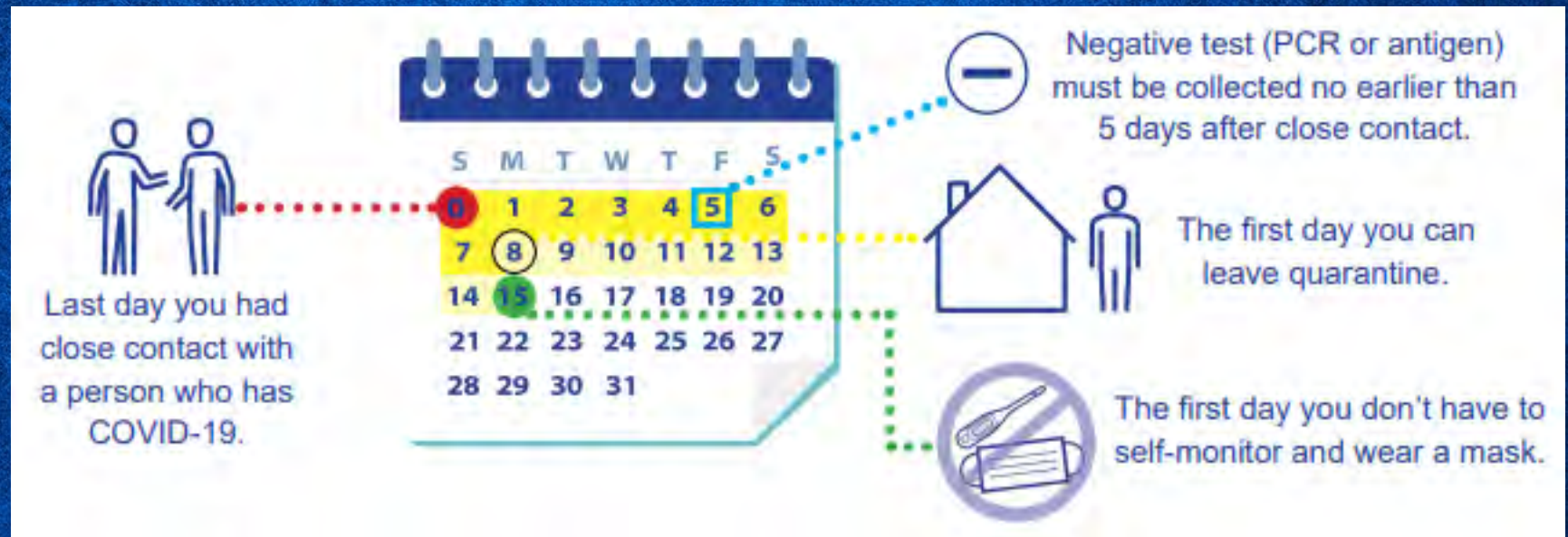
- The person is not experiencing COVID-19 symptoms.
- The person continues to self-monitor for COVID-19 symptoms and wears a mask through day 14.

## Two Important Notes:

- If a person starts having COVID-19 symptoms or tests positive, then they need to switch to a 10-day isolation instead. The 10-day isolation starts when symptoms began (or when they were tested if there were no symptoms).
- If a person can't meet the conditions (e.g. a young child that can't wear a mask), they need to complete a full 14-day quarantine.

# Determining Shorter Quarantines – 7 Day Option

- Determine the date of last close contact
- Figure out 5 days from the last close contact to know the earlier date for testing
- If test is negative, the quarantine runs through day 7 – day 8 is the first day the person can leave quarantine
- Still need to self-monitor for symptoms and wear a mask for days 8-14 – day 15 is the first day that no additional precautions are necessary.



# Determining Shorter Quarantines – 10 Day Option

- Determine the date of last close contact
- Quarantine runs through day 10 – day 11 is the first day the person can leave quarantine
- Still need to self-monitor for symptoms and wear a mask for days 11-14 – day 15 is the first day that no additional precautions are necessary.





# Two Important Notes:

- If a person can't meet the criteria they come with the 7-day or 10-day quarantine options (e.g. a young child that can't wear a mask), they need to complete a full 14-day quarantine.
- Quarantine stops and isolation begins if a person starts having COVID-19 symptoms or tests positive. Day zero of the 10-day isolation period starts from the day symptoms began (or on the day they were tested if there were never any symptoms).

**Situation 1: How long does a person have to quarantine if they are living with someone who has COVID-19 and cannot separate?**

# Situation 1: How long does a person have to quarantine if they are living with someone who has COVID-19 and cannot separate?

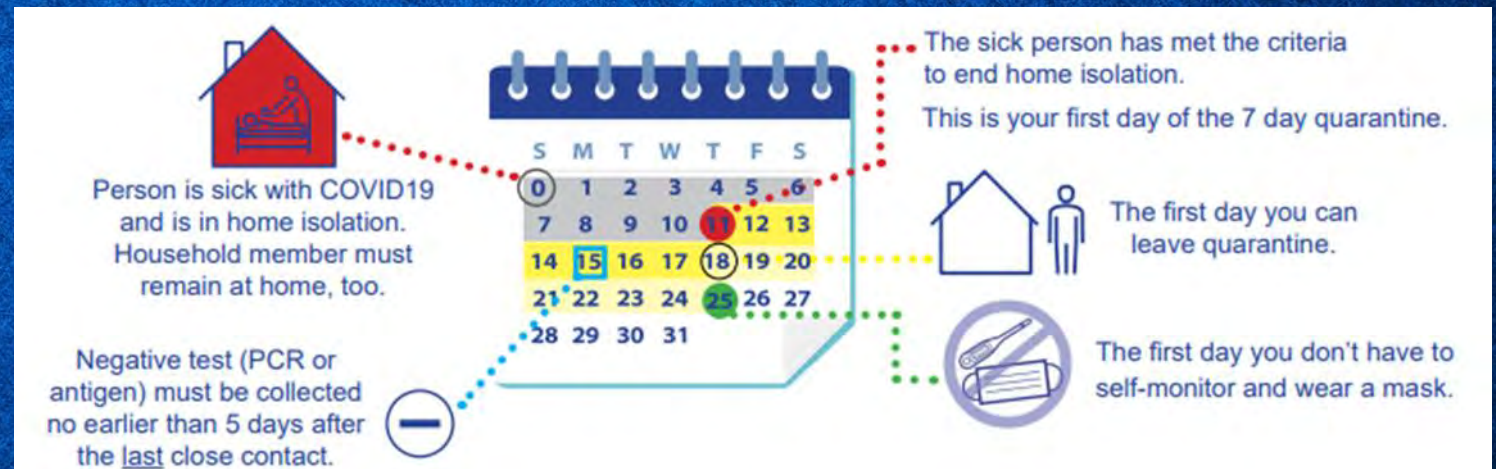
**ANSWER – 17 TO 24 DAYS**

REMEMBER – Quarantine can end after 7 to 14 days from the LAST close contact exposure.

If the person can't separate from the COVID+ household member (different bedrooms and bathrooms plus no close contact), the person is in quarantine during the COVID+ household member's 10-day infectious (isolation) period and THEN their 7-to-14-day quarantine period begins.

The total quarantine time ends up being 10 days + 7 – 14 days.

Note: Testing also need to take place 5 days after the last close contact exposure which in this situation is on day 15.



**Situation 2: An employee has been in close contact to a COVID-19 positive person and is reporting COVID-19 symptoms but doesn't have test results yet. Do they need to isolate or can they work until they get test results?**

**Situation 2: An employee has been in close contact to a COVID-19 positive person and is reporting COVID-19 symptoms but doesn't have test results yet. Do they need to isolate or can they work until they get test results?**

**ANSWER:**

**THE EMPLOYEE SHOULD HAVE BEEN IN QUARANTINE ALREADY:**

- IF THEIR RESULTS ARE NEGATIVE (AND WERE COLLECTED ON AT LEAST DAY 5 AFTER LAST EXPOSURE), THEY CAN LEAVE QUARANTINE ON DAY 7.**
- IF THEIR RESULTS ARE POSITIVE, THEY NEED TO ISOLATE FOR 10 DAYS FROM WHEN SYMPTOMS STARTED**

**Situation 3: An employee is reporting COVID symptoms but has no known close contact to anyone with COVID-19 and doesn't have test results yet. Do they need to isolate or can they work until they get test results?**

# Situation 3: An employee is reporting COVID symptoms\* but has no known close contact to anyone with COVID-19 and doesn't have test results yet. Do they need to isolate or can they work until they get test results?

**ANSWER – THEY NEED TO STAY HOME AND ISOLATE. CLOSE CONTACTS NEED TO QUARANTINE.**

- IF THE TEST RESULTS ARE POSITIVE, THE EMPLOYEE NEED TO COMPLETE A 10-DAY ISOLATION AND CLOSE CONTACTS NEED TO COMPLETE A QUARANTINE.
- IF THE TEST RESULTS ARE NEGATIVE, THE EMPLOYEE CAN RETURN TO WORK AS LONG AS THEY HAVE HAD NO FEVER OR 24 HOURS AND SYMPTOMS HAVE IMPROVED. CLOSE CONTACTS CAN END THEIR QUARANTINE.

\*State's Directed Health Measure specifies that COVID symptoms requiring isolation (or quarantine if a close contact) are cough, shortness of breath/difficulty breathing or loss of taste/smell OR two of the other COVID symptoms.

To determine if symptoms require isolation, feel free to consult the Info Line at 402-444-3400.

**Public Health Recommendations for COVID-19 Employee Screening, Exclusion, and Return to Work**

The following symptom screening criteria for ill employees is based on the most current research and state requirements. Because people with COVID-19 have reported a wide range of symptoms – ranging from mild symptoms to severe illness, the following criteria has been developed to assist employers in identifying presumptive positive COVID-19 cases.

Employees with fever and/or one or more of the following symptoms: a new cough, new onset of shortness of breath or new loss of taste or smell (State's Direct Health Measure).

The CDC also lists fatigue, muscle aches, headache, sore throat, congestion or runny nose, nausea or vomiting, and diarrhea as other common symptoms of COVID.

Employees who have these symptoms should stay home and be excluded from work until they meet the Return to Work criteria.

**Return to Work Criteria**

Employees who tests positive:	Symptomatic employees not tested:	Symptomatic employees who tests negative:
<b>Exclude for:</b> <ul style="list-style-type: none"><li>- At least 10 days since symptoms first appeared</li></ul> <b>AND:</b> <ul style="list-style-type: none"><li>- At least 24 hours with no fever without fever reducing medication</li></ul> <b>AND:</b> <ul style="list-style-type: none"><li>Symptoms have improved</li></ul>	<b>Exclude for:</b> <ul style="list-style-type: none"><li>- At least 10 days since symptoms first appeared</li></ul> <b>AND:</b> <ul style="list-style-type: none"><li>- At least 24 hours with no fever without fever-reducing medication</li></ul> <b>AND:</b> <ul style="list-style-type: none"><li>Symptoms have improved</li></ul> <p>May return to work before 10 days if a doctor establishes an alternative diagnosis and presents a doctor's note.</p>	<b>Exclude until fever free for 24 hours</b> <b>AND:</b> <ul style="list-style-type: none"><li>Symptoms have improved</li></ul> <p><b>Note:</b> People who test negative but had close contact with someone who is COVID+ still need to complete their 7-14 day quarantine.</p>

**Note:** If the employee tests positive but has no symptoms, they can return 10 days after they were tested.

**There is no reason for an employee to get a "negative test" to be cleared for the return to work.** A COVID-19 positive individual does not need a repeat a COVID-19 test or a doctor's note in order to return.

For help in making Screening, Exclusion, and Return to Work decisions, or for other questions, please contact the Douglas County Health Department at 402.444.3400.

12/07/20

**Situation 4: If an employee is an essential/critical worker, do they need to isolate or quarantine?**



# Situation 4: If an employee is an essential/critical worker, do they need to isolate or quarantine?

ANSWER – EVERYONE WHO TESTS POSITIVE OR HAS COVID-19 SYMPTOMS NEEDS TO ISOLATE.

ESSENTIAL/CRITICAL INFRASTRUCTURE WORKERS NEED TO STAY AT HOME EXCEPT TO GO TO WORK WHILE UNDER QUARANTINE.

Nebraska has only designated teachers and other educational workers, first responders, and healthcare workers as essential. For all others, the CDC guidance for critical infrastructure workers applies.

## Interim Guidance for Implementing Safety Practices for Critical Infrastructure Workers Who May Have Had Exposure to a Person with Suspected or Confirmed COVID-19

Accessible version: <https://www.cdc.gov/coronavirus/2019-ncov/community/critical-workers/interim-guidance.html>

To ensure continuity of operations of essential functions, CDC advises that critical infrastructure workers may be permitted to continue work following potential exposure to COVID-19, provided they remain asymptomatic and additional precautions are implemented to protect them and the community.

A potential exposure means being a household contact or having close contact within 6 feet of an individual with confirmed or suspected COVID-19. The timeframe for having contact with an individual includes the period of time of 48 hours before the individual became symptomatic.

Critical infrastructure workers who have had an exposure but remain asymptomatic should adhere to the following practices prior to and during their work shift:

- ▶ **Pre-Screen:** Employers should measure the employee's temperature and assess symptoms prior to them starting work. Ideally, temperature checks should happen before the individual enters the facility.
- ▶ **Regular Monitoring:** As long as the employee doesn't have a temperature or symptoms, they should self-monitor under the supervision of their employer's occupational health program.
- ▶ **Wear a Mask:** The employee should wear a face mask at all times while in the workplace for 14 days after last exposure. Employers can issue facemasks or can approve employees' supplied cloth face coverings in the event of shortages.
- ▶ **Social Distance:** The employee should maintain 6 feet and practice social distancing as work duties permit in the workplace.
- ▶ **Disinfect and Clean work spaces:** Clean and disinfect all areas such as offices, bathrooms, common areas, shared electronic equipment routinely.

If the employee becomes sick during the day, they should be sent home immediately. Surfaces in their workspace should be cleaned and disinfected. Information on persons who had contact with the ill employee during the time the employee had symptoms and 2 days prior to symptoms should be compiled. Others at the facility with close contact within 6 feet of the employee during this time would be considered exposed.

Employers should implement the recommendations in the Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 to help prevent and slow the spread of COVID-19 in the workplace. Additional information about identifying critical infrastructure during COVID-19 can be found on the DHS CISA website or the CDC's specific First Responder Guidance page.

### INTERIM GUIDANCE

This interim guidance pertains to critical infrastructure workers, including personnel in 16 different sectors of work including:

- ▶ Federal, state, & local law enforcement
- ▶ 911 call center employees
- ▶ Fusion Center employees
- ▶ Hazardous material responders from government and the private sector
- ▶ Janitorial staff and other custodial staff
- ▶ Workers – including contracted vendors – in food and agriculture, critical manufacturing, informational technology, transportation, energy and government facilities

### ADDITIONAL CONSIDERATIONS

- ▶ Employees should not share headsets or other objects that are near mouth or nose.
- ▶ Employers should increase the frequency of cleaning commonly touched surfaces.
- ▶ Employees and employers should consider pilot testing the use of face masks to ensure they do not interfere with work assignments.
- ▶ Employers should work with facility maintenance staff to increase air exchanges in room.
- ▶ Employees should physically distance when they take breaks together. Stagger breaks and don't congregate in the break room, and don't share food or utensils.

# More About Critical Infrastructure Workers\*

## IF YOU ARE AN EMPLOYER OF CRITICAL INFRASTRUCTURE WORKERS EXPOSED TO COVID-19:

- Take employee's temperatures and assess symptoms prior to their starting work
- Employee(s) must wear face masks at all times
- Employees must practice social distancing of 6 feet or greater
- If an employee becomes sick during the day, send them home immediately

*Reminder – These employees are allowed to work but should be otherwise staying at home when not working.*

\*CDC definition of “essential workers” = critical infrastructure workers, including personnel in 16 different sectors of work including: Federal, state, & local law enforcement; 911 call center employees; Fusion Center employees; Hazardous material responders from government and the private sector; Janitorial staff and other custodial staff; Workers – including contracted vendors – in food and agriculture, critical manufacturing, informational technology, transportation, energy and government facilities

# Other Contact Tracing Tips

- If there are 2 or more positive cases within the workplace found within a short period of time report it to DCHD's Epidemiology department (402-444-7214).
- When notifying employees who are close contacts need to quarantine do not identify the positive case. (There is nothing you can do about people making assumptions). Also, use they/their pronouns (not him/her pronouns).
- It is recommended that employees identified as close contacts should get tested for COVID-19 no sooner than 5 days after last date of contact.

Employees that have previously had COVID-19 do not need to quarantine if they are exposed within 3 months of when they were positive (based on their test date).

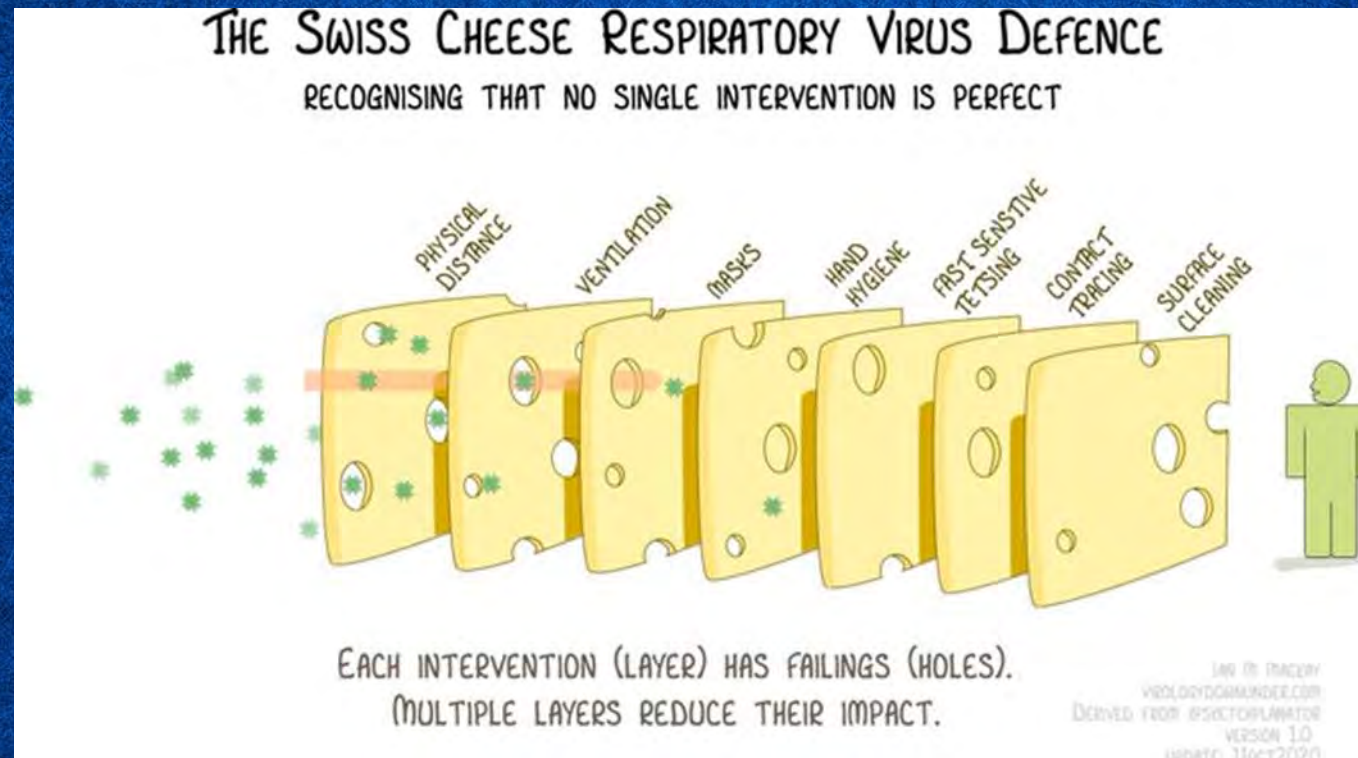
# Reminder – An Ounce of Prevention...

## Effective strategies for preventing the spread of COVID-19 in the workplace include:

- Physical distancing (separation of all employees, customers, visitors by at least 6 feet)
- Requiring masks to be worn (including making sure they are worn properly)
- Frequent hand washing plus providing hand sanitizer
- Daily cleaning and disinfection of high-touch surfaces
- Ensuring HVAC systems are in good working order and ventilation has been increased where possible.
- Establishing flexible sick leave policies that allow employees to stay home when ill and to stay home to care for sick household members.
- Symptom checks before employees enter the workspace.
- Immediate exclusion from work of symptomatic staff and immediate quarantine of all workplace close contacts.

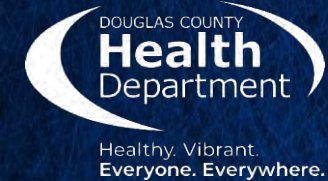
# Remember the Swiss Cheese Model

According to the model, each intervention represents a slice of Swiss cheese. Like slices of Swiss cheese have holes in them, no intervention is foolproof alone. However, when a set of them like physical distancing, ventilation, masks, hygiene, fast sensitive testing, contact tracing and surface cleaning are implemented together, they are effective in bringing the outbreak under control. Multiple layers of intervention can be successful in making up for each intervention's individual deficiencies.



Questions?

The Health Department's COVID-19 Information Line is open  
7 days a week: 8:30am – 4:00pm  
Call 402-444-3400



[www.douglascountyhealth.com](http://www.douglascountyhealth.com)



For more resources, please see:

- <https://www.douglascountyhealth.com/covid-19/109-covid-19/801-contact-tracing-for-covid-19>
- <https://www.douglascountyhealth.com/covid-19/109-covid-19/774-school-workplace-reopening-guidance-information>