COVID-19 and Minnesota Firefighters: How to keep your departments running
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PROTECTING, MAINTAINING AND IMPROVING THE HEALTH OF ALL MINNESOTANS
We don’t know what we don’t know about COVID-19

“Corona Virus Hijacks the Body from Head to Toe, Perplexing Doctors” The Wall Street Journal, 5/7/2020

- ACE-2 receptors on many tissues
- Loss of taste and/or smell
- Encephalitis
- Cardiac disease and heart attacks
- Kidney disease
- COVID Toes
- Large vessel strokes in 30-40 yr olds
- Kawasaki-like disease in children
- New onset diabetes
- Chronic symptoms/ long haulers
How COVID-19 is Spread

Person-to-person spread:

- Close contact (within about 6 feet)
- Aerosols produced when an infected person coughs, sneezes, or even talks

It may be possible to spread COVID-19 by touching a surface that has the virus and then touching your own mouth, nose, or eyes, but this is not the main way the virus spreads.
MN cases 2/11/2021; 470,803 cases; 24,989 hosp; 6,343 deaths

Holding our own in MN!
COVID-19 cumulative incidence per 100,000 in Minnesota, 2/11/2021; n = 470,803 COVID-19 cases
Weekly case rate by county of residence in Mn per 10,000 population
Workplaces

- We have seen a shift in workplace epidemiology
- Early in the pandemic there were large outbreaks in meat packing plants, and large distributors and manufacturers
- Now we see clusters of cases in small and medium sized workplaces of all types, located all over the state
- Workplace transmission is less often the source of infection than spillover from community spread
Fire Departments are workplaces too

- To date, MDH has identified 394 COVID-19 cases who report working for fire departments in Minnesota:
  - 333 firefighters
  - 24 additional first responders who work out of fire departments
  - 17 Admin and other positions
  - 20 unspecified positions
- These firefighters and staff represent 186 different stations/departments
  - Average of 2 COVID-positive employees per station/department
  - Range of 1 to 32 COVID-positive employees per station/department
COVID: Special concerns with firefighting

• Regular interactions with the public
• Difficult to distance for certain job duties
• Difficult to use effective PPE for certain job duties
• Vehicles are high risk when an occupant has COVID-19
• Trainings sometimes involve contact
What Firefighters and EMS Providers Need to Know about COVID-19

Coronavirus disease 2019 (COVID-19) is a respiratory illness caused by a virus called SARS-CoV-2. Symptoms often include cough, shortness of breath, fever, chills, muscle pain, sore throat, or new loss of taste or smell. Our understanding of how the virus spreads is evolving as we learn more about it, so check the CDC website for the latest information. The virus is thought to spread mainly from person-to-person:

- Between people who are in close contact with one another (within about 6 feet)
- Through respiratory droplets produced when an infected person coughs, sneezes, or talks

Recent studies indicate that the virus can be spread by people who are not showing symptoms. It may be possible that a person can get

First Responders
Infection prevention and control practices for healthcare delivery during the pandemic.

EMS Guidance

Wildland Firefighters
Guidance to prevent the spread of COVID-19 while responding to wildland fires.

View FAQs

Fire is critical infrastructure and firefighters are essential workers.

COVID-19 Recommendations for Critical Infrastructure Businesses and Industries

11/09/2020

This updated document clarifies which businesses and industries this document is addressing. It also updates the definition of contact with COVID-19 to make it consistent with recent CDC guidance.

This guidance is for Minnesota critical infrastructure businesses and industries in food and agriculture; veterinary medicine; mining; construction; critical manufacturing; distribution; public utilities; law enforcement; transportation; and community financial banks. This Minnesota guidance does not apply...

https://www.health.state.mn.us/diseases/coronavirus/guidebusiessential.pdf
Most important practices to prevent workplace spread

- Employee screening for symptoms, every employee, every shift
- Careful isolation, contact tracing and quarantine
- Distancing, particularly while coming and going, during breaks and lunch
- Mandatory masking (with face shield when working <6 feet apart)
- Cleaning and disinfection
Best practices: Employee screening is most important

- Effective employee screening is a two-step process
- Initial verbal screening with basic symptom questions +/- temp screen
  - Sore throat, cough, fever or feeling feverish, muscle aches, shortness of breath, loss of taste or smell
- Secondary evaluation to determine if the person is ok to work, or should be sent home for testing, or to medical clinic
Best practices: Employee screening is most important

- The objective is to establish a sustainable system of screening and testing that identifies and excludes ill employees on a continuous basis
  - Low threshold for exclusion and testing as many people with very mild symptoms have COVID-19
- Screening is often skipped in small workplaces
  - People assume that a coworker wouldn’t come to work with COVID symptoms, but that assumption is wrong!
COVID-19 Employee Screening and Testing Recommendations for Industry

Minnesota Department of Health (MDH) recommends that plants and businesses adopt an ongoing, sustainable system of testing based on intensive employee screening with a low threshold for testing symptomatic employees.

Effective employee screening is a two-step process

Step 1
The initial screening involves verbally asking each employee, before every shift, a series of five basic

https://www.health.state.mn.us/diseases/coronavirus/busiscreentest.pdf
When a symptomatic employee is tested for COVID-19:

- The employee should stay home and isolate themselves until test results are available.
- The employee who tests negative:
  - May return to work if their symptoms have improved.
  - Should remain home if still symptomatic, and be evaluated by a health care provider.
Return to work criteria for COVID-positive employees

- Symptomatic COVID-positive employees should stay isolated at home until all three of the following are true:
  - Symptoms have improved, and
  - At least 10 days have passed since symptoms first appeared, and
  - At least 24 hours have passed without fever, without the use of fever-reducing medications.

- Asymptomatic COVID-positive employees must self-isolate at home for 10 days from the testing date.
Employee Exposure to COVID-19: Contact Tracing Guidelines for Critical Infrastructure Businesses and Industries

11/24/2020

This guidance is for Minnesota critical infrastructure businesses and industries in food and agriculture; veterinary medicine; mining; construction; critical manufacturing; distribution; public utilities; law enforcement; transportation; and community financial banks. This Minnesota guidance does not apply...

https://www.health.state.mn.us/diseases/coronavirus/guidebusinessct.pdf
The purpose of workplace contact tracing is to limit disease spread by identifying coworkers who have been exposed to an infectious employee, then excluding them from the workplace.

The exposed workers are called “contacts” and they “quarantine” away from others, generally at home.

To start, you need the symptom onset or test date of the COVID+ person.
Workplace contact tracing is the responsibility of the employer

- Supervisors and HR personnel have the tools to identify workplace contacts quickly and efficiently
- Highest risk contacts are those who work very closely together, reside in the same home, eat lunch together, or carpool
- Must respect health information
How is workplace contact defined?

- **Contact** is defined as spending a cumulative total of 15 minutes or more within 6 feet of someone who has COVID-19 during their infectious period.

- People with COVID-19 can give the disease to others 2 days before they show symptoms until 10 days after their first symptoms.
  - This is termed the infectious period.
Contact exemption for critical infrastructure

- For critical infrastructure, coworkers can be exempted from this definition of contact:
  - If all individuals were using a face covering \textit{and} a face shield (or)
  - If all individuals were using a face covering \textit{and} there was a physical barrier (ex. full plexi-glass screen) between them during their period of contact
Contact exemption for critical infrastructure
Identify contacts, then exclude them from work

- Minnesota has shorter return-to-work quarantine strategies for critical infrastructure that may be adopted to avoid staffing shortages
  - Quarantine a minimum of 10 days, and test on day 7
  - Quarantine a minimum of 7 days, and test on day 5
Figuring out return-to-work date tricky with household contacts

- When an employee reports that a household member has tested positive for COVID-19
  - You need to know the symptom onset date (or test date) of the household member
- Your employee’s quarantine period starts at the end of their household member’s 10-day isolation period
  - Unless they can separate in the home or elsewhere
    - Then the quarantine period starts as soon as they separate
90 day reprieve from quarantine following positive test

- If an employee has tested positive within the past 3 months, and are later exposed to COVID-19, they don’t need to quarantine:
  

- Related to this, people should not re-test for 3 months after testing positive
  
  - People are infectious for up to 10 days following their first symptom, but can test positive for weeks
  
  - That’s why testing negative should not be a requirement for RTW
  
90 day reprieve from quarantine following vaccination

- Vaccinated people must continue to mask and distance, but

- Vaccinated people who are exposed to someone with COVID-19 are not required to quarantine if they meet the following criteria:
  - Are fully vaccinated (i.e., ≥2 weeks following receipt of the second dose in a 2-dose series, or ≥2 weeks following receipt of one dose of a single-dose vaccine)
  - Are within 3 months following receipt of the last dose in the series
  - Have remained asymptomatic since the current COVID-19 exposure

Best practices: Next in importance is distancing

- COVID-19 is spread from person-to-person through respiratory aerosols
  - 6 feet is approximate depending on size of airspace and ventilation
  - Really tough in small workplaces
  - Watch for areas of the facility where employees congregate and wherever possible innovate fixes to spread people out
  - Critical to spread out during breaks and lunch when masks are off
Best Practices: Next in importance are masks and PPE

- Use of cotton face coverings or surgical masks should be mandatory and enforced
- When possible, use face shields in addition to masks when employees have to work very closely together, and in other situations where barriers or distancing is not possible
- Fit tested N95 or other respirator and PPE when working with known COVID positive people
599,218 people with at least one vaccine dose in MN
  ▪ 177,239 people with completed vaccine series
EMS are in Phase 1a- and hopefully you have been vaccinated
Fire personnel are in Phase 1b under First Responders- up next
  ▪ Contact county health department with questions
If you are over 65, or have another opportunity for vax- take it!

https://www.health.state.mn.us/diseases/coronavirus/vaccine.html
Thank You! Questions?

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