WHAT IS COVID-19?

Coronavirus disease 2019 (abbreviated COVID-19) is an infectious disease caused by the most recently discovered coronavirus, named “SARS-CoV-2”. This new virus and disease were unknown before the outbreak began in Wuhan, China, in December 2019. Coronaviruses are a large family of viruses that are common in people and many different species of animals, including camels, cattle, cats, and bats.

The World Health Organization (WHO) declared that due to the global outbreak of disease, COVID-19 is a pandemic\(^1\). The virus that causes COVID-19 seems to be spreading easily and sustainably in the community (community spread) in affected areas. The virus can cause mild to severe respiratory illness, at times resulting in death, both in healthy adults as well as in elderly people with existing health problems or a weaker immune system.

HOW DOES COVID-19 SPREAD?

New research\(^2\) has indicated that SARS-CoV-2 may spread by respiratory droplets, environmental contact, as well as by fecal-oral transmission. A person starts being contagious during the “incubation period,” the time between catching the virus and beginning to have symptoms of the disease, which is up to 14 days.

Person-to-person spread

COVID-19 is transmitted most efficiently from direct person to person contact, through:

- Respiratory droplets produced when an infected person coughs or sneezes:
  - These droplets can land in the mouths, noses or eyes of people who are nearby or possibly be inhaled into the lungs;

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\(^2\) [https://www.nature.com/articles/s41368-020-0075-9](https://www.nature.com/articles/s41368-020-0075-9)
• Spread is most likely among close contacts (about 6 feet);
  o Close contact\(^3\) is defined as—
    ▪ being within approximately 6 feet (2 meters) of a COVID-19 case for a prolonged period; close contact can occur while caring for, living with, visiting, or sharing a health care waiting area or room with a COVID-19 case; or
    ▪ having direct contact with infectious secretions of a COVID-19 case (e.g., being coughed on, sneezed on).
• Contact with saliva and fecal matter may also be a route of transmission for the COVID-19 virus as well as viral aerosolization.

**Spread from contact with infected surfaces or objects**

It may be possible that a person can get indirect transmission of the COVID-19 virus by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads.

A recent laboratory study by researchers at the National Institutes of Health (NIH), the Centers for Disease Control and Prevention (CDC) and other academic institutions found that viable SARS-CoV-2 virus could be detected:

  - in aerosols up to 3 hours post aerosolization,
  - up to 4 hours on copper,
  - up to 24 hours on cardboard, and
  - up to 2-3 days on plastic and stainless steel.

**WHAT ARE PARTICULATE RESPIRATORS?**

Workers can wear respirators to make sure they do not breathe in infectious substances and become infected with the Coronavirus. The type of respirator workers should wear is called a *particulate respirator*. Surgical masks (like the ones that doctors wear to prevent their saliva from getting on the patient) do not protect workers as they do not fit tight around the face. Employers must follow all of the rules in **OSHA’s Respiratory Protection Standard 29 CFR 1910.134** before requiring workers to wear a respirator.

**HOW DO PARTICULATE RESPIRATORS WORK?**

A particulate respirator protects workers by filtering out particles that are in the air. These particles may contain the coronavirus. Respirators must seal tightly around the nose, mouth, and face for them to work properly. This way, when a worker breathes, the air is pulled through the filter medium before it goes into the worker’s lungs.

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CAN ANY RESPIRATOR BE USED IN THE WORKPLACE?

The National Institute for Occupational Safety and Health (NIOSH) is a federal government agency that is responsible for testing and certifying all respirators used in workplaces in the United States. Under OSHA’s respirator standard, only NIOSH certified respirators can be worn by workers.

Cloth masks and surgical masks are not respirators. A surgical mask does not give workers any protection from breathing in particles. These masks do not have a tight seal around the nose, mouth, and face. Particles that contain the virus can easily get through the gaps between the mask and face and enter the lungs. Also, the material used in surgical masks is not made to filter small particles. Surgical masks are not certified by NIOSH as respirators. OSHA does not allow them to be used in the workplace to protect workers from breathing in chemicals or particles. Surgical masks must never be used to prevent workers from breathing in virus particles!

ARE THERE DIFFERENT TYPES OF PARTICULATE RESPIRATORS?

Three types of particulate respirators will work to protect workers from breathing in the virus:

- **Disposable filtering facepieces**: If employees are working with bioaerosols, oils or mists, these respirators should be used once and discarded after use. In non-healthcare sectors, these respirators can be reused until visibly soiled or structurally damaged.⁴

- **Reusable elastomeric respirators**: These respirators can be used again after cleaning, disinfecting and replacing the used filters per manufacturer recommendations.

- **Powered air-purifying respirators** (PAPRs). These respirators run off of a battery that pulls the contaminated air through the filter. They can be used again after cleaning, disinfecting and replacing used filters.

Each of these particulate filtering respirators is rated by their ability to filter out small particles: 95%, 99%, and 100%.

OSHA GUIDELINES FOR CHOOSING RESPIRATORY PROTECTION AGAINST COVID-19?

Employers are obligated to provide their workers with PPE needed to keep them safe while performing their jobs. The types of PPE required during a COVID-19 outbreak will be based on the risk of being infected with SARS-CoV-2 while working and job tasks that may lead to exposure. When selecting PPE, consider factors such as function, fit, decontamination ability, disposal, and cost. Sometimes, when PPE will have to be used repeatedly for a long time, a more expensive and durable type of PPE may be less expensive overall than disposable PPE. Each employer should select the combination of PPE that protects workers specific to their workplace.

⁴ https://www.jhsph.edu/covid-19/articles/the-right-mask-for-the-task.html
“High exposure risk jobs” are those with high potential for exposure to known or suspected sources of COVID-19. Very high exposure risk jobs are those with high potential for exposure to known or suspected sources of COVID-19 during specific medical, postmortem, or laboratory procedures that involve aerosol generation or specimen collection/handling. Most workers at high or very high exposure risk likely need to wear gloves, a gown, a face shield or goggles, and either a face mask or a respirator, depending on their job tasks and exposure risks. Very High or High-Risk Workers, including those who work within 6 feet of patients known to be, or suspected of being, infected with SARS-CoV-2 and those performing aerosol-generating procedures, need to use respirators.5:

- When disposable N95 filtering facepiece respirators are not available, consider using other respirators that provide greater protection and improve worker comfort. Other types of acceptable respirators include an R/P95, N/R/P99, or N/R/P100 filtering facepiece respirator; an air-purifying elastomeric (e.g., half-face or full-face) respirator with appropriate filters or cartridges; powered air-purifying respirator (PAPR) with high-efficiency particulate arrestance (HEPA) filter; or supplied-air respirator (SAR). See CDC/NIOSH guidance for optimizing respirator supplies at www.cdc.gov/coronavirus/2019-ncov/hcp/respirators-strategy.
- Consider using PAPRs or SARs, which are more protective than filtering facepiece respirators, for any work operations or procedures likely to generate aerosols (e.g., cough induction procedures, some dental procedures, invasive specimen collection, blowing out pipettes, shaking or vortexing tubes, filling a syringe, centrifugation).
- Use a surgical N95 respirator when both respiratory protection and resistance to blood and body fluids are needed.
- Face shields may also be worn on top of a respirator to prevent bulk contamination of the respirator. Certain respirator designs with forward protrusions (duckbill style) may be difficult to properly wear under a face shield. Ensure that the face shield does not prevent airflow through the respirator.
- Consider factors such as function, fit, ability to decontaminate, disposal, and cost. OSHA’s Respiratory Protection eTool provides basic information on respirators such as medical requirements, maintenance, and care, fit testing, written respiratory protection programs, and voluntary use of respirators, which employers may also find beneficial in training workers at www.osha.gov/SLTC/etools/respiratory. Also, see NIOSH respirator guidance at www.cdc.gov/niosh/topics/respirators.
- Respirator training should address selection, use (including donning and doffing), proper disposal or disinfection, inspection for damage, maintenance, and the limitations of respiratory protection equipment. Learn more at www.osha.gov/SLTC/respiratoryprotection.

The appropriate form of respirator will depend on the type of exposure and the transmission pattern of COVID-19. See the NIOSH “Respirator Selection Logic” at www.cdc.gov/niosh/docs/2005-100/default.html or the OSHA “Respiratory Protection eTool” at www.osha.gov/SLTC/etools/respiratory.

Medium exposure risk workers may need to wear some combination of gloves, a gown, a face mask, and/or a face shield or goggles.

- PPE ensembles for workers in the medium exposure risk category will vary by work task, the results of the employer’s hazard assessment and the types of exposures workers have on the job.

WORKER FRIENDLY EMPLOYMENT POLICIES

As a union, the rights and benefits we have fought for can help to prevent disease and help people who do become ill, including:

- Adequate, non-punitive sick leave policies that encourage sick workers to stay at home without the loss of pay, benefits, seniority or other benefits.
- Family leave policies that allow people to stay home to take care of household members.
- Financial remedies for unemployment scenarios, where people are not able to work or are required to work overtime to take care of patients.
- Access to quality and affordable health care.
- Protection from stigma and discrimination.
- A rapid response system to share communications with employees.

WHERE TO FIND MORE INFORMATION AND RESOURCES

Stay informed. Talk to your employer, supervisor, and union representative. See these sources for more information on worker exposures to COVID-19:

- IBT: teamster.org/covid-19: https://teamstersafety.org/testing/covid-19/
- NIOSH Workplace Safety and Health Topic: www.cdc.gov/niosh/emres/2019_ncov.html
- CDC Cleaning and Disinfection Recommendations
- Whistleblower Protection for Public Transportation Agency