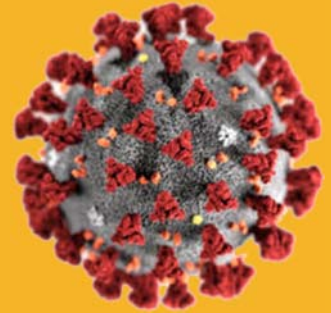




TEAMSTERS SAFETY & HEALTH Coronavirus



Wastewater Workers COVID-19, SARS-CoV-2

(Updated March 27, 2020)

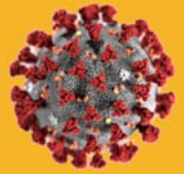
This is a rapidly evolving situation. This fact sheet will be updated online as needed. See links at the end of this fact sheet for the most up-to-date information.

COVID-19 is spreading rapidly within the United States. The outbreak has been declared a national emergency in the United States and a global pandemic by the World Health Organization. Protecting essential workers who engage in local and regional parcel delivery should be a priority so that they can continue to provide goods and services without getting sick or spreading the infection to their communities.

The IBT Safety and Health Department is continuously monitoring the COVID-19 pandemic and is committed to providing Teamsters locals and affiliates with the information they need to protect our members and the communities they serve. In March, the IBT signed on to a petition asking the Occupational Safety and Health Administration (OSHA) to issue an Emergency Temporary Standard for Infectious Diseases to ensure that workers will be protected from all infectious diseases, including COVID-19. Also, the IBT will continue to request the federal government, as well as state and local governments, to provide the resources needed to protect patients and healthcare workers from COVID-19.

Unions have a key role in standing up for the right of workers to a safe and healthy workplace. Local union representatives can use a variety of means to accomplish this, including making information requests and demanding to bargain on occupational health preparedness plans, infection control protocols, training for workers, and the supply and sufficiency of personal protective equipment.

For more information, contact the IBT Safety and Health Department at (202) 624-6960 or visit our website: <https://teamstersafety.org/testing/covid-19/>



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 pandemic¹. 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 research² 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

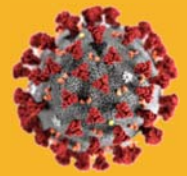
COVID-19 is transmitted most efficiently from direct person to person contact, through:

- 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;
- Spread is most likely among close contacts (about 6 feet);
 - Close contact³ 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.

¹ <https://www.who.int/dg/speeches/detail/who-director-general-s-opening-remarks-at-the-media-briefing-on-covid-19---11-march-2020>

² <https://www.nature.com/articles/s41368-020-0075-9>

³ <https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html>



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 THE SYMPTOMS OF COVID-19?

According to the World Health Organization (WHO), "Most patients (80%) experienced mild illness...approximately 14% experienced severe disease and 5% were critically ill." Older people and those with underlying medical problems like high blood pressure, heart problems, diabetes, lung disease, or cancer are more likely to develop serious illnesses.

The following symptoms⁴ may appear 2-14 days after exposure. These symptoms are usually mild and begin gradually:

- Fever
- Dry Cough
- Fatigue
- Shortness of breath

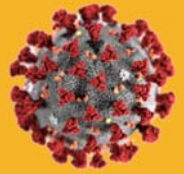
You should seek immediate help if you experience any of these emergency warning signs:

- Difficulty breathing or shortness of breath;
- Persistent pain or pressure in the chest
- New confusion or inability to arouse
- Bluish lips or face

IS THERE A VACCINE, DRUG, OR TREATMENT FOR COVID-19?

To date, there is no vaccine and no specific antiviral medicine to prevent or treat COVID-2019. Possible vaccines and specific drug treatments to prevent and treat COVID-19 are under investigation but will take months of clinical trials before they become safely and widely available. Antibiotics do not work against COVID-19 because antibiotics only work on bacterial infection. People with serious illnesses should be hospitalized where medication is given to treat symptoms like fever and pain, supportive care (IV Fluids) will be administered as needed to support the body's immune system, and possible ventilator use to help with breathing.

⁴ <https://www.cdc.gov/coronavirus/2019-ncov/downloads/COVID19-symptoms.pdf>



WHAT ARE THE MOST EFFECTIVE WAYS TO PROTECT WORKERS?

Measures for protecting workers from exposure to, and infection with, the novel coronavirus, depend on the type of work being performed and exposure risk, including the potential for interaction with infectious people and contaminated environments (e.g., worksites) or materials (e.g., laboratory samples, waste) that are contaminated with the virus. Workers are best protected when their employer conducts a hazard assessment to identify risk, follows OSHA regulations and best practices in choosing an abatement method for the identified hazard and utilizes the “hierarchy of controls” (see below) in selecting the best method to control the hazard.

OSHA Guidance

OSHA has developed planning Guidance on Preparing Workplaces for COVID-19⁵, based on traditional infection prevention and industrial hygiene practices. It focuses on the need for employers to implement engineering, administrative, and work practice controls and personal protective equipment (PPE). Employers and workers should use this planning guidance to help identify risk levels in workplace settings and to determine any appropriate control measures to implement.

Employers should establish comprehensive workplace plans – in consultation with workers – to identify potential exposure routes, establish controls to mitigate risk and implement training procedures. OSHA standards, including those for PPE (personal protective equipment)(29 CFR 1910.132) and respiratory protection (29 CFR 1910.134), require employers to assess the hazards to which their workers may be exposed. In assessing potential hazards, employers should consider whether their workers may encounter someone infected with COVID-19 in the course of their duties.

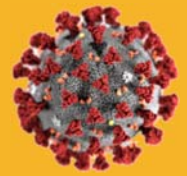
Employers should also determine if the tasks being performed could expose workers to fomites (objects or materials which are likely to carry infection) harboring the COVID-19 virus.

Employers should adopt infection control strategies based on a thorough hazard assessment, following the ‘*hierarchy of controls*’⁶, recommended by OSHA. These controls include using appropriate combinations of:

- **Engineering controls** involve isolating employees from work-related hazards. Where they are appropriate, these types of controls reduce exposure to hazards without relying on worker behavior and can be the most cost-effective solution to implement.
- **Administrative Controls** require action by the worker or employer. Typically, administrative controls are changes in work policy or procedures to reduce or minimize exposure to a hazard, such as:
 - Protocols to clean and disinfect frequently touched objects and surfaces.
 - Training and education.

⁵ <https://www.dir.ca.gov/title8/5199.html>

⁶ https://www.dir.ca.gov/dosh/dosh_publications/ATD-Guide.pdf



- **Safe work practices** are types of administrative controls that include procedures for safe and proper work used to reduce the duration, frequency, or intensity of exposure to a hazard, such as:
 - Emphasis on personal hygiene practices, hand-washing, and respiratory etiquette.
- **Personal protective equipment (PPE)** includes gloves, goggles, face shields, face masks, and respiratory protection, when appropriate. During an infectious disease outbreak, such as COVID-19, recommendations for PPE specific to occupations or job tasks may change depending on geographic location, updated risk assessments for workers, and information on PPE effectiveness in preventing the spread of COVID-19. Employers should check the OSHA and the Centers for Disease Control and Prevention (CDC) websites regularly for updates about recommended PPE⁷.

Depending on the specific work task and occupational exposure to COVID-19, and any other biological or chemical agents, various OSHA requirements may apply. Among the most relevant are:

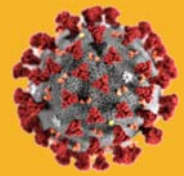
- OSHA's **Personal Protective Equipment (PPE)** standards (in the general industry) which detail requirements when using gloves, eye and face protection, and respiratory protection.
- OSHA's **Hazard Communication standard** (in the general industry), requires employers to protect their workers who are exposed to hazardous chemicals. Employers should be aware that products used for cleaning and disinfection of surfaces could contain hazardous chemicals. The Centers for Disease Control and Prevention (CDC) recommends using disinfectants that meet the Environmental Protection Agency's (EPA) criteria for use against SARS-CoV-2.
- **“OSHA's Bloodborne Pathogens standard** applies to occupational exposure to human blood and other potentially infectious materials that typically do not include respiratory secretions that may transmit COVID-19. However, the provisions of the standard offer a framework that may help control some sources of the virus, including exposures to body fluids (e.g., respiratory secretions) not covered by the standard.”
- OSHA's **recordkeeping requirements** at 29 CFR Part 1904 mandate covered employers record certain work-related injuries and illnesses on their OSHA 300 log. COVID-19 can be a recordable illness if a worker is infected as a result of performing their work-related duties.

What Steps Should My Employer Take?

Your employer should develop a COVID-19 **health and safety plan** to protect employees. This plan should be shared with you and your coworkers and should:

- Actively encourage **sick employees** to stay home. Employees should stay home until they are free of fever (100.4° F [38° C] or greater), and any other symptoms for at least 24 hours, without the use of fever-reducing or other symptom-altering medicines (e.g. cough suppressants). If sick, call your primary care physician before visiting their office.
- Provide information on **who to contact** if you become sick.

⁷ <https://www.osha.gov/SLTC/covid-19/standards.html>



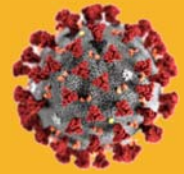
- **Designate a person** who is responsible for responding to COVID-19 concerns. You should know who this person is and how to contact them.
- Provide employees with the **right information** about COVID-19, how it spreads, and the risk of exposure.
- Conduct **worksite assessments** to identify COVID-19 prevention strategies.
- To keep workers at a safe social distance, consider operational changes that would implement the 6ft clearance recommended by CDC's social distancing guidance⁸.
- **Provide personal protective equipment** if employees are likely to touch contaminated work surfaces, expected to make contact with body fluids, or if employees are required to physically contact customers. Single-use gloves should be carefully removed and discarded after each use, reusable work gloves should be disinfected per manufacturer instructions. Ideally, single-use respirators should be disposed of when visibly contaminated or there is an obvious loss of structural integrity. The employee should immediately wash their hands after removing any PPE.
- Provide employees with **training on good hand-washing practices** and other routine infection control precautions. This will help reduce the spread of many diseases, including COVID-19.
- Reach out to **local public health officials** to establish ongoing communications to facilitate access to relevant information before and during a local outbreak.

What should employees do to protect themselves?

Regularly practice proper hand hygiene

- **Hand hygiene** is one of the single most important infection control measures. Wash your hands with soap and water, when available, for 20 seconds, particularly when hands are visibly soiled.
- If soap and water are not available regularly, use an **alcohol-based hand sanitizer** containing at least 60% alcohol. Cover all surfaces of your hands and rub them together until they feel dry.
- Key times to clean hands include:
 - Before beginning a work break and at the end of the shift.
 - After touching other commonly touched surfaces, such as time clocks, door handles.
 - After assisting a passenger.
 - After blowing one's nose, coughing, or sneezing.
 - After using the restroom.
 - Before eating or preparing food.
- **Avoid touching your eyes, nose, and mouth** with unwashed hands or when wearing gloves.
- **Avoid close contact** (i.e., within 6 feet) with customers.
- **Avoid touching surfaces** often touched by **transit passengers**.
- **Do not touch surfaces** contaminated by **body fluids**.
- **Use gloves** if touching surfaces known or potentially know to be contaminated with infectious substances.
- **Disinfect** shared surfaces, tools and equipment before and after use.

⁸ <https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html>



SPECIFIC GUIDANCE FOR WASTEWATER MANAGEMENT

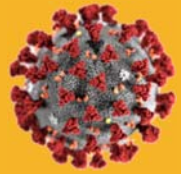
The disinfection protocols used in wastewater treatment facilities typically include the use of hypochlorite (chlorine), peracetic acid, or ultraviolet irradiation, all of which are effective on Coronaviruses.

The routine worker protective measures that are implemented in wastewater treatment facilities are sufficient to protect wastewater management employees from Coronavirus, other viruses, and bacteria. However, it is critically important for wastewater treatment plant workers to follow these routine practices to prevent exposure to wastewater, including using the engineering and administrative controls, safe work practices, and Personal Protective Equipment (PPE) normally required for work tasks when handling untreated wastewater.ⁱ

BASIC HYGIENE PRACTICE FOR WORKERS

To reduce the risk exposure to COVID-19 and other infectious substances and the following guidelines should be followed by workers and employers.ⁱⁱ

- Immediately wash hands with soap and water after handling human waste or sewage.
- Use alcohol-based hand sanitizer (containing at least 60% alcohol) if soap and water are not available.
- Avoid touching face, mouth, eyes, nose, or open sores and cuts while handling human waste or sewage.
- Wash your hands with soap and water: before eating or drinking and before and after using the toilet.
- Before eating, removed soiled work clothes and eat in designated areas away from human waste and sewage-handling activities.
- Do **not** smoke or chew tobacco or gum while handling human waste or sewage.
- Keep open sores, cuts, and wounds covered with clean, dry bandages.
- Gently flush eyes with potable water if human waste or sewage contacts eyes.
- Use waterproof gloves to prevent cuts and contact with human waste or sewage.
- Wear rubber boots at the worksite and during transport of human waste or sewage.
- Remove rubber boots and work clothes before leaving the worksite.
- Wear clean uniforms or work clothing daily



WASTEWATER WORKER PROTECTION⁹

Engineering Controls

- Use physical barriers to prevent worker exposure to splashes or sprays of potentially contaminated wastewater.
- Enclose processes that may generate potentially infectious aerosols (i.e. mixing zones, tank discharge points, pressurized lines).
- Use HEPA filter ventilation equipment to remove contaminated air from the work environment.

Administrative Controls/ Safe Work Practices

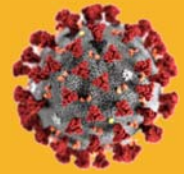
- Wash hands with soap and water:
 - Immediately after handling waste or sewage, before and after using the toilet and before eating and drinking.
- Avoid touching face, mouth, eyes, nose, or open sores and cuts while handling sewage.
- Remove work clothes before eating and eat in designated areas.
- Remove work clothes before leaving the worksite.
- Vaccinate as needed for common diseases such as Hepatitis A and B, tetanus, etc.

Personal Protective Equipment

Wastewater workers should be provided proper PPE and training on how to use it, how to properly put on and take off PPE, as well as how to clean/disinfect, maintain, store, and dispose of PPE. Workers should wash hands with soap and water *immediately after* removing PPE. The following PPE is recommended for workers handling human waste or sewage (note PPE can change based on tasks or potential exposures):

- Goggles: to protect eyes from splashes of human waste or sewage.
- A protective face mask or splash-proof face shield: to protect nose and mouth from splashes of human waste or sewage.
- Liquid-repellent
 - Coveralls: to keep human waste or sewage off clothing.
 - Waterproof gloves: to prevent exposure to human waste or sewage.
- Rubber boots: to prevent exposure to human waste or sewage.

⁹ Treatment Plant Operators Magazine, March 5, 2020: https://www.tpomag.com/online_exclusives/2020/03/covid-19-guidance-for-wastewater-workers



WHAT TO DO IF YOU ARE EXPOSED TO WASTE OR SEWAGE

- If sewage contacts your eyes, gently flush with clean water
- Wash cuts and abrasions with soap and water
- Remove contaminated work clothing after exposure, clean before reuse
- Employers should provide post-exposure evaluation and follow-up care, especially for sharps or puncture injuries.

REGULATORY REQUIREMENTS

All workers with reasonably anticipated occupational exposure to COVID-19 should be trained about the sources of exposure to the virus, the hazards associated with that exposure, and appropriate workplace protocols in place to prevent or reduce the likelihood of exposure. Training should include information about how to isolate individuals with suspected or confirmed COVID-19 or other infectious diseases, and how to report possible cases. Training must be offered during scheduled work times and at no cost to the employee.

- Per OSHA regulations (29 CFR 19010.134) workers required to use PPE must be trained. This training includes when to use PPE; what PPE is necessary; how to properly don (put on), use, and doff (take off) PPE; how to properly dispose of or disinfect, inspect for damage, and maintain PPE; and the limitations of PPE. Applicable standards include the PPE (29 CFR 1910.132), Eye and Face Protection (29 CFR 1910.133), Hand Protection (29 CFR 1910.138), and Respiratory Protection (29 CFR 1910.134) standards.
- When the potential exists for exposure to human blood, certain body fluids, or other potentially infectious materials, workers must receive the training required by the Bloodborne Pathogens (BBP) standard (29 CFR 1910.1030), including information about how to recognize tasks that may involve exposure and the methods, such as engineering controls, work practices, and PPE, to reduce exposure.ⁱⁱⁱ

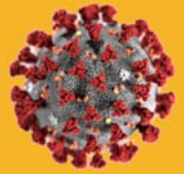
FREQUENTLY ASKED QUESTIONS (FAQS): WASTEWATER MANAGEMENT

Q: Is the COVID-19 virus found in feces?

A: The virus that causes COVID-19 has been detected in the feces of some patients diagnosed with COVID-19. The amount of virus released from the body (shed) in stool, how long the virus is shed, and whether the virus in the stool is infectious are not known.^{iv}

Q: Can the COVID-19 virus spread through sewerage systems?

A: CDC is reviewing all data on COVID-19 transmission as information becomes available. At this time, the risk of transmission of the virus that causes COVID-19 through sewerage systems is thought to be low. Although transmission of COVID-19 through sewage may be possible, there is no evidence to date that this has occurred. This guidance will be updated as necessary as new evidence is assessed.^v



Q: Should wastewater workers take extra precautions to protect themselves from the COVID-19 virus?

A: Wastewater treatment plant operations should ensure workers follow routine practices to prevent exposure to wastewater. These include using engineering and administrative controls, safe work practices, and PPE normally required for work tasks when handling untreated wastewater. No additional COVID-19–specific protections are recommended for employees involved in wastewater management operations, including those at wastewater treatment facilities.^{vi}

EMPLOYER RESPONSIBILITIES

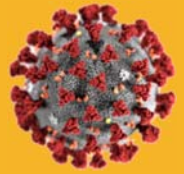
Under the Occupational Safety and Health law, employers have a responsibility to provide a safe workplace. This is a summary of key employer responsibilities:

- Provide a workplace free from serious recognized hazards and comply with standards, rules, and regulations issued under the Occupational Safety and Health Act.
- Examine workplace conditions to make sure they conform to applicable [OSHA standards](#).
- Make sure employees have and use safe tools and equipment and properly maintain this equipment.
- Use color codes, posters, labels or signs to warn employees of potential hazards.
- Establish or update operating procedures and communicate them so that employees follow safety and health requirements.
- Employers must provide safety training in a language and vocabulary workers can understand.
- Employers with hazardous chemicals in the workplace must develop and implement a written hazard communication program and train employees on the hazards they are exposed to and proper precautions (and a copy of safety data sheets must be readily available).
- Provide medical examinations and training when required by [OSHA standards](#).
- Refrain from discriminatory acts against employees who exercise their rights under the Act.

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 be at work or are required to work overtime to take care of patients.
- Access to quality and affordable health care.

WHERE TO FIND MORE INFORMATION AND RESOURCES

- ❖ IBT Safety and Health's factsheet here: <https://teamster.org/news/2020/03/teamsters-safety-health-coronavirus-update>
- ❖ CDC: Guidance for Reducing Health Risks to Workers Handling Human Waste or Sewage
- ❖ https://www.cdc.gov/healthywater/global/sanitation/workers_handlingwaste.html
- ❖ CDC: Water Transmission and COVID-19: Drinking Water, Recreational Water, and Wastewater: What You Need to Know
- ❖ <https://www.cdc.gov/coronavirus/2019-ncov/php/water.html>
- ❖ Interim Guidance for Businesses and Employers to Plan and Respond to Coronavirus Disease 2019 (COVID-19), February 2020, CDC
- ❖ https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-business-response.html?CDC_AA_refVal=https%3A%2F%2Fwww.cdc.gov%2Fcoronavirus%2F2019-ncov%2Fspecific-groups%2Fguidance-business-response.html
- ❖ OSHA guidance: <https://www.osha.gov/SLTC/covid-19/controlprevention.html>

ⁱ Wastewater <https://www.osha.gov/SLTC/covid-19/controlprevention.html>

ⁱⁱ CDC. [Guidance for Controlling Potential Risks to Workers Exposed to Class B Biosolids.Cdc-pdf](#) National Institutes for Occupational Safety and Health: 2002-149.

https://www.cdc.gov/healthywater/global/sanitation/workers_handlingwaste.html

ⁱⁱⁱ <https://www.osha.gov/SLTC/covid-19/controlprevention.html>

^{iv} Water Transmission and COVID-19 <https://www.cdc.gov/coronavirus/2019-ncov/php/water.html>

^v Ibid

^{vi} Ibid