U.S. Department of Defense
Regardless of specific exposure risks, following good hand hygiene practices can help workers stay healthy year round.

Control and Prevention

Measures for protecting workers from exposure to, and infection with, SARS-CoV-2, the virus that causes Coronavirus Disease 2019 (COVID-19), depend on the type of work being performed and exposure risk, including potential for interaction with people with suspected or confirmed COVID-19 and contamination of the work environment. Employers should adapt infection control strategies based on a thorough hazard assessment, using appropriate combinations of engineering and administrative controls, safe work practices, and personal protective equipment (PPE) to prevent worker exposures. Some OSHA standards that apply to preventing occupational exposure to SARS-CoV-2 also require employers to train workers on elements of infection prevention, including PPE.

OSHA has developed this interim guidance to help prevent worker exposure to SARS-CoV-2. The general guidance below applies to all U.S. workers and employers. Depending on where their operations fall in OSHA's exposure risk pyramid (Spanish), workers and employers should also consult additional, specific guidance for those at increased risk of exposure in the course of their job duties broken down by exposure risk level.

General Guidance for All Workers and Employers

For all workers, regardless of specific exposure risks, it is always a good practice to:

- Frequently wash your hands with soap and water for at least 20 seconds. When soap and running water are unavailable, use an alcohol-based hand rub with at least 60% alcohol. Always wash hands that are visibly soiled.
- Avoid touching your eyes, nose, or mouth with unwashed hands.
- Practice good respiratory etiquette, including covering coughs and sneezes.
- Avoid close contact with people who are sick.
- Stay home if sick.
- Recognize personal risk factors. According to U.S. Centers for Disease Control and Prevention (CDC), certain people, including older adults and those with underlying conditions such as heart or lung disease or diabetes, are at higher risk for developing more serious complications from COVID-19.

OSHA and the U.S. Department of Health and Human Services (HHS) provide joint guidance for all employers on preparing workplaces for COVID-19 (Spanish).

The CDC has also developed interim guidance for businesses and employers to plan for and respond to COVID-19. The interim guidance is intended to help prevent workplace exposure to acute respiratory illnesses, including COVID-19. The guidance also addresses considerations that may help employers as community transmission of COVID-19 evolves. The guidance is intended for non-healthcare settings; healthcare workers and employers should consult guidance specific to them, including the information below and on the CDC coronavirus webpage.

Interim Guidance for Workers and Employers of Workers at Lower Risk of Exposure

For most types of workers, the risk of infection with SARS-CoV-2 is similar to that of the general American public. Workers whose jobs do not require contact with people known to be, or suspected of being, infected with SARS-CoV-2, nor frequent close contact with (i.e., within 6 feet of) the general public are at lower risk of occupational exposure.

As the Hazard Recognition page explains, workers’ job duties affect their level of occupational risk, and such risk may change as workers take on different tasks within their positions.

Employers and workers in operations where there is no specific exposure hazard should remain aware of the evolving community transmission. Changes in community transmission may warrant additional precautions in some workplaces or for some workers not currently highlighted in this guidance.

Employers should monitor public health communications about COVID-19 recommendations, ensure that workers have access to that information, and collaborate with workers to designate effective means of communicating important COVID-19 information. Frequently check the OSHA and CDC COVID-19 websites for updates.

Interim Guidance for Workers and Employers of Workers at Increased Risk of Occupational Exposure

Certain workers are likely to perform job duties that involve medium, high, or very high occupational
exposure risks. Many critical sectors depend on these workers to continue their operations. Examples of workers in these exposure risk groups include those in:

- Healthcare
- Emergency response and public safety
- Postmortem care
- Laboratories
- Airline operations
- Retail operations
- Border protection and transportation security
- Correctional facility operations
- Solid waste and wastewater management
- Environmental (i.e., janitorial) services
- In-home repair services
- Solid waste and wastewater management
- Travel to areas where the virus is spreading

These workers and their employers should remain aware of the evolving community transmission risk.

As discussed on the Hazard Recognition page explains, workers' job duties affect their level of occupational risk. Employers should assess the hazards to which their workers may be exposed; evaluate the risk of exposure; and, select, implement, and ensure workers use controls to prevent exposure. Control measures may include a combination of engineering and administrative controls, safe work practices, and PPE.

**Identify and Isolate Suspected Cases**

- In workplaces where exposure to COVID-19 may occur, prompt identification and isolation of potentially infectious individuals is a critical first step in protecting workers, visitors, and others at the work site.
- Wherever feasible, immediately isolate individuals suspected of having COVID-19. For example, move potentially infectious individuals to isolation rooms. On an aircraft, if possible and without compromising aviation safety, move potentially infectious individuals to seats away from passengers and crew. In other work sites, move potentially infectious individuals to a location away from workers, customers, and other visitors and with a closed door, if possible.
- Take steps to limit the spread of the individual's infectious respiratory secretions, including by providing them a facemask and asking them to wear it, if they can tolerate doing so. Note: A surgical mask on a patient or other sick person should not be confused with PPE for a worker; the surgical mask acts to contain potentially infectious respiratory secretions at the source (i.e., the person's nose and mouth).
- After isolation, the next steps depend on the type of workplace. For example:
  - **In most types of workplaces (i.e., those outside of healthcare):**
    - Isolated individuals should leave the work site as soon as possible. Depending on the severity of the isolated individual's illness, he or she might be able to return home or seek medical care on his or her own, but some individuals may need emergency medical services.
  - **In healthcare workplaces:**
If possible, isolate patients suspected of having COVID-19 separately from those with confirmed cases of the virus to prevent further transmission, including in screening, triage, or healthcare facilities.

- Restrict the number of personnel entering isolation areas, including the room of a patient with suspected or confirmed COVID-19.
- Protect workers in close contact* with the sick person by using additional engineering and administrative controls, safe work practices, and PPE.
- Sick workers should leave the work site as soon as possible. Depending on the severity of the isolated worker's illness, he or she might be able to return home or seek medical care on his or her own, but some individuals may need emergency medical services.

*CDC defines close contact as being within about 6 feet of an infected person while not wearing recommended PPE. Close contact also includes instances where there is direct contact with infectious secretions while not wearing recommended PPE. Close contact generally does not include brief interactions, such as walking past a person.

**Environmental Cleaning and Decontamination**

When people touch a surface or object contaminated with SARS-CoV-2, the virus that causes COVID-19, and then touch their own eyes, noses, or mouths, they may expose themselves to the virus.

Early information from the CDC, the National Institutes of Health, and other study partners suggests that SARS-CoV-2 can survive on certain types of surfaces, such as plastic and stainless steel, for 2-3 days. However, because the transmissibility of SARS-CoV-2 from contaminated environmental surfaces and objects is still not fully understood, employers should carefully evaluate whether or not work areas occupied by people suspected to have the virus may have been contaminated and whether or not they need to be decontaminated in response.

The CDC provides instructions for environmental cleaning and disinfection for various types of workplaces, including:

- Healthcare facilities, as part of CDC healthcare infection control recommendations
- Postmortem care facilities, such as autopsy suites
- Laboratories
- Other, non-healthcare facilities

Employers operating workplaces during the COVID-19 pandemic should continue routine cleaning and other housekeeping practices in any facilities that remain open to workers or others. Employers who need to clean and disinfect environments potentially contaminated with SARS-CoV-2 should use EPA-registered disinfectants with label claims to be effective against SARS-CoV-2. Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces before applying an EPA-registered disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product's label) are appropriate for SARS-CoV-2, including in patient care areas in healthcare settings in which aerosol-generating procedures are performed.

Workers who conduct cleaning tasks must be protected from exposure to hazardous chemicals used in these tasks. In these cases, the PPE (29 CFR 1910 Subpart I) and Hazard Communication (29 CFR 1910.1200) standards may apply, and workers may need appropriate PPE to prevent exposure to the chemicals. If workers need
respirators, they must be used in the context of a comprehensive respiratory protection program that meets the requirements of OSHA's Respiratory Protection standard (29 CFR 1910.134) and includes medical exams, fit testing, and training.

Cleaning chemicals' Safety Data Sheets and other manufacturer instructions can provide additional guidance about what PPE workers need to use the chemicals safely.

Do not use compressed air or water sprays to clean potentially contaminated surfaces, as these techniques may aerosolize infectious material. More information about protecting environmental services workers is included in the worker-specific section, below.

See the interim guidance for specific worker groups and their employers, below, for further information.

**Worker Training**

Train all workers with reasonably anticipated occupational exposure to SARS-CoV-2 (as described in this document) 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.

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. The OSHA website offers a variety of training videos about respiratory protection.

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. Further information on OSHA's BBP training regulations and policies is available for employers and workers on the OSHA Bloodborne Pathogens and Needlestick Prevention Safety and Health Topics page.

OSHA's Training and Reference Materials Library contains training and reference materials developed by the OSHA Directorate of Training and Education as well as links to other related sites. The materials listed for Bloodborne Pathogens, PPE, Respiratory Protection, and SARS may provide additional material for employers to use in preparing training for their workers.

OSHA's Personal Protective Equipment Safety and Health Topics page also provides information on training in the use of PPE.

**Workers with Increased Susceptibility for SARS-CoV-2 Infection or Complications**

Identify workers who may be at increased susceptibility for SARS-CoV-2 infection or
complications from COVID-19 and consider adjusting their work responsibilities or locations to minimize exposure. Other flexibilities, if feasible, can help prevent potential exposures among workers who have diabetes, heart or lung issues, or other immunocompromising health conditions.

**Personal Protective Equipment Considerations**

The interim guidance for specific worker groups and their employers includes recommended PPE ensembles for various types of activities that workers will perform. In general:

- PPE should be selected based on the results of an employer's hazard assessment and workers specific job duties.
- When disposable gloves are used, workers should typically use a single pair of nitrile exam gloves. Change gloves if they become torn or visibly contaminated with blood or body fluids.
- When eye protection is needed, use goggles or face shields. Personal eyeglasses are *not* considered adequate eye protection.
- If workers need respirators, they must be used in the context of a comprehensive respiratory protection program that meets the requirements of OSHA's Respiratory Protection standard (29 CFR 1910.134) and includes medical exams, fit testing, and training.
  - Surgical masks are not respirators and do not provide the same level of protection to workers as properly-fitted respirators.
- If there are shortages of PPE items, such as respirators or gowns, they should be prioritized for high-hazard activities.
  - Workers need respiratory protection when performing or while present for aerosol-generating procedures, including cardiopulmonary resuscitation (CPR) and intubation.
  - Workers must be protected against exposure to human blood, body fluids, other potentially infectious materials, and hazardous chemicals, and contaminated environmental surfaces.
- CDC provides strategies for optimizing the supply of PPE, including guidance on extended use and limited reuse of N95 filtering facepiece respirators (FFRs) and methods for decontaminating and reusing disposable filtering facepiece respirators during crises.
  - These guidelines are intended for use in healthcare but may help employers in other

**Respiratory Protection Flexibilities**

Under specific circumstances in which National Institute for Occupational Safety and Health (NIOSH)-certified N95 filtering facepiece respirators (FFRs) are unavailable, and employers follow guidelines to conserve respirators, OSHA's temporary enforcement discretion permits employers to use:

- Other NIOSH-approved respirators, including N99/100, R95/99/100, and P95/99/100 FFRs; elastomeric, air-purifying respirators; and powered, air-purifying respirators.
- NIOSH-approved respirators that are beyond their
After removing PPE, always wash hands with soap and water for at least 20 seconds, if available. Ensure that hand hygiene facilities (e.g., sink or alcohol-based hand rub) are readily available at the point of use (e.g., at or adjacent to the PPE removal area).

Employers should establish, and ensure workers follow, standard operating procedures for cleaning (including laundering) PPE and items such as uniforms or laboratory coats intended to function as PPE, as well as for maintaining, storing, and disposing of PPE. When PPE is contaminated with human blood, body fluids, or other potentially infectious materials, employers must follow applicable requirements of the Bloodborne Pathogens standard (29 CFR 1910.1030) with respect to laundering. OSHA’s Enforcement Procedures for the Occupational Exposure to Bloodborne Pathogens (CPL 02-02-069) provide additional information.

Employers in all sectors may experience shortages of PPE, including gowns, face shields, face masks, and respirators, as a result of the COVID-19 pandemic. These shortages critically impact the ability of the U.S. healthcare system to provide care for the most seriously ill COVID-19 patients. However, employers outside of healthcare also may experience the effects of shortages as PPE supplies are diverted to healthcare facilities where they are most needed.

Although employers are always responsible for complying with OSHA's PPE standards (29 CFR 1910 Subpart I), including the Respiratory Protection standard (29 CFR 1910.134), whenever they apply, OSHA is providing temporary enforcement flexibility for certain requirements under these and other health standards.

Interim guidance for specific worker groups and their employers

This section provides information for specific worker groups and their employers who may have potential exposures to SARS-CoV-2. Guidance for each worker group generally follows the hierarchy of controls, including engineering controls, administrative controls, safe work practices, and PPE. However, not all types of controls are provided in each section; in those cases, employers and workers should consult the interim general guidance for U.S. workers and employers of workers with potential occupational exposures to SARS-CoV-2 sectors optimize their PPE supplies, as well.

- Manufacturer’s recommended shelf life (i.e., expired devices).
- Certain respirators certified in accordance with standards of other countries or jurisdictions, including expired devices.

These alternative respirators are expected to provide better protection against SARS-CoV-2 compared to face masks, homemade or improvised equipment, or no respiratory protection at all.

OSHA is also providing enforcement discretion for annual fit-testing requirements of the Respiratory Protection standard (29 CFR 1910.134) to help reduce the rate at which respirators—specifically disposable models—are used and discarded.

See the Enforcement Memoranda
Healthcare Workers and Employers

This section provides guidance for healthcare workers and employers. This guidance supplements the general interim guidance for workers and employers of workers at increased risk of occupational exposure to SARS-CoV-2, above.

Employers should assess the hazards to which their workers may be exposed; evaluate the risk of exposure; and select, implement, and ensure workers use controls to prevent exposure. The table below provides examples of healthcare work tasks associated with the exposure risk levels in OSHA's occupational exposure risk pyramid, which may serve as a guide to employers in this sector.

**Examples of healthcare work tasks associated with exposure risk levels**

<table>
<thead>
<tr>
<th>Lower (caution)</th>
<th>Medium</th>
<th>High</th>
<th>Very High</th>
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<tr>
<td>■ Performing administrative duties in non-public areas of healthcare facilities, away from other staff members.</td>
<td>■ Providing care to the general public who are not known or suspected COVID-19 patients.</td>
<td>■ Entering a known or suspected COVID-19 patient's room.</td>
<td>■ Performing aerosol-generating procedures (e.g., intubation, cough induction procedures, bronchoscopies, some dental procedures and exams, or invasive specimen collection) on known or suspected COVID-19 patients.</td>
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<tr>
<td>Note: For activities in the lower (caution) risk category, OSHA's <em>Interim Guidance for Workers and Employers of Workers at Lower Risk of Exposure</em> may be most appropriate.</td>
<td>■ Working at busy staff work areas within a healthcare facility.</td>
<td>■ Providing care for a known or suspected COVID-19 patient not involving aerosol-generating procedures.</td>
<td>■ Collecting or handling specimens from known or suspected COVID-19 patients.</td>
</tr>
</tbody>
</table>

Until more is known about how COVID-19 spreads, OSHA recommends using a combination of standard precautions, contact precautions, airborne precautions,
and eye protection (e.g., goggles, face shields) to protect healthcare workers with exposure to the virus.

The CDC provides the most updated infection prevention and control recommendations for healthcare workers managing suspected or confirmed cases of COVID-19.

Employers of healthcare workers are responsible for following applicable OSHA requirements, including OSHA's Bloodborne Pathogens (29 CFR 1910.1030), Personal Protective Equipment (29 CFR 1910.132), and Respiratory Protection (29 CFR 1910.134) standards. See the Standards page for additional information on OSHA requirements.

*Engineering Controls*

Use engineering controls to shield healthcare workers, patients, and visitors from individuals with suspected or confirmed COVID-19. This includes physical barriers or partitions in triage areas to guide patients, curtains separating patients in semi-private areas, and airborne infection isolation rooms (AIIRs) with proper ventilation. AIIRs are single-patient rooms with negative pressure that provide a minimum of 6 air exchanges (existing structures) or 12 air exchanges (new construction or renovation) per hour.

If an AIIR is:

- **Available**: Place patients with suspected or confirmed COVID-19 in an AIIR if available at the healthcare facility. Perform aerosol-generating procedures on patients with suspected or confirmed COVID-19 in an AIIR. Ensure that the room air exhausts directly to unoccupied areas outside of the building (i.e., not into walkways, break areas, or other areas where workers or visitors could congregate or pass through), or passes through a high-efficiency particulate arrestance (HEPA) filter, if recirculated.

- **Not available**: Isolate the patient in a private room. If available, negative-pressure rooms (i.e., rooms under negative pressure that may not meet all of the specifications of an ideal AIIR) are preferable to ordinary exam or patient rooms. Keep the room door closed. Isolation tents or other portable containment structures may serve as alternative patient-placement facilities when AIIRs are not available and/or examination room space is limited. Ensure that the room air exhausts directly to unoccupied areas outside of...
the building, or passes through a HEPA filter, if recirculated.

The CDC/Healthcare Infection Control Practices Advisory Committee (HICPAC) Guidelines for Environmental Infection Control in Healthcare Facilities contain additional information on negative-pressure room control for airborne infection isolation.

Administrative Controls

Consistent with the general interim guidance described above, isolate patients with suspected or confirmed COVID-19 to prevent transmission of the disease to other individuals. If possible, isolating suspected cases separately from confirmed cases may also help prevent transmission.

Restrict the number of personnel entering the room of a patient with suspected or confirmed COVID-19. This may involve training healthcare workers in the appropriate use of PPE so they can perform tasks such as housekeeping and meal service to reduce the need for environmental and food service workers to enter areas where suspected or confirmed COVID-19 patients are isolated.

Follow CDC guidelines for signs for and labeling of patient room doors when transmission-based precautions (i.e., contact and airborne precautions) are in place.

Minimize the number of staff present when performing aerosol-generating procedures.

Safe Work Practices

Perform as many tasks as possible in areas away from a patient with suspected or confirmed COVID-19 (e.g., do not remain in an isolation area to perform charting; use closed-circuit television systems to communicate with patients in an isolation area when a worker does not need to be physically present).

Work from clean to dirty (i.e., touching clean body sites or surfaces before touching dirty or heavily contaminated areas) and limit opportunities for touch contamination (e.g., adjusting glasses, rubbing the nose, or touching face with gloves that have been in contact with suspected or confirmed COVID-19 patients or contaminated/potentially contaminated surfaces). Also, prevent touch contamination by avoiding unnecessary touching of environmental surfaces (such as light switches and door handles) with contaminated gloves.

Ensure that there are systems in place to:

- Differentiate clean areas (e.g., where PPE is put on) from potentially contaminated areas (e.g., where PPE is removed);
- Handle waste and other potentially infectious materials; and
- Clean, disinfect, and maintain reusable equipment and PPE.

Use caution when handling needles or other sharps, and dispose of contaminated sharps in puncture-proof, labeled, closable sharps containers.

Workers should avoid touching their faces, including their eyes, noses, and mouths, particularly until after they have thoroughly washed their hands upon completing work and/or removing PPE.

Train and retrain workers on how to follow established protocols.

**Personal Protective Equipment**

Healthcare workers must use proper PPE when exposed to a patient with suspected or confirmed COVID-19 or other sources of SARS-CoV-2 (See OSHA’s PPE standards at 29 CFR 1910 Subpart I).

OSHA recommends that healthcare workers with exposure to suspected or confirmed COVID-19 patients wear:

- Gloves
- Gowns
- Eye/face protection (e.g., goggles, face shield)
- NIOSH-certified, disposable N95 filter facepiece respirators or better

Use respiratory protection as part of a comprehensive respiratory protection program that meets the requirements of OSHA's Respiratory Protection standard (29 CFR 1910.134) and includes medical exams, fit testing, and training.

When removing potentially contaminated PPE such as an N95 respirator, do not touch the outside of the respirator without wearing gloves.

In addition to the PPE considerations for all workers and employers of workers at increased risk of occupational exposure, CDC has developed strategies for optimizing the supply of PPE, including specifically for:

- Gowns
- Eye protection
- Face masks
- N95 respirators

Further Information

**Home care:**

CDC has developed interim guidance for healthcare providers who are coordinating the home care and isolation or quarantine of people confirmed or suspected to have COVID-19.
Cleaning and disinfection in healthcare:

Routine cleaning and disinfection procedures (e.g., using cleaners and water to pre-clean surfaces before applying an EPA-registered, hospital-grade disinfectant to frequently touched surfaces or objects for appropriate contact times as indicated on the product’s label) are appropriate for SARS-CoV-2 in healthcare settings, including those patient-care areas in which aerosol-generating procedures are performed.

Refer to List N on the EPA website for EPA-registered disinfectants that have qualified under EPA’s emerging viral pathogens program for use against SARS-CoV-2.

Follow standard practices for disinfection and sterilization of medical devices contaminated with COVID-19, as described in the CDC Guideline for Disinfection and Sterilization in Healthcare Facilities, 2008.

Note that workers who perform cleaning and disinfection in healthcare may require PPE and/or other controls to protect them simultaneously from chemical hazards posed by disinfectants and from human blood, body fluids, and other potentially infectious materials to which they have occupational exposure in the healthcare environment. Employers may need to adapt guidance from this Healthcare Workers and Employers section, the Environmental Services Workers and Employers section, and the interim guidance for workers and employers of workers at increased risk of occupational exposure, to fully protect workers performing cleaning and disinfection activities in healthcare workplaces.

| Emergency Response Workers and Employers |
| Postmortem Care Workers and Employers |
| Laboratory Workers and Employers |
| Airline Workers and Employers |
| Retail Workers and Employers in Critical and High Customer-Volume Environments |
| Border Protection and Transportation Security Workers and Employers |
| Correctional Facility Workers and Employers |
| Solid Waste and Wastewater Management Workers and Employers |
| Environmental Services Workers and Employers |
| In-Home Repair Services |
| Business Travelers |