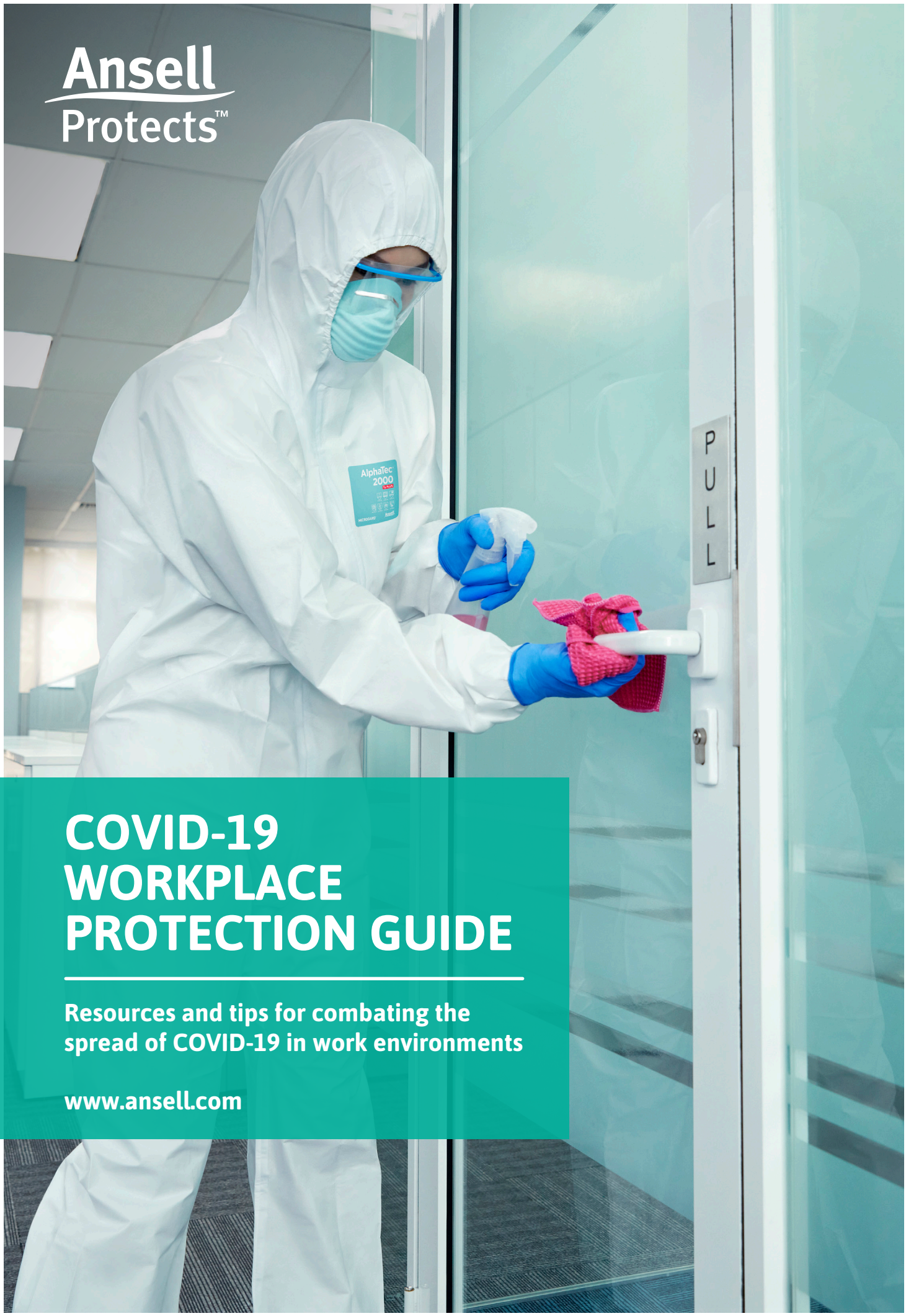

COVID-19 WORKPLACE PROTECTION GUIDE

Resources and tips for combating the spread of COVID-19 in work environments

www.ansell.com

As a global leader in personal protective solutions, Ansell's mission is to provide innovative and reliable solutions for safety, well-being, and peace of mind to workers around the world. Our global team of more than 12,000 people in 55 countries design, manufacture and market cutting edge PPE that millions of workers in industrial and healthcare settings rely upon every day.

With over 125 years of experience in keeping people safe, we have a responsibility to share our expertise to guide workplaces as they navigate the new challenges posed by COVID-19. This booklet provides guidance for reopening and protecting workers against the risk of future infection. Utilizing our knowledge and passion for safety, we hope these resources will help to demystify some of the potential confusion and address the challenges of our new reality.

To safely bring these practices into the real world, we offer AnsellGUARDIAN®, our proprietary consultative service to help organizations select the right personal protective equipment solutions to improve safety, productivity, and cost performance.

Learn about Ansell's response to the novel coronavirus by watching this video message from Magnus Nicolin, Chief Executive Officer. And see what we've done to keep our own employees safe as we continue to uphold our commitment to supplying protective solutions to our customers, in this video message from John Marsden, Senior Vice President of Global Operations and Supply Chain.

We invite you to browse this booklet and further explore our online destination for COVID-19 Updates & Resources. Please don't hesitate to reach out to your local Ansell Sales Representative or Customer Service Representative if there is anything we can do to support you in reopening and ensuring a safe work environment for the future.

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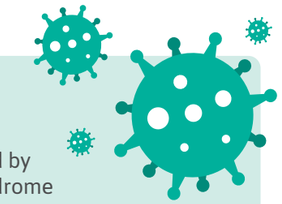
CREATING A SAFE WORKPLACE

KNOW THE FACTS ABOUT COVID-19

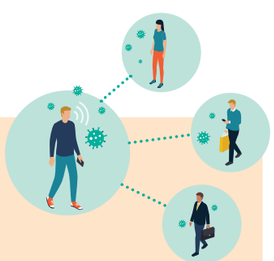


1 BASIC FACTS

- COVID-19 is a disease caused by severe acute respiratory syndrome coronavirus-2 (SARS-CoV-2)
- COVID-19 affects people differently, some without symptoms and others with life-threatening illness

2 HOW IT SPREADS

- The coronavirus that causes COVID-19 is primarily spread from person to person
- You can become infected by coming into close contact with a person who has the virus or from respiratory droplets when an infected person coughs, sneezes, or talks
- You may also be able to get it by touching a surface or object that has the virus on it, and then touching your mouth, nose, or eyes



3 TIME IT TAKES AFTER EXPOSURE TO DEVELOP SYMPTOMS

- The time between exposure to the virus and the moment when COVID-19 symptoms may start is thought to be around 5 – 6 days but can range from 1 – 14 days
- There is evidence that even persons with mild to no symptoms may also spread the virus

4 SIGNS & SYMPTOMS

Mild symptoms:

- Fever
- Chills
- Sore throat
- Dry cough
- Shortness of breath or difficulty breathing
- Headache
- Nasal congestion
- Tiredness
- Muscle pain
- Loss of taste or smell

Severe symptoms that require medical attention immediately:

- Shortness of breath or difficulty breathing
- Persistent pain or pressure in chest
- Disoriented or sudden confusion
- Bluish, grayish, or whitish color to lips or face (depending on skin tone)

(This list is not all inclusive. Always consult your medical provider for any other symptoms that are severe or concerning.)

5 WHO IS AT RISK

- Older adults and people of any age who have serious underlying medical conditions (e.g. hypertension, diabetes, heart disease, respiratory disease, and others)
- Males are shown to have a slightly higher risk than females and greater severity in symptoms

6 PROTECTING YOURSELF & OTHERS

The best way to protect yourself is to avoid being exposed to the virus that causes COVID-19

- Avoid close contact with others by practicing social distancing
- Wear a mask or cloth face covering that covers your nose and mouth in public settings
- Cover your cough with the bend of your elbow or tissue. If a tissue is used, discard it immediately and wash your hands
- Clean and disinfect frequently touched surfaces
- Wash your hands often with soap and water for at least 20 seconds, or use an alcohol-based hand sanitizer containing at least 60% ethyl alcohol

7 PREVENTING SPREAD IF YOU ARE SICK

- Stay home if you are sick and separate yourself from other people and pets in your home
- Avoid sharing personal household items
- Clean and disinfect areas that may have blood, stool, or body fluids on them
- Seek medical care if you need advice on how to relieve your symptoms

8 SURVIVAL TIME ON SURFACES

- Studies have shown that the COVID-19 virus can survive for up to 72 hours on plastic and stainless steel, less than 4 hours on copper, and less than 24 hours on cardboard
- The coronavirus can easily be removed from surfaces with common household disinfectants
- Wear a face mask and gloves during cleaning

9 DO NOT TOUCH YOUR FACE WHILE WEARING GLOVES

- Gloves protect hands from direct contact with contamination but are often contaminated in the process
- Do not touch your mouth, eyes, or face in general while wearing gloves, as it can transfer contaminants

10 CURRENT TREATMENTS AND VACCINES

- Scientists around the world are working on vaccines and possible treatments, such as steroids, for COVID-19
- There is currently no vaccine for COVID-19 and treatments are based on symptoms
- Further research is still needed to determine if convalescent plasma (from patients who have recovered from COVID-19) may be a safe and effective treatment
- Current clinical management includes infection prevention and control measures and supportive care, including supplemental oxygen and mechanical ventilatory support, when indicated

Based on guidance from the following sources:

1. *Zhou M, Zhang X, Qu J. Coronavirus disease 2019 (COVID-19): a clinical update [published online ahead of print, 2020 Apr 2]. Front Med. 2020;1–10. doi:10.1007/s11684-020-0767-8*
2. *European Centre for Disease Prevention and Control: Infection prevention and control for COVID-19 in healthcare settings. Second update, 31 March 2020.*
3. *https://www.cdc.gov/coronavirus/2019-ncov/downloads/2019-ncov-factsheet.pdf*
4. *https://www.ecdc.europa.eu/en/covid-19/questions-answers*
5. *https://www.who.int/news-room/q-a-detail/q-a-coronaviruses*
6. *https://www.cdc.gov/coronavirus/2019-ncov/if-you-are-sick/steps-when-sick.html.*
7. *https://www.cdc.gov/coronavirus/2019-ncov/hcp/therapeutic-options.html*
8. *https://www.fda.gov/emergency-preparedness-and-response/coronavirus-disease-2019-covid-19/donate-covid-19-plasma*

Please Note: Given the novelty of this coronavirus, recommendations from the source references are interim and advisory in nature and are based on current knowledge of the situation. Always ensure compliance with your local public health authorities for the latest information regarding the COVID-19 pandemic.

A PATH TO REOPENING

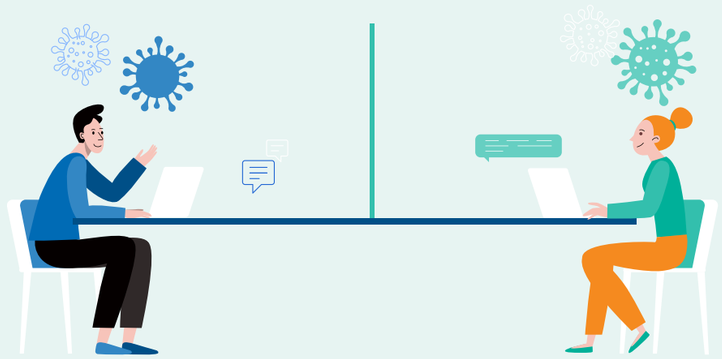
With the rapid spread of the novel coronavirus and the disease it causes, COVID-19, many businesses and industries had to shut down during widespread stay-at-home orders.

As we begin the slow process of reopening, there are still several questions around how to do so. Ansell has gathered guidance around two areas of focus: location/workplace-based and workforce-based guidance.

LOCATION / WORKPLACE-BASED GUIDANCE

Update workplace to reduce COVID-19 exposure between workers

- Spread out and/or install plastic barriers between workstations
- Reduce contact between different parts of the business
- Use directional signage to control employee flow and minimize employees facing each other



Limit the amount of workers in any space

- Consider bringing workers back in shifts
- Stagger breaks and avoid large groups in common rooms
- Regulate who can enter facilities

Frequently clean/disinfect work surfaces and touch points

- Commonly touched areas include doorknobs, counters, and shared equipment
- Break rooms, bathrooms, and other frequently used spaces
- Workstations and kitchen appliances

WORKFORCE-BASED GUIDANCE

1

If sick, stay home:

If workers feel sick, have a fever, or are exhibiting any symptoms of COVID-19, they should stay home

2

Promote respiratory hygiene:

Have employees cough or sneeze into bent elbow or tissue then immediately dispose of the tissue

3

Practice social distancing:

Keep at least 6 feet of distance between employees

4

Equip workers:

Provide proper PPE to workers as needed, including masks, gloves, and coveralls

5

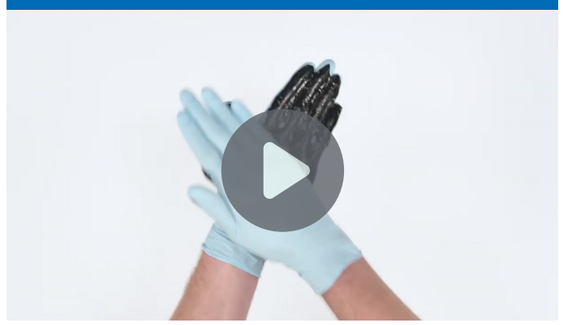
Travel alone:

Promote personal travel to/from work instead of public transport

While PPE plays a critical role in providing protection, an important role workers can play in stopping the spread of COVID-19 is proper hand hygiene.

Washing hands with soap and water is best. This video shows how to thoroughly clean hands to kill the virus in overlooked areas. When soap and water is unavailable, alcohol-based hand sanitizers containing at least 60% ethyl alcohol are an effective alternative.

Proper Hand Washing Video



WORKPLACE RISK EXPOSURE LEVELS

Workers' risk of exposure depends on the type of work they do, and whether they are able to maintain a safe social distance of 6 feet from other individuals who have, or may have, COVID-19 throughout their workdays. OSHA has divided job tasks into four risk exposure levels. Workplace controls and PPE should be selected based on the results of an Exposure Risk Assessment and workers' specific job duties. Always refer to and follow local health department regulations and business guidelines.

Click here to learn more about OSHA Guidance on Preparing Workplaces for COVID-19.

Exposure Risk	Explanation	Workplace Controls	PPE Recommendations
Very High	Caregivers in direct contact with known or suspected sources of COVID-19. Examples: First responders, healthcare workers, lab personnel, and morgue workers.	• Ensure facility policies and practices are in place to minimize exposure to respiratory droplets in direct contact and proximity to the suspected source due to person-to-person spread.	• Perform hand hygiene • Gown/protective clothing • Mask/respirator (N95/P2/FFP2) • Eye protection/face shield • Gloves The type of PPE is based on activity and healthcare worker (HCW) role.
High	Workers in close contact or proximity to known or suspected sources of COVID-19. Examples: Hospital staff entering patient rooms, medical transport workers, and mortuary workers.	• Ensure facility policies and practices are in place to minimize exposure to respiratory droplets in close contact and proximity to the suspected source due to person-to-person spread.	• Perform hand hygiene • Gown/protective clothing • Mask/respirator (N95/P2/FFP2) • Eye protection/face shield • Gloves The type of PPE is based on activity and healthcare worker (HCW) role.
Medium	Workers who have frequent and/or close contact (<6 feet of distance) with people who may be infected but are NOT known or suspected COVID-19 patients. Examples: Customer service representatives in contact with the public, cashiers, servers, and restaurant workers.	• Follow workplace-based guidance on Page 7. • Install physical barriers, such as clear plastic sneeze guards where feasible. • Post pre-marked social distancing points and signage with procedures for employees and customers. • Minimize face-to-face contact and consider offering face masks to customers. • Provide hand washing stations. • Train employees on correct use of PPE. • Provide necessary supplies and resources.	• Perform hand hygiene • Mask • Eye protection/face shield • Gloves
Low	Workers who have had no contact with known or suspected sources of COVID-19, nor frequent close contact (<6 feet of distance) with the general public. Examples: Healthcare workers providing only telemedicine services, long-distance truck drivers, and delivery service workers.	• Follow workplace-based guidance on Page 7.	• Perform hand hygiene • Non-medical mask

Please Note: Given the novelty of this coronavirus, recommendations from the source references are interim and advisory in nature and are based on current knowledge of the situation. Always ensure compliance with your local public health authorities regulations surrounding conservation, usage, and selection guidance of PPE to combat the COVID-19 pandemic.

Follow local and regional guidance for use of face masks with face shield/eye protection as an acceptable alternative in some situations until the supply chain is restored.

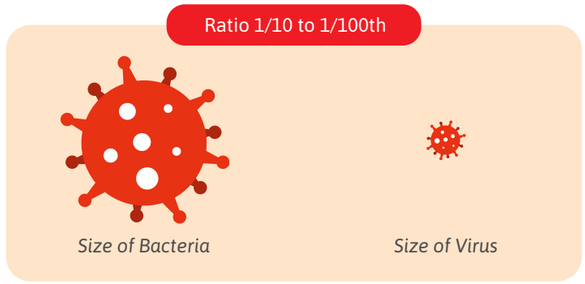
Based on guidance from the following sources: **1.** WHO Rational use of personal protective equipment for coronavirus disease 2019 (COVID-19) found on *https://apps.who.int/iris/bitstream/handle/10665/331215/* **2.** *Based on WHO-2019-nCov-IPCPPE_use-2020.1-eng.pdf?sequence=1&isAllowed=y.* Accessed May 28, 2020. **3.** Hazard Recognition guidance from OSHA. *https://www.osha.gov/SLTC/covid-19/hazardrecognition.html#low_ris.* May 29, 2020. **4.** OSHA Guidance on Preparing Workplaces for COVID-19. *https://www.osha.gov/Publications/OSHA3990.pdf.* Accessed May 29, 2020.

SELECTING THE RIGHT PPE TO PROTECT AGAINST COVID-19

CHOOSING DISPOSABLE GLOVES FOR PROTECTION AGAINST VIRUSES

Bacteria are typically 1-10 micrometers large, far smaller than what we can see with the naked eye. Yet, viruses are even smaller, often 1/10 to 1/100 the size of bacteria. The small size of a virus makes it easy to pass through the pinholes in ordinary protective garments.

That's why when choosing PPE for protection against viruses, like the one that causes COVID-19, it's important to know which regulatory standards exist to help ensure proper protection.



In North America, ASTM F 1671 measures protection against micro-organisms like bacteria or viruses.

In the European Union, the EN ISO 374-5 VIRUS standard measures the ability of gloves to protect users against bacteria, fungi, and viruses. Gloves featuring the EN 374-5 VIRUS marking on packaging have been proven to not leak when tested according to EN 374-2: 2014.

EN ISO 374-5:2016
VIRUS

Look for the EN ISO 374-5 VIRUS standard on packaging, labeling, or the Certificate of Conformity available from the manufacturer.

ASTM F 1671

This marking does not appear on packaging. Users should contact the manufacturer for ASTM F 1671 certification.

UNDERSTANDING THE DIFFERENCES BETWEEN INDUSTRIAL & MEDICAL DISPOSABLE GLOVES

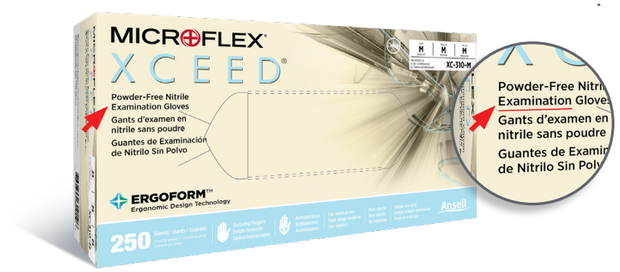
In the United States, disposable gloves are categorized as industrial grade or medical grade, the latter often referred to as "examination." Industrial grade single use gloves provide protection against industrial hazards, like oils and chemicals, but are not approved for patient contact.

On the other hand, disposable examination gloves require a 510(k) premarket authorization, covering required safety testing, product performance testing, and claims substantiation data. The additional testing is done to ensure protection between people when blood, bodily fluids, and biological hazards like bacteria or viruses may be present.

In some cases, additional testing under ASTM F1671 is done on gloves to ensure protection against bloodborne pathogens, like a virus or bacteria. This certification should be available from the manufacturer.

510(k) Documentation Requirements for Medical Gloves

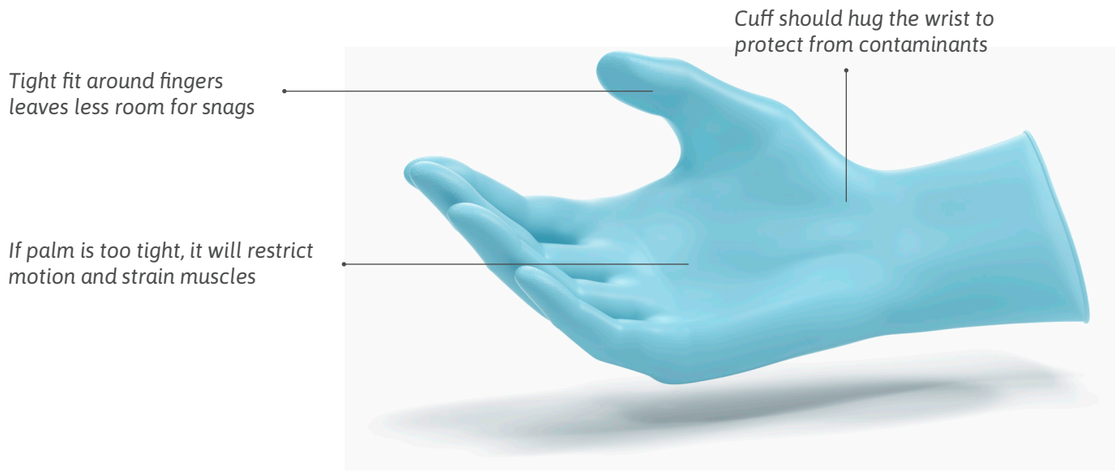
- Biological assessment per ISO 10993
- Conformity to industry standards testing
- Substantiation data for any claims
- Legal attestations by manufacturer to truth and accuracy



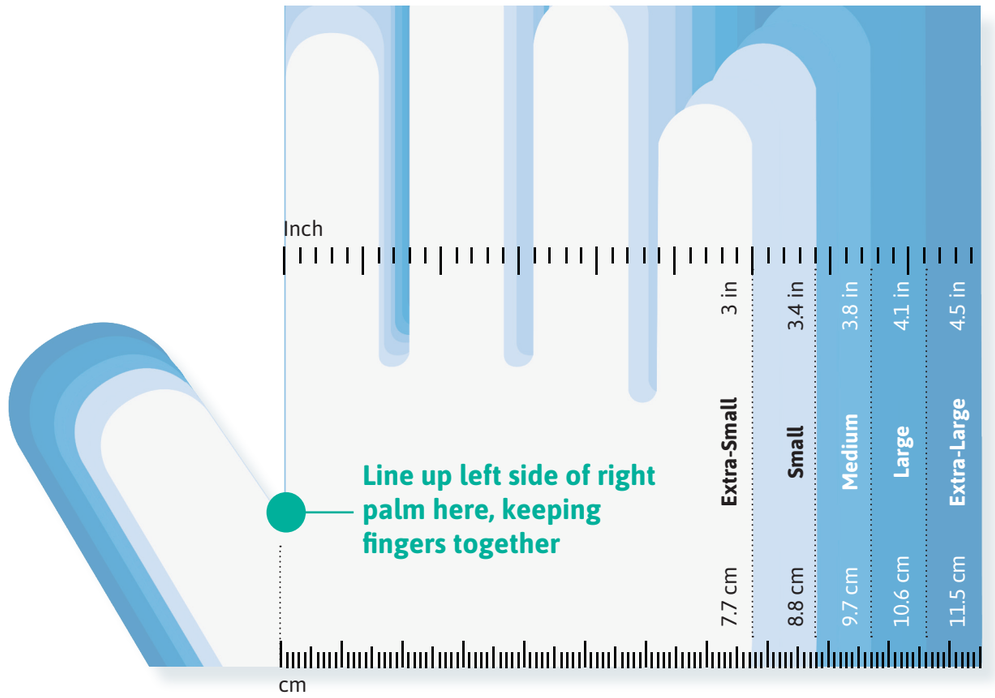
ENSURING A PROPER FIT

More people are now wearing disposable gloves to help prevent exposure to the coronavirus. But it is important to recognize that as a first layer of defense, disposable gloves are most effective when they fit well.

If gloves are too tight, dexterity is limited and gloves could tear during use. If they are too loose, gloves can get in the way when performing tasks and do a poor job of keeping out potential pathogens.



CHOOSING THE RIGHT SIZE DISPOSABLE GLOVE



CHOOSING CLOTHING FOR PROTECTION AGAINST VIRUSES

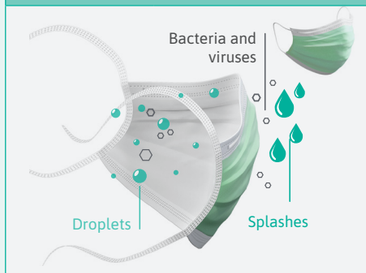
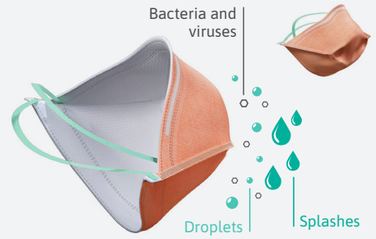
In North America, ASTM F 1671 is the standard to test the resistance of materials used in protective clothing to penetration from micro-organisms like bacteria or viruses.

In the European Union, protective clothing must meet EN 14126 standards. EN 14126 uses different test methods to measure the penetration resistance of the garment material to infective agents, using different kinds of exposure.

ASTM F 1671	In North America, ASTM F 1671 measures protection against micro-organisms like bacteria or viruses.	The ASTM F 1671 marking does not appear on packaging. Users should contact the manufacturer for ASTM F 1671 certification.
EN 14126 certified garments should carry this pictogram. **EN 14126**	**EN 14126 comprises the following material tests:**	
	Penetration test using synthetic blood **(ISO 16603)**	Resistance to penetration by biologically contaminated aerosols **(ISO/DIS 22611)**
	Resistance to penetration by bacteria **(ISO 22610)**	Resistance to penetration by contaminated dust **(ISO 22612)**

CHOOSING RESPIRATORY PROTECTION

This guide provides an overview of how some medical masks and facial filtering respirators are classified by ratings and filtration effectiveness, as defined by leading American and European Union standards.

	MEDICAL MASKS		FACIAL FILTERING RESPIRATORS		
					
Types of mask	**Level 2** Protects wearer from infective agents from the nose and mouth	**Level 3** Protects wearer from infective agents from the nose and mouth and against splashes or potentially contaminated liquids	**N95** Filters out 95% of airborne particulate matter[1]	**N99** Filters out 99% of airborne particulate matter	**N100** Maximum protection. Filters out 99.7% of airborne particulate matter
Prevents spread of droplets by the wearer	√	√	√	√	√
Wearer requires high filtration protection from expelled splashes		√	√	√	√
Expelled particulates must be contained where fluid resistance is required			√	√	√
Wearer requires tight-fitted, sealed respiratory protection and when performing aerosol-generating procedures			√	√	√

THINGS TO REMEMBER:

- Always ensure compliance with your local public health authorities' regulations surrounding usage and selection guidance of personal protective equipment (PPE) to combat the COVID-19 pandemic.
- Follow recommended mask conservation guidelines to preserve PPE for frontline healthcare workers and to ensure appropriate supply based on risk level is available.
- In addition to preservation strategies, CDC has recommended guidance for extended use and limited reuse of N95 facial filtering respirators. Extended use is preferred due to less contact and risk of transmission. If no N95 respirators are available, National Institute for Occupational Safety and Health (NIOSH) approved alternative respirators can be used.*
- WHO recommends N95 or higher protection when facial filtering respirators are advised.

** https://www.cdc.gov/niosh/topics/hcwcontrols/recommendedguidanceextuse.html*

CHEMICAL GLOVES AS A SUBSTITUTE FOR SINGLE USE PPE

As demand for PPE continues to increase as a consequence of the COVID-19 pandemic, Ansell recognizes that some organizations may need to consider **temporary or alternate solutions** to mitigate subsequent critical supply shortages.

Any alternative approach should be founded on scientific evidence and, where applicable, regulatory guidelines to avoid a false sense of security. Based on current evidence, in consultation with international experts, WHO has published last-resort temporary measures[1] for consideration during crisis situations. These temporary measures for PPE usage should be used only when and where there are serious PPE shortages or PPE is not available.

Last-Resort Temporary Measures for PPE Usage[1]

1. Extended duration of use for PPE
2. Reprocessing, followed by reuse (after cleaning or decontamination /sterilization) of PPE
3. Considering alternative items compared with the standards recommended by WHO

This guideline provides Ansell expertise to the third temporary measure based on the recommendation from CDC to remove contamination and prevent the spread of COVID-19. Because of the global presence in PPE and its capabilities, Ansell can offer reusable nitrile and latex gloves, and reusable protective clothing as alternative solutions to non-medical grade disposable PPE running low or becoming unavailable.

AlphaTec® gloves tested and certified according to the EN ISO 374-5 VIRUS standard and ASTM F 1671:

NITRILE

AlphaTec® Solvex® 37-175

AlphaTec® Solvex® 37-676

NATURAL RUBBER LATEX

AlphaTec® 87-208

NATURAL RUBBER LATEX/NEOPRENE BLEND

AlphaTec® 87-224

NOTE: *1. ATTENTION: WHO stresses that these temporary measures should be avoided as much as possible when caring for severe or critically ill COVID-19 patients, and for patients with known co-infections of multi-drug resistant or other organisms transmitted by contact (e.g. Klebsiella pneumoniae) or droplets (e.g. influenza virus).*

These substitutes may be considered as potential alternatives to non-medical grade disposable gloves only.

Remember: Always inspect PPE for defects prior to use, especially after any cleansing activity has been undertaken. If any defect or malfunction is found, the equipment must be taken out of service. Dispose of the equipment carefully. After using PPE, including protective gloves, always wash your hands according to guidelines.

Disclaimer: Employers must ensure workers are trained on the hazards of the cleaning chemicals used in the workplace a well as the proper disposal of regulated waste and PPE. Since Ansell does not control the environment the PPE is stored or used, the reuse decisions of Ansell products, whether alone or in combination with additional PPE for an application is the final responsibility of the user.

MECHANICAL GLOVES AS A SUBSTITUTE FOR SINGLE USE PPE

FOR OILY ENVIRONMENTS AND APPLICATIONS

While demand for PPE continues to increase as a result of the COVID-19 pandemic, Ansell recognizes that it is important to consider **temporary or alternate solutions** to mitigate critical supply shortages such as those related to single use gloves. These HyFlex® gloves are designed to provide barrier protection against oil and liquid, but are not tested or certified to protect against viruses.

Multipurpose

HyFlex® 11-925

- ¾ dip geometry for added protection against oil exposure and knuckle abrasion
- Double nitrile coating for increased oil protection and grip
- 18G liner for extreme comfort

EN 388 3111A · ANSI 4 ABR · GR ISO 18889:2019

HyFlex® 11-926

- Dark purple hides dirt in oily environments and prolongs usage
- Added protection against oil exposure and knuckle abrasion
- Provides superior ergonomic fit

EN 388 4121A · ANSI 3 ABR · GR ISO 18889:2019

Cut Protection

HyFlex® 11-427

- Provides not only the protection needed in dry and slightly oily environments, but also educates workers to understand risk levels
- The color indicator system on the glove ensures the wearer always has the appropriate cut level performance

EN 388:2016 4X32B · ANSI 4 ABR · EN 407 X1XXXX · ANSI A2 CUT

HyFlex® 11-927

- Industry leading oil grip, featuring ANSELL GRIP™ Technology
- Unique ¾ dip geometry provides added protection against oil
- High abrasion and cut resistance

EN 388:2016 4342B · ANSI 4 ABR · ANSI A2 CUT

HyFlex® 11-937

- High comfort: Glass fiber-free, latex-free and lightweight
- Reinforced thumb crotch: Delivering up to 12x incremental durability for extended use life*
- ¾ coated

EN 388:2016 4X42B · ANSI 4 ABR · ANSI A2 CUT · GR ISO 18889:2019 · OEKO-TEX® STANDARD 100

HyFlex® 11-939

- High comfort: Glass fiber-free, latex-free and lightweight
- Reinforced thumb crotch: Delivering up to 12x incremental durability for extended use life*
- Fully coated

EN 388:2016 4X42B · ANSI 4 ABR · ANSI A2 CUT · GR ISO 18889:2019 · OEKO-TEX® STANDARD 100

Definition of Reusable Versus Limited or Single Use PPE

Reusable*	Limited or Single Use
PPE that is constructed from materials which allow it to be cleaned after repeated exposure to a hazard, such that it remains suitable for continued use.	PPE for limited duration of use. To be worn until hygienic cleaning becomes necessary or contamination of a hazard has occurred, and disposal is required.

*Based on CENISO/TR 11610 Protective Clothing Vocabulary

NOTE: *Proper sanitization and laundering guidelines can be applied to PPE, including reusable PPE that is not claimed and/or certified for virus protection, help prevent the spread of viral contamination.*

PPE GUIDANCE FOR LABORATORY TECHNICIANS

Laboratory technicians carrying out viral isolation on clinical specimens from patients who are suspected or confirmed to be infected with novel coronavirus must adhere to strict protocols. This overview provides PPE guidance for each laboratory biosafety level to protect against COVID-19.

RISK GROUP	BIOSAFETY LEVEL	LABORATORY TYPE	LABORATORY PRACTICES	SAFETY EQUIPMENT
	Basic *Biosafety Level 1*	Basic teaching, research	GMT	None: open bench work
	Basic *Biosafety Level 2*	Primary health services: diagnostic services, research	GMT plus protective clothing, biohazard sign	Open bench plus BSC for potential aerosols
	Containment *Biosafety Level 3*	Special diagnostic services, research	As Level 2 plus special clothing, controlled access, directional airflow	BSC and/or other primary devices for all activities
	Maximum Containment *Biosafety Level 4*	Dangerous pathogen units	As Level 3 plus airlock entry, shower exit, special waste disposal	Class III BSC, or positive pressure suits in conjunction with Class II BSCs, double-ended autoclave (through the wall), filtered air

BSC = Biological Safety Cabinet; GMT = Good Microbiological Techniques (see Part IV of WHO Laboratory Biosafety Manual)

PPE Guidance for the Different Biosafety Laboratory Levels

Biosafety Level 1	• Personal protective equipment – gloves, gowns, and goggles
Biosafety Level 2 (in addition to Level 1)	• Gloves worn when handling infectious material or contaminated equipment • Face protection provided when working outside the BSC with infectious material • BSC used when potential for creating infectious aerosols/ splashes exists
Biosafety Level 3 & 4 (in addition to Levels 1 & 2)	• Closed-front gowns worn in laboratory • Protective laboratory clothing worn only in laboratory areas • Double gloves worn when handling infectious material, potentially contaminated equipment, and work surfaces • Respiratory protection worn by all personnel in the laboratory when aerosols are not safely contained in a BSC • Face protection provided when working outside the BSC with infectious material
BSC (Biological Safety Cabinet)[4]	• Personal protective clothing should be worn whenever using a BSC • Laboratory coats are acceptable for work being performed at Biosafety Levels 1 and 2 • A solid front, back-closing laboratory gown provides better protection and should be used at Biosafety Levels 3 and 4 (except for suit laboratories) • Gloves should be pulled over the wrists of the gown rather than worn inside • Elasticized sleeves can be worn to protect the investigator's wrists • Masks and safety glasses may be required for some procedures

HOW TO PROPERLY WEAR PPE

10 TIPS FOR HAND SAFETY

Personal protective equipment is an important first line of defense against a variety of hazards, but PPE is only effective when worn and used properly. Follow these general hand safety tips to keep workers aware and protected as they return to work.

1 PRACTICE HAND HYGIENE

3 REMOVE JEWELRY FROM HANDS AND WRISTS

4 FOLLOW DONNING AND DOFFING PROCEDURES

5 ENSURE A PROPER FIT

6 USE GLOVES CONSISTENTLY AS INTENDED

7 KNOW WHEN TO REPLACE A GLOVE

8 BE ALERT AND AWARE

9 AVOID HAZARDOUS ACTIONS

10 REPORT INJURIES IMMEDIATELY

DONNING & DOFFING DISPOSABLE GLOVES

Proper procedures for donning and doffing hand and body protection are critical to minimizing cross-contamination. The following step-by-step guidelines provide detailed instructions workers should follow.

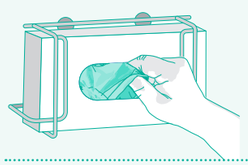
Follow the guidelines below or the instructional video to the right to ensure proper protection and avoid contamination after use.

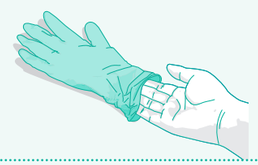
Doffing Disposable Gloves Video

HOW TO DON

1 Perform hand hygiene. Remove one glove from the box and avoid touching the fingers to reduce contamination risk. Make sure there are no holes or tears.

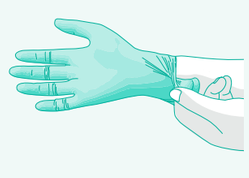
2 Most disposable and medical exam gloves can be worn on either hand. If using hand specific gloves, align the glove fingers and thumb with your hand to be sure you are putting the correct glove on the correct hand.

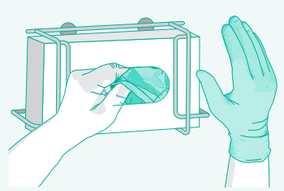




3 Insert five fingers into the cuff and pull the cuff over the wrist.

4 Repeat the procedure to don the other glove.

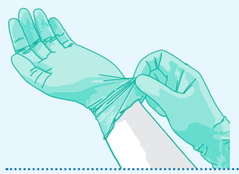


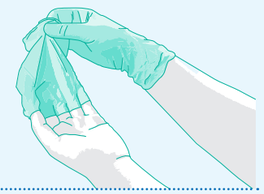


HOW TO DOFF

1 Grasp the outside edge of the glove near the palm.

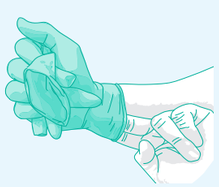
2 Peel the glove away from the hand, turning it inside out. Hold it in the opposite gloved hand.

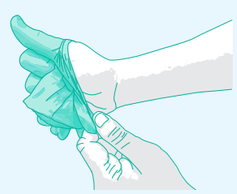




3 Slide an ungloved finger under the wrist of the remaining glove, being careful not to touch the outside of the glove.

4 Peel the remaining glove off from the inside, creating a "bag" containing both gloves. Discard the gloves appropriately. Perform hand hygiene.



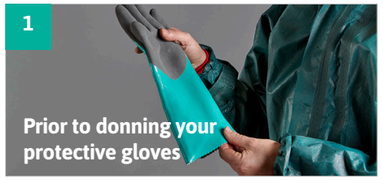


DONNING & DOFFING CHEMICAL GLOVES

Follow these guidelines for donning and doffing reusable chemical gloves. Chemical protective gloves will only help to protect you if they are:

- Properly selected
- Used for the correct environment
- Correctly fitted
- NOT torn, cut, punctured, or otherwise damaged

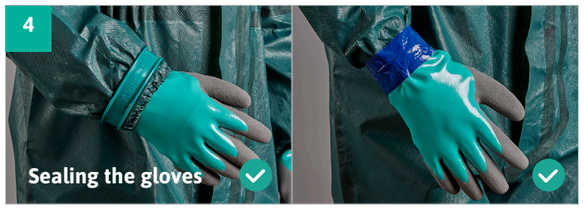
Donning



- Always follow manufacturer's instructions for use
- Wear an inner glove if required
- Inspect the gloves for any defects and imperfections

- Wash and ensure your hands are completely dry before donning the gloves

- Fold back the elasticated outer sleeve
- Pull the gloves on one at a time and ensure that the gloves fit well.



- Return the outer sleeve to its original position
- An AlphaTec® Glove Connector should be worn to provide a liquid tight seal
- Alternatively, the outer sleeve should be taped using an impermeable tape

- Wash the gloves before doffing to reduce the risk of skin contamination
- If this is not possible, take extra care when doffing to avoid the risk of chemical splash

Doffing

- Remove the Glove Connector / tape carefully
- Pull the fingertips of one of the gloves

- Crumple the loosened finger tips into a ball
- Free hand partially from the glove

- Using the cuff of the partially removed glove, grip the other cuff and pull down until the second glove is inside out and over the top of the first glove

- If the gloves are not reusable, carefully dipose of the gloves into an appropriate waste unit and ensure no contact is made by the skin to the outer glove

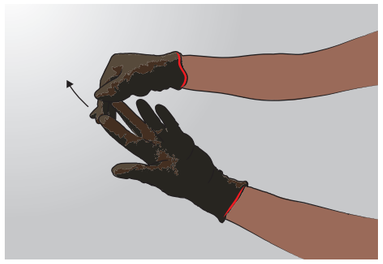
DOFFING MECHANICAL GLOVES

Follow these guidelines to correctly doff mechanical gloves.

STEP 1 –Loosen Glove at Fingertips

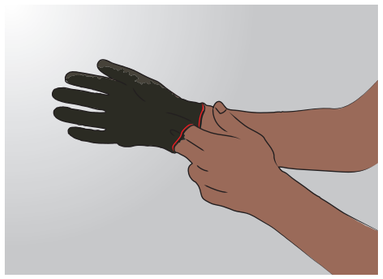
Pull one glove loose at the fingers using the opposite hand, but do not remove the glove completely

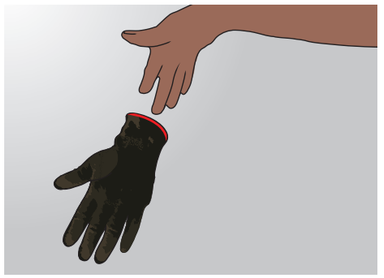
STEP 2 – Loosen Opposite Glove at Fingertips and Remove



Use the first hand with a loosened glove to pull the second glove loose at the fingers, and then pull the glove off

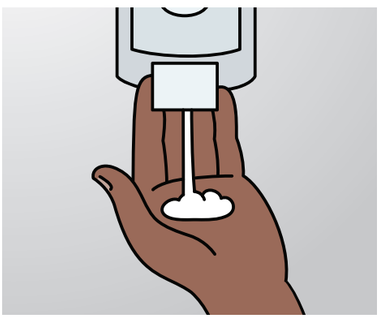
STEP 3 – Slide Glove Off

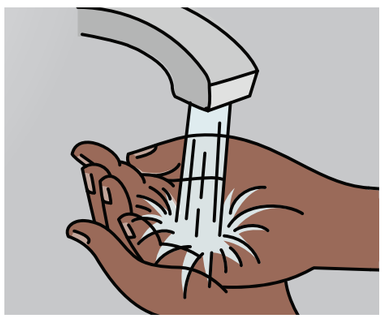




Slide two fingers inside the cuff of the first glove and slide it off the hand

STEP 4 – Wash Hands





Always wash your hands with soap and water for 20 seconds after removing PPE

DONNING PROTECTIVE SUITS

The instructions below illustrate the proper way to don Type 5/6 protective suits. For instructions on Type 3/4 suits, click here.

Prior to donning the suit

- Always follow manufacturer's instructions for use
- Use a designated changing area – free from contamination
- Check size and protection level of the chemical suit
- Open packaging carefully – do not use knives or sharp objects
- Read user instructions carefully
- Visually inspect the coverall
- Check for holes/tears and inspect seams and zips
- Do not wear if damaged

Donning the suit

- Shake the coverall to make the suit easier to put on
- Remove unnecessary bulky clothing and objects from pockets
- Remove jewelry
- Sit down and remove footwear
- Tuck trousers in to socks
- Insert leg in to coverall ensuring toes are pointed
- Pull coverall up to the waist

Putting on safety footwear

- Sitting down, roll up the legs of the coverall
- Put on required safety footwear
- Roll down each suit leg to cover the lower leg and ankle
- Do not tuck the suit leg into footwear
- If required for the application, tape the chemical suit hem to footwear above the ankle
- Insert each arm carefully into the sleeves
- Ensure each sleeve covers the wrist

Don the face mask

- If the application requires it, use protective eyewear
- Always follow the manufacturer's instructions for use
- Don the face mask, ensuring it fits comfortably around the face
- Pull up the hood ensuring there are no gaps

Sealing the suit

- Pull the zipper all the way up to under the chin
- Using the self-adhesive tape, remove backing tape first then seal down the front of the suit
- Ensure no creases or gaps are visible as this will reduce protection
- If required by the application, for full spray and particle protection, use chemical resistant tape
- To assist with taping, use the buddy system if required

Donning protective gloves

- Always wear the correct gloves for the application in accordance with the manufacturer's instructions for use
- Inspect the gloves for any defects and imperfections
- Pull the gloves on one at a time and ensure that the gloves fit well
- Wear an inner glove if required to give additional protection

Taping / finger loops

- Alternatively, the outer sleeve should be taped using an impermeable chemical tape
- Finger loops will help prevent movement when you are working above your head

Final checks

- Check the suit for fit and comfort

DOFFING PROTECTIVE SUITS

The instructions below illustrate the proper way to doff Type 5/6 protective suits. For instructions on Type 3/4 suits, click here.

Prior to doffing the suit

- Always remove as much contamination as possible before entering the washing or changing areas
- If required, use a decontamination shower
- Move to a designated decontamination area away from workplace hazards
- Where possible, stand over a decontamination bag for disposal of the suit
- Ideally have somewhere to lean against for extra stability

Unsealing the suit

- If the suit has a sealed or taped storm flap then take care to slowly pull away and unstick
- Avoid any risk of further contamination
- Find the outer zip puller under the chin
- Carefully unzip to the waist

Removal of the hood

- Using both hands, pinch the hood at each temple
- Pull upwards and backwards to stretch the hood away from the head
- Roll the hood outwards to minimize further contact with contaminated suit surfaces

Removal of the suit

- Roll the suit over the shoulders
- Take care not to touch the inside of the suit
- Pull the sleeve down and over the glove
- Repeat the procedure for the other arm

Removal of the suit

- Roll the suit outwards away from the waist to avoid the risk of contamination
- Sit down if possible to finish removing the suit
- Roll the legs of the coverall down both legs

Removal of footwear

- Hold the base of the suit and footwear
- Remove feet and move to an uncontaminated area

Removal of gloves

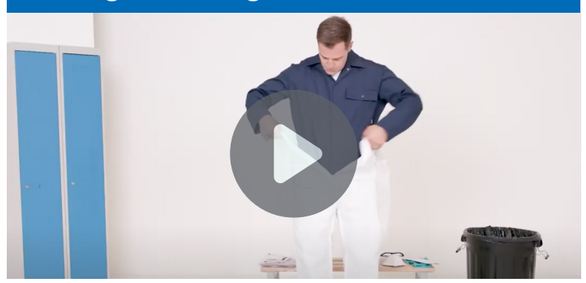
- Always follow manufacturer's instructions for removal
- Pinch the ouside of the glove on one hand and pull down over the fingers
- Using the clean hand, push inside the other glove and pull down and over, avoiding contact with the outside of the glove

Disposal of PPE

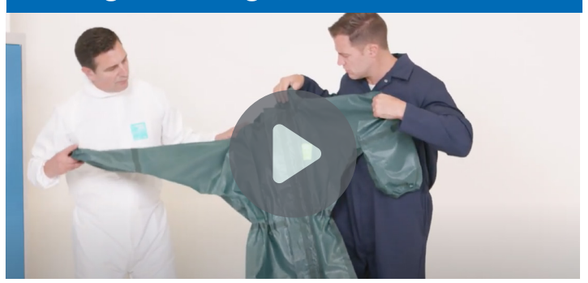
- Dispose of all PPE in accordance with manufacturer's instructions
- Ensure no contaminated equipment is left in the work area

These videos walk users through the donning and doffing process for type 5/6 and type 3/4 protective suits.

Donning and Doffing 5/6 Suits Video



Donning and Doffing 3/4 Suits Video



WEARING PROTECTIVE EYEWEAR

Many types of workers are now wearing disposable eye protection to help protect against the spread of COVID-19. Eye protection is intended to act as a barrier to infectious materials entering the eye, to reduce the risk of exposure to the novel coronavirus. Eye protection is used in conjunction with other personal protective equipment such as gloves, gowns, and face masks or respirators, and like all PPE, care must be taken when donning and doffing.

Indirectly-Vented Goggles

CDC/NIOSH states: "Appropriately fitted, indirectly-vented goggles* with a manufacturer's anti-fog coating provide the most reliable practical eye protection from splashes, sprays, and respiratory droplets. Many styles of goggles fit adequately over prescription glasses with minimal gaps. However, to be efficacious, goggles must fit snugly, particularly from the corners of the eye across the brow. While highly effective as eye protection, goggles do not provide splash or spray protection to other parts of the face."

* Directly-vented goggles may allow penetration by splashes or sprays; therefore, indirectly-vented or non-vented goggles are preferred for infection control."

Face Shields

CDC/NIOSH states: "Face shields are commonly used as an infection control alternative to goggles.** As opposed to goggles, a face shield can also provide protection to other facial areas. To provide better face and eye protection from splashes and sprays, a face shield should have crown and chin protection and wrap around the face to the point of the ear, which reduces the likelihood that a splash could go around the edge of the shield and reach the eyes. Disposable face shields for medical personnel made of light weight films that are attached to a surgical mask or fit loosely around the face should not be relied upon as optimal protection."

** In a chemical exposure or industrial setting, face shields should be used in addition to goggles, not as a substitute for goggles (ANSI Z87.1-2003 Practice for occupational and educational eye and face protection)."

Full Face Respirators

CDC/NIOSH states: "Full facepiece elastomeric respirators and powered air purifying respirators (PAPRs) are designed and used for respiratory protection, but because of their design incidentally provide highly effective eye protection as well. Selection of this type of PPE should be based on an assessment of the respiratory hazard in an infection control situation, but will also provide, as an additional benefit, optimal eye protection."

Reference:
1. https://www.cdc.gov/niosh/topics/eye/eye-infectious.html

DONNING & DOFFING PROTECTIVE EYEWEAR

Follow eye protection donning and doffing best practices[2]

1

Perform hand washing

2

With clean, washed hands, remove eye protection from packaging

3

Place goggles over eyes and secure over head with straps/ headbands

4

Tighten and adjust to ensure a snug (not tight) fit

5

Perform hand washing again before donning gloves

How to Remove/Doff

1. Use un-gloved hands
2. Grasp straps or headband and lift goggles/ face shield away from face
3. Place in designated receptacle for disposal

Reference:
2. https://www.cdc.gov/hai/pdfs/ppe/PPEslides6-29-04.pdf

PROPER DISPOSAL OF USED PPE

After doffing single use personal protective equipment, it's important to follow proper disposal guidelines to reduce risk of contamination and the spread of infection.

In most cases, single use gloves should be thrown into a lined trash bin after use.

Disposable gloves provide a critical layer of protection against hazardous substances. It's important to properly remove gloves to avoid transferring contaminants to the hands and skin. Improper disposal after use greatly increases the chance of transferring that contamination.

In some instances, a disposable glove is considered medical waste.

Disposable gloves used in patient contact and/or exposed to blood and other bodily fluids may be contaminated with hazardous substances, like viruses, and should be disposed of in medical waste bins. According to the WHO, it's important to follow local guidelines for medical waste to ensure they don't spread contamination.

Since the start of the COVID-19 outbreak, more people have been discarding gloves on streets and sidewalks. This is unhealthy for our community and environment. To reduce cross-contamination and environmental pollution, please discard used gloves in proper receptacles.

Did you know?

Improperly disposed gloves can tear and break into smaller pieces, making them difficult to retrieve and throw away. Most improperly disposed gloves end up in nature and oceans, polluting the environment and causing harm to wildlife.

HOW TO PROPERLY CLEAN & REUSE PPE

CLEANING PERSONAL PROTECTIVE EQUIPMENT FOR REUSE

While demand for PPE continues to increase as a result of the COVID-19 pandemic, Ansell recognizes that it is important to consider **temporary or alternate solutions** to mitigate subsequent critical supply shortages and support the global effort to reduce the spread of the virus.

Many PPE items specified by global agencies as suitable for protection against viruses like COVID-19 are designated single or limited-use and by definition are not intended to be cleaned for reuse. Recently, consideration is being given to alternate strategies whereby PPE for COVID-19 may be cleaned and reused. Any alternative approach should be founded on scientific evidence and, where applicable, regulatory guidelines to ensure proper protection.

Based on current evidence, in consultation with international experts, WHO has published last-resort temporary measures[1] for consideration during crisis situations. These temporary measures for PPE usage should be used only when and where there are serious PPE shortages or PPE is not available.

Last-Resort Temporary Measures for PPE Usage[1]

1. Extended duration of use for PPE
2. Reprocessing, followed by reuse (after cleaning or decontamination/ sterilization) of PPE
3. Considering alternative items compared with the standards recommended by WHO

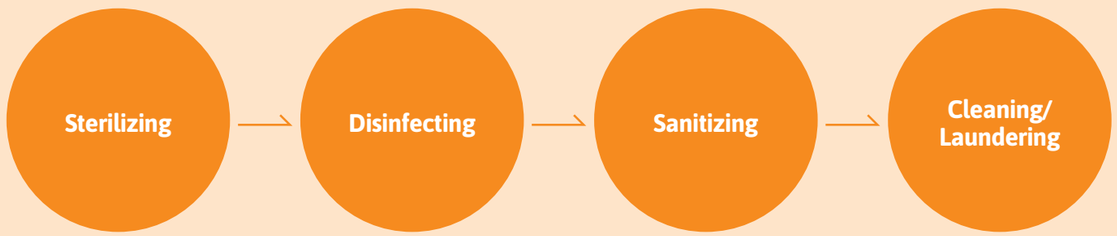
How clean is "clean" and what methods are available?

If you are considering an adapted approach to the instructions for use of PPE based on WHO guidelines, there are various factors to consider. Ansell experts have prepared the following advice for those considering how to clean or 'cleanse' PPE for reuse. These guidelines were developed after taking into consideration the impact on PPE performance and protective abilities of various different cleaning methods.

NOTE:

1. ATTENTION: WHO stresses that these temporary measures should be avoided as much as possible when caring for severe or critically ill COVID-19 patients, and for patients with known co-infections of multi-drug resistant organisms or other organisms transmitted by contact (e.g. Klebsiella pneumoniae) or droplets (e.g. influenza virus).

To protect the integrity and performance of PPE products, it is important to follow the correct steps associated with different cleansing methods. Below are the four types of cleansing methods in order of effectiveness.



***REMEMBER:* Always inspect PPE for defects prior to use, especially after any cleansing activity has been undertaken. After removing PPE, including protective gloves, always wash your hands.**

STERILIZING

CDC Definition	Requires	Process	Effectiveness	Associated RIsks
Bombardment of gamma radiation or EtO gas to kill organic matter by the breaking down bacterial DNA, inhibiting bacterial replication.	Irradiation chamber / access to EtO gas	Per the CDC definition	6-log reduction in microbial contamination on the PPE – reduction up to 99.9%	• PPE made from materials incompatible with gamma / EtO will lose mechanical and chemical properties • Repeated sterility is not a viable method of cleaning as sterility assurance cannot be guaranteed and multiple exposure to gamma radiation or EtO gas will destroy the product

DISINFECTING

CDC Definition	Requires	Process	Effectiveness	Associated Risks
Disinfecting kills germs on surfaces or objects. Disinfecting works by using chemicals to kill germs on surfaces or objects. This process does not necessarily clean dirty surfaces, but by killing germs on a surface after cleaning, it can further lower the risk of spreading infection.	Requires disinfecting agent* containing chemicals such as sodium hypochlorite or hydrogen peroxide	**Step 1:** Remove PPE using proper doffing procedure **Step 2:** Apply disinfecting agent thoroughly by spray bottle on both front and back of the PPE and allow at least 10 seconds of exposure per side **Step 3:** Allow at least 30 minutes of drying time in a well-ventilated area before reusing PPE When dealing with body protection, ensure the zipper is fully open	Reduction of up to 99.9% of microbial contamination from the surface of the PPE	• Due to the stronger agents involved, degradation or visible changes of the PPE may occur • Rapid drying, such as tumble drying, may compromise the protective properties of the PPE • Ensure it is carried out in a ventilated area far away from a flame or spark as ingredients are flammable

SANITIZING

CDC Definition	Requires	Process	Effectiveness	Associated Risks
Sanitizing lowers the number of germs on surfaces or objects to a safe level, as judged by public health standards or requirements. This process works by either cleaning surfaces or objects to lower the risk of spreading infection.	70-75% isopropyl alcohol*	**Step 1:** Remove PPE using proper doffing procedure **Step 2:** Apply 70-75% isopropyl alcohol thoroughly by spray bottle on both front and back of the PPE and allow at least 30 seconds of exposure per side **Step 3:** Allow at least 10 minutes of drying time before reusing PPE When dealing with body protection, ensure the zipper is fully open	Reduction of up to 99.9% of microbial contamination from the surface of the PPE	• Do not use 90+% isopropyl alcohol, as it evaporates too quickly for cleaning • Ensure it is carried out in a ventilated area far away from a flame or spark as alcohol is flammable • Rapid drying, such as tumble drying, may compromise the protective properties of the PPE

** Ansell recommends to use ethanol or isopropanol but not methanol*

CLEANING/LAUNDERING

CDC Definition	Requires	Process	Effectiveness	Associated Risks
Cleaning removes germs, dirt, and impurities from surfaces or objects. Cleaning works by using soap (or detergent) and water to physically remove germs from surfaces.	Warm, soapy water	**Step 1:** Remove PPE using proper doffing procedure **Step 2:** Introduce PPE to warm water **Step 3:** Perform light scrubbing	Cleans surface dirt only and moves germs from or around the surface of the PPE.	• It can be challenging to ensure all surfaces of garments are correctly washed • Use of hot water (>140°F/60°C) could cause physical stress to the PPE and affect its performance • Scrubbing too hard could compromise the physical properties of the PPE

* Some PPE items, e.g. mechanical protective gloves, can be laundered. Please refer to the laundering instruction in the packaging

LAUNDERING MECHANICAL HAND & ARM PROTECTION

Mechanical hand and arm protection safeguards workers from a variety of industrial risks such as cuts and abrasion. Experts recommend proper care and cleanliness of mechanical gloves and sleeves to extend wear life and minimize the spread of viruses. Due to the variety of coatings and fabrics, it is important to follow manufacturer's guidelines when cleaning mechanical PPE.

Follow the steps below for proper care of HyFlex® hand and arm PPE:

HyFlex® gloves and sleeves made with polyamide material (such as Nylon)

Examples: 11-800, 11-840, 11-270

HyFlex® gloves and sleeves made of para-aramid fibers (such as DuPont™ Kevlar®)

Examples: 11-541, 11-550, 70-11X

*Important Note: Do NOT use bleach on styles containing para-aramid fibers such as DuPont™ Kevlar®

HyFlex® gloves and sleeves made of high performance polyethylene (such as Dyneema® or Spectra®)

Examples: 11-518, 11-724, 11-280

Use commercial laundry soap or detergent (do NOT use dry cleaning solutions)	Use commercial laundry soap or detergent (may be bleached to help restore whiteness)
Wash for 10 minutes in warm water, do not exceed 104°F (40°C)	Wash for 10 minutes in warm water, do not exceed 104°F (40°C)
Rinse in warm water, do not exceed 104°F (40°C)	Rinse in cold water
If soiling is especially heavy, repeat wash and rinse cycle	Use high speed spin extraction for best results
Tumble dry, do not exceed 104°F (40°C)	Tumble dry, do not exceed 104°F (40°C) or dry longer than 10 minutes

NOTE: When laundering gloves that have especially heavy dirt or grease, include several pieces of heavy canvas in the second wash cycle - friction from the canvas against the gloves help to loosen and remove deep dirt.

** For all glove and sleeve styles listed above, it is important to not use water at extremely high temperatures as excessive heat can cause structural issues to the PPE.*

SANITIZING MECHANICAL HAND & ARM PROTECTION

Mechanical PPE such as HyFlex® gloves and sleeves help prevent industrial workplace mechanical risks, such as lacerations and abrasions, and are designed to withstand long-term use and multiple cleaning and sanitization cycles. Due to the COVID-19 pandemic, it is especially important to sanitize PPE between laundering cycles.

There are three steps to properly sanitizing your reusable mechanical PPE between laundering cycles.
The below protocol is effective for most mechanical protective industrial gloves and sleeves.

Step 1:

Remove PPE using proper doffing procedure†
Rest on a clean surface after removal

Step 2:

Apply 70-75% isopropyl alcohol* thoroughly by spray bottle on both front and back of the PPE and allow at least 30 seconds of exposure per side

Do not use 90+% isopropyl alcohol as it evaporates too quickly for cleaning

IMPORTANT: Ensure it is carried out in a ventilated area far away from a flame or spark, as alcohol is flammable

Step 3:

Allow at least 10 minutes of drying time before reusing PPE

REMEMBER:

- **Always wash your hands for 20 seconds with soap and water or use an alcohol-based hand sanitizer containing at least 60% alcohol after removing PPE**
- **Inspect PPE before every use to ensure the integrity is not compromised and it is suitable for the application for which it is being used**

**Ethanol can be substituted for isopropyl alcohol. Do not substitute with methanol*
*†For more information or guidelines, visit the **Mechanical Protection Resources** section on the **Ansell Safety Resources** page*

Mechanical hand and arm protection is made using different materials and therefore, have a variety of cleansing and sanitization processes. While it may seem easy to use everyday products such as sprays and wipes, all disinfecting products are created using different formulations, so it is difficult to predict their interaction with the variety of PPE coatings and fabrics and whether or not they are sufficiently disinfecting the PPE from the COVID-19 virus.

Disclaimer:
Employers must ensure workers are trained on the hazards of the cleaning chemicals used in the workplace as well as the proper inspection and disposal of regulated waste and PPE. Since Ansell does not control the environment the PPE is stored or used, the cleansing and reuse decisions of Ansell products, whether alone or in combination with additional PPE for an application, is the final responsibility of the user.

INSPECTING REUSABLE CHEMICAL & MECHANICAL PPE

Chemical and Mechanical PPE should be inspected before and after use, especially after any cleansing activity has been undertaken. Proper inspection will identify signs of weakness, damage, or wear that could indicate a reduced level of effectiveness.

If you observe any discoloration or other visually apparent defects on the PPE, it should not be reused and should be disposed of in accordance with local guidelines. The need to replace PPE will vary based on usage, exposure, and application.

1

Are there holes, snags, tears, or frayed yarn?

If so, replace the PPE.

2

Has the coating been compromised or degraded?

If so, replace the PPE.

- ☐ Can skin be seen through the coating?
- ☐ Has the material or coating hardened or cracked?
- ☐ Are there signs of chemical burns?
- ☐ Has the hand or arm PPE swollen in any way?
- ☐ Is there visible discoloration?

3

Does the PPE fit?

If not, replace the PPE.

- ☐ Is the material or liner too tight?
  - Hand and arm PPE should fit snug, but not so tight to impede movement
  - Some gloves and sleeves may shrink if laundered at high temperatures
- ☐ Is the material or liner stretched out or loose-fitting?
- ☐ Does the hand or arm PPE slide or fall off?

4

Look for symmetry - Does one side match the other?

If not, replace the PPE.

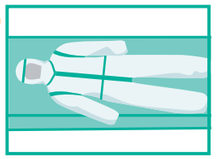
- ☐ Is either side distorted?
  - One side should be a mirror image of the other
- ☐ Are there defects hidden by stains or discolorations?
- ☐ Does it compare to a new pair of gloves or sleeves?

INSPECTING CHEMICAL CLOTHING PRIOR TO USE

Protective clothing should be inspected before and after use for signs of weakness, damage, or wear that could indicate a reduced level of effectiveness. This guideline provides a basic process to help workers with the inspection of their protective suits and gowns before and after every use.

The need to replace PPE, or its suitability for reuse will vary based on individual applications. Careful consideration should be given to how the PPE has been used and what hazards it has been exposed to. Organizations should provide guidance on the safe use and reuse of PPE based on their specific work environments.

Visual inspection of suits and gowns

1. 

Lay the garment on a clean, smooth surface to proceed with the inspection

2. 

Check the material for any visible defects including holes, tears, snags, or cuts

If so, replace the suit or gown.

3. 

Examine ancillary parts (e.g. attached gloves, visors, boots) for signs of wear and tear or damage

If so, replace the suit or gown.

4. 

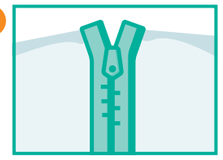
Look carefully for any signs of degradation or aging (e.g. discoloration, swelling, stiffness, and brittleness)

If so, replace the suit or gown.

5. 

Check the seams to ensure they remain intact

If not, replace the suit or gown.

6. 

Check for proper functioning of the zipper or other closures (e.g. Velcro or studs), if present

If not, replace the suit or gown.

7. 

Check the function of the glove connector system (if fitted), ensuring there are no obvious gaps between the garment sleeve and protective glove

If so, replace the suit or gown.

8. 

Check the elastic, if present, to ensure it is not damaged and remains flexible and fully attached, to enable effective joining with other PPE such as respirators or protective gloves

If not, replace the suit or gown.

Important: Always refer to the Instructions for Use that is delivered with each Personal Protective Equipment. If any defect or malfunction is found, the PPE must be taken out of service.

Disclaimer:
Employers must ensure workers are trained on the hazards in the workplace as well as the proper disposal of regulated waste and PPE. Since Ansell does not control the environment in which the reuse decisions of Ansell products, whether alone or in combination with additional PPE for an application is the final responsibility of the user.

GETTING STARTED

Virtual AnsellGUARDIAN® Assessments

AnsellGUARDIAN® is our consultative service to help companies select and implement the right personal protective equipment solutions to improve safety, increase productivity, and reduce costs. Using our 125 years of experience, proprietary software system, and database of over 30,000 chemicals, we analyze PPE needs and identify the solutions that will work best for each company's unique risks and applications. We have evaluated and implemented best business practices in over 15,000 facilities worldwide, reducing injuries and saving companies a total of $165M. AnsellGUARDIAN® assessments address 7 functional areas:

Injury Prevention
Identify hazards to reduce the risk of injury and lower the direct and indirect costs of injuries

Cost Reduction
Make performance improvements to lower direct and indirect PPE costs

SKU Reduction
Minimize SKUs to improve working capital

Standardization
Ensure optimum product selection across similar jobs

Controls
Optimize usage and disposal procedures

Training
Educate employees on selection and effective use of PPE

Productivity & Waste Reduction
Improve output through waste elimination

The New, *Virtual* AnsellGUARDIAN® Process

We've developed a new, virtual process for AnsellGUARDIAN® assessments to protect against COVID-19 risks. With virtual assessments and contactless implementation, we are fully equipped to provide all the benefits of AnsellGUARDIAN® without the need to visit your facility in person.

Data Collection | **Virtual Plant Assessment**

1 We'll gather data about your current PPE, **virtually**, by teleconferencing with safety managers and end-users and reviewing video clips of applications and processes. All intellectual property is highly secure and fully protected with NDAs.

Analysis and Recommendations | **Final Report**

2 Our industry experts and chemists will leverage our proprietary software to make tailored recommendations to meet your specific needs. We'll deliver our findings via teleconference and send our final report to you **digitally**.

Validation Testing & Implementation | **Training**

3 With our **contactless** implementation, we'll send samples and launch videos, virtually train your workforce, and validate our recommendations against all benchmarks. We're committed to ensuring successful implementation.

Protecting Against COVID-19

AnsellGUARDIAN® assessments help safety managers protect against the spread of viruses within the workplace and guide them on the path to reopening by addressing many safety needs and concerns related to COVID-19.

- Understand which PPE can help protect against exposure to viruses in specific industries and applications
- Identify potential alternatives to non-medical grade disposable gloves impacted by global supply shortages, such as reusable mechanical or chemical solutions
- Identify potential opportunities to launder, clean, sanitize, and reuse PPE
- Maximize budget by understanding the total cost of ownership of different virus protection measures, such as new PPE, hand washing stations, or physical barriers
- Reduce the risk of exposure through donning, doffing, and disposal best practices
- Implement COVID-19 controls, including social distancing guidelines, temperature checks, and mask requirements
- Provide product recommendations for janitorial, sanitization and cleaning
- Establish PPE selection criteria based on a comprehensive risk assessment, including COVID-19 prevention measures
- Train workforces on hand hygiene
- Help managers understand the financial impact of worker infections on the organization

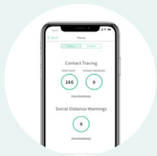
Request an AnsellGUARDIAN® assessment using our online form, or contact your local Ansell Sales Representative or Customer Service Representative today.

Ansell Protects™ Mobile App

Ansell has joined forces with Modjoul Inc., a data analytics company for worker health and safety, to develop a mobile application to help workplaces reopen safely. The Ansell Protects™ Mobile App provides an innovative, digital solution for symptoms reporting, social distancing, and contact tracing. Employees and managers can download the easy-to-use app on their mobile devices, without the need for additional hardware. All data is fully secured and protected. With the Ansell Protects™ Mobile App, **get back to work safely.**

Daily Pass

Employees can use the app to input daily responses to questions about potential symptoms. The app generates a scannable "pass" for entry into the workplace upon clearing the symptoms check.



Social Distancing

Employees are able to receive push notification when another person gets too close. An alarm, vibration, or banner notification will be triggered based on proximity.

Contact Tracing

The app discretely and securely stores employee proximity reports so managers can access contact tracing data if an employee on the team falls ill.

Learn More & Request a Demo

Ansell Protects™ modjoul

The Ansell Protects™ Mobile App is not currently available in Canada.

Support & Resources

Additional Information

Visit our Coronavirus Information Page for resources and updates on how we're protecting and supporting our people, our partners, and our communities. For additional guidance on protecting workplaces from COVID-19, browse our Safety Resources Library.

Contact Us

We're here to help. Please reach out to your local Ansell Sales Representative or Customer Service Representative if there is anything we can do to assist you in reopening and ensuring a safe work environment.

Ansell Healthcare Products LLC: +1-800-800-0444

Ansell Canada Inc.: +1-800-363-8340

Resources

Follow guidance from leading regulatory agencies and organizations, including OSHA, CDC and the World Health Organization.

For more information on Ansell's safety solutions visit www.ansell.com

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Given the novelty of this coronavirus, recommendations from the source references are interim and advisory in nature and are based on current knowledge of the situation. Always ensure compliance with your local public health authorities for the latest information regarding the COVID-19 pandemic.

Ansell Protects™