

# Sustaining Workplace Operations

## Industrial Operations Annex

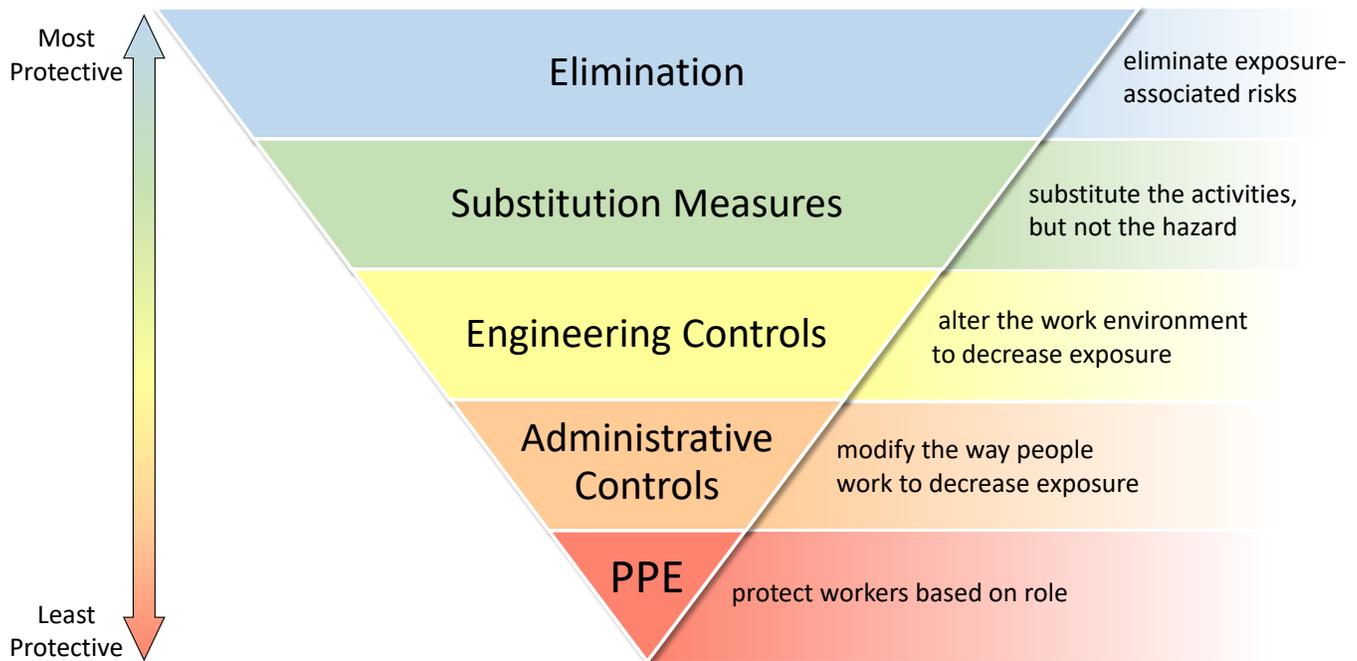
COVID-19

In addition to the controls provided in *Sustaining Workplace Operations*, this document applies the COVID-19 hierarchy of controls to Army industrial environments. These controls need to be further customized to suit the specific locations where they are employed. If the facility contains more than one type of work environment, such as administrative spaces, see appropriate annex(es) for those operations.

Army industrial workplaces include facilities and operations such as: Hazardous Material Pharmacies, Flight Lines, Ammunition Supply Points, Motor Pool and Maintenance Facilities, Ammunition Production (Arsenals and Plants), Depot Facilities, Demilitarization Facilities, Chemical Demilitarization Facilities, Army Field Support Battalion—Railhead Operations, Emergency Services, Range Operations, Research Development Test and Evaluation Operations, and Deployment Embarkation Points.

There is a draft checklist included in Appendix 1 at the end of this document. To ensure all criteria are met and no area or task is overlooked, create specific checklists from the following controls for each industrial building, area, or operation.

### COVID-19 Hierarchy of Controls for Workplace Operations



Adapted from NIOSH Hierarchy of Controls



For current COVID-19 information:

<https://phc.amedd.army.mil/covid19>

<https://www.coronavirus.gov/>

The Military Health System Nurse Advice Line is available 24/7:

Call 1-800-874-2273 option #1

or visit <https://www.health.mil/I-Am-A/Media/Media-Center/NAL-Day-at-a-glance>

For more information, contact your installation's Department of Public Health



**Public Health**  
Prevent. Promote. Protect.

**Army Public Health**

The Army COVID-19 Information Hotline:

1-800-984-8523

Overseas DSN 312-421-370

Stateside DSN 421-3700

## Elimination:

Elimination of disease transmission risk will require the development and broad distribution of an effective vaccine. For the COVID-19 pandemic, elimination of exposure can be achieved by requiring all workers to telework, canceling all travel, and other restrictions.

## Substitution Measures:

Substitution traditionally replaces the hazard with a less hazardous item or substance. In the current COVID-19 pandemic, substitution is the ability to change the activities, but not the hazard. An example is only having essential personnel on-site to perform required missions, while keeping the rest of the workforce in telework status.

## Engineering Controls:

In addition to the engineering controls described in Sustaining Workplace Operations and the Building Readiness Annex, consider the follow guidance:

- Verify all exhaust ventilation is functioning properly, including but not limited to:
  - » General building exhausts
  - » Point source exhausts
  - » Fume hoods
  - » Biosafety cabinets
- Check machine guarding, ensuring it's in the proper place and secured.
- Evaluate employee workstation layouts. If social distancing measures cannot be implemented, and multiple staff members are needed to accomplish tasks, install physical barriers where possible. Physical barriers include items such as strip curtains, Plexiglas® or similar materials, or other impermeable dividers or partitions.
- If fans, such as pedestal fans or hard-mounted fans, are used in the facility, take steps to minimize air from fans blowing from one worker directly at another worker. Personal cooling fans should be removed from the workplace to reduce the potential spread of any airborne or aerosolized viruses. If fans are removed, employers should remain aware of, and take steps to prevent, heat hazards.

## Administrative Controls:

Current information about the asymptomatic spread of SARS-CoV-2, the virus that causes COVID-19, supports the need for social distancing and other protective measures within industrial work environments.

## Communications with Army Workforce

- Early and frequent communication with the workforce prior to resuming operations will make this transition easier.
- Ensure message consistency, clarity, and alignment with installation guidance.
- Tailor communication individually for each work location. Examples of communication styles include:
  - » Written guidance that is shared with workforce
  - » Hand-outs
  - » Posted guidance
  - » Emails
  - » Using TV/monitors in common areas
  - » Social media
  - » Union notifications
- Clearly communicate to the workforce efforts to reduce risk of COVID-19 transmission within the facility:
  - » Cleaning and disinfecting of all:
    - Workstations
    - Accessible offices

- Common areas
- Break and lunch areas
- Team rooms
- Entrances
- Locker rooms/ change houses
- Restrooms
- » Instituting daily and weekly cleaning protocols; supervisors may be using a daily checklist to ensure compliance with protocols
- » Installing hand sanitizer stations in areas where soap and water are not nearby
- » Implementing social distancing actions to be taken in the workplace
- » Training regarding changes specific to COVID-19 in the workplace
- » Designing measures to control the flow of people entering and exiting facilities
- » Designing workstation distancing measures
- » Evaluating employee workstations to identify areas where less than 6 feet of separation exists
- » Rebalancing work schedules and workload to create potential for social distancing
- Clearly communicate with workforce:
  - » The use and care of face coverings
  - » How to handle restroom breaks
  - » How to implement cleaning protocols
  - » How to distribute cleaning supplies
  - » How to implement shift-to-shift separation and changeover to ensure social distancing
  - » The potential closure of common areas, such as small meeting rooms and on-site fitness facilities
- Encourage employee feedback for ways to improve COVID-19 control measures.

## General Guidance

- Limit facility access as required by the current Health Protection Condition (HPCON) level.
- Determine additional ways to reduce total number of employees present in work environment. This includes, but is not limited to, additional shifts, split shifts, staggered shifts, 4-day work weeks, etc.
- Consider cohorting (grouping together) workers, ensuring groups of workers are always assigned to the same shifts with the same coworkers. When people work in the same groups, it limits the number of people they interact with and decreases their overall potential for exposure. Those constantly moving between work groups are exposed to increased numbers of people and thus have greater chances of being exposed to COVID-19 and then potentially exposing their next work group. As such, the virus could quickly move through a facility.
- Modify the alignment of workstations, including along production or assembly lines if feasible, so that workers are properly socially distanced in all directions.
- Complete task-based review/mapping of the operational areas to determine best strategies for social distancing of at least 6 feet. Identify areas where distancing is not possible, and provide solutions or workarounds.
- Do not share tools, clipboards, etc.
- Eliminate non-essential meetings. If meetings are required, break them into smaller groups instead of holding a larger meeting. Maintain social distancing and use face coverings.
- Evaluate deliveries/shipments. Try to have an isolated area for drop-off and/or pick-up. Require delivery personnel to wear face covers.
- Maintain a visitor log, which can aid in future contact tracing efforts, if necessary.

- Modify breakroom furniture alignment to increase worker separation.
  - » Identify alternative areas to accommodate overflow volumes such as using outside tents for break and lunch areas.
  - » Communicate changes in individual work locations that are needed to accommodate social distancing.

## Face Covers

Face covers are required on installations when appropriate social distancing cannot be maintained. If social distancing can be maintained or staff are alone, they do not need to wear face coverings. Face coverings should be carried by employees at all times, as they may encounter others when moving in or around the facility. Face covers should be laundered daily.

Although face covers may be used in industrial settings where social distancing is not possible, they are not a replacement for non-COVID-19 personal protective equipment (PPE) normally worn by workers for protection from workplace hazards.

## Practices for Social Distancing

### Managing flow of people in and around facilities

To help maintain appropriate social distancing, it is important to control the flow of individuals throughout the facility.

- Define and identify walking routes inside of the facility and post diagrams of routes for employee reference.
- Dedicate specific entry and exit points, as well as parking locations to employees.
- Define perimeters around departments to limit movement as much possible.
- Assign specific restrooms, break areas, etc. for each departmental group to use.
- Consider using markings and signs to remind workers to maintain their location at their station away from each other.
- Consider touch-free timekeeping alternatives.
- Add additional physically separated clock in/out stations, if possible, to reduce crowding in these areas.
- Discourage employees from unnecessarily walking floors, between floors, or the building to reduce cross-contamination. Consider color-coded shirts or hard hat stickers to easily recognize who should be in a space.
- Reduce the number of people in company-owned vehicles or organized van pools.
- Take appropriate measures to maintain social distancing at all times within the workplace.

## Clean and Disinfect Facilities

Establish a sanitary baseline by cleaning and disinfecting before the facility resumes operations. During facility shutdown, increased cleaning and disinfection should occur within all common areas and areas that are normally unavailable during operations. Establish a cleaning routine that will regularly be executed.

Cleaning and disinfection should be performed using U.S. Environmental Protection Agency (EPA)-approved detergents and surface cleaners, followed by EPA-registered N-List disinfectants. Signage should be used to identify areas that have been cleaned and disinfected.

- Areas and surfaces outside of the work operations that should be cleaned and disinfected may include, but are not limited to:
  - » Turnstiles
  - » Guard shacks
  - » Entrances
  - » Vestibules
  - » Stairs

- » Handrails
- » Breakrooms
- » Locker rooms/ change rooms
- » Restrooms
- » Smoking areas
- » Doors (exterior and interior)
- » Counters
- » Conference rooms
- » Desks
- » Tables
- » Ice machines
- » Drinking fountains
- » Eye-wash stations
- » Trash bins
- » High-traffic office areas
- » Sweepers and scrubbers to run aisles, roadways, warehouse areas, etc.
- » Picnic tables
- » Shared office spaces
- » Additional common areas
- » Refrigerators
- » Microwaves (after each use)
- Areas and surfaces inside of the work operations that should be cleaned and disinfected include, but are not limited to:
  - » All tools
  - » All control pads
  - » Load stations
  - » Work platforms
  - » Ergo pads
  - » Hoses
  - » Lineside/in-process racks
  - » Tables
  - » Cabinets
  - » Team rooms
  - » Lockers

## Hand Hygiene

Regular handwashing is vital to stopping the spread of COVID-19. If soap and water is available, ensure employees regularly wash hands, following Centers for Disease Control and Prevention (CDC) guidance. If access to soap and water is limited, use hand sanitizer containing at least 60% alcohol.

## Suggested Locations to Place Hand Sanitizer Stations

Hand sanitizer stations should be added to the workplace. Ideal locations are areas both prominent and with high traffic. Use a sign to identify locations of hand sanitizer stations. Do not place in restrooms, locker rooms, or other places with sinks that have soap and water.

- Some suggested areas:
  - » Administration building main entrance/lobby
  - » Employee main entrance
  - » Separated buildings main entrances (e.g., shops, training center, change house)
  - » Main stairways/escalators with high usage
  - » Enclosed break rooms
  - » Outdoor break areas
  - » Outside medical/physical therapy entrances
  - » Lactation rooms

## Common Areas

- Common areas should be cleaned and disinfected at least on a daily basis.
- Provide cleaning supplies for employees to utilize before/after they use common spaces.
- Identify items likely to be frequently touched that are difficult to clean. Remove or replace such items with alternatives.
- Determine maximum occupancy of conference rooms given potential for adequate social distancing. Place signage to indicate maximum occupancy.
- Conference rooms should be disinfected before and after each use. Disinfectant wipes or spray should be left in each conference room, and employees should be encouraged to wipe down all surfaces and equipment (e.g., mouse, keyboard, phone).
- If meetings must occur in person, they should be conducted in a quick manner and while maintaining social distancing and using face coverings.
- Lingering and socializing before and after meetings should be discouraged.
- If vending machines are used, provide supplies and require cleaning and disinfecting after each use.

## Kitchen Areas

- Kitchen areas should be cleaned and disinfected after each use or at least on a daily basis.
- Refrigerators, sinks, coffee makers, ice machines, faucets, beverage dispensers, dishwasher handles, and associated control surfaces should be disinfected at least three times per day.
- Use disposable kitchen products when possible.
- If reusable products are used, ensure that these products are maintained, handled, and cleaned per product instructions. If available, utilize dishwashers to clean reusable materials.
- Both reusable and disposable silverware should be stored in a way so that adjacent silverware is not easily touched when a worker is retrieving a utensil.
- Ice machines requiring a handheld scoop should not be used, as it is difficult to control potential contamination.
- Communal meals should not be provided to employees, and food should not be available in common areas where employees may congregate.

## Restrooms

- Doors to multi-stall restrooms should be able to be opened and closed without touching handles, if at all possible.
  - » Place a trash can by the door if the door cannot be opened without touching the handle. Foot stops for doors (engineering control) may also be an option.
- For single restrooms, provide signage and materials (paper towels and trash cans) for individuals to use without touching the handles.
- Provide paper towels in restrooms, and disconnect or tape-off hand air dryers.

- Ensure bathrooms are kept clean and are properly disinfected.
- Place signs indicating that toilet lids (if present) should be closed before flushing.

## Personal Protective Equipment:

PPE is regularly used in Army industrial operations. Continue to use required PPE for the tasks performed. Due to increased demand for PPE during the COVID-19 pandemic, PPE acquisition may be delayed. Ensure on-hand quantities of PPE meet normal operational needs, and supplies are ordered to account for potential supply delays.

## References:

Ford Return to Work Manufacturing Playbook:

[https://media.ford.com/content/dam/fordmedia/North%20America/US/2020/05/01/Ford\\_ReturnToWork\\_COVID-19\\_Playbook\\_ME.pdf](https://media.ford.com/content/dam/fordmedia/North%20America/US/2020/05/01/Ford_ReturnToWork_COVID-19_Playbook_ME.pdf)

Centers for Disease Control and Prevention (CDC):

<https://www.cdc.gov/coronavirus/2019-ncov/community/guidance-manufacturing-workers-employers.html>

National Safety Council Return-to-Work Guidance for Open Industrial Operations:

[https://www.nsc.org/Portals/0/Documents/NSCDocuments\\_Advocacy/Safety%20at%20Work/covid-19/safer-playbooks/operations/open-industrial.pdf?ver=2020-05-14-181031-377](https://www.nsc.org/Portals/0/Documents/NSCDocuments_Advocacy/Safety%20at%20Work/covid-19/safer-playbooks/operations/open-industrial.pdf?ver=2020-05-14-181031-377)

## Appendix 1: Draft Checklist

### COVID-19 Industrial Operations Checklist

Date: \_\_\_\_\_

Building: \_\_\_\_\_

Building POC: \_\_\_\_\_

Assessor Name: \_\_\_\_\_

This is a draft checklist to be modified by the assessors to ensure that locally determined COVID-19 mitigation measures have been considered and implemented.

<b>ENGINEERING CONTROLS</b>	Yes/No/NA
Physical barriers where needed (reception desk, etc.)	
Partitions between desk/work stations	
Check ALL exhaust ventilation for building	

<b>ADMINISTRATIVE CONTROLS</b>	
<b>General Guidance</b>	Yes/No/NA
Adjust schedules and shifts for reduced occupancy	
Close common areas or alter use (conference rooms, break areas, etc.)	

<b>Communication Guidance</b>	Yes/No/NA
Develop communication program specific for each building and facility	
Provide guidance to occupants	
Post guidance throughout the building	
Use all available platforms to communicate COVID-19 mitigation measures (social media, email, etc.)	
Develop training on COVID-19 related topics as needed	
Communicate facility wide changes (work lines, procedures, work shifts, breaks, restrooms, change rooms, entrances, clocking in/out, how to move through the facility)	

<b>Social Distancing Requirements*</b>	Yes/No/NA
Explain where/when face coverings are required	
Explain how building will work under a reduced capacity to ensure social distancing	
Explain how flow of people into and around the building will change	

Explain one-way hallways	
Explain dedicated entrances/exits	
Explain kitchen occupancy	
Explain breakroom use and occupancy	
Explain conference/huddle room use and occupancy	

\*These can be achieved through written plans or signage.

<b>Personal Hygiene</b>	Yes/No/NA
Is handwashing/hand sanitizing enforced?	
At facility entrance	
After using bathroom	
When departing facility	
Is 60% alcohol hand sanitizer provided throughout the facility?	
Is proper cough and sneeze etiquette explained in the COVID-19 communications and posted throughout the facility as a reminder (i.e., cover nose/mouth/face)?	
Are there adequate supplies of handwashing soap, towels, and 60% alcohol-based hand sanitizer?	

<b>Other Building Changes</b>	Yes/No/NA
Reconfigure areas to meet social distancing requirements	
Remove chairs to allow for proper social distancing	
Restrict visitors and revise policies to reflect changes	
Change shipping and receiving practices, as needed	
Restrict in-person meetings	
Discourage lingering in common spaces	
Restrict elevator occupancy and post in/around elevator(s)	

### **CLEANING AND DISINFECTION CHECKLIST**

<b>Cleaning and Disinfecting Supplies</b>	Yes/No/NA
Disposable gloves	
Paper towels	
Cleaning solutions	
Disinfectants (EPA N-list per CDC guidance)	

<b>Common Areas</b>	Yes/No/NA
Clean and disinfect high-touch areas* in these common spaces:	
*High-touch areas include door handles, drawer handles, faucets, light switches, buttons, appliance handles, etc.	
Lobby	
Breakrooms	
Kitchens	
Vending	
Elevators	
Stairways/Stairwells	
Exterior doors	
Restrooms	

<b>Work Stations</b>	Yes/No/NA
Clean and disinfect work stations at least once a day/ once per shift	
Keyboards	
Control panels	
Switches	
Hand tools	
Seats	

<b>Restrooms/Showers/Locker Rooms</b>	Yes/No/NA
Are restrooms, locker rooms and showers operating according to the installation's HPCON level?	
Are signage and materials supplied to ensure proper hand washing?	
Is there signage saying to close toilet lids prior to flushing?	
Can doors be opened/closed without touching handles?	

<b>Custodial Services</b>	Yes/No/NA
Are there any changes needed in the custodial services for the building?	