

# Hazard Assessments COVID-19

A simple risk analysis can help you determine where - and what - personal protective equipment should be used.

Hazard assessments are required under OSHA regulations for deciding what personal protective equipment controls may be needed for hazards on the job. A literal reading would even suggest that they be completed for work tasks that may not require the use of personal protective equipment. This would be necessary simply to make the determination that personal protective equipment is not needed.

While the requirement for hazard assessments has been with us since 1994, I suspect that many workplaces have not complied or do not have the necessary documentation to prove that hazard assessments were adequately performed. This documentation could become especially important should a serious injury occur.

## OSHA Regulations

The requirements for personal protective equipment for General Industry are contained in 29 CFR Part 1910.132. In this context, personal protective equipment refers to head, eye and face, respiratory, body, hand and foot protection. Personal protective equipment for construction, shipbuilding, longshoring and other distinctly regulated sectors are covered in those sector regulations. Hearing protection fall protection and other special types of personal protective equipment are covered under other sections of OSHA standards. The General Industry section of the OSHA regulation states, in part:

"The employer shall assess the workplace to determine if hazards are present, or are likely to be present, which necessitate the use of personal protective equipment (PPE)."

"The employer shall verify that the required workplace hazard assessment has been performed through a written certification that identifies the workplace evaluated; the person certifying that the evaluation has been performed; the

dates(s) of the hazard assessment; and which identifies the document as a certification of hazard assessment."

The hazard assessment requirement (contained under paragraph d) and a paragraph on training requirements (paragraph f) apply to sections 1910.133 (Eye & Face Protection), 1910.135 (Head Protection), 1910.136 (Foot Protection), and 1910.138 (Hand Protection) While not explicitly stated, it would also apply to protection of the body (e.g., protective clothing). The hazard assessment and training requirements in this part of the OSHA standards do not apply to sections 1910.134 (Respiratory Protection) and 1910.137 (Electrical Protective Equipment), because each of these has its own selection scheme.

OSHA requires a written certification that the hazard assessment has been performed. However, there is no requirement that the hazard assessment itself be in writing. Most professionals would suggest that written documentation of the actual assessment, although not literally required, would be a best practice.

Appendix B of the standard contains some general guidance (nonmandatory) for assessments that include the following steps: conduct a walk-through survey observing hazards; organize the data; analyze the data (type, level of risk, seriousness of potential injury); selection (based on the hazard); and reassessment of the hazard. The appendix is very general; thus, the information is only somewhat helpful. Consider the following guidance to augment what is listed in Appendix B:

- Perform all of the hazard assessments in writing and maintain these records.
- Use a job hazard analysis (JHA) or job safety analysis (JSA) approach that identifies potential physical, chemical, biological or other hazards for each work task.
- Include an evaluation of the relative risk for each hazard and the controls proposed, including hazard controls other than PPE.
- Include copies of the references (e.g., manufacturers' literature) used for the selection or note what was relied upon for the selection. Do not rely solely on material safety data sheets.
- Document JSA or JHA for jobs not requiring PPE due to low risk or where resolved through other types of hazard control.

- Include training requirements for workers and others in the assessment.
- Establish a means to validate the selection and use of PPE through measures such as medical surveillance for higher risk applications.
- Establish a suspense date to re-evaluate the job or task (3 to 12 months from initial evaluation) to reaffirm the effectiveness of the PPE (re-evaluation is required if the job or hazards change).
- Document protective equipment failures, determine the root causes for the failures, and document corrective actions to resolve these incidents.

## **Performing the Job Safety or Job Hazard Analysis**

The basic principle of JSA or job hazard JHA is to break down the work to be performed into distinct tasks, and then analyze each distinct work task for potential safety risks or hazards. For our application, we would also be interested in information on the performance requirements of PPE. JSA may also include other elements such as property damage and product quality. Here, we will only consider what could happen to the worker and what performance requirements are needed in PPE for purposes of this analysis. JSA/JHA should also include "what if" analysis for nonroutine and upset conditions. It is important to include a "what if" or fault tree approach to the job analysis, because accidents commonly result from deviations from work practices and normal operations.

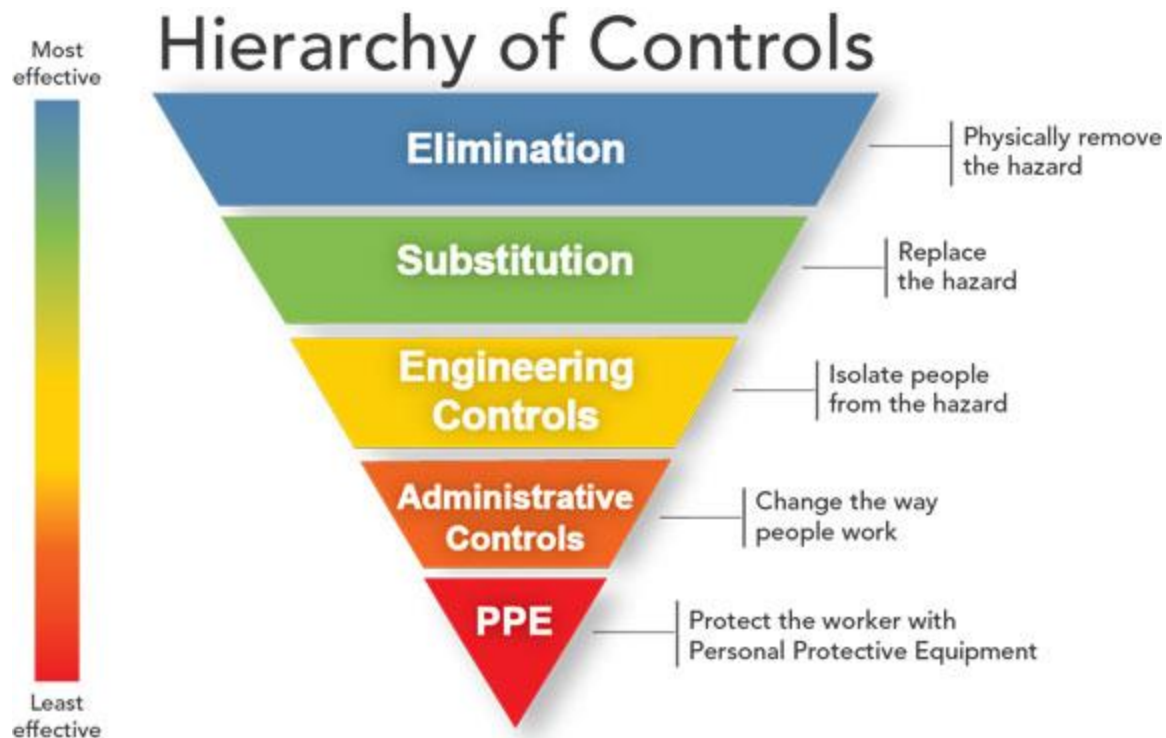
For this scenario, consider what is possible, entering customers home, the customers home is a work location that is an uncontrolled environment. Utilize the Hierachy of controls to preform your Job Briefing/JSA.

# **HIERARCHY OF CONTROLS**

## **Overview**

Controlling exposures to occupational hazards is the fundamental method of protecting workers. Traditionally, a hierarchy of controls has been used as a means of determining how to implement feasible and effective control solutions.

One representation of this hierarchy is as follows:



The idea behind this hierarchy is that the control methods at the top of graphic are potentially more effective and protective than those at the bottom. Following this hierarchy normally leads to the implementation of inherently safer systems, where the risk of illness or injury has been substantially reduced.

NIOSH leads a national initiative called [Prevention through Design](#) (PtD) to prevent or reduce occupational injuries, illnesses, and fatalities through the inclusion of prevention considerations in all designs that impact workers. Hierarchy of controls is a PtD strategy. To learn more, visit the PtD [website](#).

## Elimination and Substitution

Elimination and substitution, while most effective at reducing hazards, also tend to be the most difficult to implement in an existing process. If the process is still at the design or development stage, elimination and substitution of hazards may be inexpensive and simple to implement. For an existing process, major changes in equipment and procedures may be required to eliminate or substitute for a hazard.

## Engineering Controls

[Engineering controls](#) are favored over administrative and personal protective equipment (PPE) for controlling existing worker exposures in the workplace because they are designed to remove the hazard at the source, before it comes in contact with the worker. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The initial cost of engineering controls can be higher than the cost of administrative controls or PPE, but over the longer term, operating costs are frequently lower, and in some instances, can provide a cost savings in other areas of the process.

For descriptions of engineering control technologies researched by NIOSH, and information on the control details and their effectiveness, visit our [Engineering Controls Database](#). The engineering controls contained in the database are beneficial for users who need control solutions to reduce or eliminate worker exposures.

## Administrative Controls and PPE

Administrative controls and [PPE](#) are frequently used with existing processes where hazards are not particularly well controlled. Administrative controls and PPE programs may be relatively inexpensive to establish but, over the long term, can be very costly to sustain. These methods for protecting workers have also proven to be less effective than other measures, requiring significant effort by the affected workers.

## Conditions to consider using CDC guidelines

- <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/how-covid-spreads.html>
- <https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html>
- <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>

## Recommendations for entry into customers premises

Following the hierarchy of controls

- Elimination
  - Unachievable
- Substitution
  - Unachievable
- Engineering Controls
  - Social distancing
- Administrative Controls
  - Reschedule work – emergency work only
- PPE
  - PPE should be used in every entry to customers' homes.
  - There is NO sure way to know if the premises has been cleaned and sanitized as per CDC recommendations  
<https://www.cdc.gov/coronavirus/2019-ncov/prevent-getting-sick/disinfecting-your-home.html>
  - Also we have no ability to know that no occupant is free from the COVID-19 virus <https://www.cdc.gov/coronavirus/2019-ncov/symptoms-testing/symptoms.html>
  - PPE minimum requirement
    - Tyvek coveralls
    - N95 or greater respirator
    - Face shield
    - Latex gloves
    - Safety glasses
- Work boots-work gloves