

Hierarchy of Controls

Controlling the health and safety risks in a workplace is necessary to prevent injury and illness. The first step is to identify and assess the risks through inspections, JHA, or equipment reviews or any other information indicating a potential risk. Then decide on the best way to control the risk or hazard by either removing or reducing them, by applying the Hierarchy of Controls system.

The Hierarchy of Controls is the preferred method of controlling preventing and controlling hazards. You must document that you went through this process.

- **Engineering** - i.e. installing guards on machinery, ventilation, sound proofing
- **Safe Work Practices** - policies and procedures increasing safety either by changing the actual way the work is done or by adding a tool to help
- **Administration** - i.e. Rotating workers more often to reduce exposure times
- **Personal Protective Equipment** - i.e. respirators, ear plugs

When deciding on the best way to control a risk, start at the top of the hierarchy of controls. First investigate if the risk can be eliminated, by using an engineering control to take the worker out of the equation for the hazard. Then start to factor the worker back into the equation, by first changing the way they work, then how long they will work with the hazard, then how they can protect themselves from the hazard. This is the most effective way to control a hazard.

Examples:

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| <ul style="list-style-type: none">• Noise Overexposure<ul style="list-style-type: none">○ Engineering Controls<ul style="list-style-type: none">▪ Shielding of Noise Source○ Safe work practices<ul style="list-style-type: none">▪ Change work process to lower hazard○ Administrative procedures<ul style="list-style-type: none">▪ Rotate workers to keep under PEL○ Personal protective equipment<ul style="list-style-type: none">▪ Hearing protection | <ul style="list-style-type: none">• Respiratory Hazard<ul style="list-style-type: none">○ Engineering Controls<ul style="list-style-type: none">▪ Ventilation○ Safe work practices<ul style="list-style-type: none">▪ Change work process to lower hazard○ Administrative procedures<ul style="list-style-type: none">▪ Rotate workers to keep under PEL○ Personal protective equipment<ul style="list-style-type: none">▪ Respirators |
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Engineering Controls



This glove box is an example of an engineering control that isolates the process. Unless there is some other type of dust problem, he probably doesn't need a respirator. If he does need a respirator, he should be wearing an approved respirator.

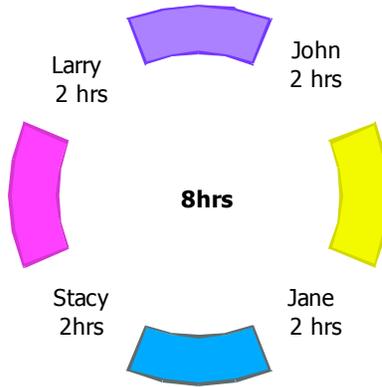
Safe Work Practice



This is example of a safe work practice control. Vacuuming, rather than sweeping, is the preferred method of dust removal. Some situations require the use of HEPA vacuums, e.g., asbestos.

Administrative Controls

Each worker is exposed to the hazard for 2 hours, rather than 2 exposed to 8 hours.



Personal Protective Equipment



When effective engineering controls are not feasible, or while they are being instituted, respirators are acceptable.

