

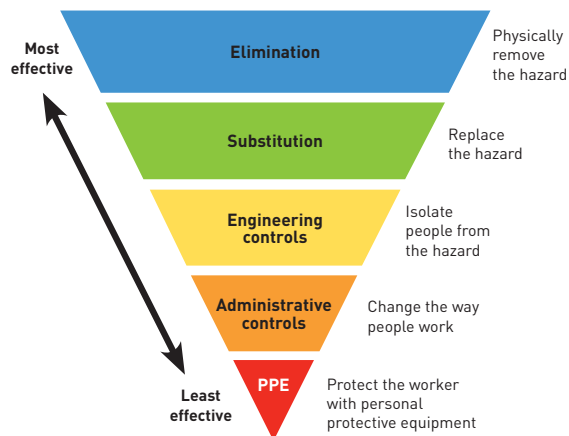
A way to address hazards - Hierarchy of controls

Key takeaways

- The Hierarchy of Controls is a helpful model for finding many solutions to addressing workplace hazards.
- Start at the top of the hierarchy and work down. Permanent solutions are most effective.
- Be sure to evaluate all costs associated with your chosen solution and discuss any 'ripple effects' that may result.

There're always opportunities to improve workplaces. After an employee observation, accident, or near miss, everyone should work together to fix what's unsafe.

The National Institute for Occupational Safety & Health (NIOSH) "**Hierarchy of Controls**" is a great way to help people find the best solution to a safety and health hazard. The hierarchy is arranged with the most effective solution at the top (elimination) and the least effective solution (personal protective equipment) at the bottom. When discussing possible solutions, aim to find an idea for each category.



Example: An employee hurt their shoulder by over-reaching to a high storage shelf.

- Elimination** - Remove elevated shelving.
- Substitution** - Store materials in their individual/smaller packaging.
- Engineering** - Provide a stepstool at storage location.
- Administrative** - Write a policy to only store small, lightweight objects overhead.
- PPE** - Provide employees with grip gloves and traction shoes.

Example: While working with wood, dust got into the eye of an employee.

- Elimination** - Outsource the task, purchase presanded or cut wood.
- Substitution** - Purchase industrial sanding machine to conduct task.
- Engineering** - Install local dust ventilation to capture dust particles.
- Administrative** - Clean workspace daily.
- PPE** - Provide employees with wraparound goggles for sanding work.

When choosing recommendations, consider all the costs. Engineering controls (barricade, wall, guard) may have a higher initial cost than purchasing personal protection equipment (safety glasses, hearing protection), but you should consider the years of maintenance and employee training that come with every choice.

Take action (Complete one or more activities as a team)

- DISCUSSION:** Choose a recent incident, near miss, or safety observation to discuss with your team. What solutions can your team brainstorm to manage the hazard?
- INSPECTION:** Get a piece of required PPE used in the workplace. Inspect it as a team. Brainstorm what technology or process would be needed to eliminate, substitute, or engineer out the hazard the PPE is protecting you from.
- FIELD TRIP:** Walk through your workspace and look for places where each of the hierarchy categories have already been put into place. Which do employees feel are most effective, and why?

