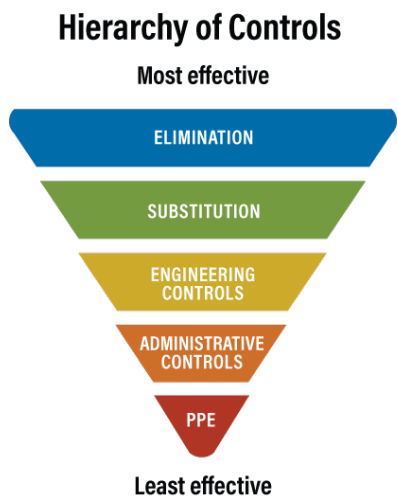


## Hierarchy of Controls –

The hierarchy of controls is a step-by-step method for eliminating workplace hazards, ranking them from most effective to least effective. Starting at the top, assess the feasibility of elimination, then substitution, and continue until the bottom, identifying as many controls as needed to protect workers.



### 1. Elimination:

Elimination is the process of removing hazards from the workplace, ensuring they are no longer present. It is the most effective method and should be used whenever possible. Examples include using noise-free equipment, using a reach pole for window washing, disposing of stored products, and avoiding driving during extreme weather conditions.

### 2. Substitution:

Substitution is a control method that involves replacing a hazard with a less hazardous one. Thoroughly assess the hazards and risks associated with the alternative, ensuring it is lower and not just as harmful. Examples include replacing solvent-based paints with water-based alternatives, using larger granule forms, and using electric motors instead of diesel ones. Ensure the substitute product doesn't cause harmful effects and monitor exposures to ensure it's below occupational exposure limits.

### 3. Engineering Controls:

Engineering controls are methods that remove hazards from the source before they reach workers. They can be integrated into plants, equipment, or processes to minimize exposure. Examples include isolation, enclosures, guarding, ventilation, mechanical lifting devices, and

guardrails. Proper design, use, and maintenance ensure reliable control of worker exposures.

#### 4. Administrative Controls:

Administrative controls aim to minimize workplace hazards through policies, training, and procedures. They are lower than elimination, substitution, and engineering controls, but can be combined with other measures like job rotation, preventative maintenance, scheduling, restricted access, and using signs.

#### 5. Personal Protection Equipment (PPEs):

Personal protective equipment (PPE) is essential for workers to protect them from workplace hazards. It should be used only when elimination, substitution, engineering, or administrative controls are ineffective or when additional protection is needed due to a temporary or emergency condition. PPE includes respiratory, skin, eye, foot, and hearing protective devices. The choice of PPE depends on the specific hazard and requires a complete PPE program.