
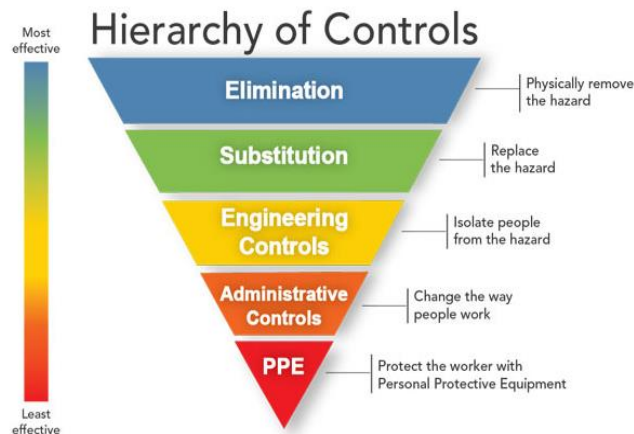


KAUST Health and Safety Toolbox Talk	Toolbox Talk Number	HSE/RF/TBT/002	 جامعة الملك عبد الله للعلوم والتقنية King Abdullah University of Science and Technology
	Title	Personal Protective Equipment (PPE)	
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Controlling exposures to occupational hazards 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.

APPLY THE HIERARCHY OF CONTROL TO MANAGE USE OF PERSONAL PROTECTIVE EQUIPMENT (PPE).

- **First:** Eliminate the hazard or exposure.
- **Second:** Substitute materials or equipment to reduce the Hazard or exposure.
- **Third:** Use engineering Control of the Hazard or exposure.
- **Fourth:** Use administrative Control of the Hazard or exposure.
- **Fifth:** Use Personal Protective Equipment.



Administrative controls and PPE programs may be relatively inexpensive 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. The following PPE may be selected based on the Hazard and where other control methods are not feasible:

- **Safety Glasses, Goggles, or Face Shields:** Use when employees are exposed to hazards such as flying particles, chemical splash and vapor, infectious materials, and harmful light radiation.
- **Protective Gloves:** Suitable gloves shall be used to protect the hands against skin absorption of harmful substances, chemical burns, electrical hazards, abrasions, cuts, and punctures.
- **Hard Hats:** Required when there are overhead hazards, electrical hazards, or there is the potential to bump the head against fixed objects.
- **Safety Shoes:** Required when the feet are potentially exposed to crushing, puncture, electrical, and slip hazards.
- **Electrical PPE:** Required when employees are potentially exposed to live electrical conductors.
- **Respirators:** May be required when respiratory hazards cannot be safely controlled through engineering or work practice controls.
- **Ear Plugs or Ear Muffs:** To protect against harmful noise levels (>85 dB(A) 8 hour time weighted average).
- **A full-body harness:** Used when there is a risk of fall and other fall protection methods such as barricades are not feasible.

SELECTING, USE and STORAGE OF PPE

- Employers are responsible to conduct a Risk Assessment covering all work activities. When other hazard control methods are not possible, the Risk Assessment must indicate when, where and the type of PPE to be worn.
- When selecting PPE, fit and comfort must be taken into consideration since a variety of sizes are available.
- Supervisors must ensure that all employees have the correct PPE for the job and wear PPE as required.
- Employees are responsible to wear PPE where required to do so.
- Employees must inspect their PPE before use and properly care for and store their PPE.
- Damaged PPE must be discarded and replaced with new suitable PPE.
- Employers are responsible to provide the correct PPE and PPE storage facilities.
- Employers must provide adequate training by a competent person for all employees regarding the selection, use and storage of PPE.

For more information, please contact Community.Safety@KAUST.EDU.

Hierarchy of Control Illustration taken from [The National Institute for Occupational Safety and Health \(NIOSH\)](#)