When it comes to protecting workers from workplace hazards, there are methods that can be implemented to eliminate or minimize exposure to hazards and provide workers with safe and healthful working conditions.

Some methods of control are more effective than others and are provided here in order of decreasing effectiveness:

**Elimination** is meant to physically remove the hazard altogether. It is the most effective way to control a risk, because the hazard is no longer present. An example is to eliminate tripping and electrical fire hazards by providing more electrical outlets.

**Substitution** seeks to reduce the risk of exposure by replacing the hazardous material for a less hazardous one. Consider using concentrated glass cleaners, such as Alconox, in place of hazardous acids and solvents, water-based paint instead of solvent-based paint, or non-mercury thermometers in place of traditional mercury thermometers.

**Engineering Controls** can remove the hazard at the source before coming in contact with the worker. They can include fume hoods, gloves boxes, and machine guarding.

**Administrative Controls** do not remove the hazard but reduce employee exposures by changing the way people work. Limiting exposure time, good housekeeping, written operating procedures, site-specific training, alarms, and signs are all examples.

**Personal Protective Equipment** (PPE) is considered to be the last line of defense when it comes to reducing exposure to a hazard. However, it provides another layer of protection for the individual and can be used in conjunction with engineering and administrative controls. A PPE Hazard Assessment Certification Form can be used to assist in identifying the type of PPE.

**Quick Take**

- Some methods of control are more effective than others.
- Hazards can change with time, so methods of control need continuous review and updating.
- Contact EHRS for assistance in determining how to control hazards in your workplace.

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