

Safety in a Changing Work Environment

"New" is frequently associated with "better" in the workplace. But when new equipment, substances, or procedures are introduced, your employees might also be exposed to new hazards.

To protect your workers in a changing work environment, you need to:

- Identify new hazards.
- Train employees to take new precautions.
- Select PPE for changing conditions.

Pinpoint New Hazards

Although new equipment is often safer because it has new or enhanced safeguards, there will almost certainly still be hazards. And those hazards may be different from the ones employees were used to with the old equipment. New risks might involve:

- Electrical shock
- Burns
- Eye injuries
- Cuts
- Amputations
- Fire
- Noise

With hazardous substances, risks might include:

- Acute and chronic health effects
- Safety hazards such as fire, explosion, or chemical reactions
- Chemical burns
- Sensitization to irritants
- Consequences of spills and other unexpected releases

If new procedures involve different materials, substances, or equipment, employees could be exposed to new hazards. And if the new procedures involve new or different steps, the consequences of forgetting steps or performing steps in the wrong order could lead to unanticipated results, including accidents and injuries.

Meet New Training Requirements

Before operators are allowed to use new equipment, they must be trained to do so safely. Even if new equipment is *similar* to what operators are used to, there may be significant changes that must be clearly identified so employees make no mistakes. Other employees who work around the equipment may also need training.

Employees who are authorized to maintain and repair new equipment need intensive training to provide them with the knowledge of how to service and repair the new equipment safely according to the manufacturer's instructions.

According to OSHA's Hazard Communication Standard, whenever a new hazardous substance is introduced into your workplace, you must:

- Identify the substance and explain how it can be hazardous.
- Tell workers where to find safety and health information about the substance and how to interpret what they read.
- Give detailed instructions on how to work safely with the substance.
- Explain how to avoid exposure
- Train employees to respond in emergencies involving the substance.

When training employees on new procedures, use demonstrations, step-by-step explanations, and hands-on experience. Make sure workers know:

- The purpose of the procedure
- The benefits (how it will help do the job better)
- The potential hazards (safety and health hazards)
- The steps and the order in which to perform them
- The required personal protective equipment (PPE)

Verify that trainees understand how to use the new equipment, handle the new substance, or perform the new procedure. Monitor performance until you're sure training has been effective and workers have adapted to the change.

Match PPE to New Hazards

Changes in equipment, substances, and procedures may involve changes in PPE. The PPE employees have been using may no longer be sufficient to protect against new hazards.

For example, even though new equipment may have built-in safety features, manufacturers may not always be able to engineer out all hazards. PPE may be required to protect against remaining hazards. The type of PPE required may include some or all of the following:

- Eye protection
- Hearing protection
- Head protection
- Face shields
- Safety shoes

New substances might also require new PPE. For example, different types of gloves or eye protection might be required to protect against new hazards. Different respiratory protection might also be necessary.

New procedures could mean changes in PPE if, for example, the new procedure involved the use of a new substance or different equipment.

Keep Up, Keep Safe

As technologies continue to evolve, the introduction of new equipment, substances, or procedures has become common in most workplaces. To make a smooth and safe transition

from old to new, prepare employees by teaching them to recognize new hazards and take new or additional precautions to prevent injuries and illnesses.

In a changing work environment, you need to be ready with new strategies for protecting your workers from the *next* hazard.