Hazard Prevention and Control

Select Controls

This worksheet lists key considerations for choosing the right controls for the hazards in your workplace. Choose controls that best protect workers—as high as possible on the hierarchy of controls. You might sometimes need to use interim or temporary controls until you can put permanent ones in place.

To-Do
☐ Review key considerations for selecting controls, such as OSHA standards and the hierarchy of controls.
☐ Consult workers about the impact of controls on job performance. Get input on whether selected controls will be feasible and effective.
☐ Evaluate and control any new hazards created by controls.

The questions below will help you select the most effective controls. As you review them, make sure to discuss options with your workers. You can do this through safety meetings, regular company meetings, or departmental meetings.

1. Does an OSHA standard specify a control method for the identified hazard? If so, choose that control at a minimum.

Example: Any worker who enters a "permit-required confined space" (such as a sewer pipe with a low-oxygen atmosphere) must wear a harness with a retrieval line. This makes rescue easier in an emergency.

2. Are you addressing any serious hazards immediately?

These are hazards that are likely to cause death or serious physical harm. Make sure workers know they have the authority to stop work they believe is unsafe.

Examples of serious hazards:

- A handheld power tool with an exposed wire
- A fork truck with defective brakes
- A toxic gas leak with a faulty gas detection system

3. When you can't put permanent controls in place right away, are you using interim controls?

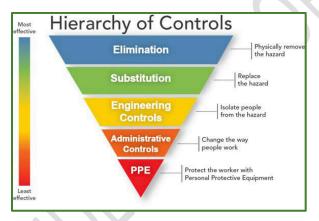
Interim controls are temporary. You should continue to monitor them while working on implementing permanent solutions.

Examples of interim controls:

- Using a pump garden sprayer to control dust until a dust suppression system is installed
- Placing oil-absorbent pads and signage around a leaking machine while waiting for new parts
- Making a railing from 2x4s on a set of stairs until a permanent one can be installed

4. Are you choosing controls using the hierarchy of controls?

Use the hierarchy thoughtfully. Consider not just where a control falls on the hierarchy, but also its impacts on quality and productivity and how easy or difficult it is to use. A control won't be effective if it's never used!



Source: NIOSH

5. Have you identified hazards that a new control might introduce?

Consider how to control new hazards and whether the trade-offs are appropriate.

Examples:

- A slip and fall hazard on a stairway installed to replace a ladder
- A confined space from enclosing a process that creates dust or fumes
- Hearing protection that makes it harder to hear backup alarms

6. Are you seeking out equipment or products that are safer by design?

This means eliminating hazards and controlling risks "at the source" or as early as possible.

Examples:

- Ergonomically designed hand tools such as pliers or wrenches
- Cleaning solutions without hazardous chemicals

For more on how to incorporate safety into design, see the NIOSH webpage on prevention through design: https://www.cdc.gov/niosh/topics/ptd.

7. When no single control fully protects workers (as is often the case), are you using a combination?

It's not unusual to combine controls from two levels of the hierarchy of controls to protect workers. Example:

A grinder is equipped with machine guarding to eliminate exposure to pinch points. Workers doing the
grinding wear face shields and goggles. The grinding station is isolated in an enclosed booth to protect
surrounding workers from flying chips and fragments.

8. Have you determined the overall feasibility of the control?

Consider how much it costs, how easily and quickly you can implement it, and how easy it is to use. Also think about what training will be required for the control. This will be important when you create a training plan under the training and education part of your program.

9. Have you included controls for emergency and nonroutine hazards?

Review the hazards you identified for emergencies and nonroutine operations in Hazard Identification, Worksheet 4a and 4b. Select control options for these hazards considering the questions above.

Activity: Choose control options for hazards in your workplace

Refer to the work you did under Worksheet 1, where you identified potential controls for hazards in your workplace. Using the questions above, choose the control(s) you will use for each hazard. If you can't implement permanent controls immediately, also specify interim controls. (You'll specify time frames in Worksheet 4.)

Again, be sure to ask workers for input. They may know of controls that worked at previous jobs or be able to suggest the best solutions based on their familiarity with the operation. They are also likely to be able to tell you which controls will be most effective.

Hazard	Selected control(s)	Interim controls, if needed	Potential hazards introduced by control(s)
Example: Unguarded mechanical power press (risk of amputation)	Light curtain Preventive maintenance Training for workers on periodic testing of, and limitations of, the light curtain	Use of long hand tools to insert and remove parts—no hands in dies Warnings Temporary guards made of wood or PVC tubing Temporary procedures such as increased observation and supervision	Injury from long hand tools Failure of light curtain if installed too close to the point of operation Lack of a fail-safe mode of the light curtain