

## Layer risk controls to help prevent workers from being struck by mobile equipment

Whenever workers are around mobile equipment or vehicles, there's a risk of being struck by the equipment or vehicle. Struck-by incidents can occur in any industry where mobile equipment is used. When struck-bys happen, they usually result in serious or fatal injuries. As an employer, the best way for you to prevent these kinds of incidents is to use a layered approach to risk controls, where several different controls work together to minimize the risk to workers.

### Employer responsibilities

Employers are responsible for managing the risk of struck-by incidents by doing the following:

1. Identify tasks and areas where workers interact with mobile equipment.
2. Assess those tasks and areas, and prioritize the most likely points of interaction between mobile equipment and workers.
3. Implement effective controls to eliminate and reduce the risk.

### Obstructed views when using mobile equipment

The operator's view from a piece of mobile equipment can be limited. All vehicles, from everyday cars to the largest heavy equipment, have some obstructed views (blind spots). The amount of obstruction depends on factors such as the type of equipment, attachments, and any loads being carried. Mobile equipment operators can't always see workers on foot. With obstructed views, operators may not even be aware that they



The operator's view is blocked by the attachment and load.



The red line shows the operator's blind spot. The operator can't see anything in that area, including the pickup truck and two people. View our [blind spot video](#).

have struck a person, especially if the equipment is large or the environment is noisy. That's why it's so important to have several different risk controls in place to protect workers on foot.

To learn more about your equipment's obstructed views, see the manufacturer's instructions and follow the recommended controls.

## How can I control the risk?

If mobile equipment is being used in a workplace, the most effective way to deal with the risk to workers is to eliminate interactions between the mobile equipment and workers. If you can't eliminate all the interactions, then minimize the risk by using several different risk controls that will overlap and work together to reduce possible interactions between workers and equipment.

### Elimination

Exclusion zones eliminate the risk of interactions between workers and mobile equipment. An *exclusion zone* is a designated area that is meant for exclusive use by either workers or mobile equipment at any one time. It can be designated to keep workers on foot out of the area or to keep mobile equipment away from a worker-only area.

Even when you have a designated exclusion zone, you will need other, overlapping controls in place to ensure the zone is effective (e.g., barriers, signage, training, and policies). If there are times when workers and mobile equipment have to work together in the exclusion zone, you will need further controls to minimize the risk (e.g., cameras, alarms).

### Engineering controls

These are physical changes to the environment, tasks, equipment, or materials. For example, use fencing to define and prevent access to exclusion zones. Use barriers to create designated walkways. Install proximity sensors that signal an alarm or shut down equipment when people get close to mobile equipment.

### Administrative controls

These are changes to the way work is done, including scheduling, policies, work procedures, and signage. For example, arrange work schedules so mobile equipment doesn't operate when pedestrians are present. Use radio communication between operators and workers on foot when workers are exposed to mobile equipment. Educate and train workers on your policies and procedures.

### Personal protective equipment (PPE)

Even when controls such as an exclusion zone or barriers are in place, PPE such as high-visibility vests can make workers more visible. Consider providing workers on foot with radio-frequency identification (RFID) tags that can be detected by an approaching vehicle and alert the operator.

### Communicate

Talk to your workers and supervisors about the risks. Communicate the controls you have in place and check that they're working effectively by asking for feedback.

### OHS Regulation requirements

- [Section 4.33, Arrangement of work areas](#)
- [Sections 8.24 and 8.25, High visibility and distinguishing apparel](#)
- [Section 16.6, Obstructed views and pedestrians](#)
- [Part 18, Traffic Control](#)

### For more information

- [Reduce the risk of workers being struck by mobile equipment](#)
- [Reducing the risk of workers being struck by vehicles or mobile equipment: Guide to using the fillable template](#)

View our blind spot video on [YouTube](#) or scan the QR code.

