

Uneven Terrain

WHAT'S AT STAKE?

Uneven ground can introduce several avoidable hazards, such as sloping slippery surfaces, ruts and furrows, and the risk of penetrating into voids hidden below the ground.

Each year, health and safety statistics continue to rank slips, trips and falls as being among the main causes of injury in workplaces

WHAT'S THE DANGER?

Slips, trips, and falls account for the [majority of general industry incidents each year](#), including accidental deaths. The cost is significant, running businesses billion per year in workers' compensation and medical costs.

These accidents are attributed to a wide variety of causes, from ice and wet spots to loose flooring, clutter, and electrical cords. But one slip, trip, and fall hazard is too often overlooked: **uneven ground conditions**.

The workers most at risk for slips, trips, and falls due to uneven ground surfaces might be those who are often around unpaved ground, which can be unpredictable, or concrete, which is prone to cracking and holes.

Construction workers, highway maintenance workers, landscapers, and even postal workers all fall into this category. But, of course, many other workers must deal with uneven terrain and walking surfaces at some point throughout their shifts.

Workers face other dangers that are aligned with uneven terrain:

- Curbs

- **Milled edges**
- **Tools on the ground**
- **Raised manholes**
- **Dismounting Equipment** – Quickly jumping off a pick-up truck, or even spinning when you only have one ladder rung remaining on a roller can be enough to twist or roll your ankle.
- **Excavations** – Beware of climbing in and out of excavations, in particular, where the excavation is only 1-3' deep.
- **String-line** – Tripping hazard
- **Concrete structures**

HOW TO PROTECT YOURSELF

Experts suggest that variation in a walking surface of as little as a quarter of an inch is enough to cause a trip and fall. That's about the thickness of a pencil. And while it's not always an easy issue to correct, there are a few key things employers can do to mitigate the safety risk that uneven surfaces pose.

1. Conduct Regular Inspections to Identify (and Fix) Uneven Surfaces

Whether indoors or outdoors, it's important to regularly inspect and assess the ground conditions of your worksite. Identify any and all places where there is an uneven walking surface – even if it's only a quarter or half an inch – and decide whether each one is fixable.

2. Well Lit Work Areas

Trip and fall risks are amplified when workers aren't able to see well. Keeping work areas lit is critical for ensuring that any safety hazards are visible. Indoors, this means changing burnt out lightbulbs as soon as you notice them and using lamps in areas where overhead lighting is insufficient.

Outdoors

Outdoor surfaces can pose unique challenges that require creative

solutions. One fix might be as simple as using a shovel to clear or pack down a raised pile of dirt or snow, or to fill a hole. In muddy spots where ground is both uneven and unpredictable, covering the area with sheets of plywood can help provide a sturdy, even walking surface to avoid trips.

Early morning and later evening outdoor work often requires additional lighting, since the sun isn't up. There are many different options when it comes to portable work lights, including strings of lights and those that are on tripods. Some require electricity and others run on rechargeable batteries, so it's important to prepare properly for the environment you'll be in.

3. Slow Down

The majority of trips and falls are preventable by simply slowing down and keeping an eye on the ground conditions in front of you. Tread carefully, and bring any concerns about the ground condition to the attention of a supervisor immediately.

4. Use Signs (When Appropriate)

Whenever possible, you should aim to eliminate a hazard. However, when that isn't an option, clearly marked signs can help draw employees' attention to a particularly risky area, ensuring they use more caution when walking and working.

5. Delay Work When Necessary

If you spot uneven (and unsafe) terrain and there is no fix available, it's perfectly acceptable to delay work. Mud, ice, and snow in particular are difficult to address on the spot and it's not always possible to work around them in a safe manner. A better option is to amend the work schedule and either return with a game plan to deal with the specific hazard or wait until it's resolved (e.g., the mud hardens, snow melts).

FINAL WORD

When you encounter an uneven ground surface, the best course of action is to be proactive and address it as best as possible.

Don't leave it for someone else to deal with – or for someone else to get injured by. Many uneven surfaces are made safer through simple fixes, and it's always worth it in the end.