TOOLBOX TALKS

Topic: Overhead Powerline Safety

How to Stay Safe When Working Near Overhead Power Lines

You'd think that people who work on overhead power lines would be the ones who most often suffer high-voltage electrocutions. But the statistics show otherwise. In fact, electricity is a leading cause of injuries on the job in many other professions, including painting, construction, and agriculture. Electrical utility workers are highly trained and recognize the dangers they face every day, unlike other workers whose projects only occasionally bring them near an overhead power line. And that's why it's important that everyone be aware of the hazards of overhead power lines and learn some safety precautions for working around them.

It's Not Just the Electricity that Can Kill You

The four main types of injuries related to working around electricity include electrocution (which is fatal), electric shock, burns, and falls. For example, three workers were installing new roof gutters on an apartment building when the top end of the gutter contacted the inboard conductor of a high-voltage circuit. One of the workers, who was on a ladder, fell almost seven meters (22 feet) onto a concrete patio. He later died of his injuries.

10 Rules to Follow

Here are some basic rules to follow when your work takes you near energized overhead power lines:

1. Assume overhead power lines are energized.
2. Know what the recommended distances are in your jurisdiction. It varies from region to region, so contact your local utility provider and find out how far away they require you to be from the power lines.
3. Whether you're cleaning windows, pruning trees, or operating mobile equipment, before starting any work, look up and locate the power lines—especially when working around trees where power lines may not be clearly visible.
4. Post warning signs about the power lines in the work area.
5. Designate a signaler who will watch to make sure you stay a safe distance away from the power lines.
6. Check the height of your vehicle's load and make sure there is adequate clearance.
7. Keep ladders, scaffolds, pipes, and other tools and materials at least three meters (10 feet) away from lines.
8. Be mindful that sometimes conditions affect your ability to determine distance, such as looking at something peripherally or without a contrast. When it comes to power lines, err on the side of caution.
9. When working in the vicinity of power lines, choose non-conductive wood or fiberglass ladders. Aluminum ladders and extensions will act as conductors of electricity if they contact overhead power lines.
10. Carry all ladders horizontally, not vertically, and be careful when placing them.

One Final Warning

If you are in a vehicle and it comes in contact with a downed power line, STAY in your vehicle. Wait until the utility service personnel tell you that it is safe to leave your vehicle. If you must leave your vehicle (because it's on fire, for example) do not touch the vehicle and the ground at the same time. Keep your feet, legs, and arms as close to your body as possible and try to jump at least a little more than half a meter (about two feet away) from your vehicle. Still keeping your feet together, shuffle away from your vehicle at least 10 meters (32 feet) away before taking a normal step.

Conclusion

Remember: You do not need to touch a power line for it to hurt you. Respect the power and stay away.

Quiz:

1. More electrical utility workers are electrocuted than workers in any other profession.
True or False

2. A ladder can be safely placed on a building within two feet from an overhead power line.
True or False

3. It is easy to tell at a glance whether an overhead power line is energized or not.
True or False

4. You need to be in direct contact with a power line in order to sustain an injury.
True or False

5. When working in the vicinity of power lines, you should use non-conductive wood or fiberglass ladders.
True or False

Answers:

1 False, 2 False, 3 False, 4 False, 5 True