

CPSG Safety Alert

Ladders and Electricity Don't Mix

CPSC warns that consumers can be electrocuted when they use ladders near overhead wires. Consumers may use ladders near overhead wires to clean gutters, paint structures, trim trees, and repair roofs and chimneys. Many overhead power lines are not insulated.

CPSC is aware of 15 (non-work related) electrocution deaths involving consumers between 2000 and 2009 when someone used a ladder that contacted an electrical wire around the home.

Electrocutions can occur when:

 Consumers move ladders that accidentally touch an overhead electrical wire near the house or street. Metal ladders and wood ladders with metal reinforcement wire can conduct electricity, which can shock or kill anyone touching the ladder or touching someone in contact with the ladder.

 Ladders shift position. Wind, uneven ground, or reaching to the side while on the ladder can cause the ladder or person to contact an overhead wire.

Metal, wood and fiberglass stepladders and extension ladders conforming to the American National Standards Institute (ANSI) voluntary standards have labels warning about this hazard.



Despite these and other warnings, electrocutions still occur each year. To avoid this hazard, CPSC advises you to use a ladder that does not conduct electricity, such as fiberglass with non-conductive side rails when working near overhead wires. Non-conductive ladders should be kept clean to maintain their non-conductive safety properties.

If you must use a metal or wood ladder, follow these precautions:

- 1. Make sure the ladder is clean and dry.
- 2. Carefully check the location of all overhead wires before using a ladder. Any power line (including the line running from the street to your house) can permit electricity to flow into a piece of metal or other object, such as a wet tree branch, that touches it.

Note: Power lines and phone lines often appear similar. Assume all overhead wires carry electricity. Some overhead power lines are coated to extend the life of the line. The coating is not intended to protect against electrocution.

- 3. Lower the ladder when carrying or moving it, to avoid touching an overhead wire. Since long ladders can be unwieldy, have someone help carry and set up the ladder.
- 4. Never work on a windy day; a gust of wind can cause the ladder to shift and touch an overhead wire.

- 5. Never place a ladder where it could slide into an overhead line. Make sure the distance to the nearest overhead line is at least twice the length of the ladder.
- 6. Place the ladder's feet on solid, level ground before climbing it. When the ground is not level or is soft, put a flat piece of wood under one or both feet of the ladder to provide a solid, level base. If possible, tie off the ladder to prevent it from moving. Wood ladders should be clean and dry to reduce the possibility of electrical conductivity.
- 7. If the ladder should start to fall into an overhead line, let it go. Never try to move it. Do not leave the ladder unattended so that no one will unknowingly touch it. Have someone call the power company and ask them to cut off electricity to the line before you move the ladder. If someone is holding the ladder when it contacts the overhead line, never try to pull them away with your hands. Use something that does not conduct electricity, such as a long piece of dry wood or rope, to push or pull them loose.