

MILLVILLEMUTUAL
INSURANCE COMPANY

(570) 458-5517
1-800-262-8495
215 STATE STREET
MILLVILLE, PA 17846
www.millvillemutual.com

Avoiding Electrical System Strain

Many people have little understanding of the electrical system in their homes. While operation of electrical devices in the home does not require a great deal of electrical knowledge, we encourage policy holders to be aware of the warning signs that indicate their electrical system may be under strain or having problems.

Electricity has been shown to be a safe and reliable source of residential power for many decades. Yet, faulty or inadequate electrical systems are too frequently a source of fires in homes and businesses.

Be aware of the signs of electrical strain that can include:

- *Recurrent tripped circuit breakers or blown fuses*
- *Outlets that are warm to the touch*
- *Discoloring of outlets or power cords*
- *Crackles, hisses, or sizzles coming from the outlets*
- *Frequent momentary power loss or dimming of lights*

If you have any of the problems listed above, or have other concerns about your electrical system, have it evaluated by a licensed professional as soon as possible.



Your persistent attention to warning signs in your electrical system is one of the best investments you can make in your property and for your family's safety.

What's Up with Watts?

Wattage is a measure of electrical power used by light bulbs and other appliances. Lamps and electrical lighting fixtures are manufactured using a number of different materials for a variety of applications. The maximum wattage of a lamp or lighting fixture defines the rated limit of safe operation of the device considering the materials used in the product's manufacture.

Exercise caution when replacing bulbs. Even though bulbs with larger wattage may precisely fit into a light socket, the increased energy consumption of the higher watt bulb can create a safety hazard. High wattage bulbs operate at higher temperatures. They also use more electrical power which draws more electrical current though the fixture's wiring. "Overlamping" is an expression that describes the practice

Know what's up with the watts in your lamps and lighting fixtures.

of using bulbs that exceed the wattage level recommended by the manufacturer. Overlamping can damage or short out wiring in the lighting device, and can increase fire risk due to overheating the socket, the lamp shade, or other nearby materials.

When purchasing a light, look beyond its decorative value to be sure it can safely provide the desired amount of light. Manufacturer specifications for wattage should be clearly listed on the product and/or the written materials that accompany it. If not, contact the manufacturer. Replacement light bulbs should be equal to or less than the wattage specified by the manufacturer.





The Confusion About Fuses

Home electrical fuses often get a bad rap. They are often considered more dangerous and inferior to circuit breakers. Actually, when properly used, fuses may be more accurate than circuit breakers. However, it is also fairly easy to misuse fuses without realizing the error.

Electrical fuses and circuit breakers are like “automatic shut off valves” for the flow of current in the electrical circuit. When current flow exceeds the capacity of the circuit, the wiring in the circuit starts to overheat. This causes the element in the fuse to melt or “blow out”, stopping the electrical flow and ending the overheating. A circuit breaker stops the electrical flow when it “trips”, requiring the circuit to be reset by flipping the circuit switch at the electrical panel.

If you have questions or concerns, contact a qualified electrician. Don't be confused about fuses.

The fuse needs to be unscrewed and replaced with another fuse. However, this is where potential danger arises. Residential fuses with different flow capacities often fit the same socket. Thus, a blown fuse can easily be replaced by a fuse that requires a much higher electrical flow before it “blows”. The result can be a fuse that won't melt or blow out before parts of the circuit overheat and catch fire. Commonly, our inspectors find 25 to 30 amp fuses (bright green) where there should be 15 to 20 amp fuses.

The Taming of the Surge

Power surges are brief “spikes” in the level of voltage that occur in almost all electrical power systems. Spikes can be caused by anything from lightning strikes on a power line, to squirrels touching power lines, to poor grounding in the home's electrical system. In fact, even the routine operation of larger home appliances can produce surges as they switch on and off.

Power surges are a serious problem for sensitive electronics and microchips that are part of many modern devices. Microwaves, computers, TV's, refrigerators...just about any modern appliance may contain sensitive electronics. Microchips are designed to function with low voltage. Surges in the level of electrical power often damage or destroy these sensitive circuits.

Surge protection devices “tame” the spikes by clamping off the surges in power before they enter the electrical device. Surge protection devices can be placed at three locations: the electrical meter, the electrical breaker panel, and/or the plug. Installation of surge protectors at the electrical panel should be installed by a qualified, licensed electrician.

Surge protectors at the individual plug provide protection only for equipment plugged into the device. Many homeowners use the general protection at the meter or panel coupled with protection at the outlet to protect devices from spikes generated within the home.

Take the time to learn how to protect your appliances from power surges.

AVOIDING CONDUCTOR SHOCK

Though you may not be musically inclined, you are most certainly an excellent conductor...of electricity. Under most circumstances, water is an excellent conductor of electricity. That's one reason why the human body is an excellent conductor of electricity. It's also why electrical appliances and water are a dangerous combination.

Electrical appliances such as hair dryers are often used in bathrooms where water is close by. The Consumer Product Safety Commission (CPSC) cautions hair dryer users. While many have safety features as part of the product design, they are still potential sources of injury or even death due to electrical shock.

- **Never use a hair dryer while bathing.**
- **Dry off before using a hair dryer or other electrical device.**
- **Unplug bathroom electrical devices when not in use.**
- **Do not stand in water or on a wet floor when using an electrical appliance.**
- **If an electrical appliance falls into water (or other liquid), carefully unplug it immediately. Do not touch the water when an electrical appliance remains plugged in.**
- **Do not use the electrical appliance after it has fallen into water. Replace it or have it serviced by a qualified professional.**
- **Follow manufacturers instructions and abide by warnings.**

Because humans are good electrical conductors, it is important to avoid mixing electricity and water.