Chainsaw Safety – before and after the storm
By Adam K. Downing
Extension Agent, Forestry and Natural Resources
Virginia Cooperative Extension

Someone once said the only difference between a Colt 45 pistol and a chainsaw is that anyone can buy and operate a chainsaw. No license is required; there is no test to take, class to complete, or competency to demonstrate. The similarity is that both can kill or injury in a split second. This is particularly evident after a storm.

When looking at chainsaw accident reports, a definite spike follows storms. This isn’t so much because of the difficult timber salvage or yard-tree cleanup situations loggers or tree-workers have to work in after a storm, but because of ill-equipped and untrained occasional users doing their own clean-up.

If you own a chainsaw, chances are you’ve never received training on safe chainsaw use. Maybe you’ve read the safety manual that is supposed to come with a new saw purchase, maybe you haven’t. Additionally, you probably didn’t purchase the appropriate personal protective equipment, which, frankly, should be part and parcel with a saw purchase.

Using a saw is like anything else: get dressed for the job. I cringe watching the news after a storm has toppled trees. I have yet to see a do-it-yourselfer appropriately dressed. Often it seems they’ve made a special effort to dress dangerously, like in shorts and flip-flops.

PERSONAL PROTECTIVE EQUIPMENT

Head, eye, and ear protection is essential. You might be surprised to know that a significant portion of chainsaw-related accidents don’t actually involve direct saw injury. It doesn’t take much of a branch from overhead to kill someone. Hard hats have prevented many deaths and would have prevented many more if everyone put one on before they pick up a saw.

Eye protection should be obvious. An interruption to your work is the best-case scenario, worst case, you lose your sight. It’s not just sawdust, either. Branches of fallen trees are often under tremendous stress that, when released, can hit you in your face or other areas with tremendous force.

Ear protection is often neglected, but not until regretted years later. Ear loss is cumulative in nature and permanent. If you’ve ever experienced a ringing in your ears after a day of working around something loud, that’s a symptom of permanent hearing loss. With a chainsaw, it’s not only what you hear in the...
engine, but what you don’t hear. The metal on metal as chain moves around bar produces a high-pitch that human ears cannot hear, but still does damage.

Next is to protect the mostly likely place to be in direct contact with the chainsaw, your legs. Chaps or chainsaw-resistant pants are made with ballistic nylon or Kevlar, and they are as effective at stopping a moving chain as they are at stopping bullets. People complain about chaps being too hot … I guess the choice is yours, sweat or blood. If you get off with just needing stitches, consider yourself lucky. If you cut the femoral artery running on the inside of your leg straight to your heart, chose your steps carefully because you only have about 15 of them left.

The next item is proper footwear. At a minimum, good, sturdy boots should be worn. Even better is to wear steel-toed or chainsaw-resistant boots. Absolutely no tennis shoes, flip-flops, sandals, or running shoes!

The most important piece of safety equipment is your brain. Accidents are much more likely to happen when you are hurried, fatigued, or otherwise not thinking clearly. Make sure you are well rested, clear-minded, and not rushed when using a power saw. A good mind and the personal protective equipment outlined above will give you every advantage should an accident happen.

THE SAW

Today’s saws are more powerful, lighter, faster, safer, and more ergonomic than saws of yesteryear. Anti-vibration, brakes, and guards are some of the newer features vastly improved upon in the past decade. Less vibration results in less fatigue, and less fatigue means fewer accidents. Halfway decent saws have a chain-brake built into them that is activated by a sudden change in motion or by the wrist coming into contact with the brake lever, such as might happen with kickback. This brake is meant to be used. Anytime you take more than two steps, engage the brake to avoid accidental chain acceleration.

The guards on a saw are to stop the chain from whipping you in the event it breaks. That’s a good thing considering there is no getting out of the way of something just a few feet from you that’s moving at 200 mph and lined with razor-sharp teeth.

Speaking of razor-sharp teeth, a sharp and well-running saw is safer than something you have to fight with to get the same amount of work done. Keep your saw in good running order and know how to sharpen your chain or keep an extra one on hand in the event you run the saw into the dirt or otherwise dull the teeth. A dull chain is exhausting.

OPERATION

Once you’ve got on the right garb, and the saw is in tip-top shape, it’s time to get to work. Most people start their saws in an unsafe and tiresome way that can also be hard on the saw. The “drop-start” is an old favorite, but a good way to break the rope, wear out your upper body, and get hurt by a live machine
you only have one hand on. Proper starting sets the saw on the ground, with one foot on the hand guard and one hand on the upper grip, and pulls on the rope.

Secondly, don’t work from a ladder and don’t saw overhead. If you have stuff to cut that is higher than your shoulders, consider getting a professional involved. Ladders and saws just don’t work together, and trying to use a saw over your head is asking for trouble.

The first power saws required two men to operate because of their weight, and you would never have lifted them over your shoulder. Even though today’s saws don’t require two operators and they are easily lifted overhead, it’s a good idea to have a buddy around. If something happens, you might not be able to get the help you need by yourself. If nothing happens, you’ll get the job done more quickly anyway.

Chainsaws are extremely useful and powerful tools. They need to be respected every time they are used. Proper attire and intelligent operation goes a long way toward safe and enjoyable use. Again, use your brain. A big part of this is to know and respect your limits. There is something macho about using a saw which can be an impediment to good judgment. It’s more macho to be in one piece at the end of the day rather than a hospital bed or worse. Be careful; be smart.