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## *Safety* NEWSLETTER

## The Hidden Danger: Metal Ladders and Electrical Safety

When working with electricity, safety is paramount. One of the most overlooked yet significant risks is the potential for electricity to come into contact with metal ladders. Metal is an excellent conductor of electricity, and when combined with the use of a metal ladder, this can create a deadly hazard. Understanding this risk and the importance of implementing proper safety protocols, such as Lockout/Tagout (LOTO), is crucial in preventing accidents and ensuring the wellbeing of workers.

A metal ladder in close proximity to an electrical source can create a direct path for electricity to flow. If the ladder comes into contact with an energized circuit or equipment, the entire ladder can become electrified, posing an immediate danger to anyone using it. This could result in severe electrical shock, burns, or even fatalities. The risk is particularly high in outdoor settings or industrial environments where ladders are often used to access electrical systems at heights.

To mitigate this risk, the first line of defense is avoiding the use of metal ladders around electrical systems. Instead, opt for non-conductive ladders made of fiberglass or wood. These materials do not conduct electricity and significantly reduce the risk of electrical shock. Equally important is the implementation of Lockout/Tagout (LOTO) procedures when working on or near electrical systems. LOTO ensures that all energy sources are properly isolated before any maintenance or repair work begins. This involves several critical steps:

- **Preparation:** Identify all electrical circuits and energy sources that may pose a risk.
- Lockout: Use locks to secure the equipment, ensuring that it cannot be inadvertently re-energized while work is being performed.
- **Tagout:** Attach tags to indicate that the equipment is under maintenance and should not be operated. The tag should clearly state who applied it and why.
- Verification: Before starting work, always verify that the electrical system is de-energized by testing the circuit or equipment.

Using metal ladders around electricity without proper precautions is a recipe for disaster. By replacing metal ladders with non-conductive alternatives and rigorously following LOTO procedures, you can significantly reduce the risk of electrical accidents. Safety is everyone's responsibility, and taking these precautions helps ensure that every worker returns home safely.



After a storm, assessing and addressing the damage to trees is a priority for municipalities and their staff. However, one of the most dangerous tasks during storm cleanup is topping a tree that has been damaged. Topping involves cutting off the upper portion of the tree, often to remove hazardous branches or reduce its height. While this may seem like a straightforward task, it carries significant risks, especially when the tree has already been compromised by storm damage.

When a tree is damaged by high winds, lightning, or heavy rain, its structural integrity can be severely weakened. Topping such a tree becomes particularly hazardous because the branches and trunk may be unstable and unpredictable. The weakened sections can easily break or shift unexpectedly during the cutting process, leading to falling branches or even the entire tree collapsing. This poses a serious risk not only to the person doing the work but also to anyone nearby.

To mitigate these risks, it is essential to establish a safe perimeter around the worksite when topping a storm-damaged tree. A safe perimeter ensures that no one is within the danger zone where falling objects could cause injury or worse. Here's how to do it effectively:

- Assess the Risk Area: Before beginning any work, carefully assess the tree and the surrounding area. Consider the height of the tree, the direction of the lean, and the potential path of falling branches or the tree itself.
- Mark the Perimeter: Clearly mark a safety perimeter around the tree. This perimeter should extend beyond the height of the tree in all directions to account for the unpredictable nature of falling branches.
- **Communicate and Enforce:** Ensure that everyone involved in the work understands the boundaries of the safe perimeter. No one should enter the marked area while the tree is being topped, and it's important to have someone designated to monitor the perimeter throughout the process.
- Use Professional Equipment and Techniques: Ensure that the person topping the tree uses proper safety equipment and follows best practices for cutting. This includes using ropes or rigging to control the fall of large branches and working from a secure position.

Safety should always be the top priority when dealing with storm-damaged trees, as the consequences of falling objects can be severe. Remember, taking the time to establish a safe working environment is essential to protecting everyone involved.

## CONTACT US TODAY! (800) 258-1152 | michigancountieswcf.org



**Timothy K. McGuire** MCWCF Administrator tmmac24@gmail.com



**Eric Waidelich** Vice President of Safety Operations ewaidelich@rizikon.net