Serving County Government

Safety Shorts

General Safety, Highway, & Law Enforcement

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Safety is no accident: June is National Safety Month

The National Safety Month Web site provides a list of tips for protecting against accidental falls, both at home and at work:

- Aisles, stairs, and walkways should be clutter-free; spills should be wiped, dropped objects picked up and cabinet drawers closed when not in use.
- Use handrails in stairways; take one step at a time and report or repair broken stairs or loose stair coverings.
- Apply nonskid floor coatings and slip-resistant mats where falls are likely. Slow down and take small steps when walking on a wet or slippery surface.
- Inspect ladders before and after every use.

For more information: https://www.reliableplant.com/Read/12369/safety-is-no-accident-june-is-national-safety-month

GENERAL SAFETY

By Chad Engle, Loss Prevention Manager and Safety Specialist

Fire Risk Associated with Lithium-Ion Batteries

Lithium-ion batteries commonly provide power to items that most of us own and use on a regular basis. Smart phones, laptops, power tools, e-scooters, e-bikes, e-cigarettes, many toys and even cars. Unfortunately, there is a risk of lithium-ion batteries overheating, catching on fire and possibly exploding when they are damaged, improperly used, improperly charged, or improperly stored.

Lithium-ion batteries store a large amount of energy in a small amount of space, batteries are not always used correctly, and a small number of these batteries are defective. To reduce the likelihood of a lithium-ion battery fire or explosion please follow these safety tips provided by the National Fire Protection Association (NFPA):

- Purchase and use devices that are listed by a qualified testing laboratory.
- Always follow the manufacturer's instructions.
- Only use the battery that is designed for the device.
- Put batteries in the device right away.
- Only use the charging cord that came with the device.
- Do not charge a device under your pillow, on your bed, or on a couch.
- Do not keep charging the device or device battery after it is fully charged.
- Keep batteries at room temperature when possible. Do not charge them at temperatures below 32° or above 105°.
- Store batteries away from anything that can catch fire.

Look out for the following signs that a lithium-ion battery may be overheating: odor, change in color, too much heat, change in shape, leaking, or odd noises. If it is safe to do so, move the device away from anything flammable and call 911.

When disposing of used lithium-ion batteries, do not place them in the trash. Recycling is always the best option. A quick google search shows multiple recycling options in the Lincoln area, most of which appear to be free. The NFPA also recommends that you do not put discarded batteries into piles. A study completed by the California Products Stewardship Council (CPSC), based on 347 reported fires in the US and Canada over a year period, found that lithium-ion batteries were the source of 40% of fires at waste management facilities.

For additional information on lithium-ion battery safety you can follow this link to the NFPA's website.

For information specifically relating to lithium-ion battery safety and power tools, please visit the Power Tool Institute, Inc.

Structure fires are costly and extremely dangerous, so please do your part to educate employees on the risks associated with lithium-ion batteries at home and in the workplace. As always, I can be reached at 1.800.642.6671 or chad@nirma.info.

HIGHWAY DEPARTMENT

By K C Pawling, Road Safety and Loss Prevention Specialist

Are Safer Choices Available?

I think we have all heard some version of the phrase "our choices have consequences." I know my wife and I often said this to our two boys while they were growing up. We let them make the choice they wanted after presenting available options, if their safety was not going to be affected. Sometimes it did hurt a little when they made the choice that had a less favorable outcome, but nonetheless they made their choice.

When we look at workers' comp claims that come into the NIRMA office, we often find that employee injuries are the result of less-than-ideal choices. I want to make it clear that I am not scolding or trying to belittle anyone. I've made more than my share of poor choices, and occasionally I still do. But looking at claims data tells us that the top five claim categories in the last 5 years are as follows: 1) Strain or injured by, 2) Fall or slip, 3) Motor vehicles, 4) Cut, punctured, or scraped, and 5) Struck or injured by.

Of these categories, one road department task can fall into four of these top five categories: motor grader blades. It seems that every operator has their own way of carrying out this task. Many of you choose the safer way of using a fabricated device to aid in lifting, placing, or holding the blade in place while changing the blade. Others choose to use the buddy system to change blades, employing a co-worker to help manage the blade while attaching it to the moldboard. And then there are those employees that choose to do it themselves. The last choice, lifting the entire 100+ lb. blade alone and unassisted, can have the unintended consequence of injury. It really does not matter how we position the moldboard, whether it is up or down, kicked out to the side or not. Just getting up and down off the creeper has the potential for injury, let alone handling a 100+ lb. blade while laying down.

This topic really came to light as I have been having many conversations with NIRMA member employees lately about maintaining proper road profile. I'm often asked, "how do we keep our blades straight for the proper road profile?" My response is always, "rotate your blades." This is when operators will share that they don't like to rotate blades because it is hard to handle long blades, and there is not always someone around to help. I always suggest using shorter segments instead of the longer blades. Some people then say they are not aware that shorter blades are available.

For a 16-foot moldboard you could use four segments that are 4 feet long rather than the two 8-foot segments. For the typical county moldboard lengths which are usually 14 or 16 feet, you can get blade lengths 3, 4, 6, 7 and 8 feet long. The 4-foot segments are going to be half the weight of the 8-foot. For example, a 6-inch tall 4-foot segment is 34 lbs., and an 8-inch tall 4-foot segment is 67 lbs. per blade while the 8-foot blades are twice this length.

I still encourage everyone to use assistive devices or the buddy system to change the blades, but the risk of injury is lowered by using shorter, lighter blades. There are inherent risks in changing blades that we cannot avoid, but we can certainly lower the

risk of injuries if we put good safety practices in place. Consider using different size blades, the use of an assistive device for safer handling, wear safety footwear, and make sure you have good quality cut-resistant gloves when changing blades.

For those of you wondering, I did check with a supplier of blades as to what sizes and prices were available for county purchase. The response I received was extremely encouraging. I won't print the price quote I received because there are so many price discounts and different programs available to your counties, but the price difference per foot was less than a dollar from the longest blade compared to the shortest.

I would also mention that there are different blade systems available that feature replaceable bits or teeth segments, further lowering the risk of injury. These systems are more expensive initially, but there are county road departments reporting in the long term that they are lowering the cost of operation. If you factor in the cost of injuries, it could be considerably cheaper in the long term.

In closing, I want to say that less safe choices can cost us much more than we expect. Lost time injuries cause loss of production. More importantly, injuries can cost quality of life and affect our family's quality of life if they are serious enough. I challenge everyone to consider the risks--all the risks--when working. Make safe choices. Consider using different blade configurations.

If you need help with your safety training or program, do not hesitate to contact us for help. I can be reached at kcpawling@nirma.info. I look forward to hearing from you!

LAW ENFORCEMENT AND CORRECTIONS

By Todd Duncan, Law Enforcement and Safety Specialist

The Risks of Propping Open Jail Doors

One of the fundamental responsibilities of corrections officers is to ensure the care, custody, and control of inmates. When it comes to custody and control, few things are more important than ensuring that doors within the jail are always kept secure. A simple Google search of four words, "inmate escape open door" will provide countless examples of dangerous offenders who have escaped from custody through jail doors that were not properly secured. Yet despite the risk, it is not uncommon to see jail doors, including those protecting master control, providing access to weapons storage lockers, and separating secure areas of the jail from public lobbies propped open by staff for convenience.

Best-case scenario when an inmate escapes is that the inmate is quickly captured without incident and the only injury is to the agency's reputation. The worst-case scenario is much more sobering. In one tragic example from 2019, an inmate raped and murdered Tennessee Department of Corrections administrator Debra Johnson in her home on prison grounds after escaping from custody. The inmate had been assigned to a minimum-security housing unit and was working as a trustee at the time of his escape. While this escape was not the direct result of an open door, it serves as a reminder that even inmates classified as "low risk" can be extremely dangerous, especially when they escape.

The safety of staff and citizens is not the only concern. The potential legal liability of an inmate who causes harm to another person after escaping can be very costly. In the above case, Johnson's family has since filed a $5 million wrongful death lawsuit against the state alleging negligence by the Tennessee Department of Corrections.

Fortunately, the risks of inmates escaping through open jail doors is nearly entirely preventable by following the simple three step risk management formula of policy, training, and oversight.

1. POLICY: The first step in mitigating this risk is to implement a policy that prohibits propping or leaving doors open within the secure area of the jail. This includes doors that provide passage between secure and non-secure areas and doors providing access to master control rooms, sally ports, kitchens, utility closets, vacant cells, key storage boxes, or any other area inmates should not have access to.
2. TRAINING: Once policies and procedures are in place, all jail staff should be trained on the importance of facility security, including maintaining security of all critical doors within the jail. Training can be as simple as reviewing the policy with all staff upon hire and annually thereafter; explaining the "why" (serious officer and public safety risk); and sharing examples where open jail doors have led to inmate escapes, attacks on staff, etc.
3. OVERSIGHT: When it comes to oversight, three great leadership philosophies come to mind, "Inspect what you expect," "Trust but verify," and "Manage by walking around." Take your pick. They are all good reminders that the buck stops with leaders to set the tone and provide their staff with the tools and training necessary to be safe and successful at work. A tell-tale sign that this dangerous practice may be happening in your facility is the presence of wedges or other objects on the ground near doors that are being used to prop doors open.

Complacency kills in this profession. Stay safe out there!