



Safety Shorts

General Safety, Highway, & Law Enforcement

October 2023

-

Volume 11, Number 10

October Is National Cybersecurity Awareness Month

Cybersecurity Awareness Month, every October, is a collaboration between government and private industry to raise awareness about digital security and empower everyone to protect their personal data from digital forms of crime.

The month is dedicated to creating resources and communications for organizations to talk to their employees and customers about staying safe online. While most of the cybersecurity news articles are about massive data breaches and hackers, it can seem overwhelming and feel like you're powerless against it.

Four key behaviors to stay safe online:

- Enabling multi-factor authentication.
- Using strong passwords and a password manager.
- Updating software.
- Recognizing and reporting phishing.

Information provided by <https://staysafeonline.org/programs/cybersecurity-awareness-month/>.

GENERAL SAFETY

By Chad Engle, Loss Prevention Manager and Safety Specialist

Property Inspections – It's That Time of Year

NIRMA's Best Practice for Safety Members # 8. Perform regular documented inspections of all workplace sites. To assist our members with this best practice NIRMA created the Property/Building Inspection Checklist. The Property/Building Inspection Checklist is designed to help reduce the risk of property and premises liability claims.

A common question I field is, "how often is regular?" In a perfect world I would love to see building inspections done quarterly. There are many NIRMA members that do quarterly inspections with each of their quarterly safety committee meetings. This creates an excellent history to help us defend liability claims while the frequent inspections help us identify and repair hazards and conditions that could lead to costly property claims.

I recommend not less than two property inspections per year. One in the spring, when maintenance crews are cleaning up the remaining leaves from last year, turning on sprinklers and getting outside projects going. It also makes sense to me to perform the second property inspection in the fall when you are closing things down, hoses are being drained and put away

and gutters are being cleaned for the last time. With the temperature falling and winter just around the corner, I would ask all our members to print a copy of the Property/Building Inspection Checklist for each building and complete a fall property inspection.

Start with a walk around the exterior of the property and building and look for new damage that may have occurred during summer storms, check trees for dead branches, make sure trees have not grown to the point where they are rubbing against the building. Check walking surfaces to be sure no concrete has settled or heaved, creating a trip hazard.

Disconnect and drain hoses to reduce the risk of frozen pipe claims and water damage. Clean gutters and ensure all drains are clear and draining properly. I recently reviewed a significant water damage claim to a NIRMA member that was the result of plugged downspouts.

If you can safely access the building's roof, inspect any roof mounted HVAC or other equipment to be sure it is securely fastened. Walk the entire roof and check for damage, possible leaks and areas that are holding water.

Water damage claims are common in the winter when snow melts on flat roofs and is not able to drain for whatever reason. Making sure the roof surface is in good condition and the drains are functioning properly goes a long way to prevent water from entering and causing damage.

When you are done inspecting the exterior and headed for the interior, pay special attention to the entrances. Are the stair treads in good condition? Are the handrails in good condition? Do the ADA automatic doors function properly? Are the floors kept dry during inclement weather? Are "Caution, Wet Floor" signs used when necessary? Are floor mats being used and are they lying completely flat to the floor? Any curls or wrinkles in floor mats are unacceptable, I highly recommend that they are replaced with new mats that lie flat.

For much greater detail and a copy of the checklist you can go to www.nirma.info, go to Resources and click on Inspection Forms and Checklists. If you have any questions or would like to schedule an inspection or inspection training, I can always be reached at chad@nirma.info or 1.800.642.6671.

While I have your attention, I wanted to remind you that NIRMA's annual Self Defense for County Officials Conference will be held October 19th and 20th in Kearney at the Younes Conference Center North. I will be presenting a concurrent session on Thursday the 19th from 4:00 – 5:00 pm where I will roll out NIRMA's new Safety Committee Resource Handbook. This would be a great session for safety committee members and any other elected official or employee that is interested in improving their loss prevention and safety program. I hope to see you there.

HIGHWAY DEPARTMENT

By K C Pawling, Road Safety and Loss Prevention Specialist

ARE YOU MISSING THE SIGNALS?

While being a highway superintendent or even just a road crew employee I rarely took the time to step outside my little box I was living in to see a larger picture. I would get so focused on the tasks at hand that sometimes I unintentionally disregarded other aspects of the jobs that needed attention. The intense focus can be a positive thing just as well as a negative.

Now, as part of the loss prevention team at NIRMA, I am trying to take the time to see things from all different perspectives and analyze situations that I become involved with. Some of those situations that I am becoming increasingly aware of are the events that are occurring at railroad crossings. Some of the events do not have very good outcomes. Others are very lucky it does not end worse than it does.

I understand as an equipment operator, we can get so focused on running a machine, for example the motor grader trying to get the road just right, that we can lose sight of the greater picture. I am going to state the obvious and say that this laser focus at a rail crossing is just not the best practice. Many of the crossings in our counties have limited traffic control so we all should be extra vigilant when working around railroad tracks.

Since Sept. 18-24 was Rail Safety Week in Nebraska, and with some recent events happening at rail crossings, I thought it was a good time to review some general safety tips. These tips are provided to us by the National Highway Traffic Safety Administration, and some incorporate requirements of drivers under Nebraska law.¹

1. **Stop, look both ways and listen.** This should include opening the doors on a motor grader to hear the train over the sound of the motor grader engine. Opening both windows on a tractor trailer is recommended also, you will need extra room to get your long truck clear of the tracks.
2. **Do not stop on the tracks.** Make sure you have room to get across. Once you enter the crossing, keep moving. I was also taught not to shift a truck while crossing the railroad tracks. This decreases the chances of either missing a gear or even stalling the engine, this would even apply to the motor grader operation.
3. **Stop within 50 but not less than 15 feet away from flashing red lights, lowered gates, a signaling flagman, a stop sign, when you hear a train emitting an audible signal, or when you see one approaching.** Keep in mind, in a motor grader you are sitting approximately 8ft from the front of your machine. So, this could cause a poor line of sight.
4. **Never drive around a lowering gate or ignore signals.**
5. **After a train passes, wait for the gates to fully rise and for all lights to stop flashing before you cross.** This will give you time to focus on all that could be happening without the distraction of the crossing train. You might have missed something while being preoccupied by the train, especially if there are multiple tracks, which takes us to tip number six.
6. **Never assume there is only one train coming from a single direction.**
7. **If your vehicle stalls on a track, quickly get out, even if you don't see a train coming.** Get away from the tracks and your vehicle to avoid being hit by flying debris if a train does come. Call the number of the blue emergency notification system sign. If the sign is not visible, call 911.

Along with the safety tips above, we also need to be mindful of fulfilling county road maintenance responsibilities at railroad crossings to mitigate the risk of legal liability. I would like to remind road the county is legally responsible for maintaining county road approaches to railway crossings, including advance warning signs (but not the crossbucks) if required by the MUTCD, and mowing of vegetation within the public right of way if it obscures the visibility of approaching trains.² Counties should be doing grade crossing inspections if you have railroad crossings in your county. Inspections should be completed with documentation of the findings to ensure the county is fulfilling its maintenance duties.

It is also essential to remember that the railroad is legally responsible for maintaining any active warning devices (gates and lights), as well as the crossbuck sign and any signs the railroad has attached to the crossbuck mast.³ A county should not interfere with railroad property but should notify the railroad if it becomes aware of a safety concern or failure of the railroad's maintenance responsibilities. A letter to the railroad is appropriate if deficiencies on railway property are found or reported to a county. If the railroad does not promptly correct the issue, legal counsel should be consulted about potential next steps. A county is also authorized under the Nebraska Administrative Code to request a review of a crossing by the State of Nebraska for safety improvements, and is entitled to a response to such a request.⁴

It is strongly encouraged to review the Nebraska Administrative Code provisions if you need a refresher on the full legal responsibilities that apply at railroad crossings. Inspections at crossings with good documentation and an understanding of the legal responsibilities at railroad crossings will help to reduce the potential for a claim or loss. If you need any help setting up an inspection program or if you are now just learning of the program, please do not hesitate to contact me.

If you have any need that I can help you with, I can be reached at kcpawling@nirma.info or 402-310-4417. My office number is 402-742-9236.

1. See for example, Nebraska Revised Statute, section 60-6,170.

2. Nebraska Administrative Code, Title 415, Chapt. 6, Section 005.02 - 005.02D.

3. Nebraska Administrative Code, Title 415, Chapt. 6, Sections 005.01 - 005.01F.

4. Nebraska Administrative Code, Title 415, Chapt 6, Section 003.01 - 003.01A.

LAW ENFORCEMENT AND CORRECTIONS

By Todd Duncan, Law Enforcement and Safety Specialist

The Dangers of Sudden Patrol Vehicle U-turns

It's a clear, crisp fall morning, and you just started your shift. You're trying out the new moving radar unit that was recently installed in your patrol vehicle as you cruise down the two-lane black top highway with a posted 65 MPH speed limit. Within minutes, you see an oncoming vehicle approaching at what appears to be a high rate of speed. You activate your radar and immediately confirm your suspicion as the radar begins to screech and the dash mounted display flashes "87".

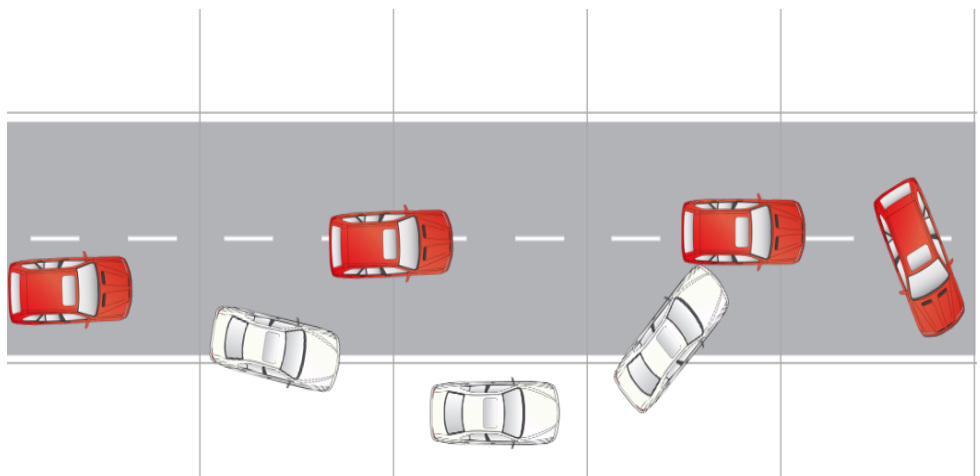
As the oncoming car speeds by you, you begin a U-turn maneuver that you have done a thousand times before – brake, pull partially onto the right shoulder to expand your turning radius, a quick mirror check, and begin the U-turn so you can chase down the violator. Unbeknownst to you, a red SUV following you at 65 MPH is now proceeding past you on the left in your blind spot as you're pulling onto the shoulder. They have no idea you are about to do a sudden U-turn. As you begin the U-turn, the left front corner of your patrol vehicle collides violently with the passenger side of the SUV that seemingly "came out of nowhere". You are thrown violently around the cockpit upon impact as the SUV slides sideways in front of you before it begins to roll multiple times. You notify dispatch, crawl out of your damaged patrol car, and run to the upside-down vehicle in the ditch to check on the occupants. You find two people inside with life-threatening injuries and immediately request EMS.

Sadly, NIRMA law enforcement members are involved in this type of U-turn crash all too often, and the sequence of events (depicted in the below diagram) is usually the same – a patrol car passes an oncoming motorist who is violating a traffic law; the patrol vehicle (white car) quickly decelerates while simultaneously pulling onto the right shoulder to expand its turning radius; a motorist in a third vehicle (red car) is following behind the patrol vehicle and drifts to the left in an effort to go around the patrol vehicle that appears to be pulling off to the side of the road to stop; and the patrol vehicle changes course suddenly to execute a U-turn colliding with the passenger side of the passing vehicle.

U-turn collisions, sequence of events:

The physics of these specific U-turn collisions are similar to tactical vehicle interventions (TVIs) or pursuit intervention technique (PIT) maneuvers performed at high speeds which we know often result in serious injury or death. NIRMA has seen numerous patrol vehicle U-turn crashes

like this that have resulted in life threatening injuries and in some cases, losses exceeding \$300,000. Particularly concerning is the potential for serious injury or death to officers should the collision involve a high-speed broadside impact to the driver's door of the patrol vehicle. It is easy



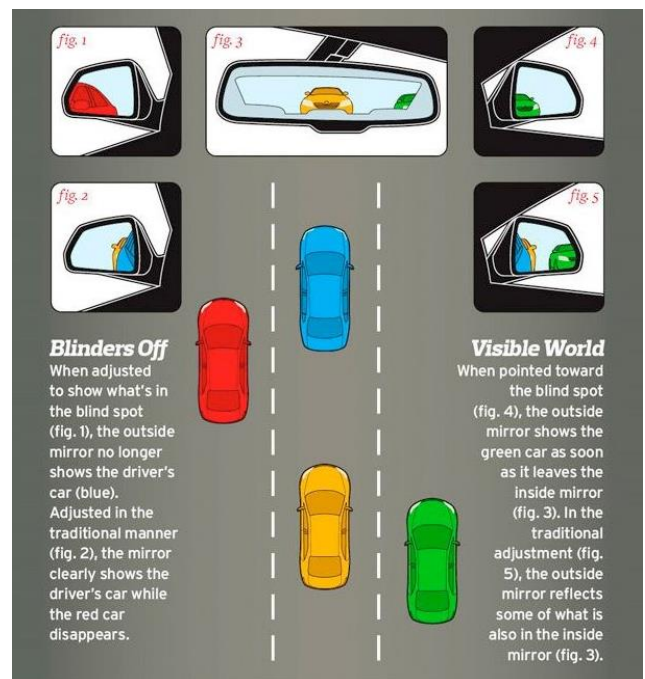
to see how these collisions occur, as officers in these situations are processing a lot of information in a short amount of time as they are negotiating the U-turn and attempting to apprehend the violator. At the same time, the driver of the trailing vehicle understandably thinks the officer is pulling onto the shoulder to stop and drifts into the officer's blind spot to create space as they attempt to go around the patrol vehicle.

The good news is these crashes are almost always preventable. The first step is to raise awareness with personnel about the dangers of these specific U-turn maneuvers and when they most often occur, i.e. making U-turns to catch up to a wanted person, vehicle, or traffic violator traveling in the opposite direction.

Another concrete step agencies can take to reduce the likelihood of these crashes is to include these U-turn maneuvers in annual pursuit and emergency vehicle operation training. Training should highlight the danger of this specific maneuver and provide steps that can be taken to prevent these collisions such as activating overhead emergency lights and left turn signal to alert motorists; double-checking mirrors; and quickly glancing over the left shoulder before initiating the turn.

Regarding mirrors, proper adjustment of outside rearview mirrors can significantly reduce blind spots which are a major contributing factor in these types of collisions. According to a study by the Society for Automotive Engineers (SAE), "A vehicle can be easily hidden in the blind zones created by setting the outside rearview mirrors to just see the side of the car" as is often the recommendation found in vehicle owner's manuals. The SAE study goes on to say that "Blind zones can be effectively eliminated if the outside rearview mirror's viewing angles are turned outward away from the side of the car." The diagram taken from (Figure 1) illustrates this nicely. [Car and Driver](#) (Figure 1) illustrates this nicely.

Figure 1



It takes some time to get used to having your mirrors positioned as recommended in Figure 1, but it makes a big difference in reducing blind spots thereby reducing your chances of a collision. Performing sudden U-turns after passing a violator or wanted person traveling in the opposite direction is a common task that presents significant risk. Raising awareness within your agency through training, including mirror positioning, can go a long way towards preventing these often devastating and costly collisions, thereby achieving what matters most to our members – ensuring the safety of everyone involved while saving tax dollars.