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Preparing for a Winter Wonderland

"When snow falls, nature listens."

Antoinette van Kleeff

There can be nothing more beautiful than a fresh blanket of snow with glistening trees reflecting the rays of the sun. But for you, the professional transit operator, the onset of snow, freezing conditions, and wind signal a need to use extra caution with pre-trip inspections and preventative maintenance in addition to handling hazardous driving conditions.

You must, as the operator, make sure that your vehicle is safe each and every time you pull out for your route. Using Zonar or a paper checklist, you follow a systematic approach to assure your vehicle is as safe as possible for transporting your passengers. Check the general condition of your vehicle for obvious damage, leaning, and fluid leaks. Check under the hood for fluid levels, condition of the battery, belts, and hoses. Start your walk around and check lights, signals, wipers, reflectors, tires, lift, doors, exhaust, license plate. Inside, you check the brakes, gauges, windshield wipers, fluids, mirrors, seat belt(s), HVAC system, defrosters, interior lights, emergency exits and equipment, communication system, wheelchair securements, and cleanliness.

Now, add in cold, ice, and snow. Your job just became much harder. In addition to your regular pre-trip inspection, you need to pay special attention to systems affected by cold, ice, or snow.

Electrical System

- The battery should be fully charged and the alternator or generator, voltage regulator and drive belts should be checked.
- The ignition system should have no loose wires.
- The lights should be fully functioning.

Brake System

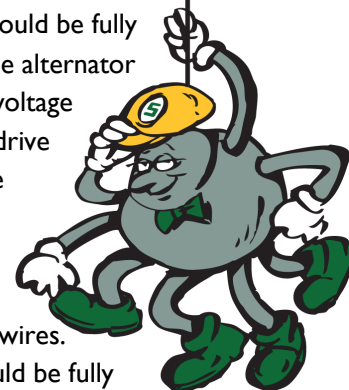
- The brake system is of utmost importance in hazardous weather. Make sure that the brake systems are checked carefully through preventative maintenance before the winter weather hits.

Tires

- All tires should be checked for proper inflation.
- The treads should be carefully checked for wear or uneven wear.
- If tires need to be changed out, they should be changed, aligned, and balanced before the winter weather hits.

Exhaust System

- The exhaust system has to be carefully checked for leaks and any infiltration of carbon monoxide into the passenger compartment.
- If you become stranded and must run the engine to heat the vehicle, make sure that the exhaust pipe is not blocked by snow, and crack open windows for fresh air.



Transit Operator Assaults



“As a transit operator, you probably have encountered a potentially difficult or dangerous situation with a passenger at one time or another.”

A Transit Story

A paratransit driver, Judy, on a demand response Medvan, was delivering two passengers to their medical appointments at a large medical building, adjacent to the hospital. The passengers were both in wheelchairs. One was situated directly behind Judy, and the other passenger was behind the first. Both were secured. The situation: Judy, the paratransit driver, had just parked her van in the designated ambulance parking area across the side street from the main entrance of the medical building. As Judy was about to open the driver's door and help her passengers out, the passenger directly behind her grabbed her long, blond ponytail and wouldn't let go. She was screaming for him to let go. What would you do?

As a transit operator, you probably have encountered a potentially difficult or dangerous situation with a passenger at one time or another, maybe similar to that just described. How did you handle the situation? What was the outcome?

First of all, to prevent any any potentially dangerous situation, start off well; set the stage. Come prepared to show your best face to the passen-

gers. Greet them with a friendly smile or a nod of the head; say hello and use their name, if you know it.

Turn your body and without staring, make eye contact with boarding passengers. This allows you to observe passengers and to determine:

- If a passenger might need assistance.
- If a passenger might be incapacitated in some way – developmental disabilities, mental instability, under the influence of medicine, alcohol, or drugs.
- The general demeanor of the passenger – angry, disinterested, pacing, restless, trembling, exaggerated gestures, loud talking, rapid breathing, abusive language, glaring or avoiding eye contact, violation of your personal space.
- Any possible sign of trouble, items out of place, anything that triggers your suspicions.

Second, avoid escalation of any possible situation. If you must confront the passenger for their safety or the safety of the other passengers on the vehicle, do so in a direct, clear way, including:

- Treat the passenger with respect.

- Speak calmly and watch your tone. Don't make provoking statements such as, "You can't speak to me like that."
- Be careful about using humor to diffuse the situation – the passenger may not understand your sense of humor and take offense.
- Avoid embarrassing the passenger in any way.

If the passenger is argumentative and the situation becomes difficult:

- Remain calm; do not provoke the situation.
- Maintain your personal space.
- Validate the passenger's concern – repeat back to them what they believe the problem is.
- Give choices to the passenger.
- Then inform the passenger of the consequences of making certain choices.

Third, protect yourself and your passengers, if the situation becomes dangerous:

- Use a predetermined code word to alert your dispatcher.
- Remain alert to your surroundings inside and outside of the vehicle.

Continued on page 5

How to Avoid Potholes

How to avoid potholes and the damage they could cause to your vehicle

Potholes are often a masked menace, hidden from view until the depths of their damage-causing dips are too late to avoid. How do potholes form?

Roads freeze and thaw, which erodes the dirt beneath them, weakening the blacktop in the process. Add frequent traffic to the mix, and the road begins to crumble. Eventually, the street erodes even more and develops a crater we know as a pothole.

Pothole damage accounts for nearly 500,000 insurance claims each year, including:

- Tire punctures, damage or wear
- Wheel rim damage
- Premature wear on shocks and struts
- Suspension damage, including broken components
- Steering system misalignment
- Exhaust system damage
- Engine damage

How to Avoid Potholes

Potholes are inevitable in our climate, so the best offense, is a good defense. Use these strategies to avoid potholes whenever possible.

- **Steer clear.** The best course of action is to steer clear of potholes. If you can do it safely, simply swerve around them. This will help you avoid damage altogether.
- **Leave space.** When driving, leave enough room between you and the vehicle ahead of you. Doing so will help you spot potholes and give you enough time to avoid them.
- **Watch for water.** Pay special attention to potholes filled with water, which can be especially dangerous, since you won't know their depth until it's too late.
- **Slow down.** If you are travelling on a pothole-filled road, slow down. Driving slowly can minimize the damage to your car if you hit a pothole.
- **But, don't slam the brakes.** At some point, despite using the utmost of precaution, you might hit a pot-

hole. To minimize damage, resist the urge to slam on the brakes. Hitting the brakes tilts the vehicle forward and puts extra stress on the front suspension, which is usually the first part of the vehicle to strike a pothole.



Spotting Damage from Potholes

If you are unable to avoid a pothole, look for damage right away. Identifying damage early may help you avoid more costly repairs later. The first thing to check is your vehicle's alignment and shock absorption systems. Shocks and struts tend to take the brunt of the damage because they compress and expand using hydraulic oil to alleviate the effects of driving on uneven surfaces. When a jolt is transferred to the vehicle, it travels from the tire and wheel directly to the shock absorber. Large potholes can cause the shock or strut to bottom out completely. The shock is then transferred to the coil or leaf spring of the vehicle. Over time, the shock-absorbing springs and struts become less resilient. You'll notice a much rougher ride and less responsive steering.

Your vehicle's alignment can also be damaged by potholes. A misaligned car tends to pull to one direction instead of maintaining a straight path. Proper wheel alignment is important to maintain the lifespan of tires and ensure safe handling in an emergency.

If your vehicle hits a pothole and experiences a significant jolt, get it inspected, especially if you experience these signs of trouble:

1. **Low tire pressure.** Tires should maintain optimum pressure to work properly. If you hit a pothole, tire pressure might be affected. Routinely check the pressure in your tires and monitor their appearance for signs of problems, like bulges or blisters on the sides. Spots of rust on tire rims may signal that your rims have been bent, which will also lead to pressure leaks.

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Preparing for a Winter Wonderland

Continued from Page 1



“Taking some time now to prepare for the winter driving ahead will keep you and your passengers safe and comfortable.”



Heating and Cooling System

- The cooling system should be checked for leaks and have fresh antifreeze installed.
- The heating system should be checked for operation at all levels and speeds. The malfunction of a heater or defrost blower could create a dangerous condition with cold and windshield visibility.

Windshield Wipers, Washer, Glass and Vehicle Exterior

- The windshield washer fluid should be kept filled.
- The windshield wiper blades should be checked for effectiveness. While wiper blades show no obvious damage, they may not do a good job of keeping the windshield clean.
- To prevent damage to your wiper blades or wiper motor, be sure to clear ice and snow before turning them on.
- Clear ice and snow from all windows and mirrors.
- The lights and reflectors should be kept clean of grime and snow.
- The doors, handhold, steps, and deck plates need to be kept free of ice, snow, water or any debris that could be a tripping hazard.
- The wheel wells should be checked periodically for ice buildup that could affect turning capability.

Gas

- The gas tank should always be at least half full during the winter cold with the correct grade of gasoline or diesel.

Safety and Emergency Equipment

The following items should be kept on your vehicle in the event of an emergency (these items should be easily accessible and secured on the vehicle):

- Bag of abrasive material (cat litter, sand, salt)
- Small snow shovel
- Snow brush and ice scraper
- Flashlight
- Windshield washer fluid
- Blankets, winter wear
- Paper towels or rags
- Booster cables
- Emergency triangles
- Communication device (cell phone or radio)
- First-aid kit
- Fire extinguisher
- Bloodborne pathogens kit
- Seat belt cutter
- Jack handle for manual wheelchair lift operation

Taking some time now to prepare for the winter driving ahead will keep you and your passengers safe and comfortable. Be safe out there!

Resource:

<http://exchange.aaa.com/safety/roadway-safety/winter-driving-tips/>

Transit Operator Assaults *Continued from Page 2*

- Note the perpetrator's details, including gender, race, height, weight, clothing, distinguishing marks, and any other detail to identify him or her.
- Call for help, without alerting the perpetrator, as soon as possible.
- Use a silent panic button, if one is available.
- Stay in a well lit and populated area with the entry and exit doors open, if at all possible.
- Do not put yourself or your other passengers at risk.
- Encourage other passengers to leave the vehicle.
- Do not resist a robbery.
- Remain in your seat and escape through the driver's door, if an attack seems inevitable.
- Do not make any sudden moves. Tell the perpetrator what you are going to do before you do it.
- Do not attempt to detain or follow a perpetrator; let him or her leave the vehicle.

The Rest of the Story

The second passenger was able to release his shoulder harness and rise up enough in his wheelchair



to bat the head of the first passenger with his ball cap while yelling for him to let go of Judy's hair. When the Medvan remained parked and Judy did not get out, the security guard approached the vehicle. The first passenger, who had intellectual disabilities, was being bombarded by a flying Steel cap and finally let go of the blond pony tail. Judy was able to get out of the driver's door, and the helpful second passenger relaxed back into his wheelchair and replaced his Steeler cap on his head.

The Lesson of the Story

If you have a passenger you are not familiar with, who may have intellectual disabilities or mental disabilities, do not situate or secure his or her wheelchair in a position where he or she could invade your personal space, such as directly behind you, or where you cannot keep an eye on them. While Judy's hair did not suffer any serious injury, everyone was shaken by the incident. In the end, I doubt that the first passenger meant to be hurtful. If worried, you can always keep your favorite ball cap at hand.



How to Avoid Potholes *Continued from Page 3*

2. **Your vehicle is misaligned.** If your vehicle pulls to one side when you're trying to drive straight, your alignment is probably out of sync.
3. **You have less control of your car.** If you feel your vehicle swaying or rocking during turns, bouncing quite a bit or if you bottom out on the road after hitting a few potholes, the shock absorber and suspension may be damaged.

If you've damaged the vehicle when you hit a pothole, the event must be reported to your operations or maintenance supervisor, and an insurance claim may need to be submitted.

Potholes are, unfortunately, inevitable in our freeze and thaw winters. Avoid them whenever possible, and when you can't, identify and address any resulting damage as

soon as possible in order to avoid more costly repairs down the road.

Sources:

1. "How Can I Tell If My Car Has Pothole Damage?" WiseGEEK. N.p., n.d. Web. 02 May 2013. <<http://www.wisegeek.org/how-can-i-tell-if-my-car-has-pothole-damage.htm?PartnerID=Ford&RefID=&EmailID=>>.
2. "Firestone Complete Auto Care™." Pothole Damage to Tires and Vehicles. N.p., n.d. Web. 02 May 2013. <<http://www.firestonecompleteautocare.com/cf/tires/pothole-damage-to-tires-and-vehicles?PartnerID=Ford&RefID=&EmailID=>>.
3. Ameriprize Auto and Home Insurance. www.ameriprize.com

Feed Your Body, Fuel Your Brain

Operating a public transit vehicle in today's distracted world requires high levels of focus and concentration. The brain must be able to detect a hazard or potential hazards and cause us to react in a specific way to keep out of harm's way. The brain functions on the fuel that we feed our bodies – our breakfast, lunch, dinner and snacks. In short, what we eat directly impacts our brain power.

On a typical morning think about what you eat for breakfast. Sometimes, it is difficult to just get out of the door in the morning. While some caffeine from coffee can be healthful, five cups of coffee and a pop tart or a donut do not make a healthy breakfast that provides the brain energy to keep going until the next break. A possible healthier breakfast could include oatmeal (whole grain), sprinkled with blueberries (a nutrient rich fruit), and skim milk (dairy). Add some healthy nuts or lean sausage or bacon (protein), sliced tomato (vegetable), and you have a completely balanced meal. If you have to rush out of the door, consider a healthy smoothie or a high protein bar.

The key to all healthy meals is balance, as shown in the ChooseMyPlate Illustration, which replaces the USDA food pyramid most of us have grown up with. Vegetables are still king. Whole grains and breads replace white grains and breads. Lean proteins are recommended, including nuts, beans and lentils. Fruits, healthy oils and dairy products are also recommended, in moderation. For more information, explore www.ChooseMyPlate.gov.

A balanced diet can help reduce fatigue levels and possible midmorning irritability. Good nutrition also boosts the immune system and wards off illnesses that can disrupt sleep.

Eating meals at regular times is important. You wouldn't expect your vehicle to run without regular fueling. Likewise, your body needs fuel at regular intervals. Healthy

snacks are recommended. Contrary to the current commercial that advertises "you're not yourself" until you eat their candy bar, a sugary snack gives your brain a sugar boost that can quickly pass and leave you even more fatigued.

A vegetable or a protein snack would be a better choice.



Drinking adequate fluids is as important as regular meals because dehydration can lead to fatigue and lack of concentration. At a 5% level of dehydration, individuals exhibit impatience, sleepiness, headache, and difficulty concentrating. Try drinking some water in the morning before your coffee and at regular intervals throughout the day. Researchers have found that moderate coffee use, 3-5 8 oz. cups of coffee, may be beneficial to your health and reduce the risks of some diseases. This definition of coffee used in the research means black coffee - not lattes or espressos, or coffees highly flavored with creams and sugar.

In conclusion, a healthy, balanced diet consumed in regular intervals can improve your concentration, focus, and reaction time – all important factors when operating a public transit vehicle. In addition, you may improve your immune system and ward off diseases, fatigue and irritability. Remember to keep hydrated – water, juices, tea or moderate coffee. In short, feed your body, fuel your brain.

Inspired by:

Mentzer, Steve. "How Bus Operators Can Improve Focus, Concentration with Food Choices" Metro Magazine, N.p., Web. 10 Aug. 2015

http://www.metro-magazine.com/blogpost/295030/how-dietary-changes-can-improve-focus-concentration-of-bus-operators?ref=Safety-Corner-NEW-20150810&utm_campaign=Safety-Corner-NEW-20150810&utm_source=Email&utm_medium=Enewsletter

Your Safety, Your Life, and your Passengers' Lives Are Riding on Them

Many drivers are aware of the importance of their vehicle's strength during a crash. But are they as familiar with one of the most important features of their vehicle in avoiding a crash – tires? A vehicle's tires are the only thing between drivers and their passengers and the road. To help ensure they can perform their best in a critical driving situation, drivers should properly inspect each tire during the pre-trip inspection. The time spent checking the tires is minimal compared to the safety consequences of tire failure.

Underinflated tires lead to sluggish handling, longer stopping distances, increased stress to tire components, and heat buildup. These consequences can lead to catastrophic failure of the tire, such as separation or blowout. Underinflated tires also decrease fuel economy. Properly inflated tires strike the perfect balance of maximized safety and fuel economy, both of which are related to the amount of surface contact between the tire and the road.

Tire Pressure Monitoring System (TPMS) Indicator



All passenger cars, light trucks, and vans that are Model Year 2008 or newer are equipped with TPMS.

- A NHTSA (National Highway Traffic Safety Administration) study of tire inflation pressure and tire pressure monitoring systems (TPMS) showed that 12 percent of all passenger vehicles in the United States of model years 2004-2011 (with and without TPMS) have at least one tire underinflated by at least 25 percent.
- NHTSA estimates that TPMS reduces by half (56%) the likelihood that a vehicle will have one or more severely underinflated tires.
- Your agency can improve its gas mileage by up to 3.3 percent if drivers keep the vehicle tires inflated to the proper pressure.

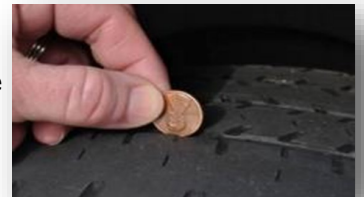
Do you know the recommended service life for your tires? Check the vehicle owner's manual for specific recommendations for tire replacement. Some tire manufac-

turers cite six years, while others recommend ten years as the maximum service life for tires. Look at the sidewall of the tire for the tire identification number (TIN). The last four digits are the week and year that the tire was manufactured. Note that some older tires may have the TIN on the inside sidewall. And, don't forget about the spare tire. Even if it has not been used and the tread is not worn, the tire may be too old to operate safely.

Even though a tire may have a lot of remaining tread, its integrity may be compromised. The effect of aging may not be visibly detectable. Tires age whether they are driven on or not which is a concern for the infrequently used vehicles and spare tires in your inventory.

NHTSA reviewed data from the National Motor Vehicle Crash Causation Survey for tire-involvement before the crash occurred. About 9% of the estimated total crashes were "tire-related crashes." Some of the issues leading to the crashes included tread separations, blowouts, bald tires, and underinflated tires.

With tread depth at 2/32" or less, vehicles experienced tire problems before the crash three times more often than vehicles with tread depth



between 3" and 4/32." Try the penny test. Place a penny in the tread of the tires with Lincoln's head upside down and facing the driver. If the driver can see the top of Lincoln's head, it is time to purchase new tires. According to the tire industry, the average new tire for a car starts with a tread depth of 10/32" to 11/32."

References:

NHTSA (National Highway Traffic Safety Administration) Safety in Numbers Vol. I Issue 3 June 2013

Walking in a Winter Wonderland

“No matter how well the snow and ice is removed from parking lots and sidewalks, we will still encounter some slippery surfaces when walking outdoors in the winter.



While driving in the winter presents its own challenges, walking during the winter can be treacherous. As we reluctantly leave a warm vehicle or transit facility to traverse the snow and ice, our rush to get out of the cold can result in a wipe-out if we are not careful. Unfortunately, slips and falls are some of the most frequent types of injuries that occur during the winter months.

No matter how well the snow and ice is removed from parking lots and sidewalks, we will still encounter some slippery surfaces when walking outdoors in the winter. Therefore, it is important that we remain constantly aware of these dangers and to learn to walk safely on ice and slippery surfaces.

To avoid injury, please keep these important safety tips in mind:

CHOOSING APPROPRIATE CLOTHING

- During bad weather, avoid boots or shoes with smooth soles and heels. Instead, select footwear that provides traction on snow and ice. Footwear made of non-slip rubber or neoprene with grooved soles are best.
- Wear a heavy, bulky coat that will cushion you if you should fall.
- Wear a bright scarf, bright hat, or reflective gear so drivers can see you.
- Keep warm, but make sure you can hear what's going on around you.
- During the day, wear sunglasses to help you see better and avoid hazards.
- Whatever you wear, make sure it doesn't block your vision or make it hard for you to hear traffic.

WALKING OVER ICE

- In cold temperatures, approach with cau-

tion and assume that all wet, dark areas on pavement is slippery and icy. Dew or water vapor can freeze on cold surfaces, forming an extra-thin, nearly invisible layer of ice that can look like a wet spot on the pavement.

- Walk in designated walkways as much as possible. Taking shortcuts over snow piles and other frozen areas can be hazardous. Look ahead when you walk; a snow- or ice-covered sidewalk or driveway, especially if on a hill, may require travel along its grassy edge for traction.
- Avoid taking shortcuts through areas where snow and ice removal is not possible.
- Bend slightly and walk flat-footed with your center of gravity directly over the feet as much as possible.
- Extend your arms out to your sides to maintain balance. Beware if you are carrying a heavy backpack or other load—your sense of balance will be off.
- If you must carry a load, try not to carry too much; leave your hands and arms free to balance yourself.
- Keeping your hands out of your pockets while walking lowers your center of gravity and increases balance. You can help break your fall with your hands free if you do start to slip.
- Watch where you are stepping and go slowly. This will help increase your reaction time to changes in traction.
- When walking on steps always use the hand railings and plant your feet firmly on each step.
- Use special care when entering and exiting vehicles; use the vehicle for support.
- Take short steps or shuffle for stability. It also helps to stop occasionally to break momentum.

Section 5311 transit systems can now submit requests for 2015-2016 safety training, July 1, 2015 thru June 30, 2016, anytime, but at least sixty days prior to the anticipated training. **All requests must be submitted on the WV Training Request form** available from the DPT to Rosamary Amiet, ramiet@rlsandassoc.com, with a copy to Christina Risk, christina.a.risk@wv.gov.

CALENDAR

October:

- 10/12/2015—Dealing with Difficult People/Sexual Harrassment—Little Kanawha Transit Authority, Arnoldsburg
- 10/12/2015—Dealing with Difficult People/Stress Management—Mountain Transit Authority, Summersville
- 10/12/2015—Columbus Day
- 10/15/2015—Defensive Driving/Pre-Trip, CENTRA, Clarksburg
- 10/31/2015—Halloween

November:

- 11/3/2015—Election Day
- 11/4-6/2015—2015 West Virginia Division of Public Transit Training and Education Forum—Stonewall Resort
- 11/11/2015—Veterans Day
- 11/26/2015—Thanksgiving Day

December:

- 12/21/2015—Winter Begins
- 12/25/2015—Christmas Day
- 12/26/2015—Kwanzaa
- 12/31/2015—New Year's Eve

January:

- 1/1/2016—New Year's Day
- 1/18/2016—Martin Luther King Jr. Day

February:

- 2/2/2016—Groundhog Day
- 2/14/2016—Valentine's Day
- 2/15/2016—President's day

March:

- 3/13/2016—Daylight Savings Time Begins
- 3/17/2016—St. Patrick's Day
- 3/20/2016—Palm Sunday
- 3/20/2016—Spring Beings
- 3/25/2016—Good Friday
- 3/27/2016—Easter



The West Virginia DOT Division of Public Transit sponsors safety-related training throughout the year at centralized locations on a variety of topics. To inquire about the above listed training, or any other training topics, contact the Division at DOTPublicTransit@wv.gov.

If you are not receiving this newsletter directly, or know of someone who is not currently receiving it, and would like to, please contact the Division (DOTPublicTransit@wv.gov). This publication is free.