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Upcoming Events:

April 5-6, 2017
RTAC Spring Conference, Springfield
On-Site Driver Training and Classroom Driver Training
(Call RTAC: 800.526.9943)
RTAC Notes

Something significant occurred on the federal level in July of this year. The Interagency Transportation Coordinating Council on Access and Mobility (CCAM) met for the first time in many years. Why? The Fixing America’s Surface Transportation (FAST) Act of 2015 Section 3006 (c) Coordinated Mobility revived the FTA effort to address our nation’s convoluted human service transportation delivery system.

The CCAM or "Council" is charged with developing, by December 2016, a strategic plan to:

1. Outline the roles and responsibilities of each federal agency with respect to local transportation coordination, including nonemergency medical transportation.

2. Identify a strategy to strengthen interagency collaboration.

3. Address any outstanding recommendations made by the Council in the 2005 Report to the President relating to the implementation of Executive Order No. 13330 including:
   A. A cost sharing policy endorsed by the Council.
   B. Recommendations to increase participation by recipients of federal grants in locally developed, coordinated planning processes.

4. To the extent feasible, address recommendations by the Comptroller General concerning local coordination of transportation service.

5. Examine and propose changes to federal regulations that will eliminate federal barriers to local transportation coordination, including nonemergency medical transportation.

6. Recommend to Congress changes to federal laws, including Chapter 7 of title 42, United States Code, that will eliminate federal barriers to local transportation coordination, including nonemergency medical transportation.

—RTAC Notes continued on page 12
Delays in payments from the State of Illinois have caused the shutdown of a western Illinois transit system and threaten to shut down others over the next several weeks. More than $157 million is owed by the state to the Downstate Public Transportation Fund, which accounts for transfers that have been directed monthly since March. Fifty-Six urban and rural public transportation systems downstate receive operating assistance through the Downstate Public Transportation Fund, which is funding derived by a portion of the state sales taxes collected in the service areas of each public transportation system. Downstate public transportation systems provided a combined total of more than 41.5 million rides in FY16.

Public transportation systems across the state provide critical services to some of the state’s most vulnerable populations. Downstate and in rural areas particularly, the bulk of the riders are elderly, persons with disabilities and the low income population, who are relying on public transportation to get them to work, medical appointments and for other critical services. Service reductions and shutdowns will have a significant impact on the economy in Illinois. A large part of the state’s workforce also relies on transit to get to and from their jobs. Illinois cannot afford for transit systems to be shut down. Delays in payments to public transportation systems caused West Central Mass Transit District in Jacksonville, and also serving six counties in western Illinois, to shut down entirely in October. Many other systems across the state have reduced service to stretch their reserves and lines of credit for as long as possible. Other systems across the state will be forced to do the same if payments are not received.

The funding delay has been caused by the state’s inability to pass a full balanced budget. Former Comptroller Leslie Munger’s office has said that the legislature’s failure to come to a full budget resolution continues to leave them short on cash. Their office reported that October and November are low revenue months and that high-priority expenditures such as debt service, state aid to schools, state employee payroll, foster care, child care, and pensions utilize all of the revenue and leave them no room to pay anything else. Additionally, part of the problem was delay in grantees of the Downstate Public Transportation Program receiving their FY17 contracts, resulting in a delay in processing of first and second quarter vouchers. State statute allowed the downstate transit systems to advance request payment for the first quarter of FY17 on June 1 and the second quarter September 1. As contracts have been obligated, the Illinois Department of Transportation has been processing first and second quarter vouchers and sending them to the Comptroller’s office for payment.

The state’s inability to pay grantees as they are statutorily required to is making it difficult for transit systems to continue providing the vital transportation services they provide to citizens of Illinois. If payment delays continue, many will be forced to suspend services in communities across our state, impacting transit employees and the passengers that rely on public transportation to get to employment, healthcare, education, and shopping. Continued delays will be devastating. IPTA is asking its members to contact their legislators and the Governor’s office to urge them to pass a full budget resolution. Ending the budget stalemate is the only solution to this and many other problems impacting citizens of Illinois. IPTA also encourages members to reach out to the State Comptroller’s office asking them to prioritize the statutory transfers for transit, so that we may be able to continue our mission of providing safe and reliable transportation to citizens across the state.

Laura Calderon
Tire Tech: Measuring Tire Tread Depth with a Tire Gauge

While U.S. coins can be used to estimate remaining tread depth as a tire approaches the end of its useful life, the established method of measuring remaining tread depth in the U.S. is with a gauge that reads in 32nds of an inch (other countries measure tread depth in millimeters). Typical tire tread depth gauges measure up to 32/32nds (or 25-26mm) since almost all passenger car and light truck tires begin with less than one inch of tread depth.

To use a tread depth gauge, follow the steps below.

**Step 1:** Confirm which measuring scale you are using. Some tread depth gauges measure in 32nds of an inch (left), while others measure in both 32nds of an inch and millimeters (right).

**Step 2:** Push the tread depth gauge against a hard, flat surface to confirm it "zeros out" when fully compressed.

**Step 3:** Push the measuring scale into the gauge as far as it will go.
What To Do if a Passenger Has a Seizure on Your Vehicle

By Anne Lowder

Reprinted with permission from the April 2016 issue of the Kansas TransReporter, a publication of the Kansas Rural Transit Assistance Program at the Kansas University Transportation Center.

Seizures are caused by unusual activity in the brain.

There is a chance your transit driver will transport someone who has epilepsy, a seizure disorder. How would you want your driver to handle the situation if this rider had a seizure while en route? This article provides tips for drivers in responding to someone having a seizure on a bus—tips that would be good to add to your policy set or driver guidelines.

Epilepsy is more common than you may think. According to the Cure Epilepsy Research Organization, one in 26 Americans will develop epilepsy due to result of strokes, brain tumors, Alzheimer’s and incidents resulting in traumatic brain injury. An estimated three million Americans currently live with epilepsy and 200,000 people are diagnosed with epilepsy each year. In two-thirds of the cases the cause is unknown.

Types of epileptic seizures

There are two main types of epileptic seizures: generalized and focal. Not all seizures are immediately noticeable.

A generalized seizure affects both sides of the brain, and symptoms vary. In this situation a person could have an absence seizure, sometimes called a petit mal seizure, where they just stare at something or blink rapidly. Or a person could have a tonic-clonic seizure or “grand mal” seizure where they may cry out, lose consciousness and fall to the ground and shake.

The second type of seizure is the focal seizure. A focal seizure affects a small part of the brain. There are three focal seizure types. A simple focal seizure causes twitching or changes in sensation. A complex focal seizure can make a person unable to respond to questions or direction. A secondary generalized seizure is where the person starts with a focal seizure that then turns into a generalized seizure.

Quick flashes of light may set off a seizure; for example, flashes of sunlight through branches in a treed area.

Non-epileptic seizures

A seizure does not necessarily mean epilepsy. Other medical problems can cause a seizure, such as a high fever, low blood sugar, and alcohol or drug withdrawal.

Advice for drivers

Seizures vary widely in intensity, and not all are emergencies. Here are some tips for driver response to a seizure from the Centers for Disease Control, Easter Seals Project Action, and Tri-Board Student Transportation Services.

First, remain calm—it will be helpful to you, the person experiencing the seizure, and any others on the bus. In a practical way, your own tranquility and realistic acceptance of epilepsy will help others to overcome their uneasy feelings about seizures. Note that, in most cases, a person going through a seizure is aware of what people around them are saying.

Most seizures will last only 3 to 7 minutes. It may seem longer. If a seizure lasts more than 5 minutes or if the person has never had a seizure before, is having difficulty breathing or waking after the seizure, or has started a second seizure shortly after the first seizure. Check for a bracelet that identifies the person as having epilepsy, which would indicate a history of prior seizures.

—Passenger continued on page 6
Treat the person for shock by maintaining normal body temperature.

**More tips for drivers**

The first line of response when a person has a seizure is to provide general care and comfort and keep the person safe. The information below, from the Epilepsy Foundation, relates to all types of seizures. For the majority of seizures, basic seizure first aid may be all that is needed.

**Always stay with the person until the seizure is over**
- Seizures can be unpredictable and it’s hard to tell how long they may last or what will occur during them. Some may start with minor symptoms, but lead to a loss of consciousness or fall. Other seizures may be brief and end in seconds.
- Injury can occur during or after a seizure, requiring help from other people.

**Pay attention to seizure length**
- Look at your watch and time the seizure – from beginning to the end of the active seizure.
- Time how long it takes for the person to recover and return to their usual activity.
- If the active seizure lasts longer than the person’s typical events, call for help.
- Know when to give “as needed” or rescue treatments, if prescribed, and when to call for emergency help.

**Stay calm. Most seizures only last a few minutes**
- A person’s response to seizures can affect how other people act. If the first person remains calm, it will help others stay calm too.
- Talk calmly and reassuringly to the person during and after the seizure; it will help as they recover from the seizure.

**Prevent injury by moving nearby objects out of the way**
- Remove sharp objects.
- If you can’t move nearby objects or a person is wandering or confused, help steer them clear of dangerous situations.

**Make sure their breathing is okay**
- If the person is lying down, turn them on their side and call for help.

**Do not forcibly hold the person down**
- Trying to stop movements or forcibly holding a person down doesn’t stop a seizure. Restraining a person can lead to injuries and make the person more confused, agitated or aggressive. People don’t fight on purpose during a seizure. Yet if they are restrained when they are confused, they may respond aggressively.
- If a person tries to walk around, let them walk in a safe, enclosed area if possible.

**Do not put anything in the person’s mouth!**
- Jaw and face muscles may tighten during a seizure, causing the person to bite down. If this happens when something is in the mouth, the person may break and swallow the object or break their teeth!
- Don’t worry; a person can’t swallow their tongue during a seizure.

**Make the person as comfortable as possible**
- Help them sit down in a safe place.
- If they are at risk of falling, call for help and lay them down on the floor.
- Support the person’s head to prevent it from hitting the floor.

**Keep onlookers away**
- Once the situation is under control, encourage people to step back and give the person some room. Waking up to a crowd can be embarrassing and confusing for a person after a seizure.
- Ask someone to stay nearby in case further help is needed.

**A seizure does not necessarily mean epilepsy. Seizures can also happen because of other medical problems, according to the Centers for Disease Control. These problems include a high fever, low blood sugar and alcohol or drug withdrawal.**

**More tips for drivers**

- During a convulsive or tonic-clonic seizure, it may look like the person has stopped breathing. This happens when the chest muscles tighten during the tonic phase of a seizure. As this part of a seizure ends, the muscles will relax and breathing will resume normally.
- Rescue-breathing or CPR is generally not needed during these seizure-induced changes in a person’s breathing.

**Do not give water, pills, or food by mouth unless the person is fully alert**
- If a person is not fully awake or aware of what is going on, they might not swallow correctly. Food, liquid or pills could go into the lungs instead of the stomach if they try to drink or eat at this time.
- If a person appears to be choking, turn them on their side and call for help. If they are not able to cough and clear their air passages on their own or are having breathing difficulties, call 911 immediately.

**Call for emergency medical help when:**
- A seizure lasts 5 minutes or longer.
- One seizure occurs right after another without the person regaining consciousness or coming to between seizures.
- Seizures occur closer together than usual for that person.
- Breathing becomes difficult or the person appears to be choking.
- Injury may have occurred.
- The person asks for medical help.

**Be sensitive and supportive, and ask others to do the same**
- Seizures can be frightening for the person having one, as well as for others. People may feel embarrassed or confused about what happened. Keep this in mind as the person wakes up.
- Reassure the person that they are safe.
- Once they are alert and able to communicate, tell them what happened in very simple terms.
- Offer to stay with the person until they are ready to go back to normal activity or call someone to stay with them.

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— Passenger continued on page 7
A seizure is not always violent. Certain types of seizures will manifest as a blank stare, where the individual may not respond to questions.

**ADA considerations**

Often times people diagnosed with epilepsy are not able to drive or may have restricted licenses. Epilepsy is considered a disability under the Americans With Disabilities Act (ADA). Due to a person’s inability to get to necessary places such as work or the doctor’s office, public transportation can be a lifeline.

Under ADA, a person with disability cannot be required to travel with a personal attendant on paratransit trips. The only exception is if a paratransit agency is legitimately entitled to refuse service to an individual with violent or illegal conduct; in these cases, the agency may require an attendant as a condition of providing service, per 49 C.F.R. Section 37.125(i).

**Fixed route or paratransit?**

The type of service a person diagnosed with epilepsy would use depends on their symptoms. In many cases a person diagnosed with epilepsy may find it dangerous to use fixed route service if there is the possibility of having a seizure while walking to, or at, a bus stop. Paratransit would be a better choice for this person because the disability makes it so they can’t use the regular bus system for mobility.

**In sum**

There are several types of seizures with different symptoms and different causes, including stroke and traumatic brain injuries. Most people diagnosed with generalized seizure disorder are not going to be able to transport themselves to and from work, the doctor’s office, the grocery store, or other destinations. These individuals will depend on you to help them with mobility. Some people, due to the severity of their seizures will need to use paratransit instead of fixed route transportation. It is important, as a driver, to be aware of the symptoms of a seizure and to follow basic steps to try to ensure the person’s safety during the seizure episode.

**References**

The Spotlight is on Tori McDaniel, director of transportation, Whiteside County Public Transportation

How did you get started in rural transportation?

I was working on my Master’s Degree in School Counseling when a family issue arose that required me to find a full-time job. I didn’t know that our county offered public transportation until I obtained my job.

If you didn’t have a transit background, how did you learn the ropes?

I had no prior transit experience so the past few years have been difficult at times. I learned by attending conferences and various webinars, reaching out to my peers, staying connected with Edward Hefflin and the RTAC team, attending IPTA board meetings, and reaching out to my project manager at IDOT. Even after five years in the industry, I feel like I learn something new every day.

Did you have a mentor in transit?

I don’t recall who told me to contact Ed Hefflin with RTAC when I first started but I am so grateful that they did. Ed has been a great mentor for me over the past five years. He helped me learn what was important and how to be successful in our industry. Our system has had various obstacles over the years which Ed helped guide me through. For new industry professionals, I would strongly recommend connecting with the RTAC team. I’m glad I did!

Toughest day-to-day operational problem?

Our toughest day-to-day operational problem is currently meeting the increased demand for service. We have begun to see an increase in demand in our less populated villages and towns. We are extremely happy to see this but at times it is a challenge to figure out how we can fit everyone in our schedule.

What’s a typical day like?

No day is ever the same. Having a small team means each of us have many responsibilities, which I like because there is variety in my day. One day might be filled with committee meetings and the next I might be giving presentations.

What’s your proudest achievement?

My proudest achievement is that our community knows we are here! When I first started, I would go out to sell advertisements on our vehicles and business owners would be reluctant because they didn’t know we existed. When I go out now, the common response is “I see the buses everywhere”. We have also worked hard to show that we are vested in our community and care about our community members. I feel that we are now recognized as a partner to many agencies in our community and I am proud of that as well.
Step 4: Place the probe into the center of a circumferential tire groove and push down on the gauge’s base.

Step 5: Do not place the probe on the molded tread wear indicators or on any raised surfaces of the tread design.

Step 6: Carefully remove gauge by holding its barrel (without touching the probe) and confirm the tread depth reading.

Step 7: Place the probe into additional locations around the central circumferential tire groove at least 15 inches apart and repeat.
Tire Tech: Air Pressure, Temperature Fluctuations

Your tires support the weight of your vehicle, right? Well they don't! It's the air pressure inside them that actually supports the weight. Maintaining sufficient air pressure is required if your tires are to provide all of the handling, traction and durability of which they are capable.

However, you can't set tire pressure...and then forget about it! Tire pressure has to be checked periodically to assure that the influences of time, changes in ambient temperatures or a small tread puncture have not caused it to change.

The tire pressure recommended in your vehicle's owner's manual or tire information placard is the vehicle's recommended cold tire inflation pressure. This means that it should be checked in the morning before you drive more than a few miles, or before rising ambient temperatures or the sun's radiant heat affects it.

Since air is a gas, it expands when heated and contracts when cooled. In most parts of North America, this makes fall and early winter months the most critical times to check inflation pressures...days are getting shorter...ambient temperatures are getting colder...and your tires’ inflation pressure is going down!

"Tire pressure has to be checked periodically to assure that the influences of time, changes in ambient temperatures or a small tread puncture have not caused it to change."

The rule of thumb is for every 10° Fahrenheit change in air temperature, tire pressures will change about 2% (up with higher temperatures and down with lower). This means that light-duty, standard-pressure tires (typically inflated to 30-50 psi) used in applications on cars, vans and light trucks will change by about 1 psi; where heavy-duty, high-pressure tires (typically inflated to 80-100 psi) used in applications on recreational vehicles, busses and trucks will change by about 2 psi.

In most parts of North America, the difference between average summer and winter temperatures is about -50° Fahrenheit...which results in a potential loss of about 5 psi as winter's temperatures set in. And a 5 psi loss is enough to sacrifice handling, traction, and durability!

Additionally, the difference between cold nighttime temperatures and hot daytime temperatures in most parts of the country is about 20° Fahrenheit. This means that after setting tire pressures first thing in the morning, the vehicle's tire pressures will be almost 2 psi higher when measured in the afternoon (if the vehicle was parked in the shade). While that is expected, the problem is when you set your vehicle's tire pressures in the heat of the day, their cold pressures will probably be 2 psi low the following morning.

And finally, if the vehicle is parked in the sun, the sun's radiant heat will artificially and temporarily increase tire pressures.

We put some of these theories to the test at the Tire Rack. First, we mounted two tires on wheels. We let them sit overnight to equalize and stabilize their temperatures and pressures. The following morning we set them both to 35 psi. One tire and wheel was placed in the shade while the other was placed directly in the sun. We then monitored the ambient temperatures, tire temperatures and tire pressures through the day. As the day's temperatures went from 67° to 85° Fahrenheit, the tire that was kept in the shade went from our starting pressure of 35 psi to a high of 36.5 psi. The tire that was placed in the sun and subject to the increase in ambient temperature plus the sun's radiant heat went from our starting pressure of 35 psi to a high of 40 psi. In both cases, if we had set our tire pressures in the afternoon under the conditions of our evaluation, they would have been between 2 and 5 psi low the following morning.

Next we evaluated the effects of heat generated by the tire’s flexing during use. We tried to eliminate the variable conditions we might encounter on the road by conducting this test using our "competition tire heat cycling service" that rolls the tires under load against the machine's rollers to simulate real world driving. We monitored the changes in tire pressure as test tires were inflated to 15 psi, 20 psi, 25 psi and 30 psi. Running them all under the same load, the air pressure in all of the tires went up about 1 psi during every 5 minutes of use for the first 20 minutes of operation. Then the air pressures stabilized, typically gaining no more than 1 psi of additional pressure during the next 20 minutes. This means that even a short drive to inflate your tires will result in tires that will probably be under-inflated by a few psi the following morning.

Add all of these together, and you can understand why the conditions in which you set your vehicle's tire pressures are almost as important as the fact that you do set it.

It's important to remember that your vehicle's recommended tire pressure is its cold tire inflation pressure. It should be checked in the morning before you drive more than a few miles, or before rising ambient temperatures or the sun's radiant heat affects it.
And by the way, if you live in the North and park in an attached or heated garage you will lose pressure when you leave its warmth and venture into the real world outside during winter. Add 1 psi cold tire pressure to compensate for each 10° Fahrenheit temperature difference between the temperature in the garage and outside.

What motivates you?

My motivations are our riders and my staff. Recently with the funding issues we are all facing, we asked our riders to write what our services mean to them. Many of the responses were touching and reminded us as to why transit is so important to our community. I’m also motivated by my staff as they are truly a great group of individuals that try extremely hard and I greatly appreciate that.

What do you do to motivate your staff?

We motivate the staff by setting quarterly and yearly goals. We have a goal board posted in our dispatch office that lists the current quarterly goal and where we are at meeting the current goal. We also list an overall yearly goal on the board. However, I think simply showing appreciation and recognizing a job well done goes far with my staff. I try my best to thank and acknowledge their hard work as it occurs.

What innovations have occurred since you began in transit?

The biggest innovation for us, has been the implementation of our software system. When I first started, we used Excel spreadsheets. Our software system has allowed us to be more efficient, increase rides per hour, and gives our team the reporting tools we need to determine where we are and if we are providing a sufficient amount of transportation.

How has your system grown, and why?

Our system has grown a great deal over the past five years. We have put a lot of effort into marketing and networking. We give presentations often, hang flyers, distribute brochures, attend community events, and attend networking functions. We try to be as involved as we can be with our community. We have found this to be successful because when someone has a need for transit they now know we are an option.

Step 8: Place the probe into the inner and outer circumferential grooves and repeat.

Step 9: Average all readings.

Step 10: Identify the percentage of tire wear by confirming the tire's original/new tread depth in its specs compared to the remaining tread depth just measured.

Note: Incorrect air pressure, vehicle alignment, loose or worn parts, driving conditions, load, etc, can cause rapid or uneven tire wear. An accurate tread depth gauge can detect developing wear patterns earlier than simply looking at the tread. This often allows the cause to be identified and corrected before excessive or irregular tread wear ruins the tire.
Rural Transit is One of Safest Modes of Transportation

The Community Transportation Association of America (CTAA) has released a rural transit safety infographic based on data from the 2015 National Transit Database. Nationwide in 2015 over 1,300 rural transit systems provided 135 million rides, utilizing over 24,000 vehicles which traveled over 536 million vehicle revenue miles.

Over 600 rural transit incidents and injuries and 14 fatalities were reported in 2015. The data included any reported incident involving a rural transit vehicle, regardless of at-fault driver. The financial impact of compliance per incident is $95,000. Rural transit fatalities accounted for .04 percent of overall traffic deaths in the nation. Based on current trends, the Federal Transit Administration (FTA) projects the average rural transit provider can expect 1 injury every 3 years and 1 fatality every 93 years.

Most of the 2015 rural transit fatalities appeared to be due to non-transit vehicle error. This included a lane crossover head-on by the non-transit vehicle, an accident where the non-transit vehicle came to rest by hitting the transit vehicle, an out-of-control non-transit vehicle hitting a parked transit vehicle, a non-transit vehicle turning into moving traffic in front of a transit vehicle, an ambulance failing to yield and without lights hitting a transit vehicle, and an intoxicated pedestrian pushing on the side of a 40’ bus as it was leaving the stop and slipped and fell under the bus.

Rural transit is “the safest mode of moving people aside from commercial airlines,” according to the CTAA. The infographic in PDF format is found at: web1/ctaa.org/webmodules/webarticles/articlefiles/Rural_Safety_Info_2015_3.pdf

— RTAC Notes continued from page 2

The Council is also charged with developing a cost-sharing policy in compliance with applicable federal laws. The Council may consider, to the extent practicable:

1. Developing recommended strategies for grantees of program funded by members of the Council, including strategies for grantees of programs that fund nonemergency medical transportation, to use the cost-sharing policy in a manner that does not violate applicable federal laws
2. Incorporate an allocated cost model to facilitate local coordination efforts that comply with applicable requirements of programs funded by members of the Council, such as:
   A. Eligibility requirements.
   B. Service delivery requirements.
   C. Reimbursement requirements.

The Council will, concurrently with the submission to the president of a report containing final recommendations, transmit such report to the Committee on Transportation and Infrastructure of the House of Representatives and the Committee on Banking, Housing, and Urban Affairs of the Senate.

What does this mean for the Illinois rural transit environment in the coming year? We could see a renewed focus on transportation coordination efforts via reviving the Interagency Coordinating Committee on Transportation (ICCT). We could see enhanced expectations for the rural Human Service Transportation Plan (HSTP) effort. RTAC can help with both of those endeavors.