

THE IMPORTANT ROLE OF PERSONAL PROTECTIVE EQUIPMENT TO A SAFETY PROGRAM

Kim Carr, WV LTAP

Public works employees are faced with hazardous situations every day, including working around or operating heavy equipment, dealing with motorists, working with dangerous products, and exposure to environmental issues (such as excessive heat or cold, poisonous plants, ticks, etc). The number of potential hazards that road crews and other public works employees face is extensive, which is why it is important to have an understanding of common safety practices, foster a culture of safety, and have procedures for safe operations in place. The most important thing to remember in terms of safety is to use common sense and have the right attitude. If these two things are present, the rest will fall into place much easier.

PERSONAL PROTECTIVE EQUIPMENT (PPE)

A basic foundation of any safety program is a focus on personal protective equipment (PPE). This includes items such as safety vests, gloves, hard hats, steel toed work boots, eye protection, ear protection, dust masks, chaps, and so forth. From a management standpoint, it is essential that each employee is provided with training on who is required to wear PPE, why they are required to wear it, and when they are required to wear it.

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Country Roads & City Streets is published three to four times per year. The purpose of this newsletter is to provide information that is beneficial to decision makers, elected officials, and roadway construction, maintenance, and management personnel.

The material and opinions included in this newsletter are those of the West Virginia LTAP and do not necessarily reflect the views of the Federal Highway Administration or the West Virginia Department of Transportation. Every effort has been made to ensure the integrity and accuracy of both original and borrowed material; however, the West Virginia LTAP does not assume responsibility for any information that is found to be incorrect.



The West Virginia LTAP is part of the National Local Technical Assistance Program, which is funded by the Federal Highway Administration. West Virginia LTAP also receives funding from the West Virginia Department of Transportation.

MISSION:

The mission of the WV LTAP is to foster a safe, efficient, and environmentally sound surface transportation system by improving skills and increasing knowledge of the transportation workforce and decision makers.

To help achieve this mission, training, demonstrations, technical assistance, and resource materials are provided.

ROAD FACTS INFORMATION SHEET

Road Facts has been designed to help provide useful tips and facts regarding roadway issues. The Road Facts series can be downloaded from the WV LTAP website (wvltap.wvu.edu) as a PDF or Microsoft Publisher file. The Publisher files are formatted so agencies can add their individual contact information, if desired. The WV LTAP does ask that the main text not be changed or altered without permission. Agencies are encouraged to post these information sheets on their webpage, distribute printed copies to elected officials and citizens, send out in mailings, etc. The WV LTAP staff welcomes your suggestions for new topics and will continue adding new sheets as they become available.

ROAD RULES FOR DRIVING IN WORK ZONES



WV LTAP Image

Roadway workers and motorists often face dangerous situations and hazards in work zones. According to workzonesafety.org, there were 609 work zone fatalities (workers and motorists) nationwide in 2012, six of which were in West Virginia. The occupational injury rate for roadway workers is eight times that of all workers and three times that of other construction workers.

Following the tips listed below can help keep you, other motorists, and roadway workers safer.

- Pay attention to work zone signs, and always obey the directions of the road crew flagger personnel.
- Stay alert! Eliminate distractions, such as cell phones and changing the radio station.
- Allow enough time to drive safely through the work zone, or choose an alternate route. (Use the internet, radio, television, 511 system, etc., to get traffic information before your trip.)
- Be patient and stay calm.
- Slow down when approaching a work zone, and always obey posted speed limits.
- Stay alert. Expect the unexpected!
- Watch out for road workers, and keep a safe distance from them and their equipment.
- Do not change lanes unless directed to do so.
- Turn on headlights, even during the day, and be especially alert at night.
- Allow for plenty of space between you and the car in front of you. Do not tailgate!
- Be ready for lane shifts and merge when instructed to do so.
- Do not pass on the shoulder.

PERSONAL PROTECTIVE EQUIPMENT CONT'D



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COMMON PPEs AND BARRIERS

Most workers appreciate the value of safety, but they often don't like the inconvenience of wearing PPE, or they don't think an accident will happen to them.

Wearing hearing protection is an item that some employees balk at. As a supervisor or manager, you may hear statements such as, "If I wear it, I can't hear other workers." "I'm used to the noise." "Protectors are uncomfortable." "I've already lost some of my hearing." Explain that the reality of not wearing hearing protection can lead to hearing loss, even complete hearing loss.

In some instances, workers may be required to wear hard hats. This is another PPE that workers sometimes balk about wearing. "It makes it hard to see." "It's not really going to help save my life if something falls on my head." As a manager, facts are important here. Educate your employees about how hard hats resist and deflect blows to the head, how they act as shock absorbers, and that they shield the employee's scalp, face, neck, and shoulders against splashes, spills, and drips. Also, remember that as a general rule, hard hats should be replaced every two years, if they are worn every day.

Additionally, if the hard hat has had direct impact, such as by falling debris, it needs to be replaced immediately.

Reflective vests and uniforms are another great PPE item, but again, some employees are resistant to wearing these items. "They're not comfortable." "The lime green color attracts bugs." "They're too hot." All of these statements may be true, but the benefits of wearing this

PPE outweigh the potential risks and discomfort. Explain that by wearing this PPE, motorists and fellow workers have a better chance of seeing the employee, which helps decrease their risk of getting hit, run over, seriously injured, or even killed. Explain why there are different standards for vests for night work versus day work. Also, educate employees on why it is important to keep vests relatively clean and to replace them periodically. A vest that is dirty will often cover the reflective stripes, thus decreasing the visibility and effectiveness of the garment. Keep in mind that vests will need to be replaced after they have been washed the designated number of times, as indicated by the manufacture on the garment's label.

GETTING BUY-IN FROM EMPLOYEES

If you are on the management side, and you are looking at purchasing new PPE, for example hearing protection equipment, solicit feedback from your employees on what items they like and have found more comfortable. Find out what their experience has been with PPE that you are looking to reorder or replace. While you might

not be able to provide everyone with their first choice, by incorporating your employees' feedback in the process, you'll often end up with better products and a better attitude toward your PPE and safety program.

Protecting Yourself from West Nile Virus

Information from the Center for Disease Control and Prevention (<http://www.cdc.gov/westnile/prevention/index.html>)

The most effective way to avoid West Nile virus disease is to prevent mosquito bites.

Use insect repellents when you go outdoors. Repellents containing DEET, picaridin, IR3535, and some oil of lemon eucalyptus and para-menthane-diol products provide longer-lasting protection. To optimize safety and effectiveness, repellents should be used according to the label instructions.

When weather permits, **wear long sleeves, long pants, and socks when outdoors.** Mosquitoes may bite through thin clothing, so spraying clothes with repellent containing permethrin or another EPA-registered repellent will give extra protection. Don't apply repellents containing permethrin directly to skin.



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IT'S NOT TOO LATE TO ENTER WV LTAP'S 2015 BUILD A BETTER MOUSETRAP COMPETITION



There is still time for you to enter the WV LTAP's 2015 Build a Better Mousetrap Competition! We'd love to know if you, one of your coworkers, or one of your employees recently built an innovative gadget or developed an improved way/process to accomplish an everyday task. If either of these apply, you've built a better mousetrap and now is the time to show off your project.

As a reminder, the purpose of this competition is to collect and disseminate real world examples of best practices, tips from the field, and assist in the transfer of technology.

For more information, or to enter the competition, visit our website, wvtap.wvu.edu. You can access the competition's additional information, including the judging criteria and entry form, on our website's homepage; you can also submit your entry online.

If you have questions or would like an entry form emailed or mailed to you, please email Kim Carr at Kim.Carr@mail.wvu.edu or call (304) 293-9924. The deadline for submissions has been extended to June 1, 2015.

TWO NEW WV LTAP CLASSES

The WV LTAP recently added two new classes, both half-day in length, to our training options — Backhoe Safety and Load Securement. Stay tuned for upcoming classes!

BACKHOE SAFETY



Being able to operate a backhoe, or any large piece of heavy equipment, takes skill and safety awareness. This classroom training will focus on parts of the machine, safety basics, safe operation in situations such as traveling up or down a grade, operating on a slope, digging a trench, and much more. This is an excellent class for anyone that works around heavy equipment or operates a backhoe.

Please note that this class is classroom only training, and does not include hands-on operation of the equipment.

LOAD SECUREMENT

Proper load securement is vital in the day-to-day operations of public works departments. This course is designed to provide a basic introduction to load securement and the inspection of load securement devices that are used. Participants will become familiar with proper securement techniques and devices that they use on a regular basis.

This class includes a classroom session and a hands-on load securement exercise.



BILL WYANT RETIRES FROM WV LTAP ACTIVITIES



Bill Wyant, on the left, is with Ron Eck at the beginning of a New River Gorge Bridge catwalk tour.

After serving on the WV LTAP Advisory Board and as a senior volunteer for the WV LTAP for nearly 15 years, Bill Wyant has decided to retire from these positions.

Bill has been a wonderful supporter of the WV LTAP. During his time with us, he contributed to the development of a project management course that was presented as part of the Roads Scholar I Program, contributed materials to the WV LTAP's storm water management program, participated in examining and reviewing high-incident lane-departure crash sites in West Virginia, and attended and provided useful insight at WV LTAP Advisory Board meetings.

Upon stepping down Bill said, "Thank you Ron, Mike, Andrew, Kim, and a bunch of

technical assistants and graduate students for including me in so many interesting and useful activities over the years."

Everyone involved with the WV LTAP and the advisory board will definitely miss Bill's useful expertise, knowledge, and insight at our Board meetings.

SPRING 2015 STREET SMARTS CONTEST

The Street Smarts Contest has been expanded to include bridges and buildings. This is in addition to streets and roadways that are located in West Virginia.

For this contest, on or after, May 12, 2015 the first correct answer posted on the WV LTAP Facebook page will be the winner of a fabulous prize! (*Well, as fabulous as a prize can be for \$25.*)

The correct answer will only be accepted on our Facebook page.
www.Facebook.com/WVLTAP

This question has two parts.

What is this historical building, and in what WV city or town is it located?



FHWA DOT Image

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THE BENEFITS OF ACTIVE LISTENING

Kim Carr, WV LTAP

Active listening, also referred to as empathic listening, is a critical communication skill. When you engage in the active listening process, as the listener you are truly committed to understanding the message being delivered by the person or persons you are listening to.

KEY COMPONENTS OF ACTIVE LISTENING

- You are committed to understanding the other person and listen so you can reflect what the other person is saying and feeling.
- You put your biases and judgments aside.
- You try to put yourself in the other person's shoes and hear things from their perspective.
- You don't interrupt, criticize, or think about what you are going to say next.
- You aren't listening to agree with or refute them, but just to hear and understand.
- You ask questions for clarification, not to steer the conversation in a different direction.
- You don't debate.
- You don't assume you understand; you ask for clarification or more details.
- You paraphrase what you have heard and reflect it back to the speaker so they can verify whether or not you are accurately stating what they have said.

BENEFITS OF ACTIVE LISTENING

- People feel heard, understood, and valued.
- Increases trust in a relationship and helps promote mutual respect, even when people completely disagree.
- People are more apt to listen to differing opinions when they know their opinions and views are being listened to and valued.
- Provides everyone the opportunity to be heard and understood.

ACTIVE LISTENING IS A CRITICAL SKILL TO USE WHEN

- Dealing with individuals who are angry, frustrated, upset, sad, etc.
- Dealing with an important issue.
- There is conflict or opposing views.
- Trust among the individuals is low.

LISTENING STEPS

- Minimize distractions.
- Reflect, restate, and paraphrase.
- Ask for clarification.
- Exhibit positive body language.
- Be respectful.
- Truly try to understand.



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WV LTAP LAUNCHES NEW WEBSITE

The WV LTAP is excited to announce the launch of our new and improved website! Launched in April, the site offers visitors a fresh look, user-friendly navigation, and an increased amount of helpful information regarding the WV LTAP. The website continues to be a great tool to determine upcoming training opportunities, view the *Country Roads & City Streets* newsletter, access the *Road Facts* and *Road Sleuth* series, and learn about the various services and resources we can provide to our roadway agencies.

Some of the improved features of the new website include:

IN-DEPTH TRAINING DESCRIPTIONS

Want to know more regarding Roads Scholar I, II, and special topic courses? Our class descriptions have been revamped, and include a more in-depth class overview, class objectives, and target audience.

IN-DEPTH EQUIPMENT LOAN PROGRAM DESCRIPTIONS

Are you aware of the WV LTAP Equipment Loan Program? If not, it's worth checking out. Learn about equipment offered through this program that could benefit your agency. The best part, it's free!

COUNTRY ROADS & CITY STREETS NEWSLETTER SUBSCRIPTION FORM

Subscribing to our *Country Roads and City Streets* newsletter is much easier and quicker on our new website. Simply click the "Subscribe" button under "Resources." Please note, the newsletter, along with the *Road Facts* and *Road Sleuth* series, are all located under "Resources."

FREE MATERIALS DESCRIPTIONS & REQUEST FORM

Helpful guides, posters, and pocket books are now offered that cover various topics, including high visibility apparel, nighttime lighting, snow fighting procedures, and pedestrian accessibility. These materials are available outside of the WV LTAP library and - the best part - they're free and are yours to keep! You can view a description for each available material, and complete a form on-line to request materials.

ON-LINE VIDEOS

The WV LTAP has videos that can be directly viewed on our site in a variety of topic areas. These streaming videos are arranged by the following topics: Construction and Maintenance, Road Surfaces, Bridges, Traffic, Safety, Management, Pedestrians, and Communications.

TRAINING ANNOUNCEMENTS

If you want to see what classes we have scheduled, or learn about classes that our partnering agencies are offering, visit our training calendar. We'll also have announcements of upcoming classes on our homepage.

The WV LTAP staff encourages you to visit our new website and give us your feedback. Please let us know if you encounter any issues, such as broken links, error messages, or even things such as grammar or spelling mistakes. We appreciate any and all feedback!

You can find the WV LTAP website at the same address, wvltap.wvu.edu.



WV LTAP Image

ASK AN ENGINEER

Is there an engineering or maintenance issue that is troubling you? Are you confused on how to address a specific road problem? Email or call us with your questions, and the WV LTAP staff engineers will do their best to answer your question. Also, don't forget, the WV LTAP staff is also available to come to your community and provide guidance based on our site visit.

Q We recently had an emergency traffic control situation and only had an orange flag available. Is it ok to use an orange flag in an emergency?

A The Stop/Slow paddle is the primary and preferred hand-signaling device. However, **in emergencies**, a flag can be used when working on roadways in West Virginia, if it meets the following criteria: "shall be a minimum of 24 inches square, made of good grade red material and securely fastened to a staff that is approximately 36 inches in length. The free edge of a flag should be weighted so the flag will hang vertically, even in heavy winds." The flag should be replaced with a Stop/Slow paddle as soon as one can be obtained. Additional information about flagging can be found in the West Virginia Department of Transportation, Division of Highway's **Manual on Temporary Traffic Control for Streets and Highways**. A pdf version of this manual is available at transportation.wv.gov/highways/traffic/Documents/TemporaryTrafficControlManual2006.pdf.



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- City Engineers
- Others