



PUBLIC WORKS

VILLAGE OF NILES

FIRST RESPONDER

DISASTER DEPLOYMENT SAFTEY DOESN'T TAKE SHORTCUTS



Hot Topics

- ▶ Personal Protective Equipment
- ▶ Chipper Safety
- ▶ Chainsaw Safety
- ▶ Road Safety
- ▶ Dangerous Situations
- ▶ Sending the right person for the right emergency
- ▶ Who you shouldn't send
- ▶ What is your responsibility
- ▶ Remember who you represent. Be professional.

Where am I at in this continuum?



PPE/ Lack of training COSTS all of us \$\$\$

- ▶ ▪ It has been estimated that employers pay almost \$1 billion per week for direct workers' compensation costs alone. The costs of workplace injuries and illnesses include direct and indirect costs.
- ▶ ▪ Direct costs include workers' compensation payments, medical expenses, and costs for legal services.
- ▶ ▪ Examples of indirect costs include: training replacement employees, accident investigation and implementation of corrective measures, lost productivity, repairs of damaged equipment and property, and costs associated with lower employee morale and absenteeism, higher work comp. costs
- ▶ ▪ Additionally someone has experienced pain!!

PPE-Types of Personal Protective Equipment

- ▶ ▪Eye protection - spectacles/goggles, shields, visors.
- ▶ ▪Hearing protection -ear muffs and plugs.
- ▶ ▪Hand protection -gloves and barrier creams.
- ▶ ▪Respiratory protection -disposable, cartridge, air line, half or full face.



EYE PROTECTION



Figure 1. Prior to the surgical removal of the staple. The upper

- ▶ ▪ Wear protective eyewear during risky activities. (really any activity) Wear safety glasses with side shields anytime you might be exposed to flying particles, objects or dust. (Brush chipper?)
- ▶ ▪ Wear goggles when exposed to chemicals. Take precautions even if you're just a bystander. (EX: Mixing weed killer?)
- ▶ ▪ Each day, about 2,000 U.S. workers sustain a job-related eye injury that requires medical treatment. However, 90% of eye injuries can be avoided by wearing eye protection.
- ▶ ▪ (OSHA) Reports that work place eye injuries alone cost an estimated \$300 million a year in lost productivity, medical treatment and worker compensation

From:

<https://www.rosenfeldinjurylawyers.com/workers-eye-injury>

- ▶ ▪ Workers' Eye Injury Facts
- ▶ ▪ Half a million workers injure their eyes each year.
- ▶ ▪ Most eye injuries at work could be prevented.
- ▶ ▪ Workers eye injuries are nearly half of all total head injuries that make them miss them work.
- ▶ ▪ Workers' eye injuries cost the US hundreds of millions each year. ▪ Young male workers suffer most eye injuries.
- ▶ ▪ Most work eye injuries come from scratching, chemicals, penetration, or scraping. ▪ Some workers get eye diseases that can be life threatening.
- ▶ ▪ Prevention costs are a small fraction of care costs for eye injuries.

This could be anyone of us. It only takes
a split second.



HEARING PROTECTION



- ▶ ▪ (NIOSH) recommends that workers are not exposed to noise at a level that amounts to more than 85 decibels (dBA) over 8 continuous hours. (Wood Chipper 110 db)
- ▶ ▪ NIOSH estimates that 30 million U.S. workers are exposed to noise levels high enough to cause irreversible hearing loss.
- ▶ ▪ According to the U.S. Bureau of Labor Statistics, more than 20,000 workplace hearing loss cases occur annually, many resulting in permanent hearing loss.
- ▶ ▪ An estimated 24% of hearing loss in the United States has been attributed to workplace exposure, according to the CDC.
- ▶ ▪ We Must Self Regulate! We must take care of our staff!

HEARING PROTECTION CONT.

- ▶ ▪ Research also shows that stronger occupational regulation of noise leads to safer sound levels. (You don't say)
- ▶ ▪ Did you know that hearing loss is the most common work-related injury in America? It's true. According to the CDC, approximately 22 million American workers are exposed to hazardous levels of noise annually.
- ▶ ▪ While not all those people end up with work-related hearing loss, those who do cost businesses an estimated \$242 million in worker's compensation claims, according to the U.S. Department of Labor.

\$242 million



Annual dollars spent on
worker's compensation for
hearing loss disability.

Source: U.S. Department of Labor
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Hearing protection cont.

► \$17.09



► 100 PIECES FOR \$30.00



► \$12.59 A PAIR



Chipper Safety



- ▶ ▪ Wood chipper injuries-data from 11/22/2016
- ▶ ▪ Since 2015, OSHA has received 19 severe injury reports related to wood chippers with injuries including amputations and head trauma. Of those, five occurred because the chipper pulled fingers or arms directly into the blades, and four occurred when a machine's belt or pulley caught a body part and pulled it in.
- ▶ ▪ James Blaney, 32, was working his job with Triple Crown Tree Co. when his foot became trapped in the machinery after he attempted to fix a jam.

Chipper Safety Cont.



- ▶ A young man was killed on his first day (seasonals?) in a new job after being pulled into a wood chipper. Mason Scott Cox, 19, of Gastonia, North Carolina, had taken a day's work at Crawford Tree Service to earn some extra money. Jon Crawford, Cox's employer, said the teenager was working "side by side with TWO experienced employees when the accident occurred.



NEW AND IMPROVED ONE HANDED CHAINSAW. NO PPE REQUIRED.

ANZI Z133 – 6.3.5 a chainsaw shall be operated with two hands at all times.



Chainsaw Safety

- ▶ ▪ Do not cut alone. Always have someone nearby - don't do this work alone
- ▶ ▪ Never cut wood being held by somebody else.
- ▶ ▪ When starting your chainsaw make sure the chain brake is engaged.
- ▶ ▪ Always hold your running chainsaw with two hands. Never use one hand. If you need to use your hand for something make sure you turn off your chainsaw first.
- ▶ ▪ Do not climb a tree with your chainsaw. Climbing trees is for experienced or professional operators. Look into buying a pole saw if you need to cut branches that require climbing.
- ▶ ▪ Don't rush. Relax. If you're unsure what to do next, turn off your chainsaw
- ▶ ▪ ALWAYS WEAR CHAPS.

ANZI Z133 - 5.2.13 during pruning / removal operations, a hand saw shall be taken by the aerial device while working aloft.



ALWAYS WEAR YOUR CHAPS



Chainsaw Safety Cont.

- ▶ ▪ Inspect your chainsaw before starting to ensure that all the safety features are working and the chain is tight on the guide bar.
- ▶ ▪ Never cut with the nose or tip of your chainsaw. This will cause kickback and can lead to a serious injury.
- ▶ ▪ Never use a chainsaw to cut above your head.
- ▶ ▪ Before you refuel, allow the chainsaw to cool down.
- ▶ ▪ When moving from tree to tree either turn off your chainsaw or engage the chain brake.
- ▶ ▪ Don't use a chainsaw on a ladder.
- ▶ ▪ Keep your chainsaw out of the hands of untrained employees

Chainsaw Safety Cont.

- ▶ Each year, hospital emergency rooms see approximately 30,000 catastrophic injuries from chainsaws.
- ▶ The most frequent chainsaw injury occurs to the left leg and the back of the left hand.



Road Safety

- ▶ ▪Have a plan before you go out.
- ▶ ▪Have high quality cones, barricades, lighting etc.
- ▶ ▪Proper signage and spacing for your speed limit.
- ▶ ▪Know your audience
- ▶ ▪ Set up your work zone for least qualified driver
- ▶ ▪ We have a duty to protect the worker AND the motoring



Document! Document! Document!
Have a written plan if possible. Even when
do everything right, someone will say you did
it wrong.



Preparing for a IPWMAN Deployment

- ▶ ▪ Create a “go bag”
- ▶ ▪ PPE
- ▶ ▪ Writing material
- ▶ ▪ Insect repellent
- ▶ ▪ Water container
- ▶ ▪ What else?



Be Prepared. Don't Show Up Unprepared

- ▶ ▪Communication between team members.
- ▶ ▪ We need to establish at least the minimum
- ▶ ▪Lack of training/first time doing this type of tree work?
- ▶ ▪ Removing fallen trees is different than removing a standing tree
- ▶ ▪Working in a different environment
- ▶ ▪ A lot of energy and excitement during a deployment. Hurraypitis
- ▶ ▪You send your best team, but my team does not know your team.. Think of the all star team.
- ▶ ▪ We send our best but they've not worked together before.

Saluting Branches



Dangerous Situations

- ▶ Prepare for the unexpected
- ▶ Your not in Kansas anymore. Not familiar with the area.
- ▶ Day/Night
- ▶ Spring Poles
- ▶ Electrical Hazards
- ▶ Widow Makers
- ▶ Following instructions from new supervisor/ Incident Commander
- ▶ ANZI 3.2 EMERGENCY PROCEDURES AND READINESS - 3.2.5 For field crews involving two or more workers at a location, at least two workers trained in first aid/cpr shall be available.



Can working along side another crew be dangerous? People can be just as dangerous as anything you come across.

- ▶ Your familiar with your staff
- ▶ Your crew operates a certain way
- ▶ Nothing is really unexpected
- ▶ You trust your crew
- ▶ You know what each other can do
- ▶ Some people are carless
- ▶ Untrained
- ▶ Have no common sense



Deployment Dangers

- ▶ ▪ These are not normal work conditions.
- ▶ ▪ Increased vehicle traffic in a confined area.
- ▶ ▪ Civilian foot traffic.
- ▶ ▪ Media.
- ▶ ▪ The “do gooder”
- ▶ ▪ The employee may be subjected to a different task than they are accustomed to and don’t want to say no.
- ▶ ▪ Is the electric really turned off...
- ▶ ▪ Are you trained to assess a tree at risk.

Media can be your best friend or worst enemy.



Hidden Dangers cont. Courtesy of the TCIA

- ▶ ▪Ask yourself, “What will happen when I cut this branch/tree?” Consider all the possibilities.
- ▶ ▪Plan an escape route from the falling tree or tree part before cutting.
- ▶ ▪Do not use a chain saw for tree removal unless you are trained and experience. Even tree care professionals face risk of injury using chain saws. Tree and branch removals are very unpredictable. Don’t take unnecessary chances!
- ▶ ▪If you have any doubts, ask a more experienced person or don’t attempt the job.

What Injuries can you suffer on deployment??????

- ▶ ▪Scratches and bruises from tripping on exposed roots or fallen branches.
- ▶ ▪Fractures from falling branches or trees.
- ▶ ▪Traumatic brain injuries and concussions.
- ▶ ▪Paralysis from spinal cord injuries.
- ▶ ▪Death from being crushed or severe head injuries.

Send the right people for the right job.

What you might encounter?

- ▶ Most deployments are usually for flooding and storm damage.
- ▶ When dealing with dangerous situations you should be sending your best.
- ▶ Send staff that has proven they can work under pressure.
- ▶ Send crews with specialized training or certifications.
- ▶ Make sure the crew knows how to use the equipment needed for the incident. Chippers, Chainsaws, Front End Loaders, Ropes, Trash Pumps. Etc.....

Who Shouldn't Go On Deployment

- ▶ Don't send staff from your Meter Department to cut up storm damage.
- ▶ Don't send the untrained. Untrained employees can put the lives of residents, media, and other employees at risk.
- ▶ If they don't care in your own town, they probably won't care in another.
- ▶ Don't send the stand around and talk instead of work.
- ▶ Don't send the guy you can't wait to get rid of for the day.
- ▶ Don't ever send the problem child (PC).

Might Not Be Trained.



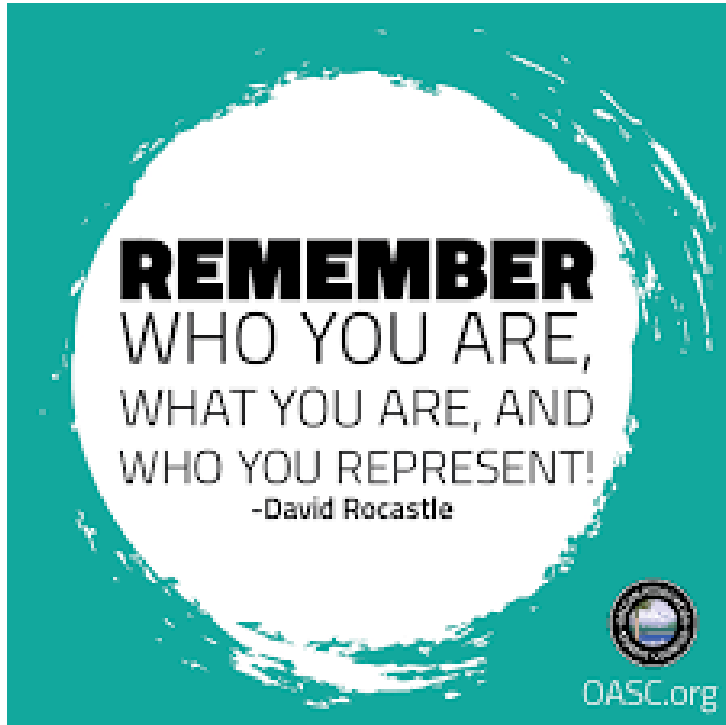
Difficult employees. A.K.A “The problem child”

- 5 types:
- The Victim-poor me
- The Hisser
- Negative Nellie
- The Ghost-the magician
- The Narcissist-it's all about me.
- Reminder: The crew I send out represents my organization

What is your responsibility??????

- ▶ **Your responsible for your own actions. What does that mean?**
- ▶ Don't take shortcuts
- ▶ If you see someone doing something you know is not safe, let them know.
- ▶ Your responsible for following the instructions of the Supervisor or Incident Commander.
- ▶ Keep the public safe and protect property.
- ▶ Wear your Personal Protective Equipment. (PPE)
- ▶ You are responsible for your departments equipment.
- ▶ Your are responsibility is to go back to your municipality in one piece.

Remember who you represent.



THANK YOU

Tony Dati

Streets Superintendent, Village of Niles

President Elect, Illinois Arborist Association