

This is the only way...

ROOM B

Topic: Effective ES&H: Four Critical,

Mutually Dependent Steps

Speaker: Mark Woodward of Missouri

Employers Mutual

All ES&H programs function through four basic safety management principles that are mutually dependent. Engineering, administrative, and P.P.E controls will fail when one step is missing. All four foundation steps are critical, together. All ES&H programs MUST have these four core-critical management steps in place and in use — or else the effort will not succeed.

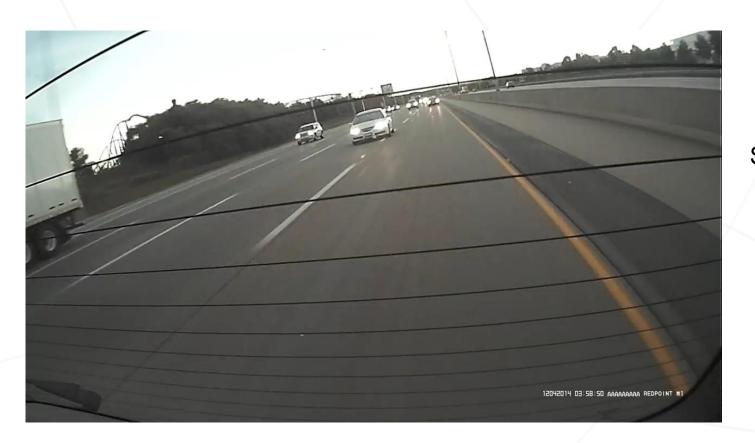
Does your safety program (actually) affect behavior?

Are the rules part of daily work life?









Safety programs are about what employees DO.

What they're DOING.



Purpose of a Safety Program?

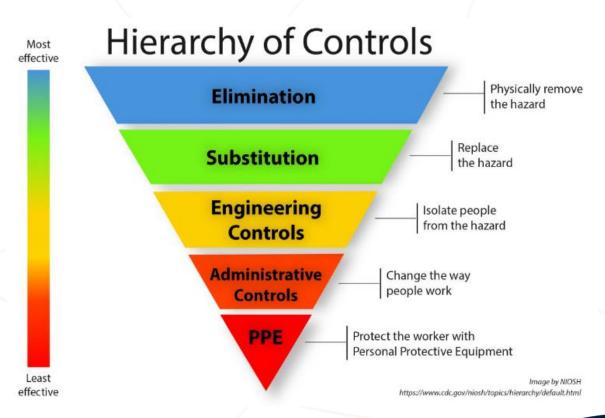
• Through *controls*, reduce the frequency and severity of incidents.

Effectiveness.

Get results.

✓ Environmental

- √ Safety
- √ Health



https://www.cdc.gov/niosh/topics/hierarchy/default.html



Each safety rule matters... The only way to make a safety rule effective:

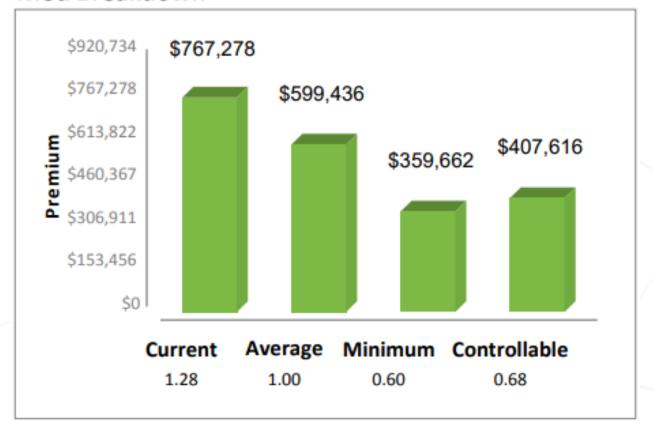
- ✓ The written rules focused appropriately...
- ✓ Followed by education and training on those rules...
- ✓ Followed by auditing to verify / validate the rules are being followed...
- ✓ Followed by documented corrective action / follow up / thank you...



The importance of ONE rule.

The importance of EACH employee as an individual.

Mod Breakdown



2009 1.18 2010 1.11 2011 1.08 2011 1.09 2012 1.03 2013 1.122014 1.22 1.25 2014 2015 1.14 2016 1.16 2017 .94 2018 .89 2019 .96 2020 1.24 1.21 2020 2021 1.26 2022 1.28



- VIOLATION SUMMARY			Unsafe Driving Violations: 17	
Violations	Description	# Violations	# OOS Violations	Violation Severity Weight
392.2-SLLS2	State/Local Laws - Speeding 6-10 miles per hour over the speed limit.	5	0	4
392.16	Failing to use seat belt while operating a CMV	2	0	7
392.2-SLLS3	State/Local Laws - Speeding 11-14 miles per hour over the speed limit.	2	0	7
392.82(a)1	Using a hand-held mobile telephone while operating a CMV	2	0	10
392.2-INAT	Inattentive Driving	1	0	5
392.2-ML	Failure to Maintain Lane	1	0	5
392.2-SLLS4	State/Local Laws - Speeding 15 or more miles per hour over the speed limit.	1	0	10
392.2C	Failure to obey traffic control device	1	0	5
392.2FC	Following too close	1	0	5
392.2Y	Failure to yield right of way	1	0	5



Top 10 Most Cited Standards

FY 2022



Fall Protection: General Requirements 1926.501 5,915 violations



Hazard Communication 1910.1200 2,639 violations



1926.1053 2,449 violations



Respiratory Protection 1910.134 2,412 violations



Scaffolding 1926.451 2,251 violations



Control of Hazardous Energy (Lockout/Tagout) 1910.147 2.139 violations



Powered Industrial Trucks 1910.178 1,896 violations



Fall Protection: Training Requirements 1926.503 1,762 violations



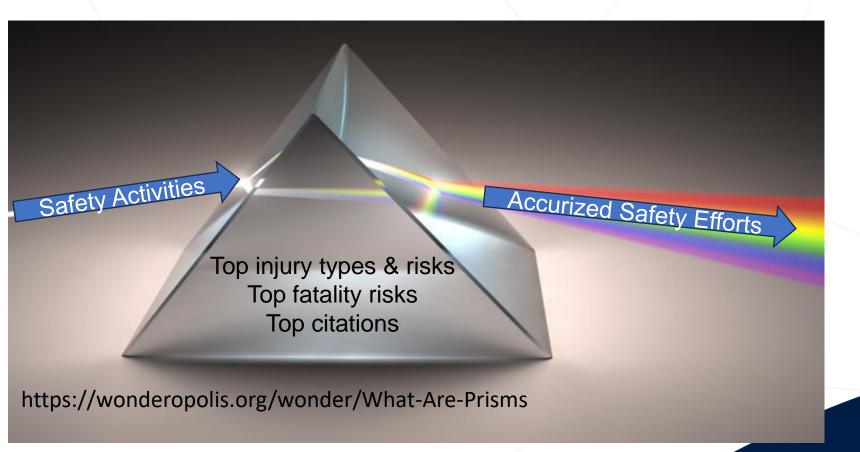
Personal Protective and Lifesaving Equipment: Eye and Face Protection 1926.102 1.572 violations



Machine Guarding 1910.212 1,469 violations



All safety activities must be focused through the prism of priority – focus on the right things that reduce fatality & injury risks, top citations.



MêM

Loss Prevention – What is a "Loss"

- ✓ Properly administered plans reduce the frequency & severity of
 - ✓ Sudden traumatic incidents
 - ✓ Occupational disease

- √When an incident occurs, loss management controls
 - **✓ Direct Costs**
 - ✓Indirect Costs

29 USC 654 General Duty Clause Did you know OSHA wants employees to follow safety rules?

(a)Each employer

(1) shall furnish to each of his employees employment and a place of employment which are free from recognized hazards that are causing or are likely to cause death or serious physical harm to his employees;

(2) shall comply with occupational safety and health standards promulgated under this chapter.

(b) Each employee shall comply with occupational safety and health standards and all rules, regulations, and orders issued pursuant to this chapter which are applicable to his own actions and conduct.

OSHA Employee Misconduct Defense

- Employee actions are always taken into account during all OSHA inspections, and employees and employee representatives are encouraged to participate.
- Unsafe actions by employees are brought to the attention of the employer. In those situations where the employer has met all the conditions for affirmative defense, no citation is issued. The conditions for affirmative defense associated with "unpreventable employee misconduct" or "isolated event" are listed below.

The violative conduct was:

- 1.unknown to the employer; and
- 2.in violation of an adequate work rule which was effectively communicated and uniformly enforced.
- However, it is our experience that unsafe acts of employees are often known by management and that they are often allowed to proceed without remedial action. When it is found that employers have not been pro-active in controlling these conditions, citations are issued to the employer.

The State of Missouri supports safety! Please Develop Safety Rules Section 287.120.5

Where the injury is caused by the failure of the employee to use safety devices where provided by the employer, or from the employee's failure to **obey any reasonable rule** adopted by the employer for the safety of employees, the compensation and death benefit provided for herein shall be reduced **at least twenty-five but not more than fifty percent**; provided, that it is shown that the **employee had actual knowledge** of the rule so adopted by the employer; and provided, further, that the employer had, prior to the injury, made a reasonable effort to **cause** his or her employees to use the safety device or devices and to obey or follow the rule so adopted for the safety of the employees.

- Initial Employee Orientation Training
- Signed Receipt of Employee Manual, Ongoing Safety Meeting Logs
- Specific Safety Training
- Documented Corrective Action / Enforcement



The State of Missouri supports safety! Please Develop a Drug & Alcohol Policy

Section 287.120.6

- (1) Where the employee fails to obey any rule or policy adopted by the employer relating to a drug-free workplace or the use of alcohol or nonprescribed controlled drugs in the workplace, the compensation and death benefit provided for herein shall be reduced fifty percent if the injury was sustained in conjunction with the use of alcohol or nonprescribed controlled drugs.
- (2) If, however, the use of alcohol or nonprescribed controlled drugs in violation of the employer's rule or policy is the **proximate cause** of the injury, then the benefits or compensation otherwise payable under this chapter for death or disability shall be **forfeited**.
- (3) An employee's **refusal to take a test** for alcohol or a nonprescribed controlled substance, as defined by section 195.010, at the request of the employer shall result in the **forfeiture** of benefits under this chapter if the employer had sufficient cause to suspect use of alcohol or a nonprescribed controlled substance by the claimant or if the employer's policy clearly authorizes post-injury testing.





Don't forget the "human element"



All Employee Policies, Procedures, Documents.

Departmental policies, procedures, documents. Warehouse, receiving, shipping, trucking, etc.

WORK
METHODS
PROCESS
RULES
CHEMICAL
RULES
EQUIPMENT
RULES
MACHINE
RULES
TOOL

OWNER'S MANUALS, SDS, CONTAINER LABELS, WARNING LABELS, ENGINEERING DIAGRAMS



All Employee Policies, Procedures, Documents.

Departmental policies, procedures, documents. Warehouse, receiving, shipping, trucking, etc.

MACHINE RULES TOOL RULES

WORK METHODS CHEMICAL RULES PROCESS RULES

OWNER's MANUALS, SDS, CONTAINER LABELS, WARNING LABELS, ENGINEERING **DIAGRAMS**









PPE

Process Safety Rules

PSM Safety Rules



Safety Rules

Tool Safety Rules

EQUIPMENT RULES

Machine Safety Rules





PPE Safety Rules



PSM Safety Rules



Equipment Safety Rules

Process

Safety Rules

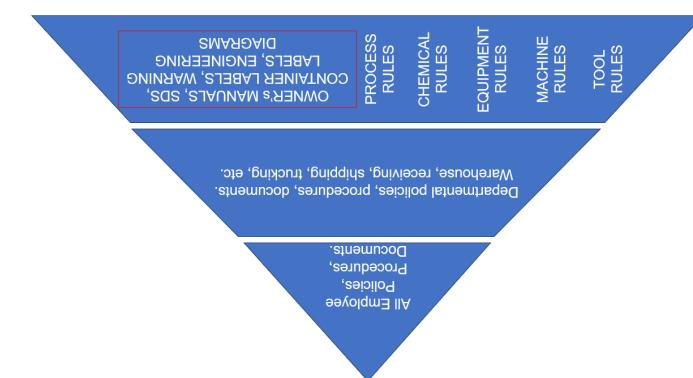


Tool Safety Rules



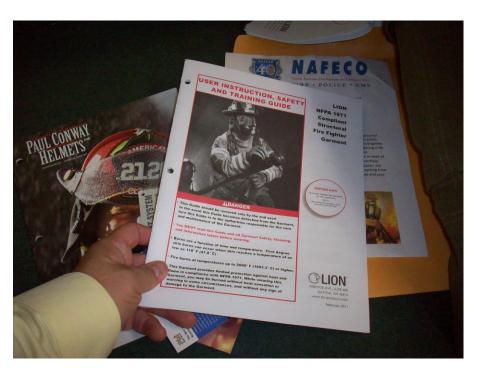






REDUCED FREQUENCY AND SEVERITY OF INCIDENTS ASSOCIATED COST SAVINGS









OSHA FATALFacts

No. 16 – 2018

Confined Space Entry on a Farm

U.S. Department of Labor

Occupational Safety and Health Administration

www.osha.gov (800) 321-OSHA (6742)

Confined spaces are areas large enough for a worker to enter and perform work, have a limited or restricted means of entry or exit; and are not designed for continuous employee occupancy. The purpose of this Fatal Facts is to highlight the importance of identifying confined spaces in agricultural workplaces to prevent another fatality.

The General Duty Clause requires employers to provide employees with workplaces, including confined spaces, which are free from recognized hazards likely to cause death or serious physical harm. Agricultural operations are covered by several Occupational Safety and Health standards including Agriculture (29 CFR 1928) and parts of General Industry (29 CFR 1910), as well as the General Duty Clause of the Occupational Safety and Health Act (section 5(a)(11), OSHA's confined spaces standard at 29 C.F.R. 1910.146 does not apply to agricultural operations, but serves as a guide for how to prevent these accidents.



Figure 1: The hole cut into the side of the whey tank was used for the rescue operation.

BRIEF DESCRIPTION OF INCIDENT

A farm maintenance worker died after entering an 8,000- gallon polyethylene storage tank that was not marked to indicate a potential uncontrolled hazardous atmosphere. At the time of the incident, the tank contained liquid whey, known to produce carbon dioxide gas as it decomposes. A broken ball valve inside the tank needed replacement. Using a forklift, a worker was lowered through a 16-inch-diameter hole at the top to fix the valve. The forklift operator had no visual contact or other means to monitor the situation inside the 12 foot-by-12-foot tank. To determine the worker's progress inside the tank, the operator climbed to the top of an adjacent bin where he saw the worker lying face down inside the whey tank. The fire department responded and cut a hole in the tank (see Figure 1) to retrieve the worker who had died from sophyxiation.

LIKELY CAUSES

The high outdoor temperatures and direct sunlight on the tank likely caused the liquid whey in the tank to decompose more rapidly than normal. Decomposition likely released lethal carbon dioxide gas and lowered oxygen levels, resulting in a hazardous atmosphere (oxygen concentrations below 19.5% or above 23.5% create a hazardous atmosphere). The employer failed to recognize that the tank was a confined space containing a hazard, so protective measures were not in place to alert workers to a potential hazardous atmosphere and prevent them from entering the storage tank without reconsized controls.

INCIDENT PREVENTION

Employers involved in agricultural operations can take the following actions to reduce worker exposures to confined space hazards:

- Identify and label all confined spaces. Examples common in agriculture include:
- Grain and feed storage facilities
- Corrugated steel bins
- Silos

Workers have the right to:

- Working conditions that do not pose a risk of
- Receive information and training (in a language and vocabulary the worker understands) about workplace hazards, methods to prevent them, and the OSHA standards that apply to their workplace.
- Review records of work-related injuries and illnesses
- File a complaint asking DSHA to inspect their workplace if they believe there is a serious hazard or that their employer is not following OSHA's rules.
- Exercise their rights under the law without retalation, including reporting an injury or rising health and safety concerns with their employer or OSHA. If a worker has been retaliated against for using their rights, they must file a complaint with OSHA as soon as possible, but no later than 30 days.

For additional information, see www.osha.gov/workers.

Under the Occupational Safety and Health Act of 1970, employers are responsible for providing safe and healthful workplaces for their employees. OSHA's role is to ensure these conditions for America's working men and women by setting and enforcing standards, and providing training, education, and assistance. For more information, visit www.osha.gov.

OSHA Standards and Regulations: www.osha.gov/law-regs.html

OSHA Publications: www.osha.gov/publications

OSHA-Approved State Plans: www.osha.gov/dcsp/osp

Free On-Site Consultation Services: www.osha.gov/consultation

Training Resources: www.osha.gov/dte

Compliance Assistance Services:

www.osha.gov/complianceassistance



Occupational Safety and Health Administration www.osha.gov



USHA 3252-05N 200:

OSHA CARD

- Have a clear view of and immediate access to all areas of hot work (29 CFR 1915.504(c)(2)(i)).
- Have the proper fire extinguisher or charged water hose ready for use.
- Ensure that you have the ability to communicate with workers in the area of hot work (29 CFR 1915.504(c)(2)(ii)).
- Isolate or cover combustible materials that cannot be removed with fire-resistant blankets and flameretardant chemical gels or solutions. Wet down the area surrounding hot work.
- Do not abandon the hot work area during breaks or interruptions, or at the end of work shifts, unless properly relieved.
- Continue fire watch duties for at least 30 minutes after completing hot work, unless released by your employer after a site inspection (29 CFR 1915.504(c)(2)(iv)).
- Follow all confined space entry and hot work requirements established by your employer, the shipyard competent person (SCP), National Fire Protection Association (NFPA)-certified Marine Chemist, or Coast Guard authorized person (29 CFR 1915.12 and 29 CFR 1915.14).
- Shut down any hot work activity deemed unsafe and take the appropriate corrective measures to restore and maintain safe conditions. Immediately address all concerns or refer questions to your employer or the SCP (29 CFR 1915.504(c)(2)(iii)).

REMEMBER

- Attempt to extinguish any incipient stage fires consistent with the fire protection equipment provided and your training (29 CFR 1915.504(c)(2)(vi)).
- If a fire gets beyond the incipient stage, alert workers and activate the alarm (29 CFR 1915.504(c)(2)(vii) and (viii)), then exit the area.

For more information:



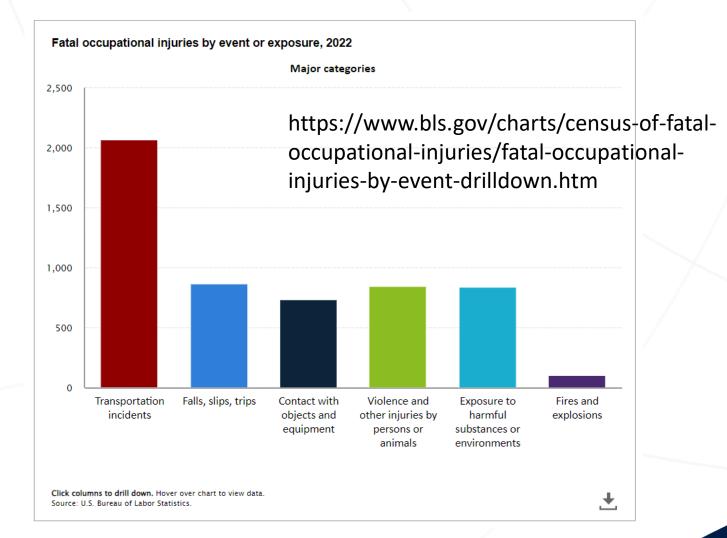
Hierarchy of Injuries

- 1. Slips, Trips, Falls
- 2. Overexertion
- 3. Motor Vehicle Accident
- 4. Hazardous Contact

Hierarchy of Work-Related Deaths

- 1. Motor Vehicle Accidents
- 2. Falls
- 3. Workplace Violence
- 4. Electrocution
- 5. Struck By
- 6. Caught In Between









OVERALL All-**EMPLOYEE** SAFETY **PLAN**

SAFETY **RULES FOR MAJOR** JOBS, TASKS, **DUTIES**

MACHINE, TOOL OR JOB-**SPECIFC RULES**

Company Safety Rules

The sofety rules have d below are guidelines for sofety procedures which should assist in preventing accidents or injuries while on the construction jobate.

Everyone must wear seat belts when driving and operating machines or forklifts.

Do not operate vehicles or machines when fatioused Report to work free from the altereffects of drugs or

Report incidents or injuries in writing immediately Know the Joballa severe weather plan.

Clean up spills and huzards that could cause a slip, trip or fall.

Wear hearing and eye protection. Get hein to heart lift heavy objects

Perform a safety walk-around prior to moving vehicles or machines on the jobsite. Inspect construction machines and tools for hazards or

maindenance concerns before use. Wear proper safety footwear when on a jobsite. West an approved hard hat when working on

Wear a reflective, high-visibility vest when working new truffic or construction machines.

Stay ten feet away from overhead entrances and

Scan for overhead power lines before raising ladder distrip beds, or booths.

If exposed to a fall hazard you must be protected by Do not exerteech when working from ladders

Do not use the top two rungs of step ladders. Do not jump from equipment or trucks,

Employees must be protected by trench skiping, shoring or shielding. Never raise employees in the bucket of loaders, skid

Operators must look behind machines before backing Drivers must get out and look or use a spotter before

Previsor | MeM





Water Department Safety Rules

The soficty rules listed below are guidelines for soficty procedures which should assist in preventing accidents or injuries while on the construction lobalis.

Everyone stust wear seal belts when driving and operating stachines or forkitts.

On not operate valueles or machines when fatimised Report to work free from the aftereffects of drags or

Report maintenance needs or hazards before the end of your work shift. Report incidents or injuries in writing immediately

Clean up spills and hazards that could cause a slip, trip or fall.

Wear hearing and eye protection. Perform a safety multi-around prior to moving vehicles or machines on the jobsite.

Inspect construction machines and tools for hazards or maintenance concerns before use. Wear proper safety footwear when on a jobsite.

Wear an approved hard hat when working on constitution lobelites.

Wear a reflective, high-visibility vest when working near traffic or construction mac Nase

Stay ten feet away from overhead entrances and

Scan for overhead power lines before raising ladders, dump bads, or booms.

Secure ladders to present tip over or kick out. On not use the top two moves of stan ladders Do not jump from equipment or tracks.

Use three-point contact when mounting or dismissating tracks or machines. Do not item Employees must be protected by trench sloping, shoring or shielding

Never raise employees in the bucket of loaders, skid

Othersfore must look habited machines before backton Drivers must get out and look or use a spotter before Never climb into dumpoters to "compress" or dig by hand through jobolte waste.







Chlorine Cylinder Change-Out Procedure

The sofety rules listed below are guidelines for sofety procedures which should assist to preventing accidents or injuries while on the construction lobelite.

Safety Rules

Everyone must wear seat belts when driving and operating machines or forkiths.

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Do not work underpeath rehead loads

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Secure ledders to prevent tip over or kick out. Do not use the top two rungs of step ladders: Do not jump from equipment or trucks.

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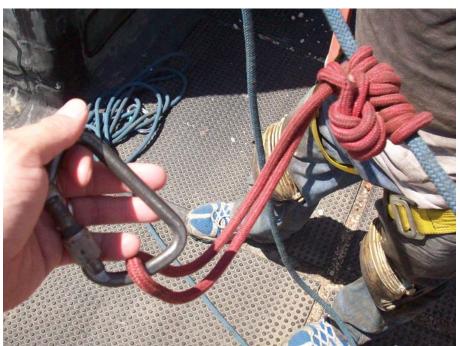
MACHINE OPERATIONS SAFETY RULES

CHASSIS SAFETY RULES SAFE DRIVING SAFETY RULES

- 1. When was the last time your written safety & work comp expectations were reviewed and signed?
- 2. When was the last safety meeting your employees attended?

- 3. Does anyone perform documented inspections / observations?
- 4. When was the last time corrective action occurred after an unsafe act / condition?





















Inspections PROVE if the safety plan is working.

Document Self-Inspection Findings.

Document corrective action,

ALWAYS document when no corrective action is needed.

Employee recognition is a MUST.

Publish all findings.

Assign a \$\$\$ value.





- 1. ALL Management Commitment (Top and Middle Mgmt.)
- 2. Understand Your Costs EMR, Premium, Claims
- 3. Develop, Communicate, Enforce Focused Safety Rules
- 4. Hold Regular Safety Education & Provide Training
- 5. Perform Documented Corrective Action
- 6. Inspect Jobsites, Tools, Machines, Premises, and Vehicles
- 7. Enforce a Drug-Free Workplace (NH & PA)
- 8. Enforce a Written Seat Belt Policy All Employees
- 9. Enforce Written Distracted Work / Driving Policy
- 10. New Hires Provide Training and Set Expectations
- 11.New Hires Post-Offer Employment Physicals



That's it! Thank you!!!

Mark Woodward, Sr. Safety and Risk Trainer