

**COMMISSION ON UNIVERSITY SUPPORT
MEETING
December 16, 2021
Videoconference (via Zoom)**

Present: John Benner (Chair), Alisha Ebert *for Bob Broyden*, Martha Glass, Debbie Greer *for Ken Miller*, Ariel Heminger, Bradley Klein, Kristie Caddick, *for Charlie Phlegar*, Gannon Davis, *for Chris Kiwus*, Patrick Pithua, Connie Stovall, Jim Tokuhisa, Paul Winistorfer

Absent with Notice: Judy Alford, Holly Carroll, Jeff Earley, Polly Middleton

Absent: Kimani Jackson, Scott Midkiff

Guests: Lori Buchanan, Nathan King, Curt Porterfield, Kristina Cook

1. Welcome and Roll Call

Commission Chair, John Benner, called the meeting to order at 2:00p.m.; initiated introductions and roll call. A quorum was present.

2. Approval of Agenda

Proper motion was made, seconded, and unanimously carried to adopt the December 2021 agenda.

3. Approval of the November 2021 meeting minutes

Chair Benner noted that these minutes have been voted on electronically and can be publicly accessed on the Governance Information System on the Web (<http://www.governance.vt.edu>).

4. Old Business

CUS 2021-22A Resolution: Resolution to Change Membership to the Parking and Transportation Committee

Update: Chair Benner updated the Commission that he presented the resolution for second reading to University Council at their December 6 meeting. This resolution, as amended (add a member from the Commission on Equal Opportunity and Diversity and a representative from the Office of Equity and Accessibility) and was approved and adopted by University Council.

GPSS Resolution 2021-2022K Resolution to End Prison Labor Contracts

Chair Benner reported that currently there is internal discussion regarding this proposed resolution which was brought before the Commission at the November 18, 2021 meeting and is not an action item at this time.

5. New Business

Guest Speaker

Curt Porterfield, Department of Environmental Health and Safety, presented an informative overview of the Farm and Ag Safety Training (FAST) program and other safety programs offered by the department. A copy of his presentation is incorporated herein and made a part of these minutes.

6. Updates from Committee Representatives

Campus Development Committee – No representative present for the meeting; no updates from the committee.

Energy and Sustainability Committee – Nathan King reported the energy and Sustainability Committee are working to introduce a Resolution for first reading to the Commission that will address Goal 13 of the Climate Action Commitment to change the name, membership and charter of this committee. Kristina Cook added the targeted timeline to bring to the Commission is the February 2022 meeting. Nathan further reported they are working with the campus energy manager, Stephen Durfee, on a sustainable lighting project and will share more details on this as it develops.

IT Services and Systems Committee – No representative present for the meeting; no updates from the committee.

Transportation and Parking Committee – No representative present for the meeting; no updates from the committee other than the Resolution update Chair Benner covered and reported herein under old business.

7. Acceptance of Committee Minutes

Campus Development Committee – No new minutes submitted to the Commission.

Energy and Sustainability Committee – November 15, 2021 minutes were submitted to the Commission and were unanimously accepted and approved.

IT Services and Systems Committee – No new minutes submitted to the Commission.

Transportation and Parking Committee - No new minutes submitted to the Commission.

8. Next Meeting Date

Next meeting date is January 20, 2022.

Tentative guest speaker: Robin White, Associate Professor, Animal and Poultry Sciences, presenting on Precision Animal Agriculture with livestock.

Chair Benner encouraged everyone to email him any proposed ideas for presentation topics.

9. Adjournment

There being no further business and with proper motion, the meeting adjourned at 2:56pm.

About this Program

The *Farm & Agricultural Safety Training Program* was produced under grant number SH-99061-SH0 from the Occupational Safety and Health Administration, U.S. Department of Labor.

It does not necessarily reflect the views or policies of the U.S. Department of Labor, nor does mention of trade names, commercial products, or organizations imply endorsement by the U.S. Government.



Grant Activities

Hazardous Chemicals in Hospitality

Hazardous Chemicals in General Industry

Fall Protection in General Industry

*** FAST Farm and Agriculture Safety Training**

HCH 566 persons trained (36 in Spanish) ~1500 Contact training hours

HCGI 774 person trained ~3100 Contact hours

FPGI 778 persons trained ~3300 Contact hours



Hazard Communication



Authority

OSHA's authority governing hazard communication is found in 29 CFR 1910.1200, commonly referred to as the Hazard Communication, or HazCom, Standard.

The current Standard aligns with the UN Globally Harmonized System of Classification and Labeling of Chemicals (GHS), Revision 3.

The current Hazard Communication Standard has five key pieces.



The OSHA HazCom Standard

Written
Program

Labeling

Safety
Data
Sheets

Training

Chemical
Inventory

The written Hazard Communication (HazCom) Program's purpose is to reduce or eliminate workplace risk involving chemical hazards that can cause:

- Acute injuries/ illnesses such as rashes, burns, and poisoning;
- Minor health effects such as irritation; and
- Chronic diseases such as heart and kidney disease, sterility and cancer.

Since the OSHA HazCom Standard was introduced in 1983, studies have shown that workplace injuries and illnesses related to hazardous chemical exposure have been significantly reduced.

(Source: Oleinick (2014), American Journal of Industrial Medicine)



GHS Labeling

The Basic Parts of A GHS-Compliant Label

1 → **n-Propyl Alcohol**
UN No. 1274
CAS No. 71-23-8

2 → **DANGER**

3 → Highly flammable liquid and vapor. Causes serious eye damage. May cause drowsiness and dizziness.

4 → Keep away from heat/sparks/open flames/hot surfaces. No smoking. Avoid breathing fumes/mist/vapours/spray. Wear protective gloves/protective clothing/eye protection/face protection. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present. Continue rinsing.

Fill Weight: 18.65 lbs. Lot Number: B56754434
Gross Weight: 20 lbs. Fill Date: 6/21/2013
Expiration Date: 6/21/2020

5 → Acme Chemical Company • 711 Roadrunner St. • Chicago, IL 60601 USA • www.acmechem.com • 123-444-5567

See SDS for further information.



6 →

- 1. Product Identifier** - Should match the product identifier on the Safety Data Sheet.
- 2. Signal Word** - Either use "Danger" (severe) or "Warning" (less severe)
- 3. Hazard Statements** - A phrase assigned to a hazard class that describes the nature of the product's hazards
- 4. Precautionary Statements** - Describes recommended measures to minimize or prevent adverse effects resulting from exposure.
- 5. Supplier Identification** - The name, address and telephone number of the manufacturer or supplier.
- 6. Pictograms** - Graphical symbols intended to convey specific hazard information visually.



Label Confusion

NFPA Diamonds



Found outside buildings, on tanks.
Mainly for emergency responders.

DOT Placards



Found on tank cars, portable tanks,
packages, and vehicles.
Mainly for transportation workers
and emergency responders.

GHS Labeling



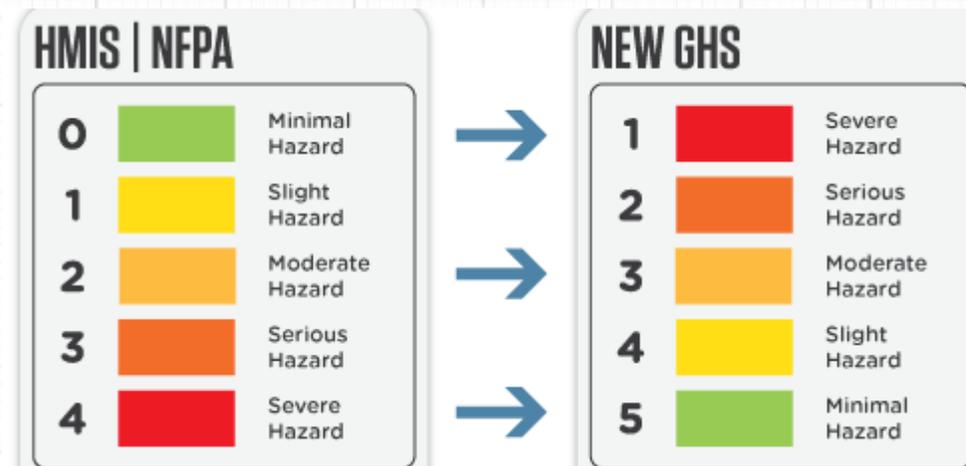
Found on containers and packages
used in the workplace.
Mainly for workers who will be
using the chemicals.



Label Confusion

Using the GHS system has led to confusion. Many employers have used the NFPA “fire diamond”, and the HMIS rating system to rate chemical hazards. These systems use a number to tell you how hazardous a chemical is. Higher numbers indicating a bigger hazard. The new GHS / OSHA rating system is the reverse; the lower the rating the higher the hazard.

You must know whether the label is an “old” HMIS/NFPA label or a “new” GHS label!



GHS PICTOGRAMS & CHEMICAL HAZARD CLASSIFICATION



Severe Health Effects

Causes cancers, impacts having children, causes long-term breathing problems, problems in organs like the liver or kidneys.



Less Severe Health Effects

Irritates your skin or eyes, causes short-term breathing problems, makes you sleepy, or is acutely harmful.



Corrosives

Burns your skin, can damage your eyes. Causes damage to metal through a chemical process.



Serious Toxicity (Poisonous)

Significant harm can result from a single exposure, or several in a short time.



GHS PICTOGRAMS & CHEMICAL HAZARD CLASSIFICATION



Flammables & Oxidizers

Chemicals that burn or ignite easily, emit a gas that burns, can ignite simply by being exposed to air, or can ignite due to impact.

Oxidizers may cause a fire by increasing the oxygen in the air.



Explosives

Solid or liquid chemicals that can react and cause damage to the surroundings and chemicals that can cause a fire or explosion simply by being exposed to air.



Compressed Gases

Gases under pressure. The gas may be hazardous, or can displace oxygen in the air around you.



Aquatic Toxicity

Chemicals that are potentially harmful if allowed to get into streams, rivers or lakes.



On the Job or at the Farm...

Do labels work?

Why or why not?

How would you improve a label?



Secondary Containers

If you move a chemical from the original container to a secondary container, the secondary container should be labeled with a GHS-compliant label.

If a label isn't available, you must at least write the chemical product name (like it would be on a Safety Data Sheet), along with the chemical's primary hazard.

When you move a chemical to a temporary container, a label isn't required as long as the temporary container remains in your possession and is used promptly.



Safety Data Sheets

Safety Data Sheets provide a wealth of information. 12 of the sections are required. SDSs must be updated by the manufacturer or importer within 3 months if new information becomes available. SDSs must be written in English.

Safety Data Sheet Parts	
1. Identification	9. Physical and Chemical Properties
2. Hazard(s) Identification	10. Stability & Reactivity
3. Composition/Ingredient Information	11. Toxicological Information
4. First Aid Measures	12. Ecological Information ♦
5. Firefighting Measures	13. Disposal Considerations ♦
6. Accidental Release Measures	14. Transport Information ♦
7. Handling and Storage	15. Regulatory Information ♦
8. Exposure Control/PPE	16. Other Information

♦ Section Not Required by Law



At Work or Farm...

1. What health effects may be experienced when using this product?
2. What first aid should be given if a coworker is exposed to this product?
3. Are any aspects of the product identified as a “trade secret”? How might that affect you in the workplace?
4. How should the product be stored?
5. Is your product combustible? Flammable?
6. What telephone numbers can you call for additional information?



The OSHA HazCom Standard

Written
Program

Labeling

Safety
Data
Sheets

Training

Chemical
Inventory

The HazCom Standard requires your employer to provide training. This training must cover:

- The requirements of the HazCom standard, including where your written HazCom plan is located;
- The specifics of your written program, such as your labeling system;
- Information on the chemicals you will work with;
- How to work safely where hazardous chemicals are located and used;
- Where Safety Data Sheets and list(s) of hazardous chemicals are located;
- How to detect and react to the presence or release of hazardous chemicals in your workplace; and
- How to protect yourself from possible hazards.



The OSHA HazCom Standard

Written
Program

Labeling

Safety
Data
Sheets

Training

Chemical
Inventory

Employers are required to maintain a list of all chemicals used in the workplace. This is known as a chemical inventory.

Employers must record the product names of all chemicals, using a name that can easily be matched to the Safety Data Sheet. Most employers also include the manufacturers' names, address, telephone numbers, and where the chemical is typically used or stored.

Something as simple as a tube of caulking compound is a product that contains chemicals for which an employer must maintain an SDS and list the product on the chemical inventory.



Hazard Controls



Understanding Hazards

Hazards can arise from:

- **The chemical you're using.**

The chemicals used in many work-related tasks can pose a serious risk of illness or injury.

- **A condition in which you're using the chemical.**

Working with multiple chemicals in small or enclosed areas can increase the hazards.

- **How you're using the chemical**

Mixing chemicals or using them for anything other than an intended purpose also increases hazards.



Creating Hazards

Hazards can also be ***created***:

- When something normal goes wrong;
- When you make a mistake;
- When a piece of equipment fails; or
- Something unusual happens, such as a power outage or severe weather.



Can you explain?...

**CLEANING,
DISINFECTING,
& SANITIZING:
WHAT'S THE
DIFFERENCE?**



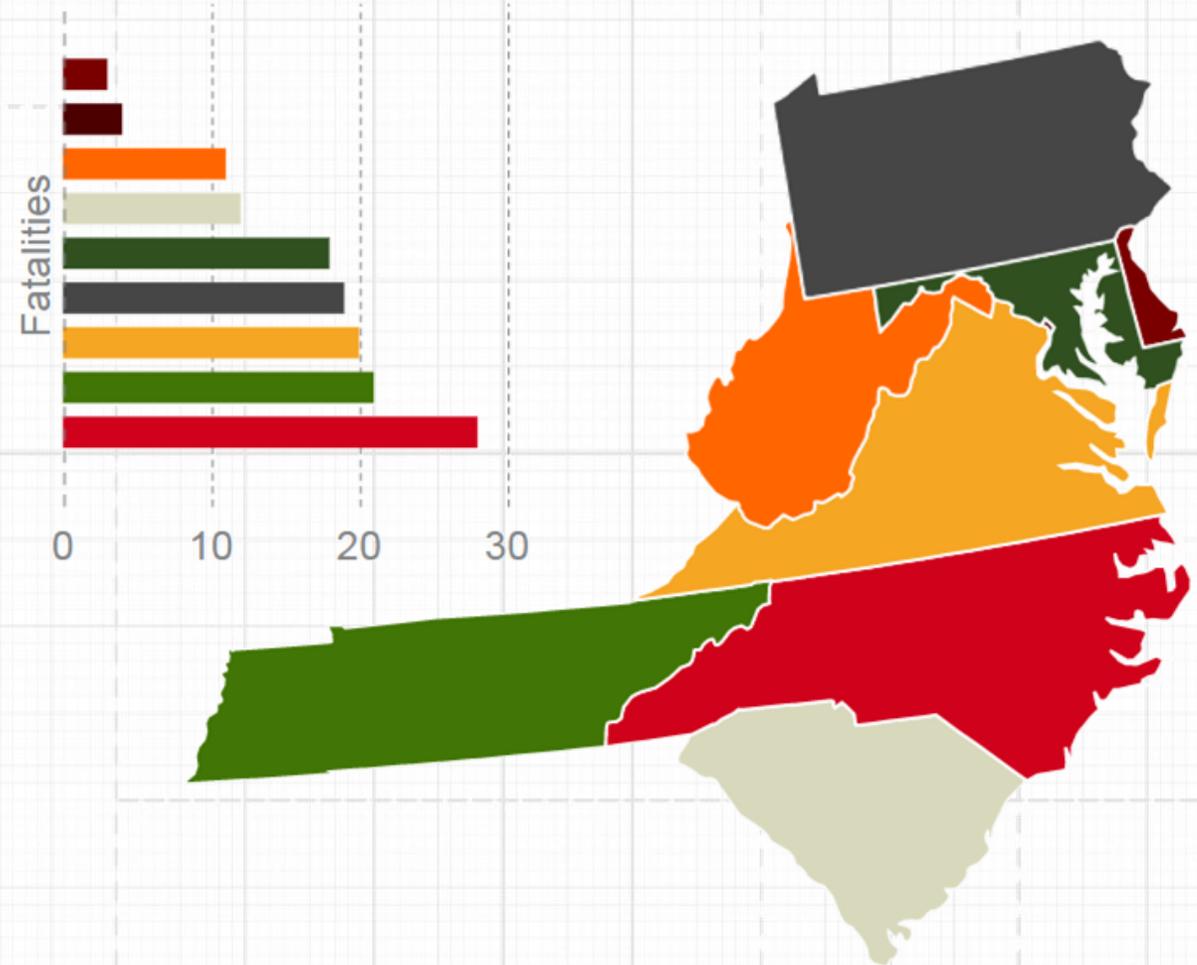
Falls



Falls

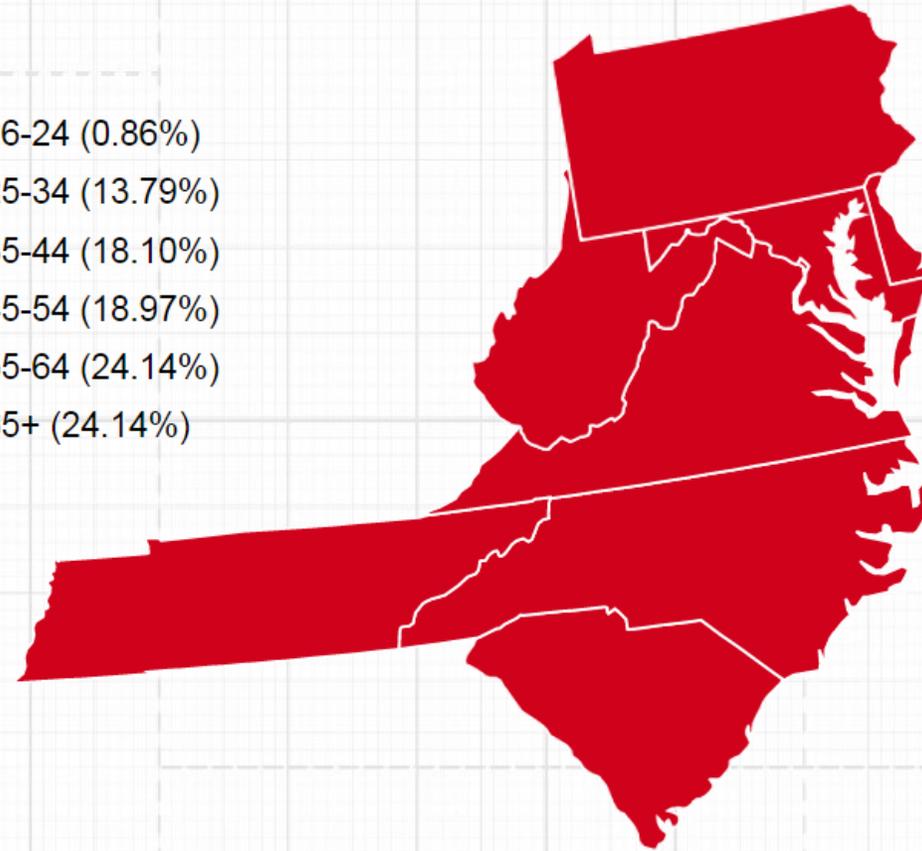
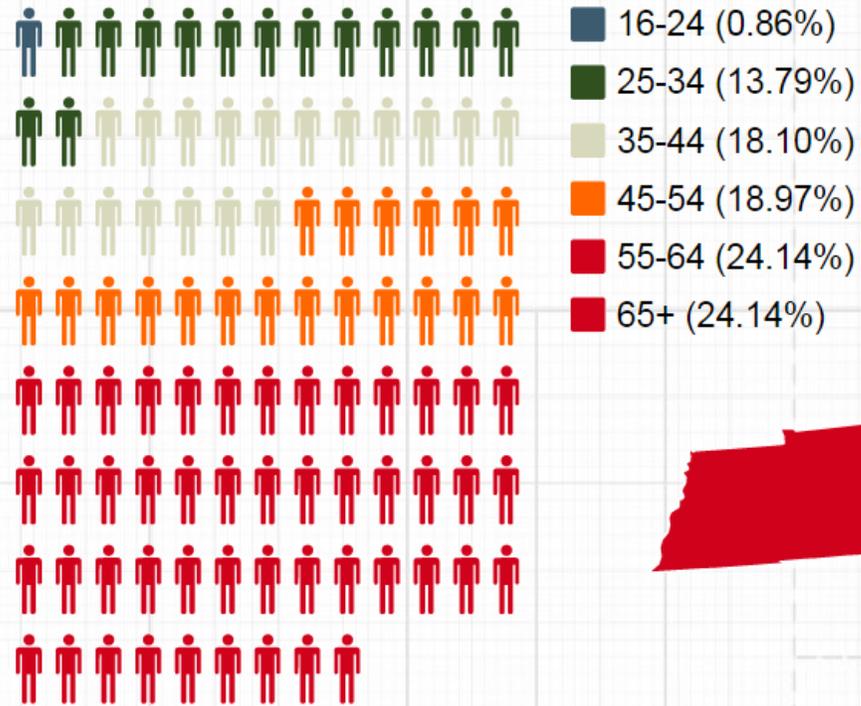
2017 Fatal Falls, Mid-Atlantic Region, By State

STATE	FATALITIES
Delaware	3
District of Columbia	4
West Virginia	11
South Carolina	12
Maryland	18
Pennsylvania	19
Virginia	20
Tennessee	21
North Carolina	28



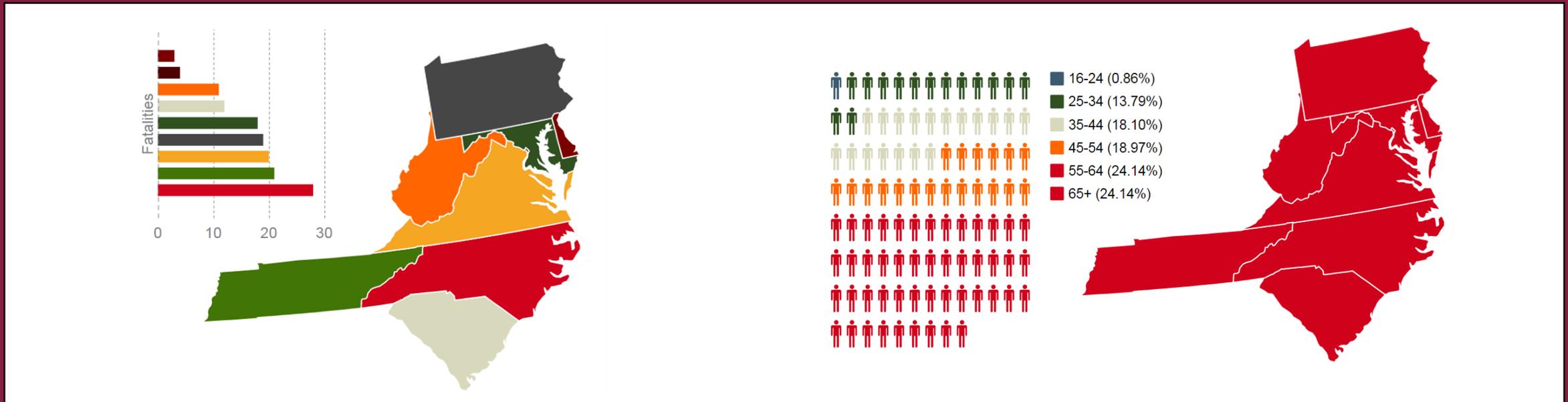
Falls

2017 Fatal Falls, Mid-Atlantic Region, By Age



ACTIVITY THREE

Why do you think there are more fatal falls in Virginia, Tennessee and North Carolina? What reasons might there be for the trend in fatal falls as they relate to the age of the worker?



Fall Hazards

Recognizing & Evaluating Fall Hazards

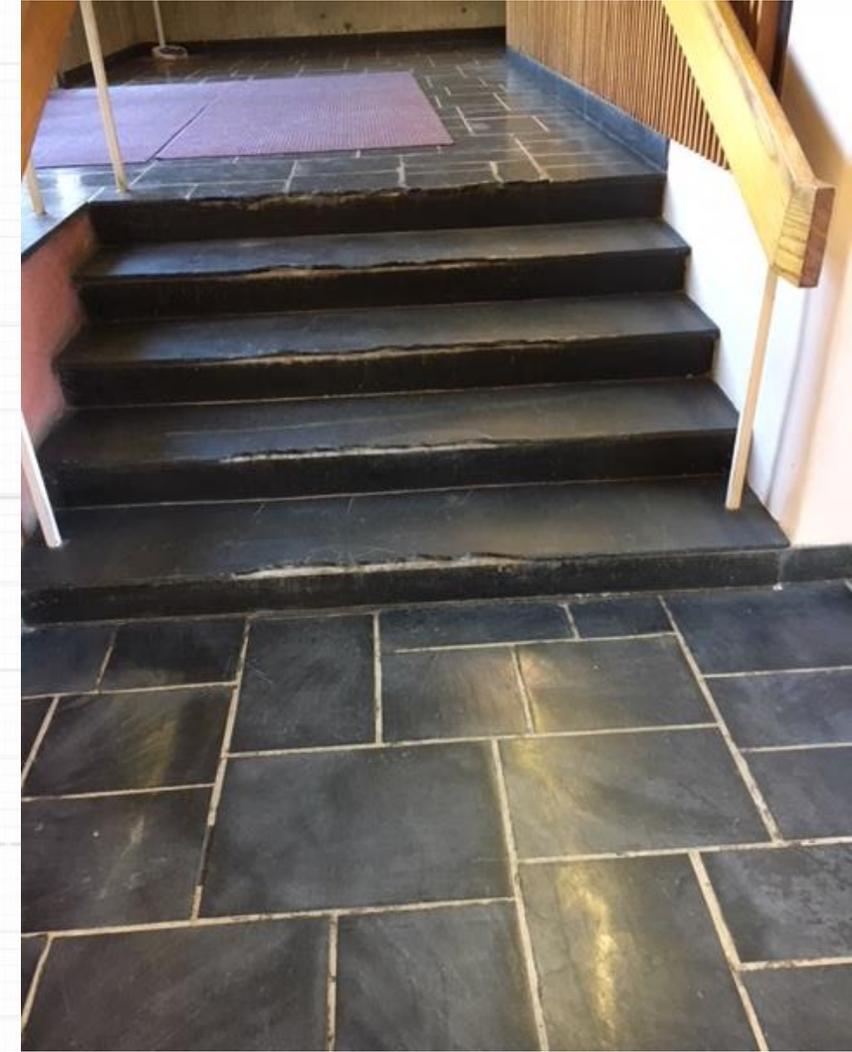


Falls on the Same Level

Even though most people think of falls as being from one level to another, many falls happen on the same level. Falls involving stairs also presents a significant risk.

Slips on the same level can occur due to flooring material and design, a worker's footwear, or wet/uneven surfaces.

Falls involving stairs are also part of this category.



Falls from Height

Falls from a height of four (4) feet or greater from one level to another present a significant hazard to the worker.

Although most falls are under 15 feet, higher falls are associated with a greatly increased risk of injury or death.

You are considered exposed to a fall if you are within six (6) feet of an unguarded edge that is more than four feet above the next level.



Falls from Height

There are many factors that can contribute to a fall from one level to another, including:

- Precarious work positions;
- Excessive leaning or reaching;
- Improper work practices;
- Unstable structures;
- Trip hazards;
- Slippery surfaces; and
- Distractions



Excavations

While excavations are normally considered part of construction, non-construction workers often work nearby. When thinking of falls, people often think of falling from height to the ground.

Excavations present the same kind of risk of falling to another level, often with the added hazard of falling onto something.



Ladders

Ladders are a common tool for transitioning between work levels, and in some cases serving as platforms.

A fall from a ladder usually occurs when the ladder is:

- Not the right ladder for the job;
- Damaged;
- Unstable; or
- Used improperly



Secondary Falls



Secondary falls are a new area of concern to employers.

Secondary falls occur when a worker has a fall where an existing medical condition is a contributing factor. These types of falls are especially common in workers 55 and older.



Secondary Falls



Fall hazards are compounded when individuals have medical conditions such as:

- Diabetes
- Cardiovascular Disease
- Neurological Changes
- Bone and Joint Changes
- Changes to Vision, Hearing and Balance

In workers who have underlying medical conditions, falls from something as simple as climbing onto a piece of equipment can be especially hazardous.

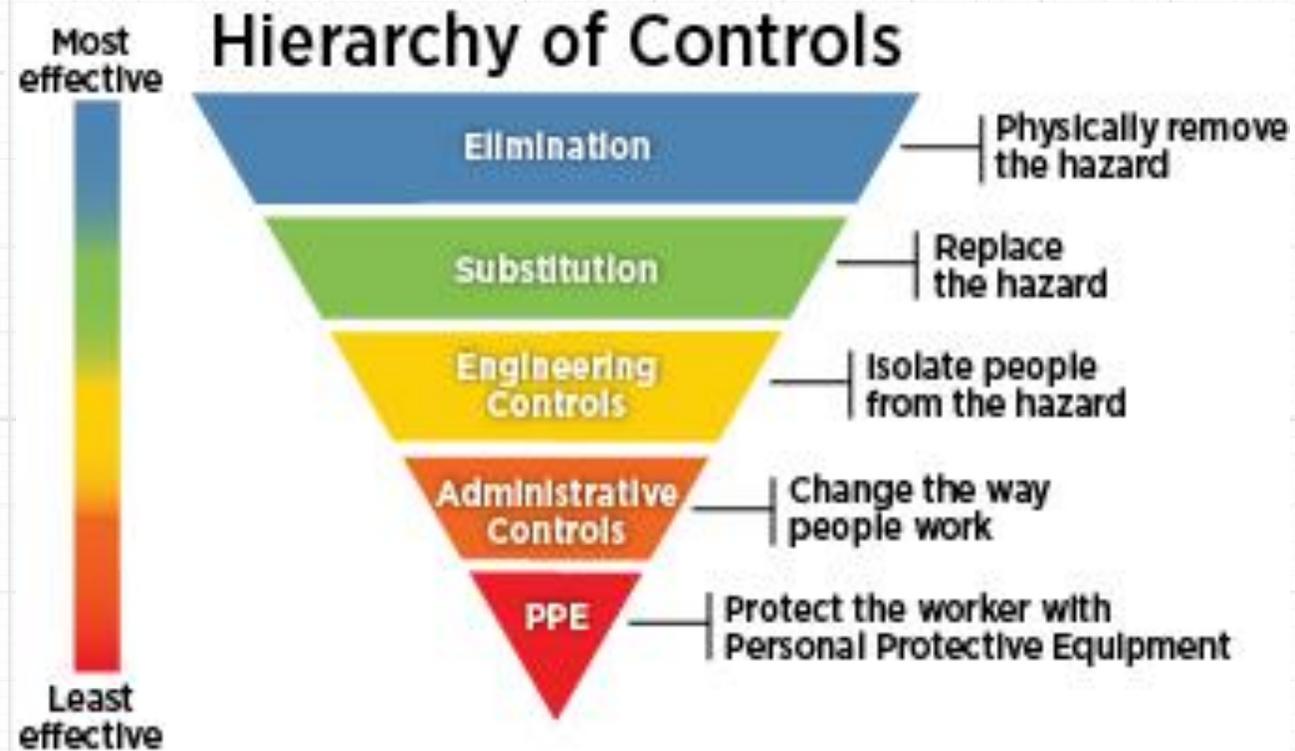


Evaluating Your Fall Risk

- Are there slip or trip hazards?
- Are there slick surfaces?
- Do I have to move materials?
- Is the lighting adequate?
- Do I have to move from one working level to another?
- What is the location of the work?
- How far can I fall?
- Is there anything I can fall into or onto?



Hazard Controls



Source: NIOSH



Best Practices

Learn to recognize, evaluate and control falls everywhere – not just at work.

When you are injured by a fall away from work, your absence impacts your employer!



Best Practices



Avoid improvising.

Use the right equipment for the task. Even a fall from less than four feet can have life-changing implications.



Best Practices



Watch out for weather.

Falls at the same level occur more frequently when walking surfaces are wet, snowy or icy. Make sure you have a plan to manage walking-working surfaces. Be sure employees working on wet, snowy or icy surfaces have proper footwear.



Best Practices

Work Sober.

Many medications can impact your balance, judgment and perception. Know the side effects of any prescription or over-the-counter medications. Never work under the influence of alcohol or drugs that may increase your risk of falls.



Farm & Agricultural Safety Program

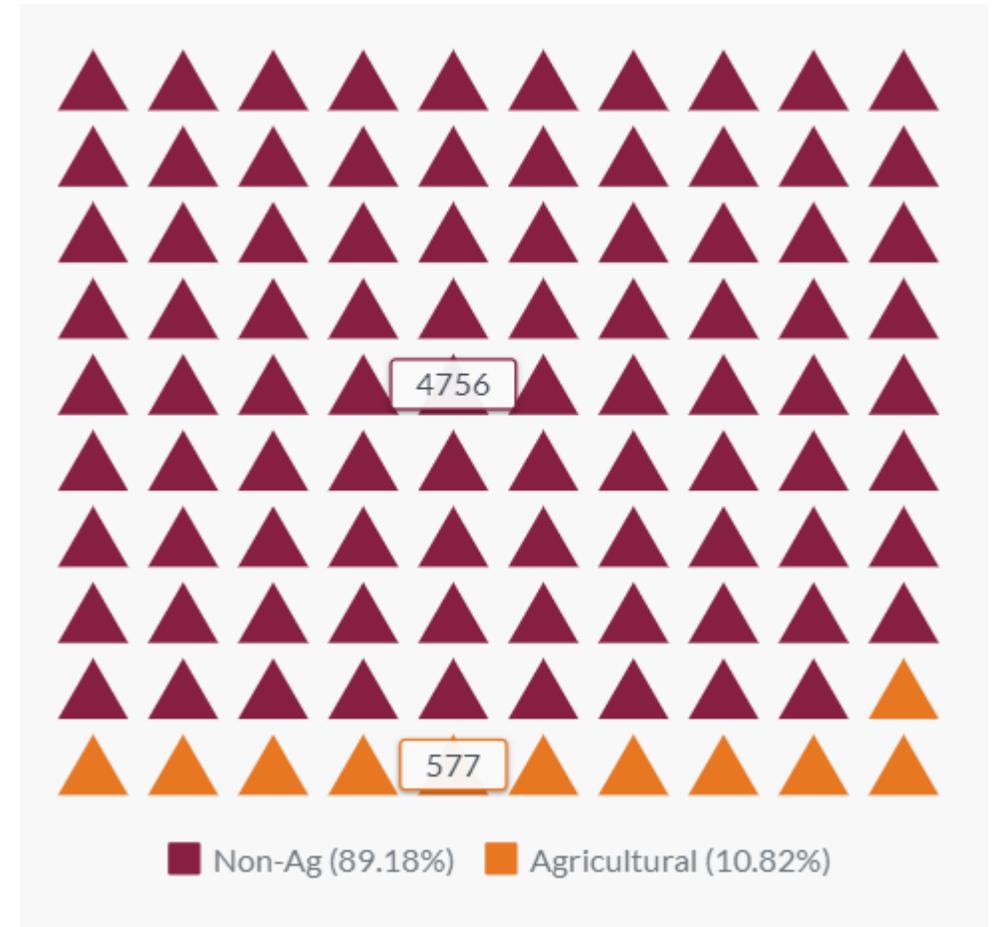
MODULE 1: AGRICULTURE & OSHA



Why is OSHA Important to You?

Agricultural Injuries and Fatalities

- 577 of 5,333 fatalities in 2019
- 310 of the 577 fatalities involved workers 55 and over
- 2nd Deadliest Occupation (23.0 per 100,000 full-time workers)
- Hispanic workers suffer non-fatal injuries or illness involving days away from work by a 3:1 margin over other ethnic groups



Source: 2017-18 OSHA Illness, Injury & Fatality Program



What are Agricultural / Farming Operations?

Farming operations are “any operation involved in the growing or harvesting of crops, the raising of livestock or poultry, or related activities conducted by a farmer on sites such as farms, ranches, orchards, dairy farms or similar farming operations.”

Why is that important?

The Appropriations Act provides exemptions and limitations that apply to small farming operations.



Farm & Agricultural Safety Program

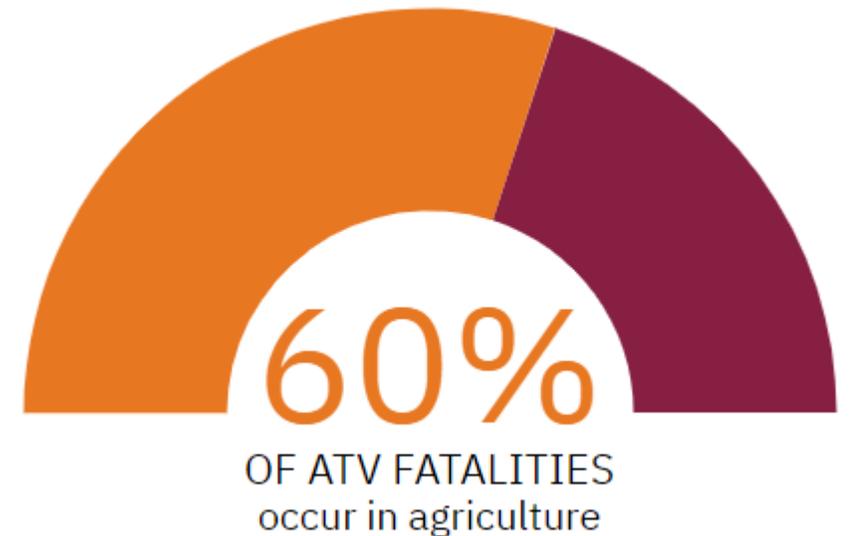
MODULE 2: ATV SAFETY



Introduction

ATVs are one of the most common, and most dangerous pieces of equipment on today's farm. An average of 500 persons die and another 100,000 are seriously injured each year while operating ATVs.

Many farms own ATVs that are used for multiple purposes – personal, recreational and farm use. There are basic safety principles apply to all ATV operations, whether used for personal or business purposes.



ATV Hazards

There are some common elements of serious injuries and fatalities in work-related ATV accidents.

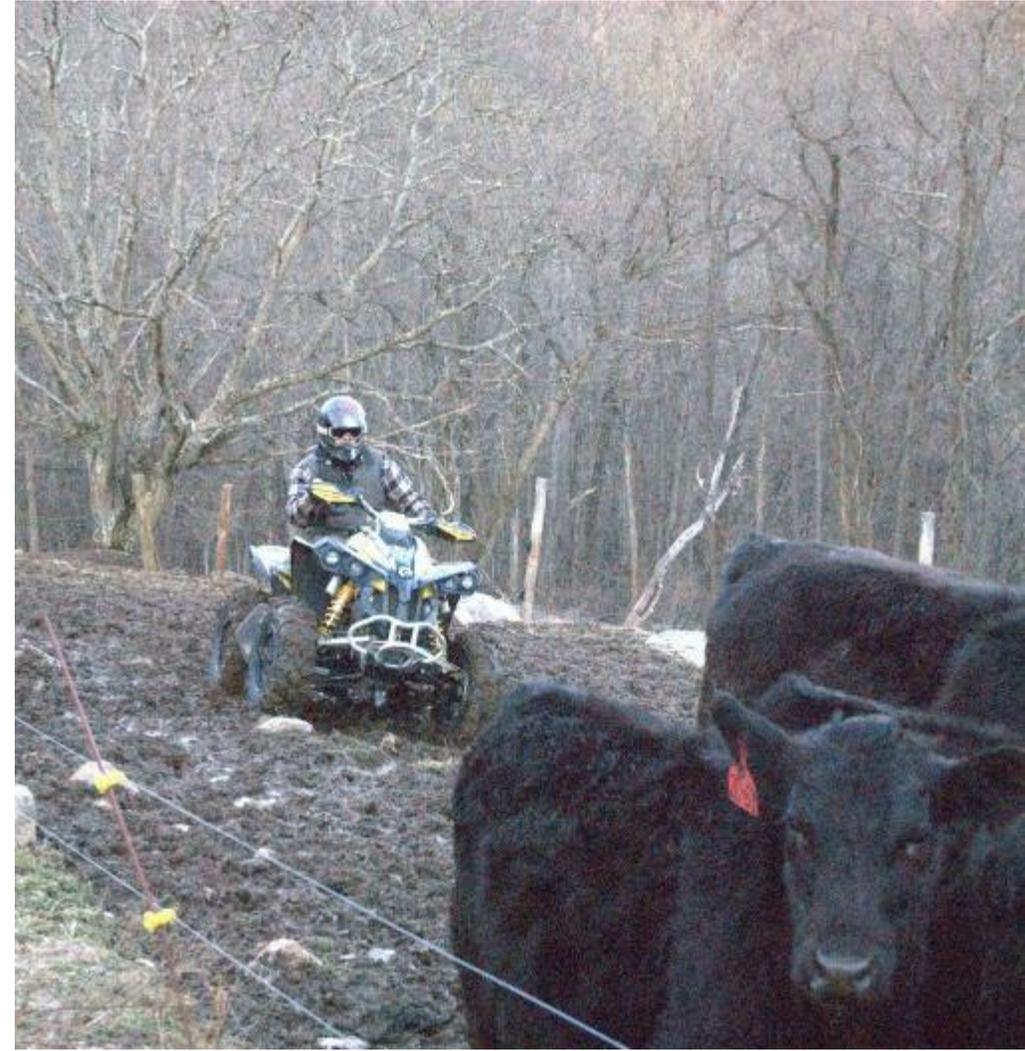
- Speeding;
- Operating the ATV on a paved road;
- Not wearing a protective helmet;
- Operating the ATV while overloaded or with an unbalanced load; and
- Carrying passengers on single rider ATVs.



Working Alone

Always have a check-in procedure in place. Tell someone where you will be working, when you will be back, and how to contact you.

Have a plan for seeking shelter in the event of bad weather.



ATV Hazards

Rollovers are among the most common types of incident. Rollovers can be attributed to things that alter an ATV's center of gravity. Things that can impact the center of gravity include:

- Excessive speed while turning or on rough terrain;
- Overloading the ATV or having an unstable loads, including using unbaffled tanks;
- Altering the ATV or cargo bed configuration;



Active Riding

Be prepared for unexpected hazards and react appropriately.

- Scan ahead several seconds.
- Predict what will happen.
- Decide what to do.



Farm & Agricultural Safety Program

MODULE 5: FARM MACHINERY SAFETY

What is Farm Machinery?

Agricultural and Industrial Tractors

Utility machines for multiple uses with a variety of implements and attachments.

Implements and Attachments

- Land processing equipment
- Equipment for planting, fertilizing, pest control or irrigation
- Machinery for harvesting, mowing, baling, etc.



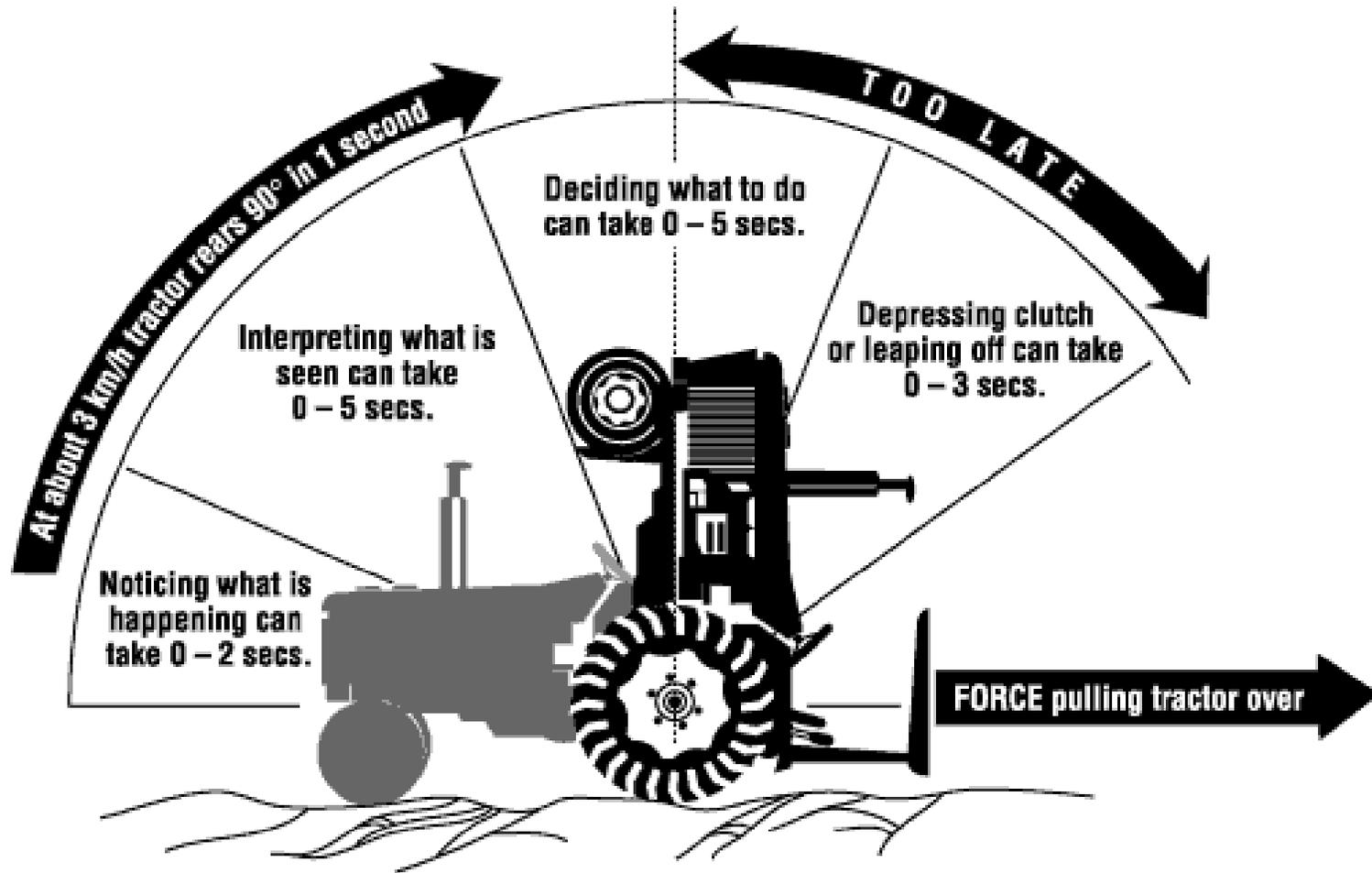
Farm Machinery Hazards

Common injuries resulting from farm machinery include:

- Crush injuries;
- Amputations;
- Eye injuries;
- Cuts and punctures;
- Thermal burns; and
- Chemical burns



Overturns



Rear rollovers happen so quickly that even if you recognize the problem, you don't have time to react.

Equipment can reach the “Point of No Return” in $\frac{3}{4}$ of a second. For many tractors, this point can be as little as 75 degrees from a level surface. Rear rollovers are less common but are deadly.

You increase the risk of a rear rollover anytime you attach a load anywhere other than the designed location; when backing downhill and applying brakes, or accelerating too rapidly.

Vehicle Recovery

Equipment can easily become stuck in mud or snow. Recovering a stuck vehicle is a dangerous process that can result in serious injury or death.

If you do not feel you can safely recover stuck equipment, contact a wrecker or recovery service. These services have the specialized knowledge and tools to recover equipment safely.





VIRGINIA TECH™

Managing the risks associated with your work is a shared responsibility. Laws, training, and workplace policies are only small part of what makes a workplace safe. We encourage each of you to be innovative as you work with each other, your supervisors, and senior managers to create a safe and healthful workplace. Ask questions, talk openly, and share your ideas and solutions with each other.

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