

### **Instructor Guidebook: Cover Up!**

This Train the Trainer course is designed for teachers, Extension staff, 4H and FFA leaders and others who work with young adults.



Agriculture is ranked as one of the most dangerous occupations and involves workers and families of all ages – but injuries can be prevented if we use the right protective equipment for the job.

This program will present an overview of common exposures in farming and ranching. Students can discuss those exposures and determine the appropriate protective gear for each scenario. In addition, there is one case study presenting common multiple exposures that young people experience are included for discussion.





### **Instructor Guidebook Includes:**

- On-Demand Webinar Link
- Presentation File Link
- AgriSafe Activity Worksheets
- AgriSafe Personal PPE Worksheet



### Who is at Risk?

Agriculture presents a unique set of exposures and risks to people of all ages – from very young children to older adults. Even workers who are healthy are at risk for acute and chronic illness and injury due to the nature of exposure to dust, noise, animals, heavy equipment, hand tools, and weather conditions.

An increased at-risk population includes:

- Youth young children through young adult
- Older adults
- People suffering from chronic illness and injury and weakened immune systems
- Women -those in their reproductive years and workers of smaller stature

### Personal Protective equipment –

Personal protective equipment (PPE) refers to protective clothing, helmets, goggles, or other garments or equipment designed to protect the wearer's body from injury or infection. The hazards addressed by protective equipment include physical objects and animals, slips, trips, and falls, heat, chemicals, noise, and airborne particulate matter.



# Classroom Activity #1 Webinar Recording: Cover Up!



### **Intended Webinar Audience:**

This Webinar course is designed for young adults aged 16-23 years of age who work in agriculture.

### **Objectives**

### Program Objectives:

At the conclusion of the program, participants/educators will be able to:

- Review several of the indicators related to use of personal protective equipment (ppe) in agriculture
- Access personal protective (ppe) educational material developed for classroom use
- Select decision making activities from programs designed for classroom schedules
- Identify safety and health resources for use in educational settings

### Meet the Presenter



Charlotte Halverson grew up on a Dubuque County, IA dairy farm. As the oldest of four kids and active in 4-H, agriculture has remained an important part of her life. Her nursing career has taken her from acute care and trauma nursing to community health with a focus on the rural communities. As the clinical director for AgriSafe, Charlotte's passion has been agricultural health and safety education for healthcare providers and agricultural businesses, as well as families in production agriculture.

Charlotte Halverson, BSN, COHN-S Clinical Director AgriSafe Network

### To Play Free On-Demand Webinar Click Here



### **Classroom Activity #2**

### **Circle What's Wrong with This Picture**

It is recommended you use this classroom activity initially as an introduction or Ice Breaker activity.

### **Answer Key**

### This depicts inappropriate farm and ranch work attire because:

#### Female -

- · Long hair is not secure danger of entanglement
- · Necklace can become caught in machinery, fencing, etc.
- · Bracelet may be loose if not tighter it could get caught on an object.
- · Cell phone with ear buds in possible cannot hear external noise or warnings; also, is a distraction
- · Short pants no protection for legs.
- · Flip flops no protection for feet from crushing, falling objects, etc.; also can get caught in uneven surfaces, wires, equipment (brakes, clutch, etc.)

#### Male -

- · Respirator only has one strap should have two for secure seal.
- $\cdot$  Sweatshirt has strings entanglement danger...remove them.
- · Jeans are torn and tattered risk of entanglement.
- · Shoes have laces that are not tied entanglement and/or tripping hazard. He should have sturdy work shoes/boots with laces tied and secured.

Do either one of them have access to hearing protection or safety glasses if needed?

Activity picture is located in the end of this guide.



### **Classroom Activity #3**

### PPE Match Up Game: Dress the Farmer/Rancher

- Provide the opportunity for participants to determine what would be the right and wrong ppe to use.

### The prototypes show:

### Figure of a person

Pictures of types of protective gear/clothing. Not all of them will be appropriate for agricultural exposures.

Instructions for completing activities are located across the bottom of each worksheet.



### **A**nswer Key for Match Up Scenarios:

### **Grain exposure: correct answers -**

2 strap respirator (can also be referred to as a mask)

Half - face respirator

Shoes/boots with good traction

**Safety glasses** 

Long hair secure in a bun or cap

**Hearing protection** 

### **Machinery Exposure:**

2 strap respirator (can also be called a mask)

Half face respirator

**Tucked in clothing** 

**Hearing protection** 

Hair secure in bun or cap

Shoes or boots with good traction

**Safety glasses** 

### **Large Animal exposure:**

Two - strap respirator (can also be called a mask)

**Half-face respirator** 

Shoes or boots with good traction

**Safety glasses** 

Hair secure in a bun or cap

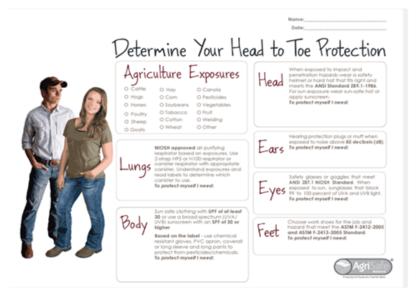
**Hearing protection** 

Work gloves that fit

### **Classroom Activity #4**

Determine your Own Head to

**Toe Protection** 



**Determine Your Head to Toe Protection** Students can use this form to create their customized specific PPE needs.

Ask the students to choose PPE for their own work tasks.

### **How to Secure Free PPE Products**

Contact your local 3M representative or other safety equipment provider for free samples of PPE. Local reps may also be happy to join you in the classroom.

If you visit the website of a PPE manufacturer like 3M you can easily find information regarding your local sales representative.

# Classroom Activity #5 Case Study

This case study provides a scenario that is typical of many rural youth. You can read this to the class or print it for individual use. The purpose is to generate group discussion. Lead questions include; What are the Risks? Why are they Risks? What personal protective equipment is appropriate – and why? This section includes a list for you to use as a guide to identify the risks and the appropriate protective equipment.

**Joe** is 16 years old. His parents raise soybeans in northwest Illinois. Joe plays basketball and baseball for his high school team. He is also a member of the math club and is a 4-H officer and working on a carpentry project. In addition to his farm work at home and his school activities, he helps on his uncle's farm – especially during soybean harvest. He runs the combine for his uncle.

Joe's sister and his mom operate a riding academy for kids, so he pitches in with the horses as time permits.

### **Questions for Discussion**

- 1. What are the risks that Joe will experience?
- 2. What protective equipment should Joe be using?
- 3. What other risks that may not require personal protective equipment do you think Joe might encounter?

### **Risk: Organic dust and molds**

Soybean dust

Mold in bins when cleaning

### PPE:

Minimum – 2 strap N95

May want a N100

Option: ½ face respirator (get a fit test)

Safety glasses

# Risk: <u>Large Equipment:</u> Combine Tractor

Augers

Grain cart

PPE:

Hearing protection – ear plugs with NRR of 25 or above – would recommend flanged on a cord with a stamen, head bands, or ear muffs

Footwear with good traction – shoe laces secure!

No loose clothing that can get caught in equipment

Hair tucked in if it is long

Safety glasses

### **Risk: Hand tools:**

Vibration

Size of tool grip

Moving parts

### PPE:

Gloves that fit well with good grip

No loose clothing

Safety glasses with side protection

Hearing protection

May need appropriate respiratory protection

### Risk: Large animals:

Stepped on

Bumped into

Temperament

Noise

### PPE:

Shoes/boots with good traction

Head protection - hard hat (cowboy style?)

Gloves that fit properly with good grip

Hold lead ropes, lunge lines, reins correctly

### **Heat Exposure:**

Long hours outdoors

Sunburn

Heat / Humidity

Dehydration

### PPE:

Sun protective hat

Sun screen with SPF of 30 or more

Hydrate with water – not caffeine beverages or alcohol

Long sleeved shirts and pants in a cool cotton material or with SPF in them

Safety sun glasses with UV protection

### **Cold Exposure:**

Frost bite

Windburn

Dehydration

### PPE:

Layered clothing

Appropriate footwear with good traction

Warm gloves that fit well

Sun glasses with UV protection

Head covering with ear protection

Hydrate – with water – limit caffeine

### **Musculoskeletal:**

At sixteen, Joe is still growing, and his muscle and joint structure is still developing.

Because of his high level of physical activity, he needs to be sure he is using good body mechanics and warming up before jumping into heavy lifting or excessive movements.

### **Sleep deprivation:**

It is important that Joe gets an adequate amount of restorative sleep and rest as well as proper nutrition. He has a very active schedule, is operating large equipment and spending time with large animals, and evidently must drive for school and farming activities.

# Cover Up! Webinar Suggested Test Questions

- 1. What is the best protection against fine agricultural dust particles?
  - a. A good disposable mask with one strap that goes around your head?
  - b. A clean, heavy handkerchief or bandanna tied securely over your nose and mouth
  - c. A disposable respirator with two straps

## Answer: c. A two-strap respirator. Be sure it has a stamp on it that indicates it is NIOSH approved.

- 2. What is the "danger zone" decibel level that indicates a need for hearing protection?
  - a. 65 decibels
  - b. 85 decibels
  - c. 100 decibels

### Answer: b. 85 decibels

3. What should you look for in footwear when working in agriculture?

Check all that apply

- a. Comfortable, breathable, lightweight
- b. Soles with gripping surfaces and able to channel water
- c. Flat shoes/boots except when riding horses
- d. Secure laces
- e. All of the above

### Answer: b, c, and d

- 4. Why are nitrile gloves appropriate for handling chemicals?
  - a. Some chemicals can soak through cotton and leather
  - b. You can see The green or blue color
  - c. They are thinner and not as bulky

### Answer: a. the nitrile is a non-permeable material

### **Suggested Flow of Classroom Activities**

- A. Provide the 4-question pre-test either in pen& paper format or with a cell phone-based program such as Kahoot.
- B. Provide the activity sheet labeled: What is Wrong with This Picture?
- C. Play the 30 minute Cover Up! video
- D. Select the Match the PPE activity(ies) that you want to use.
- E. Provide the post test.
- F. \*A case study is also available use it based on age and experience of your students

# Find more information



### Resources

AgriSafe Invest in Your Health - It is the summary of Invest in Your Health resources.

AgriSafe Personal Protective Resources for Youth

Updated Worker Protection Standard \_ This section addresses the regulations related to youth and work with pesticides

OSHA Publications – Quick Cards Several of these fact cards relate to agriculture.

Support provided by



Sam and Sally are about to farm with their parents. Sally will be working on the farm driving a tractor and moving equipment. Sam is heading to the grain bin to clean it and will be breaking up bales for cattle feed later in the day. Circle what aspects of their body, clothing and gear pose a risk while working on the farm.

