

What's
the Deal

Strategies

Impact

PPE

Intro

Contact
Details



Personal Protective Equipment

Selecting the Right PPE for the Job and for the Person

GearUp

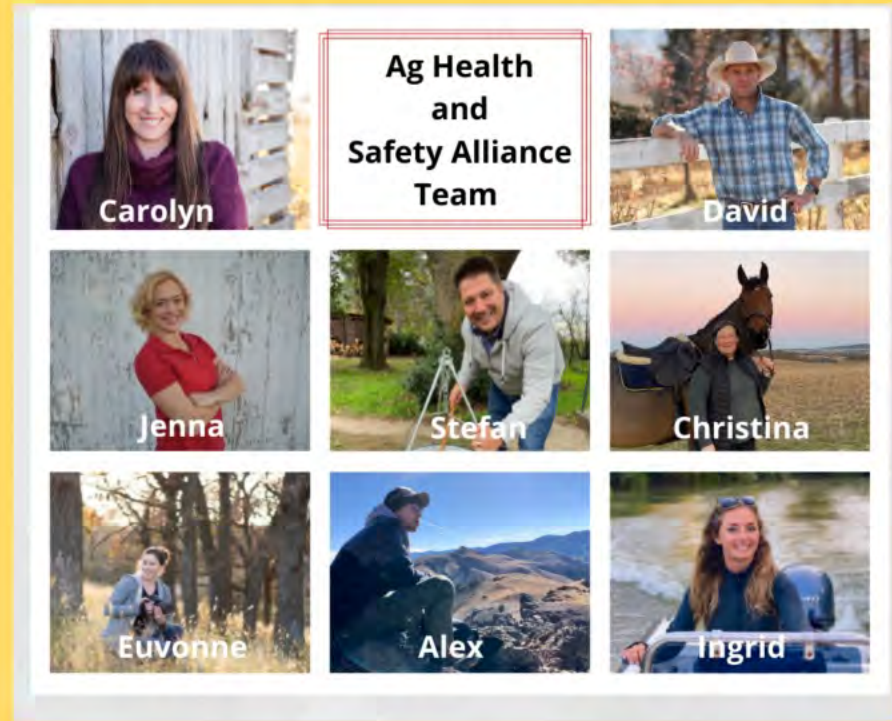
for Ag Health & Safety™



Ag Health and Safety Alliance Team

International
Gear Up for Ag Team

Carolyn Sheridan RN, BSN, COHC
Executive Director, Founder





Carolyn

**Ag Health
and
Safety Alliance
Team**



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Jenna



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Euvonne



Alex



Ingrid

**Carolyn Sheridan RN, BSN
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Gear Up for AG



**Jenna Gibbs, MPHT, PhD
Director of Operations**

Carolyn Sheridan RN, BSN Executive Director, Founder







Jenna Gibbs, MPH, PhD
Director of Operations



Gear Up for AG

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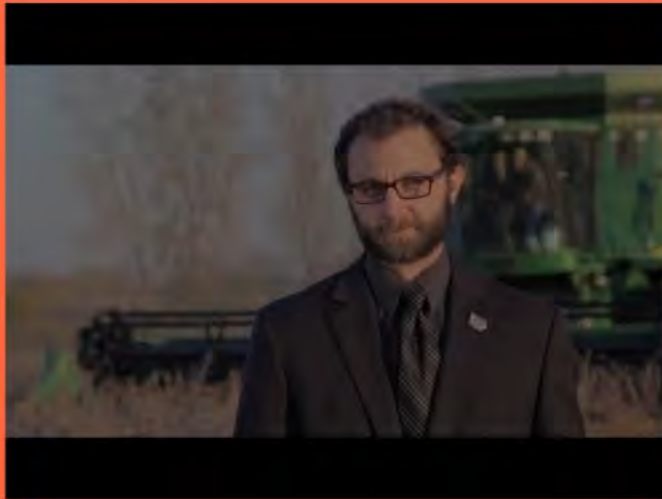
Contact
Details



Personal Protective Equipment
Selecting the Right PPE for the Job
and for the Person

GearUp

for Ag Health & Safety™





“
A FARMER IS
A MAGICIAN
WHO ...



Course Objectives & Agenda

COURSE OBJECTIVES

Integrate the anticipation, recognition, diagnosis, treatment, and **prevention** of occupational and environmental illnesses and injuries within rural and agricultural communities.



9:00 - Personal Protective Equipment (PPE)

8:30 - Selecting the Right PPE for the Job and for the Person

10:00 Break

10:15 Respirator Fit Testing

12:15 Lunch Break

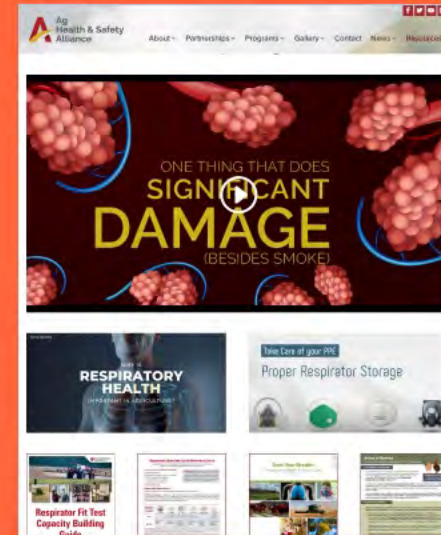
1:15 Integrating Safety and Health Into Health Care Practice

2:15 Final Questions and Review

PPE & Resources

Personal Protective Equipment (PPE)

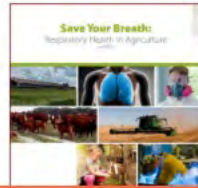
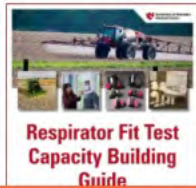
- Safety Glasses
- N95 Respirator
- Hearing protection
- Chemical Gloves
- Gear Up for Ag Bag



Personal Protective Equipment (PPE)

- Safety Glasses
- N95 Respirator
- Hearing protection
- Chemical Gloves
- Gear Up for Ag Bag





Exposures in Ag



Chemicals



Working Long Hours



Animal Handling



Respiratory Hazards



Zoonotic Diseases
and other illnesses



Technology



Machinery

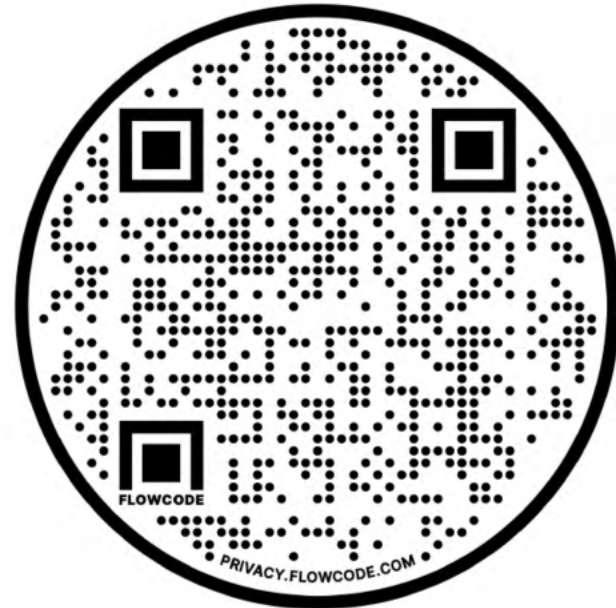
Extreme Weather & Environment







Cattle Handling in 360°



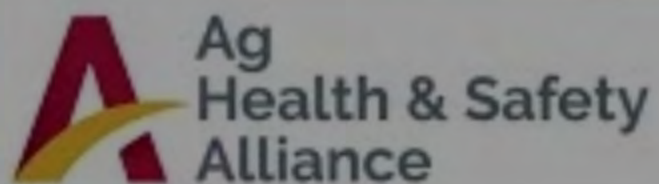
Scan and open in the YouTube App.
Click the 'VR' icon and place your device in
the cardboard.



This is the 'VR' icon that
should be in the bottom
right corner of your screen.

CATTLE HANDLING

360°



Extreme Weather & Environment





Wear Appropriate Cold Weather Gear



40% of person's body heat can be lost when head is left exposed

Don't forget about gloves

Change them if they get wet

Layer synthetic or wool clothing

Pair warm wool socks with anti-slip footwear



chain



coil



For use in moderate ice

For ice over deep snow



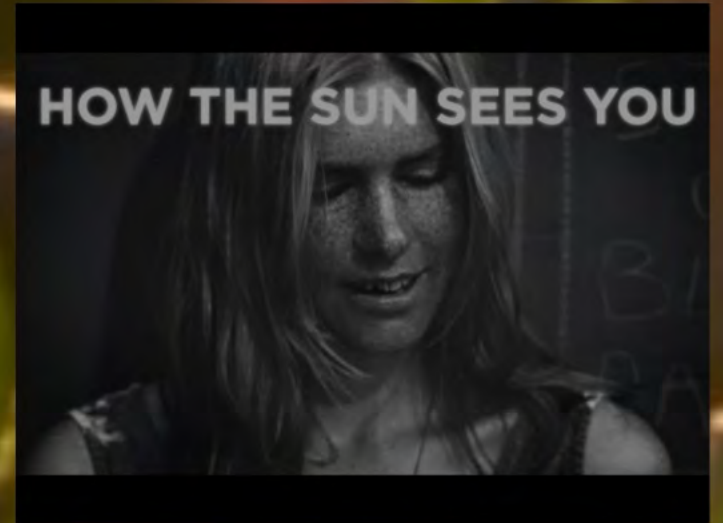
spike



crampon



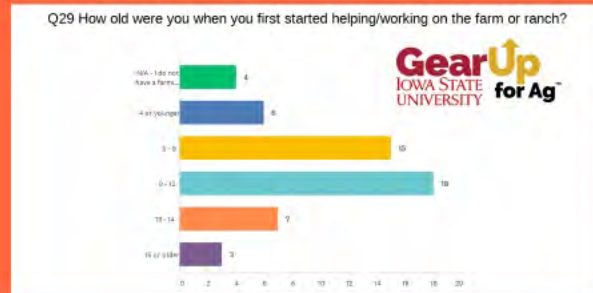
Coolibar
Get protection with you.



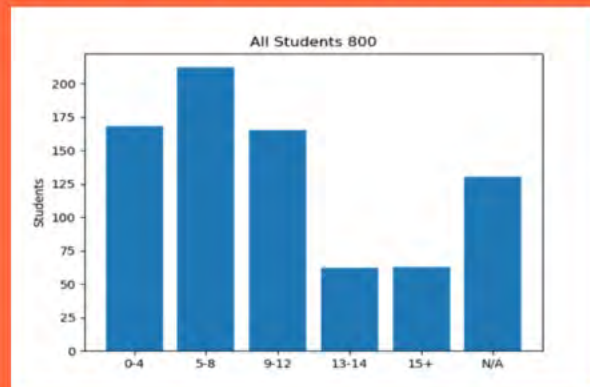
HOW THE SUN SEES YOU



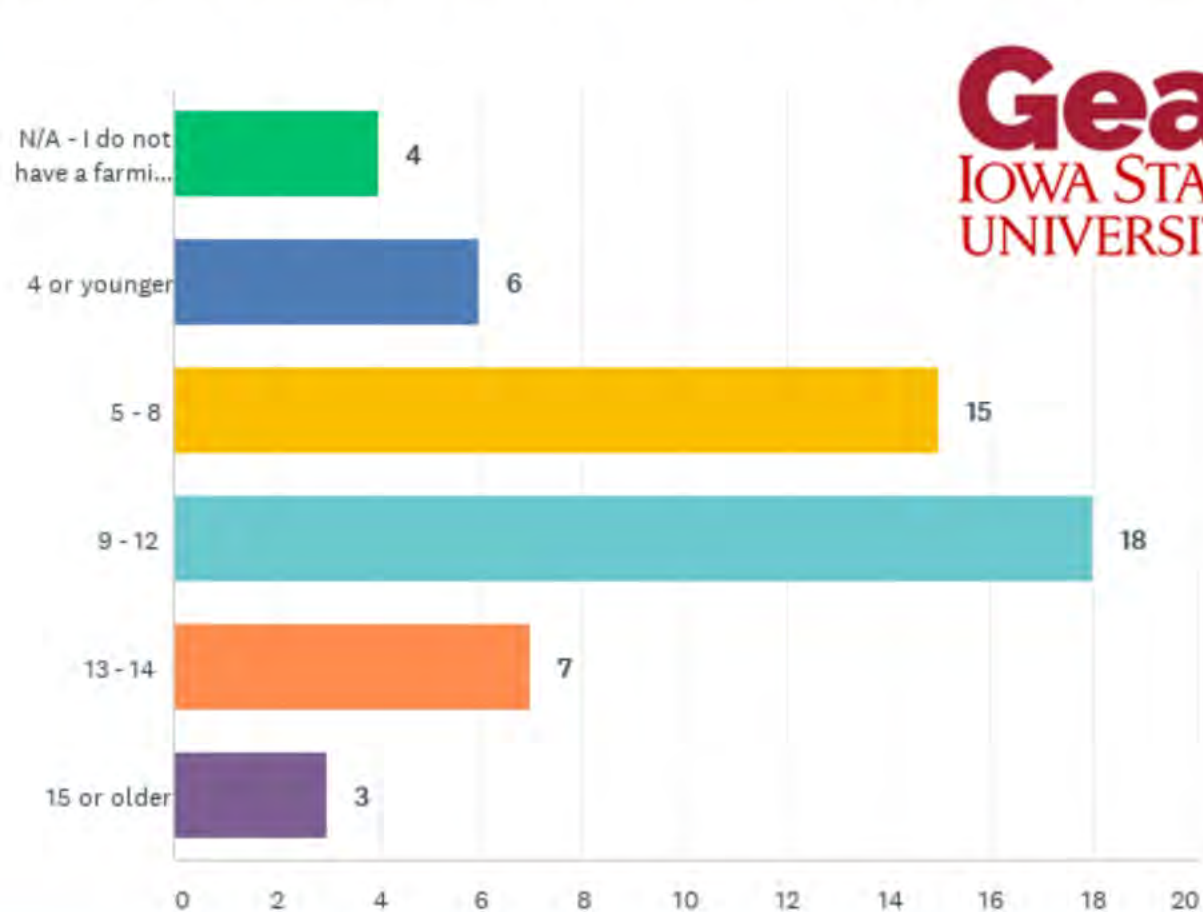
The Survey - responses from Ag Students



Farm Kids Start Early
US, Canada, Denmark, Sweden, Australia



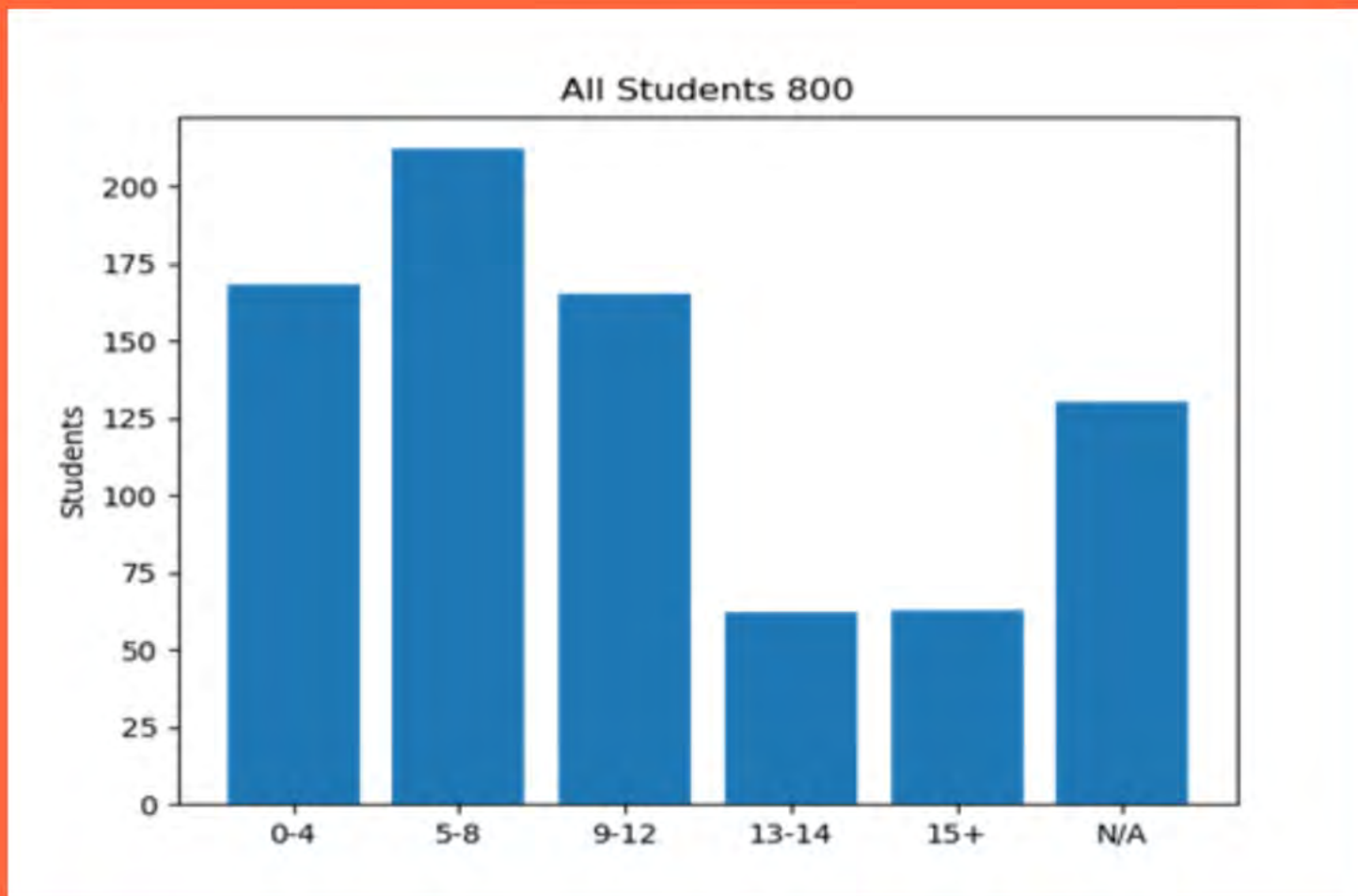
Q29 How old were you when you first started helping/working on the farm or ranch?



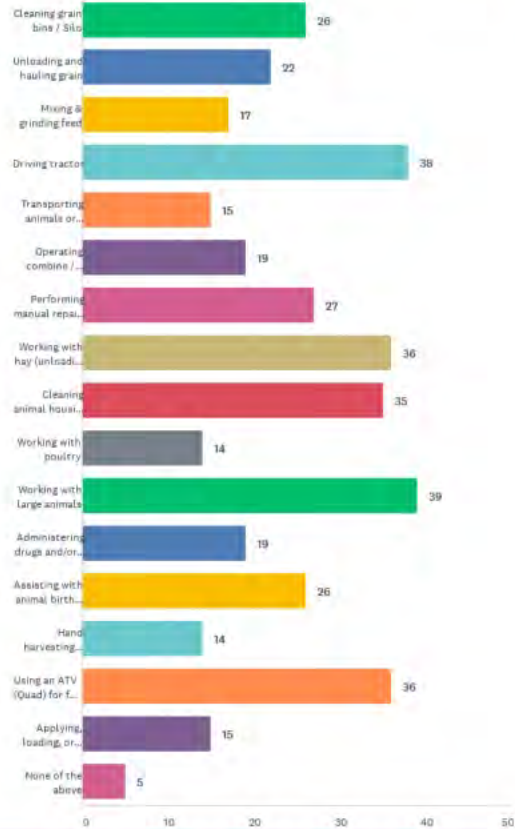
GearUp
IOWA STATE UNIVERSITY **for Ag™**

Farm Kids Start Early

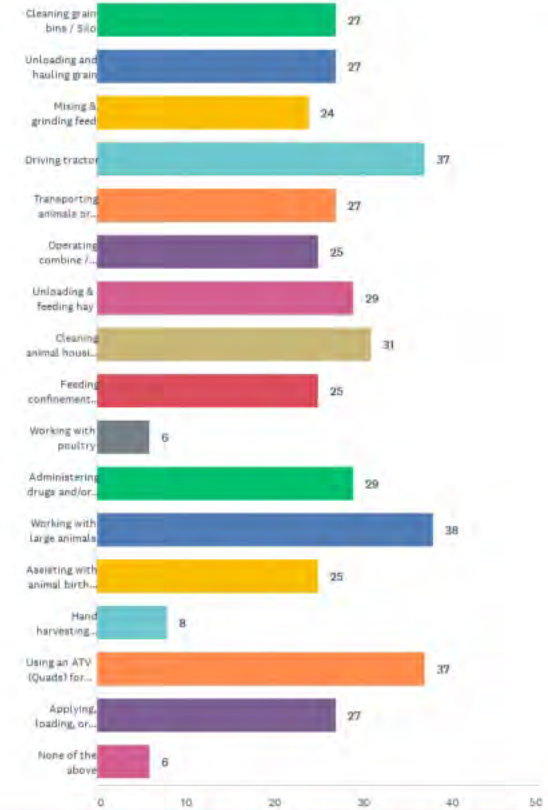
US, Canada, Denmark, Sweden, Australia



Q30 Please check the farming activities you participated in before the age of 14.



Q31 Please check the farming activities you participated in the past 12 months.



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Personal Protective Equipment

Selecting the Right PPE for the Job and for the Person

Prevention Strategy

Step #1

Understand Agriculture
Occupational Hazards

Step #3

Determine your strategy to be
part of prevention strategies.

Health
and Safety

Step #2

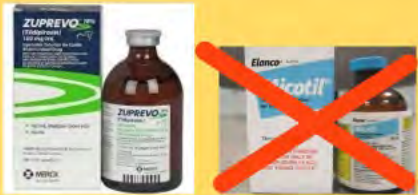
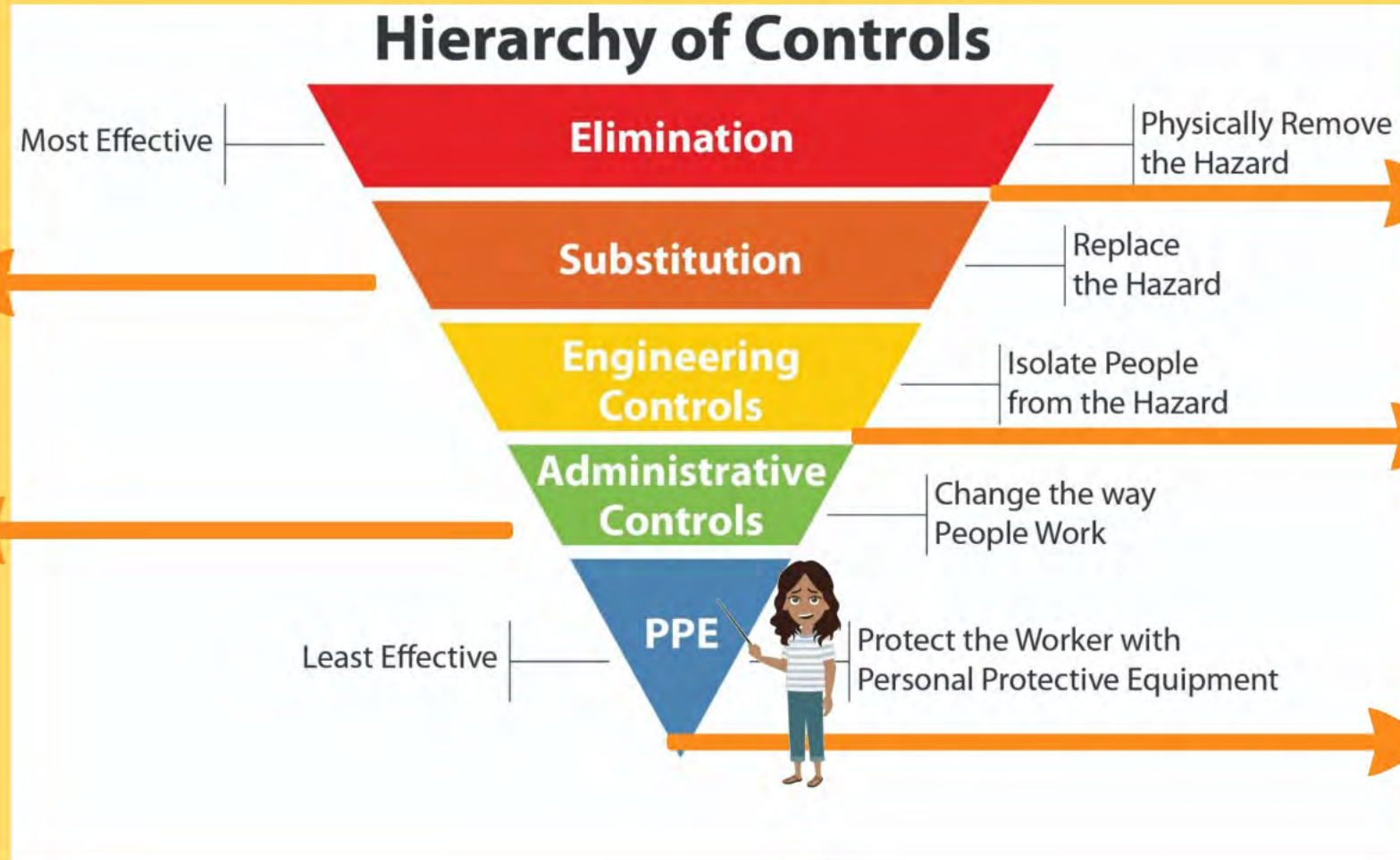
Understand how the hazards impact
you and your clients

Step #4

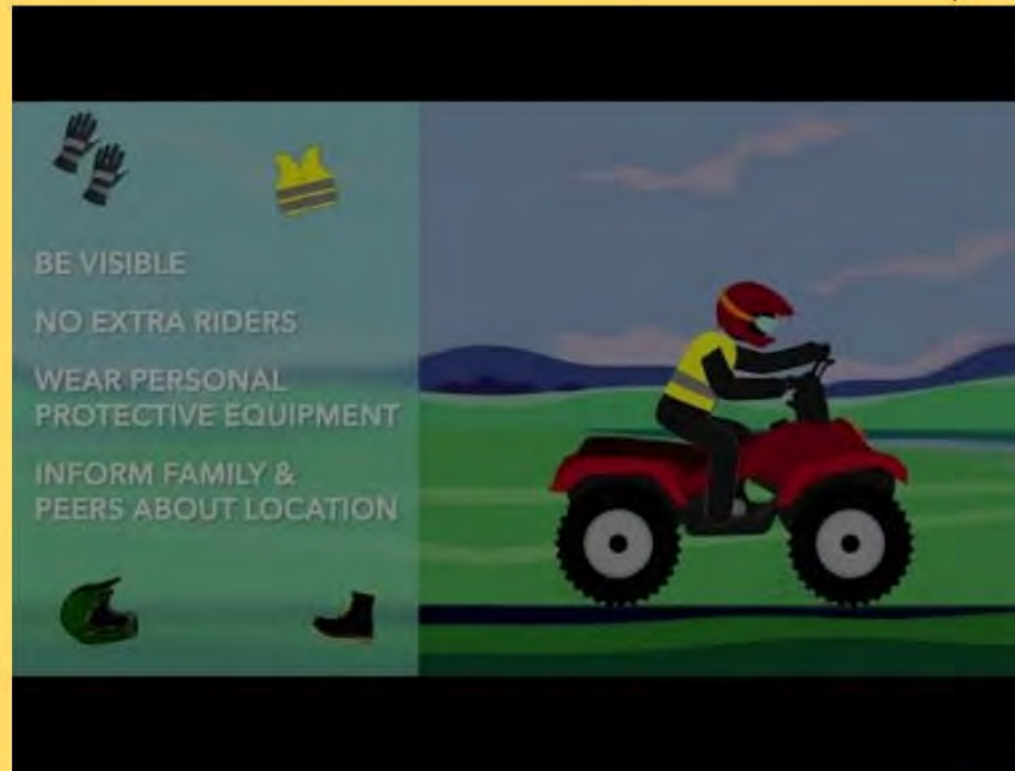
Understand
Personal Protective Equipment

Strategy

Can you eliminate, substitute, engineer or apply administrative controls?



ATV Safety



Things we can do:
Wear Helmet
Bright Safety Colors
Wear Gloves
Wear Sturdy Boots
Crash Protection Device
Select ATVs with Safety Design



BE VISIBLE

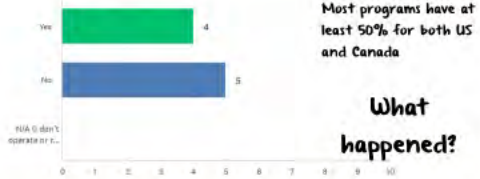
NO EXTRA RIDERS

WEAR PERSONAL
PROTECTIVE EQUIPMENT

INFORM FAMILY &
PEERS ABOUT LOCATION



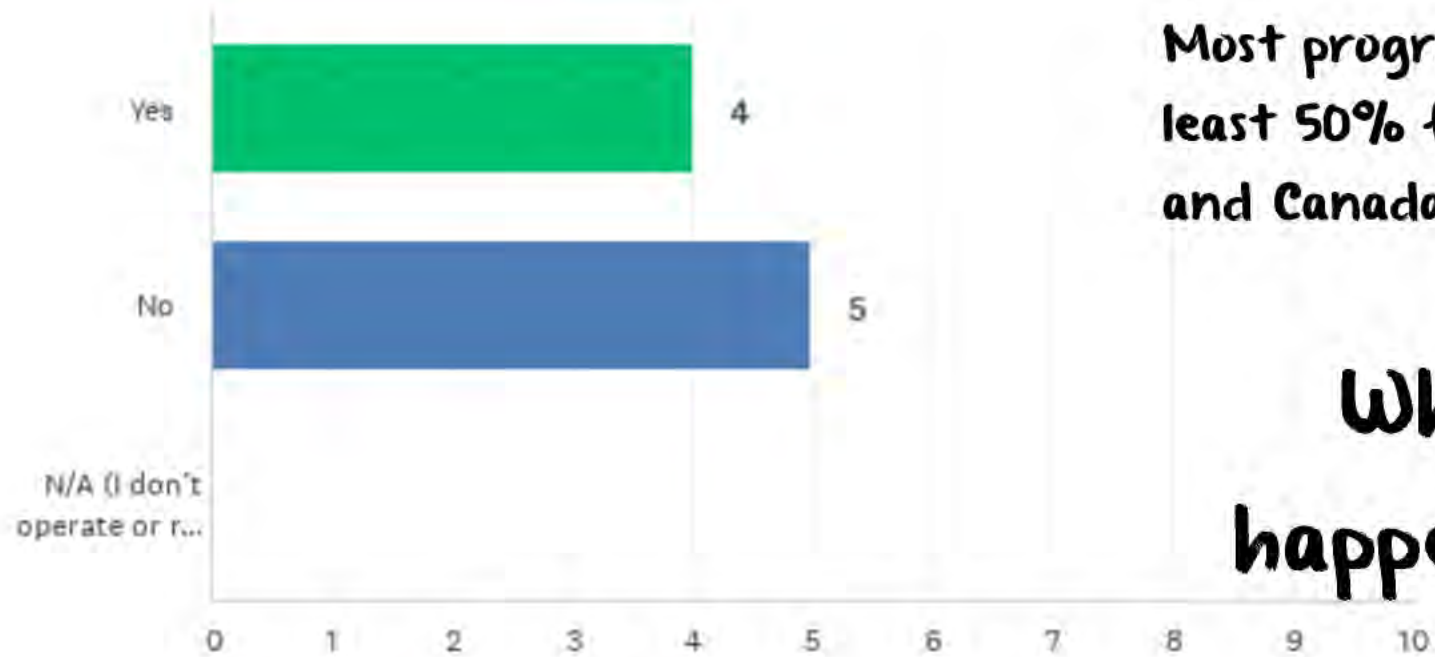
Q18 Have you ever rolled an ATV/Quad bike?



Things we can do:

- Wear Helmet
- Goggles /Safety Glasses
- Wear Gloves
- Wear Sturdy Boots
- Crush Protection Device
- Select ATVs with Safer Design

Q18 Have you ever rolled an ATV/Quad bike?



Most programs have at least 50% for both US and Canada

What happened?

Things we can do:

- Wear Helmet
- Goggles /Safety Glasses
- Wear Gloves
- Wear Sturdy Boots
- Crush Protection Device
- Select ATVs with Safer Design

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Personal Protective Equipment

Selecting the Right PPE for the Job and for the Person

Impact of Hazards on Your Body

skin

ears

eyes

lungs



Personal Protective Equipment (PPE)

- Right PPE for the Job with the Right Fit
- Proper Care
- Storage
- Have PPE in the right place



What about the cost?
Where can you buy it?

GearUp for Ag PPE Worksheet Name: _____ Date: _____

What are your hazards?

What Personal Protective Equipment (PPE) do you need?

Head <ul style="list-style-type: none">✓ 5" brim✓ ANSI Z89.1✓ CSA Z94.1	<ul style="list-style-type: none">• Sun Safe Hat - COST varies <i>Donated by Goodhart - Value Jr 549</i>• Hard Hat - COST varies 
Eyes <ul style="list-style-type: none">✓ Right Size & Shape✓ 99% - 100% UVA/UVB✓ ANSI Z87.1 / CSA Z94.3	<ul style="list-style-type: none">• Safety Glasses Clear - COST: \$2.10• Safety Glasses Tinted - COST: \$3.25• 3M™ SecureFit with foam - COST: \$ 8.30• Goggles COSTS: Honeywell Lives Futura - COST: \$12.50 Honeywell Lives Stealth™ - COST: \$38.00• Welding Helmet - COST varies 
Ears <ul style="list-style-type: none">✓ NRR Rating✓ Noise above 85dB✓ Good fit	<ul style="list-style-type: none">• Earplugs (3M Peltor) - COST: \$17.00• Ear Plugs - COST: \$2.00 per pair for no-touch type• Moldex Rock bands - Cost: \$6.50 each 
Body <ul style="list-style-type: none">✓ Read Label	<ul style="list-style-type: none">• Reusable chemical resistant gloves - COST: \$2.20each• Single Use chemical resistant gloves - COST: \$25 box of 50 pairs/ 5.05 pair• Chemical Resistant Boots - COST varies• Coveralls - COST: \$8 - \$10 each 
Skin <ul style="list-style-type: none">✓ SPF 30✓ UPF 30	<ul style="list-style-type: none">• Sun Safe Hat - COST varies <i>Donated by Goodhart - Value Jr 549</i>• Sun Safe Clothing - COST varies• Sunscreen - COST varies 
Feet <ul style="list-style-type: none">✓ ASTM F-2412-1005✓ Chemical Resistant	<ul style="list-style-type: none">• Work Shoes• Steel Toed Shoes• Chemical Resistant Boots• Cramp on ice cleats - COST for all items varies 

Contact information: info@agbesthardware.com | Website: www.agbesthardware.com

What about the cost? Where can you buy it?









PPE Worksheet

Name: _____

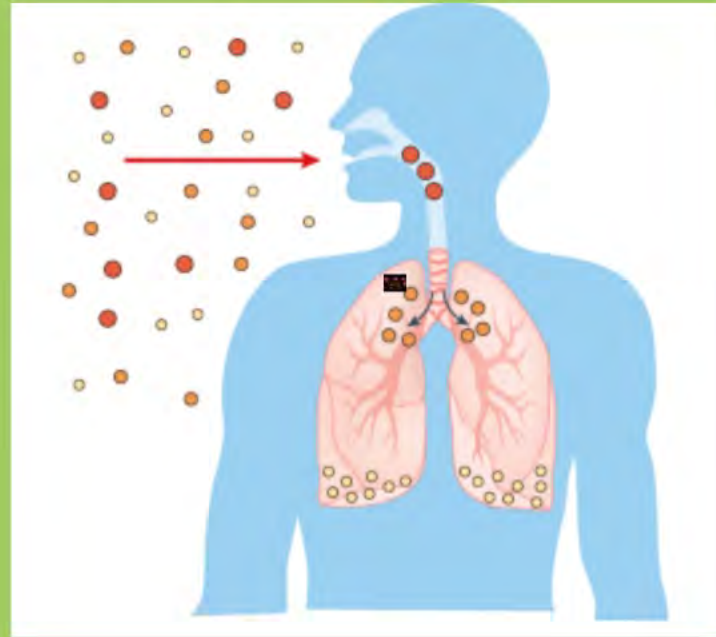
Date: _____

What are your hazards?

What Personal Protective Equipment (PPE) do you need?

Head ✓ 3" brim ✓ ANSI Z89.1 ✓ CSA Z94.1	<ul style="list-style-type: none"> • Sun Safe Hat - COST varies <i>Donated by Coolibar – Value is \$49</i> • Hard Hat – COST Varies 	
Eyes ✓ Right Size & Shape ✓ 99% - 100% UVA/UVB ✓ ANSI Z87.1/ CSA Z94.3	<ul style="list-style-type: none"> • Safety Glasses Clear - COST: \$2.10 • Safety Glasses Tinted – COST: \$3.25 • 3M™ SecureFit with foam COST: \$ 8.50 • Goggles COSTS: Honeywell Uvex Futura COST: \$12.50 Honeywell Uvex Stealth® COST: \$18.00 • Welding Helmet: COST varies 	
Ears ✓ NRR Rating ✓ Noise above 85dB ✓ Good fit	<ul style="list-style-type: none"> • Earmuffs (3M Peltor) COST: \$17.00 • Ear Plugs: COST: \$2.00 per pair for no-touch type • Moldex Rock bands - Cost: \$6.50 each 	
Body ✓ Read Label	<ul style="list-style-type: none"> • Reusable chemical resistant gloves COST: \$2.20each • Single Use chemical resistant gloves COST: \$25 box of 50 pairs/ \$.05 pair • Chemical Resistant Boots: COST varies • Coverall- COST: \$8 - \$10 each 	
Skin ✓ SPF 30 ✓ UPF 30	<ul style="list-style-type: none"> • Sun Safe Hat- COST varies <i>Donated by Coolibar (value \$49)</i> • Sun Safe Clothing- COST varies • Sunscreen – COST varies 	
Feet ✓ ASTM F-2412-1005 ✓ Chemical Resistant	<ul style="list-style-type: none"> • Work Shoes • Steel Toed Shoes • Chemical Resistant Boots • Cramp on ice cleats COST for all items varies 	
Contact Information : info@aghealthandsafety.com Website: www.aghealthandsafety.com		

Lungs

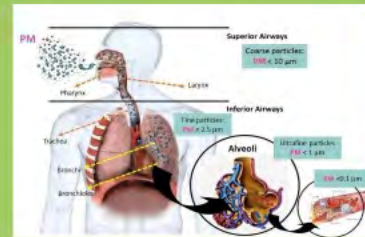


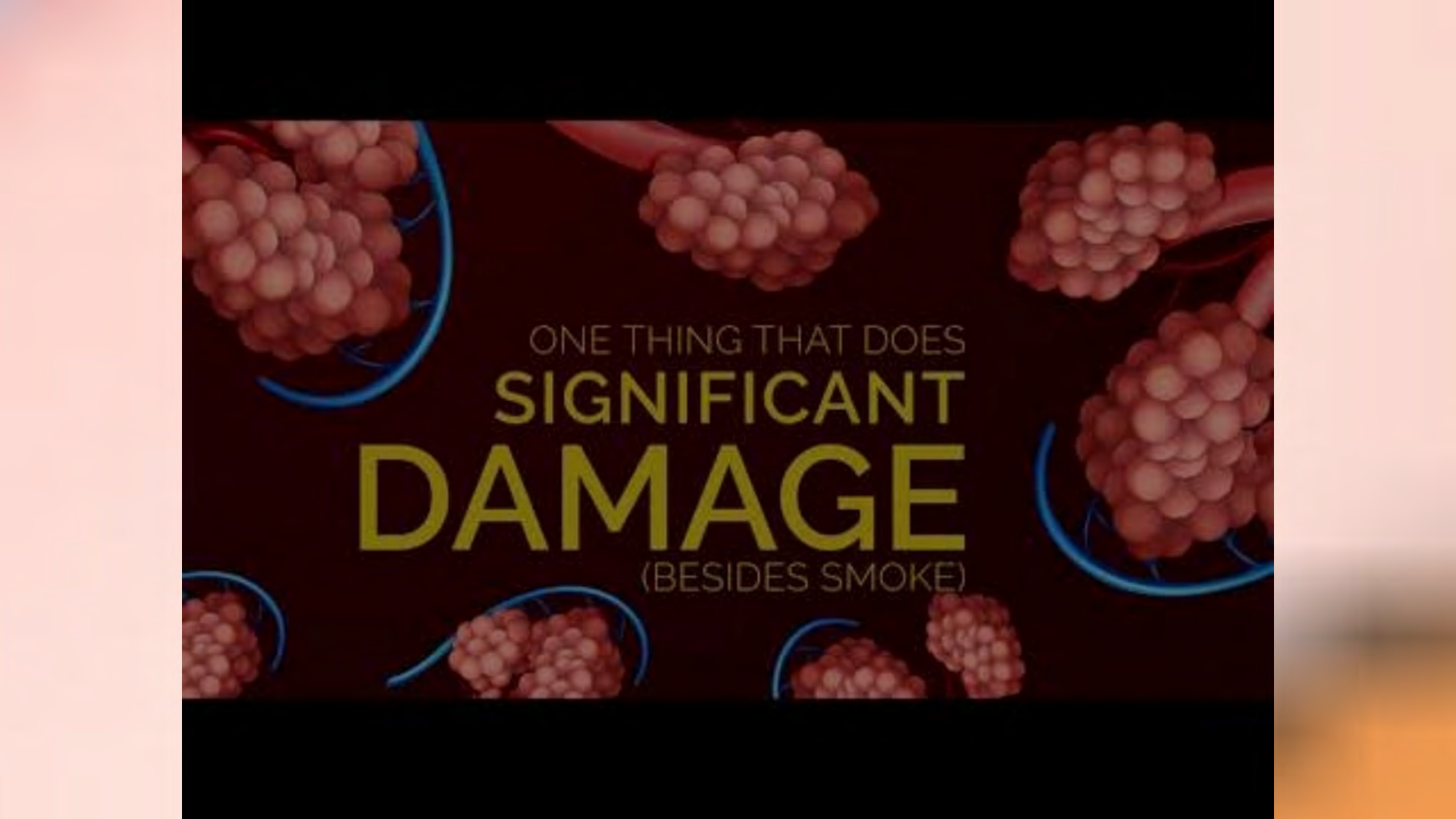
Symptoms
cough
shortness of breath
sore throat
headache 🙄

Risk Factors
Asthma
Smoking
Occupational exposures

How much Dust is a problem?

- Depends upon
 - Amount of dust
 - Size of the dust particles
 - Type of dust

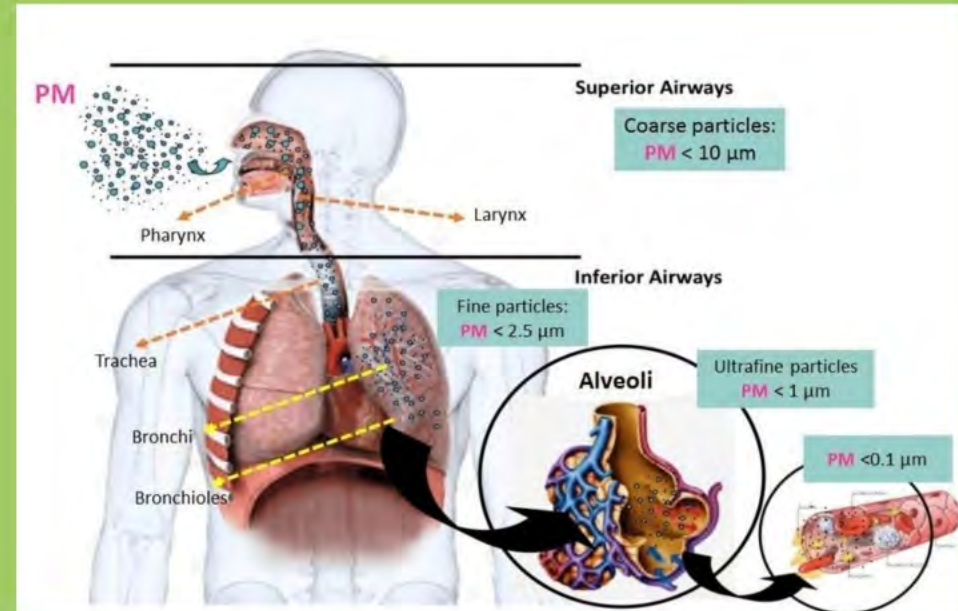
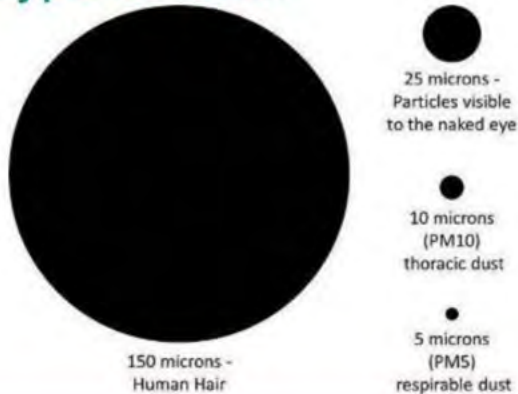




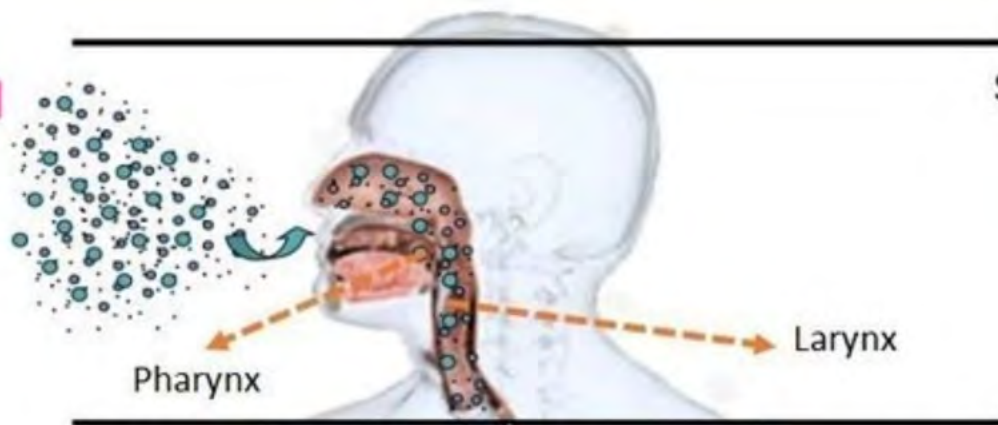
ONE THING THAT DOES
SIGNIFICANT
DAMAGE
(BESIDES SMOKE)

How much Dust is a problem?

- Depends upon
 - Amount of dust
 - Size of the dust particles
 - Type of dust



PM



Superior Airways

Coarse particles:
PM < 10 μm

Pharynx

Larynx

Inferior Airways

Fine particles:
PM < 2.5 μm

Trachea

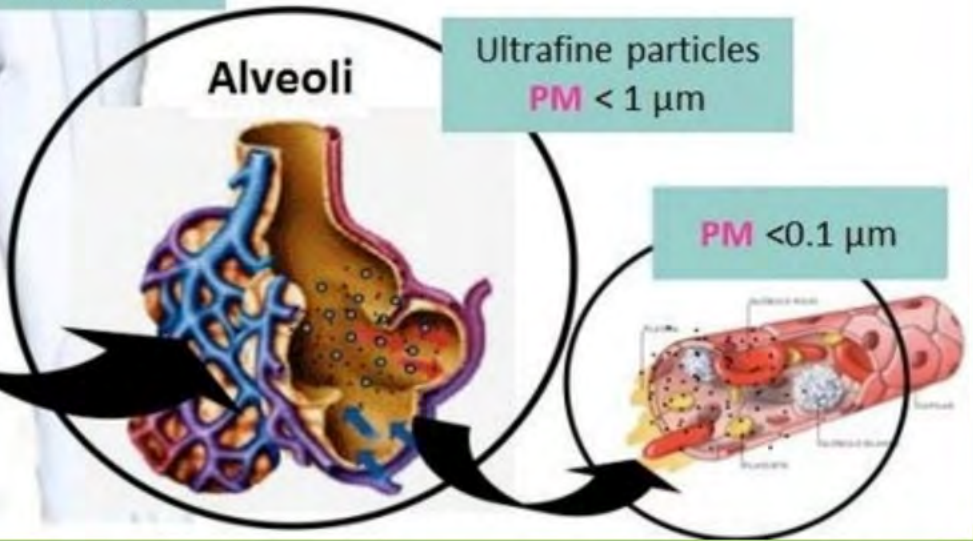
Bronchi

Bronchioles

Alveoli

Ultrafine particles
PM < 1 μm

PM < 0.1 μm



Symptoms

cough

shortness of breath

sore throat

headache



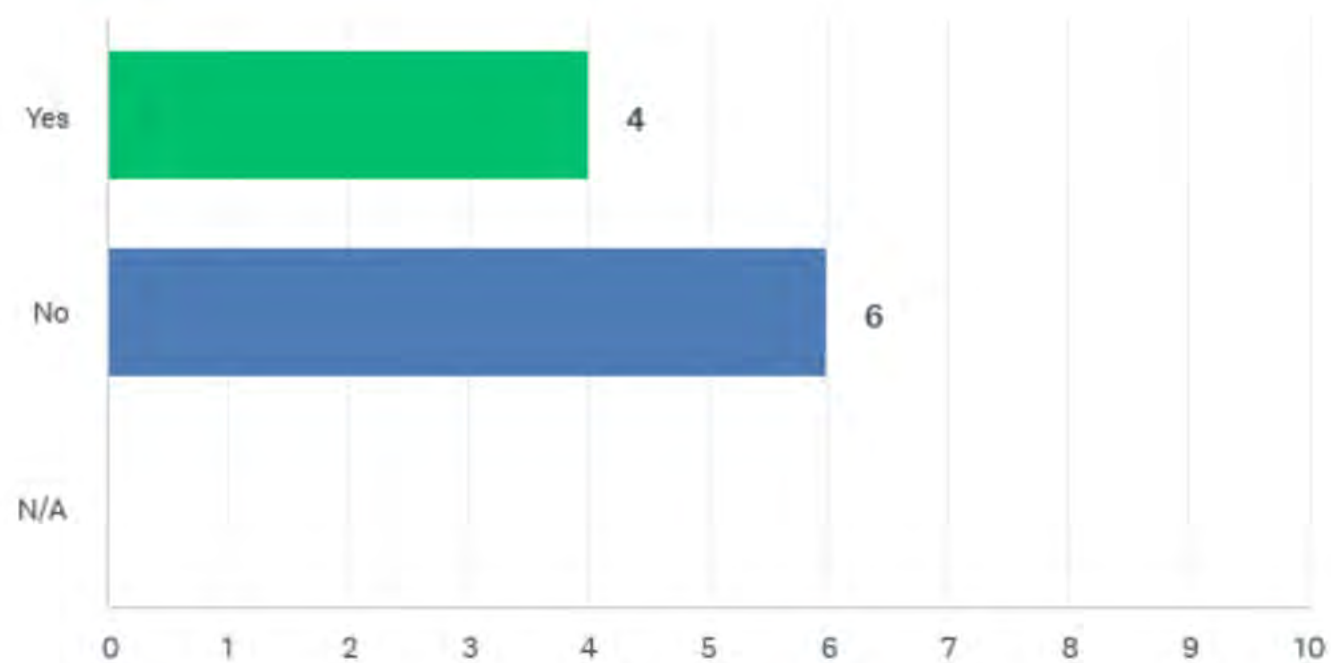
Risk Factors

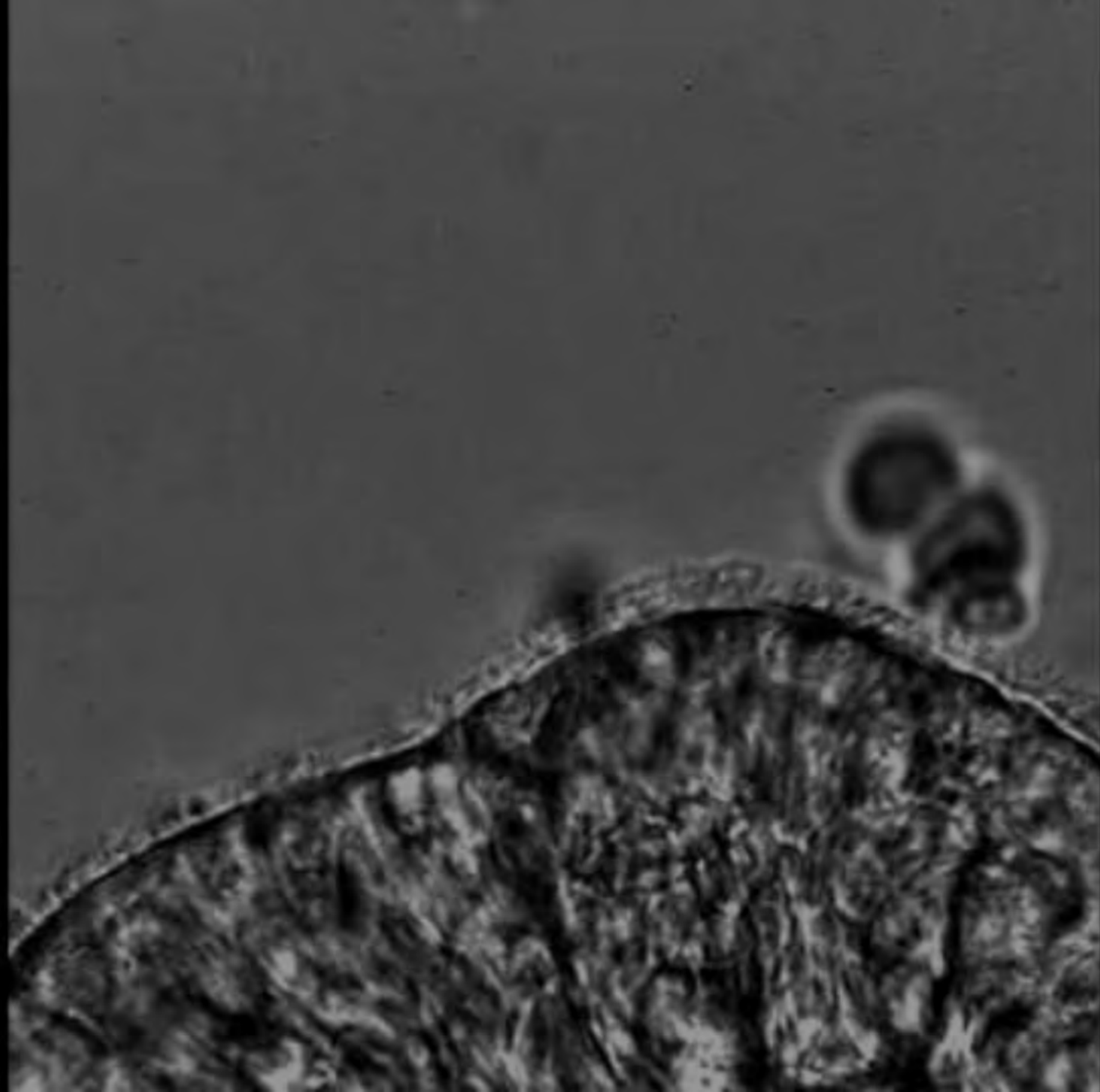
Asthma

Smoking

Occupational exposures

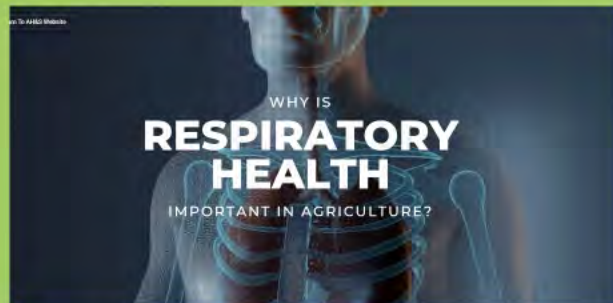
Q6 Have you ever had shortness of breath, cough, fever or chills after being exposed to a dusty environment?





Lung Protection

Right Respirator
for the
Right Job
with the
Right Fit



Respirator Selection Quick Reference Guide

In agriculture, you may encounter hazardous particles in the air while you are working. A respirator can protect you from breathing in these particles.

To select and use the appropriate respirator:

- ✓ Identify the hazard
- ✓ Understand the hazard
- ✓ Select the appropriate respirator
- ✓ Use NIOSH approved respirators
- ✓ Have your respirator fit tested
- ✓ Do a user seal check

NIOSH Approved: A respirator must be certified by the National Institute for Occupational Health and Safety (NIOSH) and worn properly to provide appropriate protection. NIOSH's classification ratings describe the ability of the device to protect the wearer from dust and liquid droplets in the air.

Disposable Respirators

Generally single use but repurposing may be appropriate in some situations.

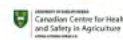
N95 filtering facepiece respirators are the most common types of disposable respirators. They are used in agriculture for working with hay, handling grain, in livestock housing, with infected livestock, and while welding or shop work. They are also recommended for use when working with moldy materials. Certain types of pesticide labels will recommend the use of N95 respirators.

Disposable Respirator Examples	8210-N95	9211-N95	8511-N95	8271-P95	8233-N100	8515-N95	
Uses	Organic Dust, Mold, Livestock, Poultry, Hogs, Cattle, Hay, Grain, Woodworking, Pesticide Handling (refer to label), Zoonotic Disease Prevention	Organic Dust, Mold, Livestock, Poultry, Hogs, Cattle, Hay, Grain, Woodworking, Pesticide Handling (refer to label), Zoonotic Disease Prevention	Organic Dust, Mold, Livestock, Poultry, Hogs, Cattle, Hay, Grain, Woodworking, Pesticide Handling (refer to label), Zoonotic Disease Prevention	Organic Dust, Mold, Livestock, Poultry, Hogs, Cattle, Hay, Grain, Woodworking, Pesticide Handling (refer to label), Zoonotic Disease Prevention	Organic Dust, Mold, Livestock, Poultry, Hogs, Cattle, Hay, Grain, Woodworking, Pesticide Handling (refer to label), Zoonotic Disease Prevention	Welding, Soldering, Metal Finishing	
Benefits	- Loose exposure - Easy to use - Durable	- Exhalation valve - Small face shape - Wide packaged	- Exhalation valve - Good for long periods of wear - Good for large face shapes	- Exhalation valve - Good for use with oil mist - Good seal	- Exhalation valve - Good lines - Large use - Good seal - 100% efficiency	- Exhalation valve - Economical option for welders - Flame resistant	- Exhalation valve - Economical option for welders - Flame resistant

Particulate Filter Types: NIOSH-approved filters are cited as N95, R95, P95, N99, N100, P100, or P100. The number 95, 99 or 100 (99.97%) indicates the percent NIOSH Respirator efficiency. **R Series:** Used in particulate environments free of oil aerosols. **P Series:** Used for oil and non-oil particles with time use limitations specified by manufacturer. **Filteration values** are designed to increase breathability by reducing heat, humid exhaled breath and fogging, helping to reduce heat buildup and moisture inside the facepiece. This can help prevent fogging of glasses. An exhalation valve can also permit the exhalation of viruses and should not be worn for protection during a pandemic.

Non-Respirator

These mask types are not certified by NIOSH for use as a respirator and will not provide protection from occupational or agricultural hazards. They are only effective for nuisance dusts and can help prevent the spread of viruses.



Reusable Respirators

Reusable Respirators are cost effective options that offer protection from hazardous gases, vapors, and particles found in many agricultural environments.

Half Facepiece
Different sizes available, can add cartridges.



Full Facepiece
Includes eye protection and provides more protection.



Cartridge Options

P100 Pink or White		Organic Dust, Grain, Feed, Hogs, Poultry, Welding, Mold, Woodworking, Shopwork
Particulate Pre-Filter		Can be used with the gas cartridges below to also filter particulates.
Organic Vapor Black		Pesticides, Paints Use Pre-Filter/Filter Cover
Ammonia Green		Anhydrous Ammonia (dry ice or wet situations), Hogs, Poultry Use Pre-Filter/Filter Cover
Organic Vapor Acid Gas Yellow		Paints, Disinfectants, Bleach Use Pre-Filter/Filter Cover
Multi Gas Olive		Paints, Disinfectants, Bleach Use Pre-Filter/Filter Cover

Remember: Schedule times to change your cartridges based on all the info on the product label, so when it becomes difficult to breathe, or when you can taste or smell the hazard.

Advanced Respirators

Powered Air Purified Respirator (PAPR):

Use for cleaning out grain bins, working with hay, in dusty livestock buildings, shop work (grinding, cutting), power washing, pesticide handling (with cartridges if label specifies). Can be used with a beard or medical condition such as asthma, claustrophobia, heart, or lung conditions.



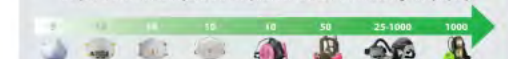
Self Contained Breathing Apparatus (SCBA):

Use in confined spaces that may be low in oxygen such as storage bins, tanks, and manure pits with high levels of hydrogen sulfide. An SCBA should be used in situations where airborne hazards are immediately dangerous to life and health.



Assigned Protection Factor

The assigned protection factor (APF) describes the decrease of harmful substances in inhaled air. It is used to describe how well a respirator can protect someone. The higher the number the higher the APF. The protection factor is only true if the respirator fits the wearer and is being used properly.



Respirator Fit Test: Everyone has a unique face size and shape. A fit test should be conducted by qualified personnel before an individual wears the respirator in a hazardous environment.

User Seal Check: Do not confuse a fit test with a user seal check. Once you have identified a fitting respirator, a "seal check" should be performed each time you wear the respirator to make sure it is properly on the face and adjust as needed.

[Return To AH&S Website](#)



WHY IS
**RESPIRATORY
HEALTH**

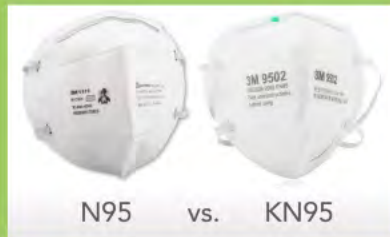
IMPORTANT IN AGRICULTURE?

DO NOT USE!!!
NOT NIOSH Approved

Protection Factor = 0



What about these type of masks and respirators?



What about these type of masks and respirators?



Air Purifying

NIOSH Approved

Assigned Protection Factor

The assigned protection factor (APF) describes the decrease of harmful substances in inhaled air. It is used to describe how well a respirator can protect someone. The higher the number the higher the APF. The protection factor is only true if the respirator fits the wearer and is being used properly.

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Protection
Factor=10



Protection
Factor=10



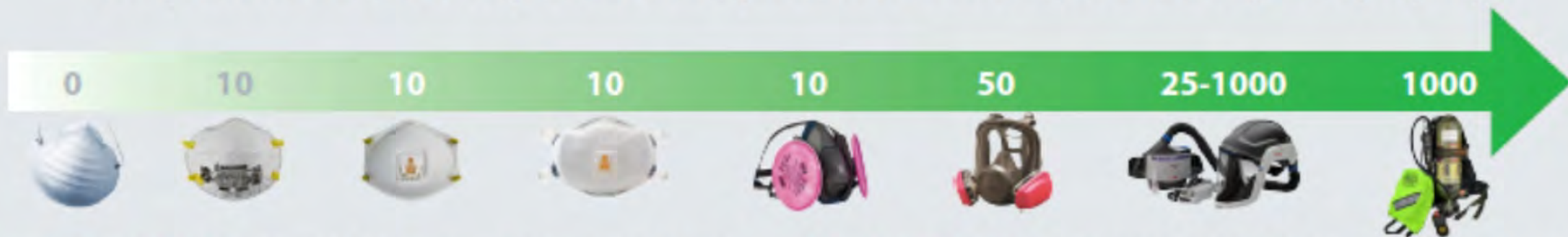
Protection
Factor=50



Protection Factor
25 - 1000

Assigned Protection Factor

The assigned protection factor (APF) describes the decrease of harmful substances in inhaled air. It is used to describe how well a respirator can protect someone. The higher the number the higher the APF. The protection factor is only true if the respirator fits the wearer and is being used properly.



Respirator Fit Test: Everyone has a unique face size and shape. A fit test should be conducted by qualified personnel before an individual wears the respirator in a hazardous environment.

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Air Purifying

NIOSH Approved

Assigned Protection Factor

The assigned protection factor (APF) describes the decrease of harmful substances in inhaled air. It is used to describe how well a respirator can protect someone. The higher the number the higher the APF. The protection factor is only true if the respirator fits the wearer and is being used properly.

Respirator Fit Test: Everyone has a unique face size and shape. A fit test should be conducted by qualified personnel before an individual wears the respirator in a hazardous environment.

User Seal Check: Do not confuse a fit test with a user seal check. Once you have identified a fitting respirator, a "seal check" should be performed each time you wear the respirator to make sure it is properly on the face and adjust as needed.



Protection
Factor=10



Protection
Factor=10



Protection
Factor=50



Protection Factor
25 - 1000

Immediately Dangerous to Life and Health (IDLH)




Hydrogen Sulfide - #25




Monitor Types

Low-Maintenance H₂S Monitors:



BW Clip Real Time
 Shows concentration of H₂S gas
 Lasts 2 years (hibernation case may extend lifetime)



SGC Plus
 Shows months remaining; shows concentration when H₂S is present
 Lasts 2 years (IR link may extend lifetime)

Both vibrate, flash, and alarm
 slow for low alarm
 fast for high alarm

H ₂ S Concentration (ppm)	Symptoms/Effects
0.00011 – 0.00033	Typical background concentrations
0.01 – 0.3	Rotten egg odor threshold
2 – 5	Nausea, teary eyes, headaches, loss of sleep
20	Fatigue, appetite loss, headache, irritability, dizziness
50 – 100	Digestive upset, gas eye, respiratory irritation
100 – 150	Olfactory fatigue, nose, lung, and eye irritation
200 – 300	Pulmonary edema may occur from prolonged exposure
500 – 700	Collapse within 5 minutes; death after 30 – 60 minutes
700 – 1000	Rapid unconsciousness; death within minutes
1000 – 2000	Nearly instant death





Monitor Types

Low-Maintenance H₂S Monitors:



BW Clip Real Time

- Shows concentration of H₂S gas
- Lasts 2 years (hibernation case may extend lifetime)



SGC Plus

- Shows months remaining; shows concentration when H₂S is present
- Lasts 2 years (IR link may extend lifetime)

Both vibrate, flash, and alarm

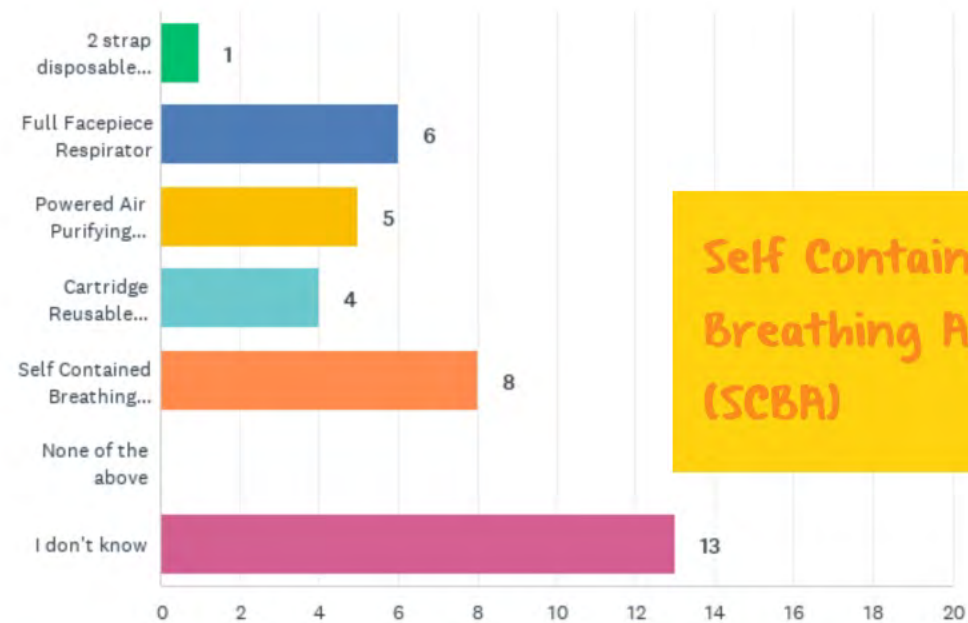
- slow for low alarm
- fast for high alarm

H ₂ S Concentration (ppm)	Symptoms/Effects
0.00011 – 0.00033	Typical background concentrations
0.01 – 0.3	Rotten egg odor threshold
2 – 5	Nausea, teary eyes, headaches, loss of sleep
20	Fatigue, appetite loss, headache, irritability, dizziness
50 – 100	Digestive upset, gas eye, respiratory irritation
100 – 150	Olfactory fatigue, nose, lung, and eye irritation
200 – 300	Pulmonary edema may occur from prolonged exposure
500 – 700	Collapse within 5 minutes; death after 30 – 60 minutes
700 – 1000	Rapid unconsciousness; death within minutes
1000 – 2000	Nearly instant death

Protection Factor = 1000



Q23 Which respirator should be worn when hydrogen sulfide (H₂S) levels are immediately dangerous to life and health? (Example: pumping out manure pit in confinement/livestock housing building, lagoons, oil and gas well heads).



Self Contained
Breathing Apparatus
(SCBA)

Organic Dusts / Mold

What is in organic dust?

- feces
- animal dander
- bacteria
- endotoxins
- mold



Livestock

Dairy
Swine
Poultry
Cattle



What PPE
should be
used?

Livestock

Dairy

Swine

Poultry

Cattle



What PPE
should be
used?

Gases, Fumes, Vapors

PPE for other activities

GOOGLE

Understand the
hazard
READ the LABEL



Ammonia, Pesticides, Paint,
Disinfectants
Also known as ACID GAS and
ORGANIC VAPORS



Hobbies: Woodworking, Auto-
body, Painting, Shop work





Ammonia, Pesticides, Paint,
Disinfectants
Also known as ACID GAS and
ORGANIC VAPORS



Hobbies: Woodworking, Auto-body, Painting, Shop work



PPE for other activities



GOOGLE

Understand the
hazard

READ the LABEL



Respirators are important
for use in **agriculture**.





Respirators are important
for use in **agriculture**.



Respirator Fit Test

OSHA'S RESPIRATORY PROTECTION STANDARD - 29 CFR 1910.134

UNITED STATES DEPARTMENT OF LABOR
OSHA
Occupational Safety & Health Administration

Regulations

A-Z INDEX

SEARCH

1. Selection
2. Medical evaluation
3. Fit testing
4. Use
5. Maintenance and care
6. Breathing air quality and use
7. Training
8. Program evaluation

RESPIRATORY PROGRAM ELEMENTS



User Seal Check



REASONS FOR FIT TESTING

Regulations for Respiratory Protection (29 CFR 1910.134) require employers to provide fit testing for workers who use respirators.

Check for all of the following to ensure fit testing is done properly:

Respirator Fit Test Capacity Building Guide

Jan 2018

Roles and Responsibilities

Role	Selection	Medical Evaluation	Fit Testing	Use
Employer	X	X	X	X
Supervisor	X	X	X	X
Respirator Fitter	X	X	X	X
Worker	X	X	X	X

Respirator Fit Test

OSHA'S RESPIRATORY PROTECTION STANDARD - 29 CFR 1910.134

UNITED STATES DEPARTMENT OF LABOR

OSHA

Occupational Safety & Health Administration

Regulations (Standards - 29 CFR) - Table of Contents

- Part Number: 1910
- Part Title: Occupational Safety and Health Standards
- Subpart: 1
- Subpart Title: Personal Protective Equipment
- Standard Number: 1910.134
- Title: Respiratory Protection
- Appendix: A, B-1, B-2, C, D

Regulations

SEARCH

A-Z INDEX

1910.134(a)
Permissible practices

1910.134(a)(1)
In the control of those occupational diseases caused by breathing air contaminated with harmful dusts, fogs, fumes, mists, gases, smokes, sprays, or vapors, the primary objective shall be to prevent atmospheric contamination. This shall be accomplished as far as feasible by accepted engineering control measures (for example, enclosure or confinement of the operation, general and local ventilation, and substitution of less toxic materials). When effective engineering controls are not feasible, or while they are being instituted, appropriate respirators shall be used pursuant to this section.

1910.134(a)(2)
A respirator shall be provided to each employee when such equipment is necessary to protect the health of such employee. The employer shall provide the respirators which are applicable and suitable for the purpose intended. The employer shall be responsible for the establishment and maintenance of a respiratory protection program, which shall include the requirements

1. Selection

2. Medical evaluation

3. Fit testing

4. Use

5. Maintenance and care

6. Breathing air quality and use

7. Training

8. Program evaluation

RESPIRATORY
PROGRAM
ELEMENTS

RESPIRATORY PROGRAM REQUIREMENTS



REASONS FOR FIT TESTING

Requirement for Worker Protection Standard (WPS) when respirator is required by the label
FERC WPS Respirator Guide - the Gold Standard

Overall, a good idea whenever a respirator is used to ensure respirator fits properly

Respirator Fit Test Capacity Building Guide

July 2021

Roles and Responsibilities

What is your role in respirator fit testing based on professional capacity?
 Roles and responsibilities related to Respirator Fit Testing and medical evaluation is directly related to your degree of education which you are a professional with an degree of education. There are aspects of Respirator Fit Testing that can be done by someone who is not a health care provider.

Medical Evaluation and Qualification Requirements
 Qualification for the use of a respirator in which the person can be exposed to hazardous airborne contaminants. These requirements are based on the person's health, respiratory and other respiratory protection program as specified in OSHA's Respiratory Protection Standard (29 CFR 1910.134).

Before using a respirator, workers must first be medically evaluated, using the respiratory medical questionnaire as an assessment method. The use of the questionnaire is required to meet the respiratory protection requirements of 29 CFR 1910.134. The health care professional (HCP) performs the medical evaluation using the medical questionnaire in Appendix C of the Respiratory Protection Standard or a medical questionnaire that contains the same information.

Profession	Administer Medical Questionnaire	Perform Medical Questionnaire	Medical Evaluation	Fit Test
Farmer	X			X
Safety Officer	X			X
Manager	X			X
Personnel Tech	X			X
Pharmacist	X	X		X
LPN	X	X		X
RN	X	X		X
Respirator Assessor	X	X		X
Nurse Practitioner	X	X	X	X
Chiropractor	X	X	X	X
Physician	X	X	X	X

User Seal Check

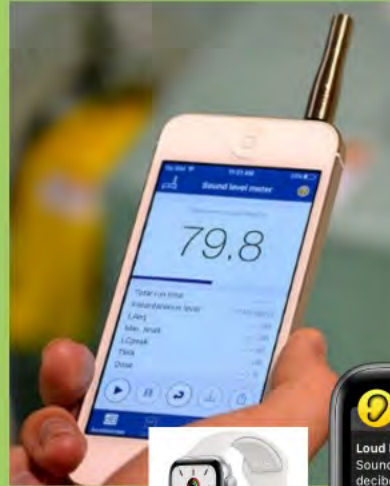


Protect Your Hearing

HOW LOUD IS TOO LOUD?

Farm Equipment	Noise Level (dB)	Max Safe Time*	*Max time without wearing hearing protection
ATV, Push Mower	90 dB	2.5 HRS	
Tractor/Combine (with Cab), Grain Auger	92 dB	1.5 HRS	
Air Compressor, Shop Vac	95 dB	47 MIN	
Pigs Squealing, Irrigation Pump	100 dB	15 MIN	
Riding Mower, Pressure Washer	102 dB	9 MIN	
Tractor (No Cab), Grain Dryer	105 dB	4 MIN	
Leaf Blower	110 dB	1 - 2 MIN	
Chain Saw	115 dB	< 1 MIN	

PPE in AG - Livestock



Proper Insertion



Know the NRR Rating
Noise Reduction Rating

HOW LOUD IS TOO LOUD?

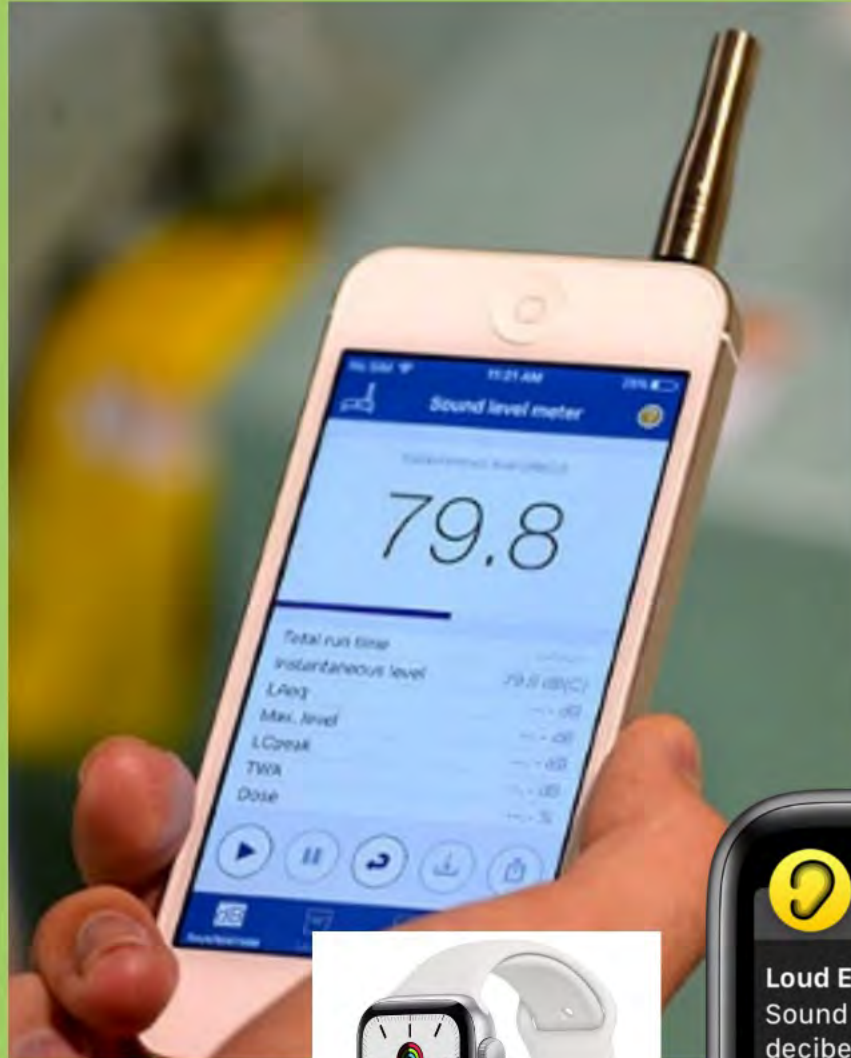
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Chain Saw	115 dB	< 1 MIN	



PPE in AG - Livestock

TOO LOUD?

*Max time without wearing hearing protection



Proper Insertion



Know the NRR Rating
Noise Reduction Rating

Body

Pesticides enter your body through:

- eyes
- nose
- mouth
- skin



ivermax
(ivermectin)
Pour-On for Cattle
Contains 5 mg ivermectin/mL
ANADA 200-272, Approved by FDA

Parasiticide
Kills: Roundworms (including Brown Stomach Worm), Lungworms, Grubs, Sucking Lice, Biting Lice, Mange Mites, Horn Flies

169 fl oz (5 Liter)

WARNING! FLAMMABLE! KEEP AWAY FROM HEAT, SPARKS, OPEN FLAME AND OTHER SOURCES OF IGNITION. WARNING! NOT FOR USE IN HUMANS. ANADA 200-272, Approved by FDA. Lot No. & Exp. Date

Manufactured by: **RXV**
Norsbrock Laboratories Ltd.
Newry, Co. Down, BT23 6PL,
Northern Ireland

0061103.02

ivermax
(ivermectin)
Pour-On for Cattle
Contains 5 mg ivermectin/mL
ANADA 200-272, Approved by FDA

Consult your veterinarian for assistance in the diagnosis, treatment and control of parasites.

INDICATIONS:
For the treatment and control of gastrointestinal nematodes (including intestinal *Osieragia ostentis*, lungworms, grubs, horn flies, sucking and biting lice, and winged grubs) in cattle. See package insert for complete indications and use directions.

RECOMMENDED DOSE:
1 mL per 25 lb of body weight.

Administration:
Because of the solvents used in IVERMAX® Pour-On for Cattle, the applicator gun from Spence Tech, or equivalent, is recommended. Other applications may exhibit compatibility problems resulting in foaming, incorrect dosage or leakage. Remove the shipping cap from the backpack container and replace with the vent cap provided. Attach the hose from the automatic dosing equipment to the outlet from the vent cap. Follow the applicator gun manufacturer's directions for priming the gun, adjusting the dose, and care of the applicator gun following use.

RESIDUE INFORMATION: Cattle must not be treated within all days of slaughter for human consumption. Because a withdrawal time is not applicable, the risk of drug residues in beef and milk is not established. The risk of drug residues in milk of nursing calves has not been established for this product. Use in nursing calves. Do not use in calves to be processed for veal.

WARNING:
NOT FOR USE IN HUMANS. Keep this and all drugs out of the reach of children. The Material Safety Data Sheet (MSDS) contains more detailed occupational safety information. To report adverse effects, obtain an MSDS, or for assistance call ChemTrex at 1-800-424-9300.

039

This product should not be applied to self or others because it may be irritating to human skin and eyes and absorbed through the skin. To minimize accidental skin contact, the user should wear a long-sleeved shirt and rubber gloves. If accidental skin contact occurs, wash immediately with soap and water. If accidental eye exposure occurs, flush eyes immediately with water and seek medical attention.

PRECAUTIONS:
Store away from excessive heat (104°F/40°C) and protect from light.
Use only in well-ventilated areas or outdoors. Close container tightly when not in use.
Cattle should not be treated when heat or haze is well known reduced efficacy may be experienced.
Do not use when rain is expected to wet cattle within six hours after treatment. This product is for application to skin surface only. Do not give orally or parenterally.
Cloudiness in the formulation may occur when IVERMAX® Pour-On for Cattle (ivermectin) is stored at temperatures below 32°F. Allowing it to warm to room temperature will restore the normal appearance without affecting efficacy.
Antiparasitic activity of ivermectin will be impaired if the formulation is applied to areas of the skin with mange scabs or lesions, or with dermatitis or soiled materials, e.g. soiled mud or manure.
Ivermectin has been associated with adverse reactions in sensitive dogs; therefore, IVERMAX® Pour-On for Cattle is not recommended for use in species other than cattle.
Disposal:
Do not contaminate water by direct application or by the improper disposal of drug containers. Dispose of containers in an approved landfill or by incineration.
Revised Drug: California, Use Only as Directed.
169 fl oz (5 L)
IVERMAX® is a trademark of RXV Products®

RXV
Manufactured for:
RXV Products®
Waukegan,
Illinois 60087
USA
Made in the UK
00715203 1 54629 10540 9





Always Check the Label



body




Check the Label



ivermax
(ivermectin) Pour-On For Cattle
Contains 5 mg ivermectin/mL

Parasiticide
Kills: Roundworms (including Brown Stomach Worm), Lungworms, Grubs, Sucking Lice, Biting Lice, Mange Mites, Horn Flies

169 fl oz (5 Liter)



WARNING! FLAMMABLE! KEEP AWAY FROM HEAT, SPARKS, OPEN FLAME AND OTHER SOURCES OF IGNITION. WARNING! NOT FOR USE IN HUMANS.
ANADA 200-272, Approved by FDA Lot No. & Exp. Date

Manufactured by:
Northbrook Laboratories Ltd.
Newry, Co. Down, BT35 6PU,
Northern Ireland
009153L02

Manufactured for
RXV
PRODUCTS

ivermax
(ivermectin)
Pour-On for Cattle
Contains 5 mg ivermectin/mL
ANADA 200-272, Approved by FDA

Consult your veterinarian for assistance in the diagnosis, treatment and control of parasitism.

INDICATIONS:
For the treatment and control of gastrointestinal roundworms (including inhibited *Calotegia osteragi*), lungworms, grubs, horn flies, sucking and biting lice, and sarcoptic mange mites in cattle. See package insert for complete indications and use directions.

RECOMMENDED DOSE:
1 mL per 22 lb of body weight.

Administration
Because of the solvents used in IVERMAX® Pour-On for Cattle, the applicator gun from Simco Tech, or equivalent, is recommended. Other applicators may exhibit compatibility problems resulting in locking, incorrect dosage or leakage. Remove the shipping cap from the backpack container and replace with the vent cap provided. Attach the hose from the automatic dosing equipment to the outlet from the vent cap. Follow the applicator gun manufacturer's directions for priming the gun, adjusting the dose, and care of the applicator gun following use.

RESIDUE INFORMATION: Cattle must not be treated within 44 days of slaughter for human consumption. Because a withdrawal time in milk has not been established, do not use in female dairy cattle of breeding age. A withdrawal period has not been established for this product in pre-ruminating calves. Do not use in calves to be processed for veal.

WARNING
NOT FOR USE IN HUMANS. Keep this and all drugs out of the reach of children. The Material Safety Data Sheet (MSDS) contains more detailed occupational safety information. To report adverse effects, obtain an MSDS, or for assistance call ChemTrec at 1-800-424-9300.

This product should not be applied to self or others because it may be irritating to human skin and eyes and absorbed through the skin. To minimize accidental skin contact, the user should wear a long-sleeved shirt and rubber gloves. If accidental skin contact occurs, wash immediately with soap and water. If accidental eye exposure occurs, flush eyes immediately with water and seek medical attention.

PRECAUTIONS:
Store away from excessive heat (104°F/40°C) and protect from light.
Use only in well-ventilated areas or outdoors. Close container tightly when not in use.
Cattle should not be treated when hair or hide is wet since reduced efficacy may be experienced.
Do not use when rain is expected to wet cattle within six hours after treatment. This product is for application to skin surface only. Do not give orally or parenterally.
Cloudiness in the formulation may occur when IVERMAX® Pour-On for Cattle (ivermectin) is stored at temperatures below 32°F. Allowing it to warm at room temperature will restore the normal appearance without affecting efficacy.
Antiparasitic activity of ivermectin will be impaired if the formulation is applied to areas of the skin with mange scabs or lesions, or with dermatoses or adherent materials, e.g. caked mud or manure.
Ivermectin has been associated with adverse reactions in sensitive dogs; therefore, IVERMAX® Pour-On for Cattle is not recommended for use in species other than cattle.
Disposal:
Do not contaminate water by direct application or by the improper disposal of drug containers. Dispose of containers in an approved landfill or by incineration.
Restricted Drug - California. Use Only as Directed.
169 fl oz (5 L)
IVERMAX® is a trademark of RXV Products®

Manufactured for
RXV
Products
Texas 76262
USA
Made in the UK.
007153L03 7 54629 10540 9





⚠ DANGER

TOTAL CHEMICAL HAZARD
IRRITANT, SKIN IRRITANT,
WATER
HEAVY METAL
CORROSIVE

FAILURE TO FOLLOW THESE INSTRUCTIONS
WILL RESULT IN SERIOUS INJURY OR DEATH

**TANK RINSE AND FLUSH SYSTEM
OPERATING INSTRUCTIONS**

1. Park the machine in a well-ventilated area.
2. Turn off the engine and the PTO.
3. Disconnect the battery.
4. Remove the cap of the tank.
5. Fill the tank with water.
6. Run the machine for 10 minutes.
7. Repeat steps 4-6 until the tank is empty.
8. Dispose of the water properly.



Hand Care

Wash hands thoroughly with soap and water after handling this product.

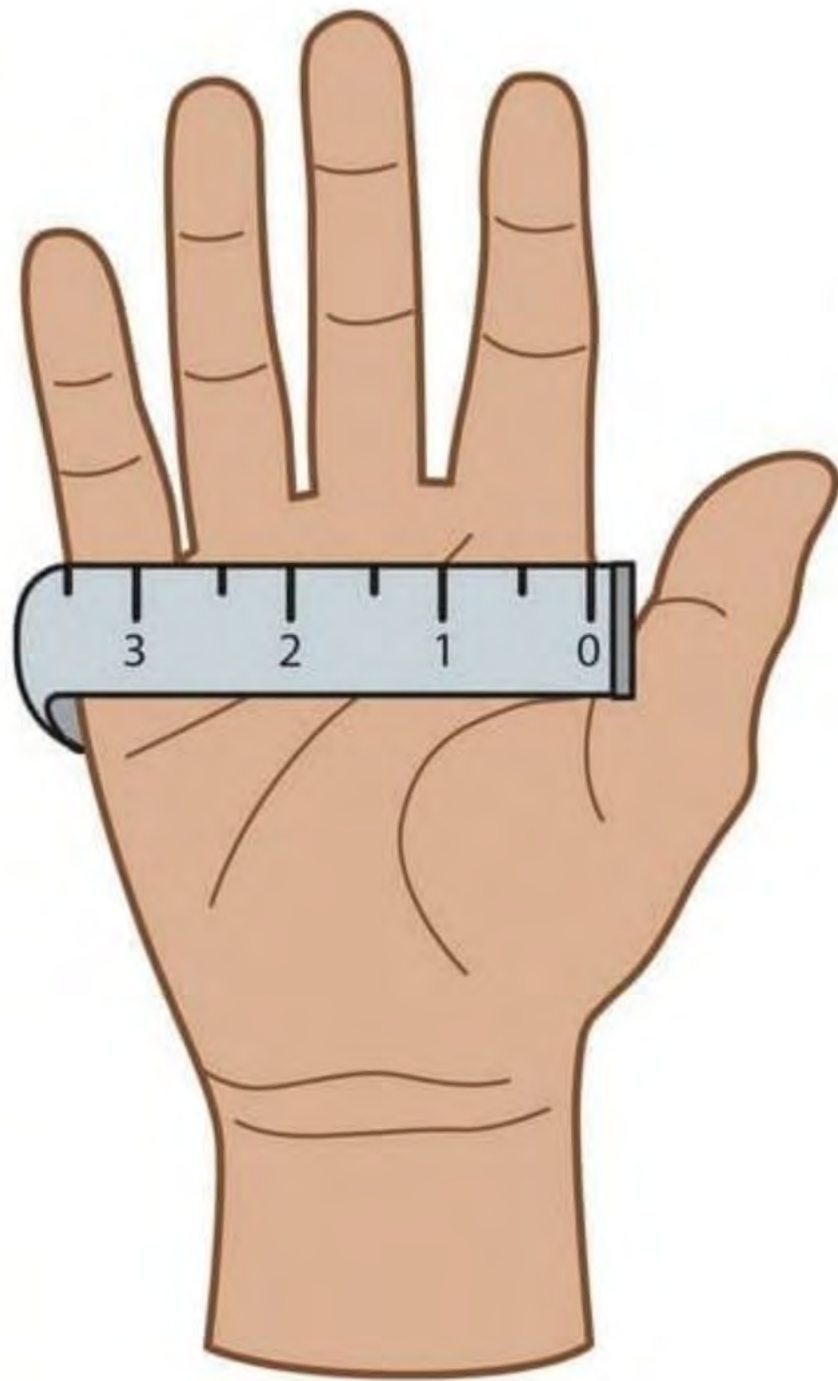
IMVCO

2.5L

CHEMICAL INJECTION SYSTEM

OPERATING INSTRUCTIONS

Glove Sizing



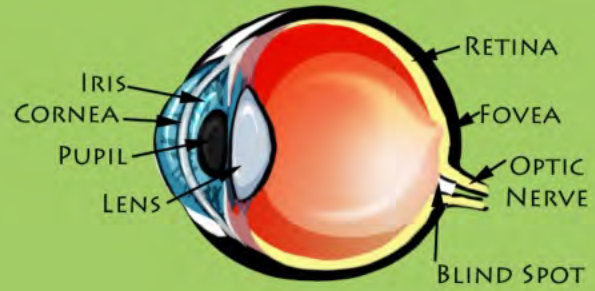
1. Measure your dominant hand around the fullest part of your palm.
2. Do NOT measure around thumb
3. 7.5" inches -> Size 7.5
8" inches -> Size 8
8.5" inches -> Size 8.5
9" inches -> Size 9
9.5" inches -> Size 9.5
10" inches -> Size 10

1 inch = 2.54 cm

FORT
BELVEDERE



Eyes



CSA Z94.31-16 or ANSI
Z87.1 Approved
Block 99% UV

Right Size &
Shape



Welding

**CSA Z94.31-16 or ANSI
Z87.1 Approved
Block 99% UV**



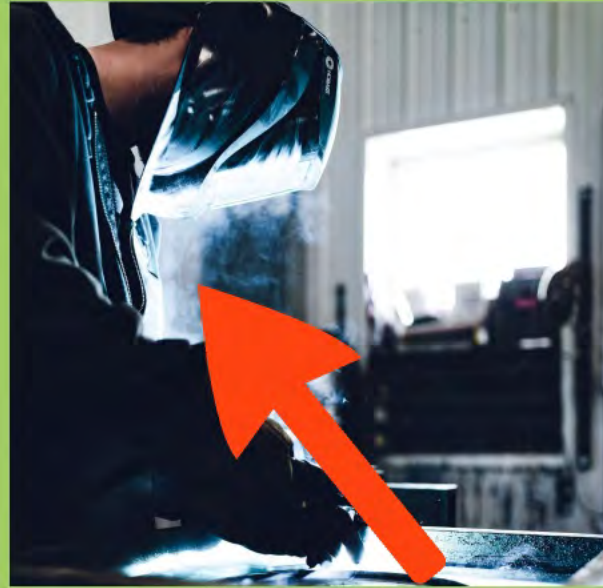
**Right Size &
Shape**



Test 1:

**Drop ball
Impact test
with safety
eyewear**





Welding

Livestock and PPE



Way's to prevent spreading or contracting are:

- Good Hand washing
- PPE
- Good Animal Health
- Good Work Practices



Examples of PPE to be Used



Hendra Virus



Calving



Scabby Mouth



What are the hazards to the animal handler?

**Have you ever
had a zoonotic
disease?**



Way's to prevent spreading or contracting are:

- Good Hand washing
- PPE
- Good Animal Health
- Good Work Practices



Examples of PPE to be Used



What's
the Deal

Strategies

Impact

PPE

Intro

Contact
Details



Personal Protective Equipment

Selecting the Right PPE for the Job and for the Person

PPE for Farm Work

Hearing protection

- What type?

Eye protection

- Safety Glasses?
- Goggles?

Respiratory protection

- What type?

Body

- Gloves?
- Coveralls?

What else is needed?



What's
the Deal

Strategies

Impact

PPE



Intro

Contact
Details

Personal Protective Equipment

Selecting the Right PPE for the Job
and for the Person



Stay Connected



• info@aghealthandsafety.com



• www.aghealthandsafety.com



• [@aghealthandsafety](https://www.facebook.com/aghealthandsafety)



• [@aghealthandsafetyalliance](https://www.instagram.com/aghealthandsafetyalliance)



What's
the Deal

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Personal Protective Equipment

Selecting the Right PPE for the Job and for the Person