

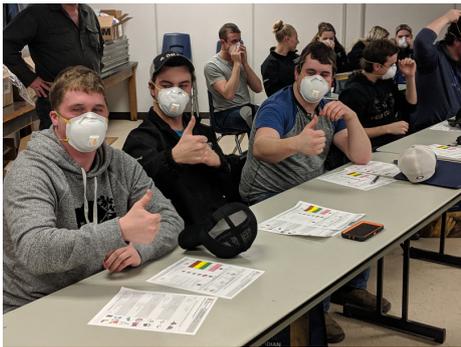
# MILESTONES REPORT

Lessons

Successes

Impact

October 2017 - December 2021



501(c)(3) Non-Profit Organization

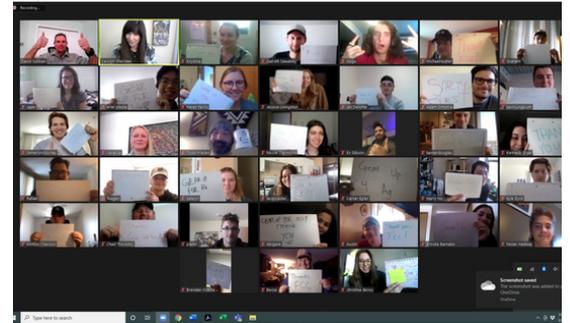


Training the next generation of Ag!

# WHO WE ARE

The Ag Health and Safety Alliance™ is an international nonprofit organization, registered in the US and Canada, that focuses on health and safety for the next generation of agriculture.

**Our programs are tailored specifically to our audience with ongoing development and promotion of dynamic programs.**



**Not the typical safety training . . . . .**

Our programs involve:

- Infographics
- Motion Graphics
- Video Concepts, including Virtual Reality/360 Videos
- Hands-on demos
- Participant and instructor feedback
- Storytelling
- Gamification
- Problem Solving
- PPE Kits!

To train young adults and professionals on a range of agricultural health and safety topics by promoting practical, relevant, and evidence-based information.

## OUR MISSION



We do this by partnering with passionate local professionals (instructors, outreach specialists, sponsors) to assist with ideas and program delivery.

## OUR VALUES

- Evidenced-based health and safety information
- Program consistency
- Fun and inclusive learning experiences
- Safety leadership
- Advocating for farmers and ranchers

“Learn everything you can about the possible hazards in your environment and then be willing to consider ways to protect yourself and those around you.”

Carolyn Sheridan  
Executive Director, Founder



# FEEDBACK AND TESTIMONIALS

“ I look forward to seeing you again next year at our college. Your energetic and engaging presentation covers many of the highlights of farm safety. Instructor Comment- 2018 ”

I would like to know how I can get this kind of respirator for my brother and my Dad. I think they both need to use one. Student Comment - 2020

“ I am impressed with how engaged the students are for the "Virtual Gear Up for Ag" program. Instructor Comment 2021 ”

Ag Health and Safety Alliance  
Published by Carolyn Sheridan · March 4, 2020 ·  
Today we were super excited to work with Kendra Ulmer from the Agricultural Health & Safety Network to bring our Gear Up for Ag program to AG students at the University of Saskatchewan. Our first Canadian "PPE and PPE" session was a huge success!! A huge thank you to Farm Credit Canada and 3M Worker Health and Safety for your ongoing support!



Ag Health and Safety Alliance  
Published by Carolyn Sheridan · January 15, 2020 ·  
We had a great day at Morningside College today! Thank you Morningside College and Central States Center for Agricultural Safety and Health (CS-CASH) for partnering with us to provide the students with great PPE and Ag Health and Safety education. #gearupforag #agriculture #partnerships #aghealthandsafety #RUMAC



“ Thanks so much for your very valuable training. I really enjoyed it and appreciated that you made it fun! Gear Up for Ag exceeded my expectations! Student Comment - 2018 ”

Ag Health and Safety Alliance is at Assiniboine Community College.  
Published by Carolyn Sheridan · February 8, 2020 · Winnipeg, MB, Canada ·

Assiniboine Community College has over 50 unique certificate, diploma and advanced credential programs and we were fortunate to speak with the Agriculture students this week! Interactive Kahoot quizzes and PPE demonstrations kept the students engaged for the Gear up For Ag day long program. A huge thank you to Assiniboine College and our sponsors for making the day successful!! #gearupforag #agriculture #3mcanada #farmcreditcanada #canada #AssiniboineCommunityCollege

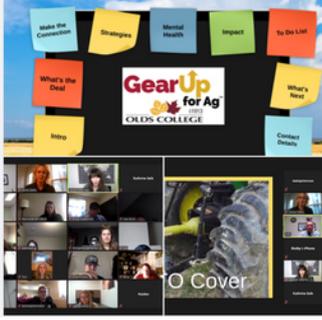


Ag Health and Safety Alliance is with David Sullivan and 3 others.  
Published by Evvonne Hickey · September 24, 2019 · Instagram ·

Gear Up for AG Health and Safety reached 69 students in Denmark at the Roskilde Tekniske Skole (Farm school in Hong, Denmark) through our partnership with Seges /AgriSafety. This large group of students were fortunate enough to have 3M Denmark provide valuable information and take home PPE. #segese/AgriSafety #agriculture #aghealthandsafety #roskildetekniskeskole #3mworkersafety #segese



Ag Health and Safety Alliance  
Published by David Sullivan · November 27, 2020 ·  
Feedback from Olds College (Alberta, Canada) agriculture student participants: "Awesome Gear Up for Ag Team! Excellent virtual delivery!" and "One of the best presentations this year so far." This is music to our ears, after transitioning to an online platform during the pandemic. Our "virtual" team covered a lot of ag health and safety topics in only two hours, from hearing and respiratory protection to machinery safety and livestock handling. Time to celebrate Thanksgiv... See More



Ag Health and Safety Alliance  
Published by Jenna Gibbs · January 12 ·  
This month, we jumped right back into all our VIRTUAL Gear Up for Ag(TM) programs after a brief break for the holiday. The first program of the year was held at Lakeland College Canada in Alberta, with approximately 150 crop sciences and agriculture students. Mental Health continues to be reoccurring theme throughout our trainings in Canada. Thanks to our sponsors at Farm Credit Canada for their continued support of the Gear Up for Ag(TM) training and the continued content... See More



## MEET OUR TEAM

This is your hardworking Gear Up for Ag™ Team who make it possible to reach our goals.



Carolyn Sheridan  
Executive Director, Founder



Jenna Gibbs  
Director of Operations



David Sullivan  
Director of Programs



Kayla Walls  
Curriculum Developer



Alex Beach  
Virtual & Graphic Design  
Specialist



Stefan Mandić-Rajčević  
Director of Digital Learning & Innovation



Euvonne Hickey  
Photographer, Graphic  
Designer

Special thanks to University of Minnesota Veterinary Residents, August Brihn and Colin Yoder for also contributing to our work in curriculum development.

# INTERNATIONAL TEAM

International programs are an important part of our Gear Up for Ag™ goals.



Kendra Ulmer  
Canada



Peter Lundqvist & Eva Göransson  
Sweden



Ingrid Boldizsar  
Romania



Christina Estrand  
Denmark



Helle Birk Domino  
Denmark

NATIONAL CENTRE FOR  
**FARMER  
HEALTH**

**GearUp**  
for Ag Health & Safety™

 <b>Morna Semmens</b> Lead Facilitator	 <b>Sally Cunningham</b> Facilitator	 <b>Scott Mullins</b> Facilitator	 <b>Angela Couch</b> Facilitator
 <b>Tam Phillips</b> Lead Facilitator 2018-2020	 <b>Cecilia Fitzgerald</b> School Engagement	 <b>Tracey Hatherell</b> Data Coordinator	

[www.farmerhealth.org.au](http://www.farmerhealth.org.au)

Australia Team

**We are thankful to our international partners who contributed to important projects in the U.S. and abroad.**

## WHAT WE DO



**Gear Up for Ag Health and Safety™** focuses on educating the next generation of agriculture by interacting with young adults at colleges with agricultural programs. The program reaches multiple generations living and working together in agriculture through sharing of information with family and friends.

This program is applicable to any post-secondary young adult who is interested in agriculture and is attending trade schools, colleges, and universities. Benefits of the program reach those engaged in agriculture including Ag businesses, extension, Ag education, on-farm work, public health, veterinary medicine, and many more applications.

**Gear Up for Ag™ is trademarked in 5 countries!**

**US, Canada, Australia, Denmark & Sweden**

**In the last four years, this program has reached more than just individuals in agriculture.**

**In 2017, we began training health care professionals, public health care professionals, extension personnel, and safety managers.**

**In 2021, we expanded our programs to include large animal veterinarians.**

### OUR REACH

**Social Media  
Conferences  
Online  
Radio/Podcasts  
Live Streaming  
Presentations**

“

"Investing in the next generation of Ag producers is critically important to the future of a safe and healthy work environment for farmers and their families."

David Sullivan,  
Director of Programs

”



# Respiratory Protection

## SAFETY TRAINING TOPICS

### Mental Health

### ATV/Quad Safety

### Manure Gas Safety

### Heat Illness

Customized programs may include the following topics:

- Respiratory Health and Protection
- Mental Health
- Prevention Strategies
- Eye Safety
- Hearing Conservation
- Livestock Handling
- ATV
- Machinery
- Pesticides Handling
- Sun Safety & Heat Illness
- COVID-19
- Zoonosis
- Needle and safe pharmaceuticals handling
- Cold weather hazards

### Zoonosis

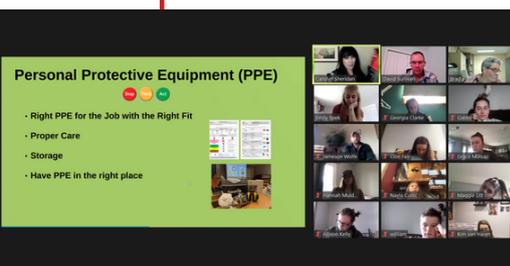
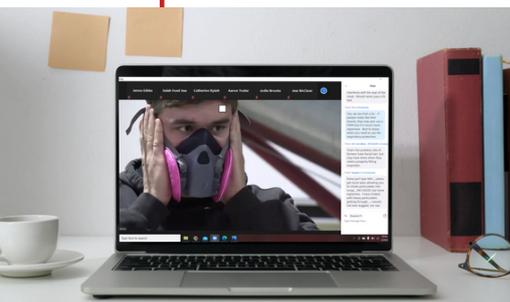
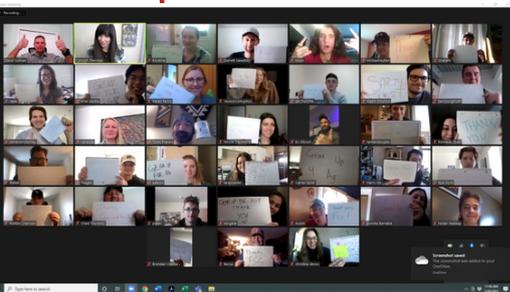
**In the last three years, we have received additional funding from partners to further evolve the following training topics:**

- Mental Health
- Zoonotic Disease Prevention and Anti-Microbial Resistance
- Hydrogen Sulfide and Manure Gas Safety
- Respiratory Protection in Response to COVID-19
- Emergency Response
- Heat Illness
- Cold Weather Hazards
- Safe ATV Design
- Common Respiratory Types in Agriculture
- Respirator Storage and Care

We modified our programs for in-person or online delivery in response to the COVID-19 pandemic.

## ONLINE PROGRAM DEVELOPMENT

The **Gear Up for Ag™ Online** course replicates the structure of the on-site program, adding the flexibility of an e-learning approach. The on-site Gear Up for Ag™ program includes presentations, printed materials, text, pictures, infographics, and discussions with participants. Similar materials (text, pictures, infographics) are divided into sections, while usual on-site discussions were transformed into discussion forums, surveys, and feedback forms. Participant engagement is tracked using the number of registrations, course enrollments, course access, activity access, and completion. During this process, we learned that additional steps, such as gamification, should be taken to increase student motivation.



### Benefits of an online learning experience:

- Participants may access all resources, even after program completion.
- Instructors can access all resources and monitor interaction and progress.
- More feedback can be provided by participants.
- Attendance and participation can be recognized, from the most basic (presence at the course) to an advanced completion certificate for those making an extra effort.
- More networking opportunities for those interested in ag health and safety through LinkedIn and ongoing mentorship.
- The aim of the online learning platform is not just to substitute the on-site training, but to offer additional depth, interaction, and continuity to the on-site course which would benefit the participants.

"Having an Online Learning experience guarantees resilience and continuity of our programs, opens the door to an even wider outreach, and allows the further development of innovative training materials".

Stefan Mandic-Rajcevic  
Director of Digital Learning and Innovation



These statistics were published in a special farm safety edition of Safety (Gibbs et al, 2021).  
Read the full article [here](#).

## PARTICIPANT DEMOGRAPHICS

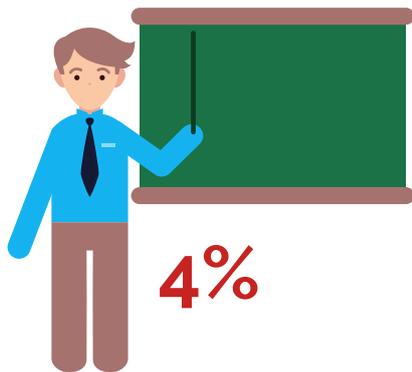
### Who do we train?

Many of our Gear Up for Ag™ programs focus on young adults, ages 18-25 years old.



55%

WILL BE RETURNING TO OWN/OPERATE THEIR FAMILY FARM OR RANCH



4%

IN AG EDUCATION



1%

IN AG SAFETY



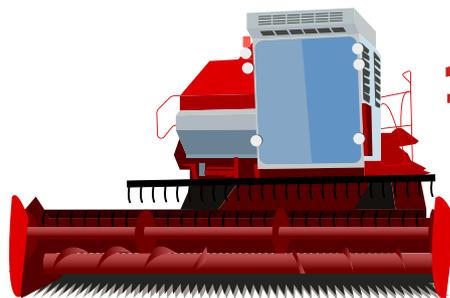
33%

INTEND TO WORK ON AGRICULTURAL COOPS OR IN AGRIBUSINESS



6%

IN GOVERNMENT OR FINANCIAL SERVICES



1%

IN AG CONSULTING

## PARTICIPANT DEMOGRAPHICS

### Who do we train?

This innovative program has provided agricultural-specific health and safety education to more than **5,000 participants (70% male/30% female)** in the past 4 years in person or through live streaming educational programs.

About half of young adult participants were enrolled in community college and university degree programs, respectively. Most (72%) stated they were concerned about the safety and health of their family and co-workers in agriculture.

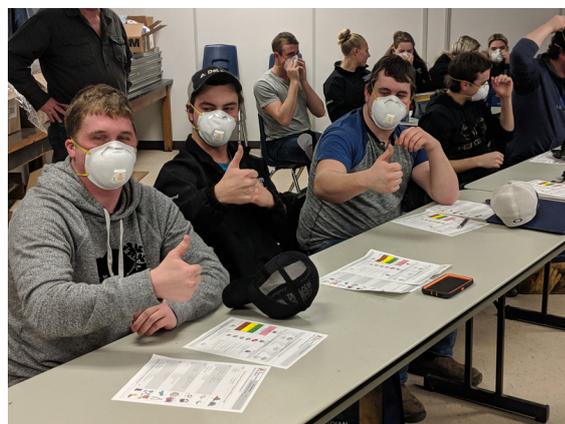
Survey data shows that 89% of participants plan to work in agriculture after they complete college and over 90% report sharing the information that they learn in class with their college peers, co-workers, friends, and family.

**The most common agricultural careers being pursued are working on a family-owned agricultural operation or for an agricultural business or cooperative. Most participants pursuing agriculture have experience in livestock production (66%).**



“ We obtain survey data from participants all around the globe, so you can see trends and notice cultural differences. . . . I think this is a big strength of our organization. ”

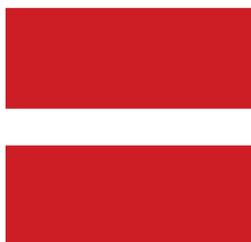
Jenna Gibbs,  
Director of Operations



# 5009 Students

Canada - 2417  
United States - 2045  
Australia - 411  
Denmark - 103  
Sweden - 33

## WHERE WE'VE BEEN INTERNATIONAL

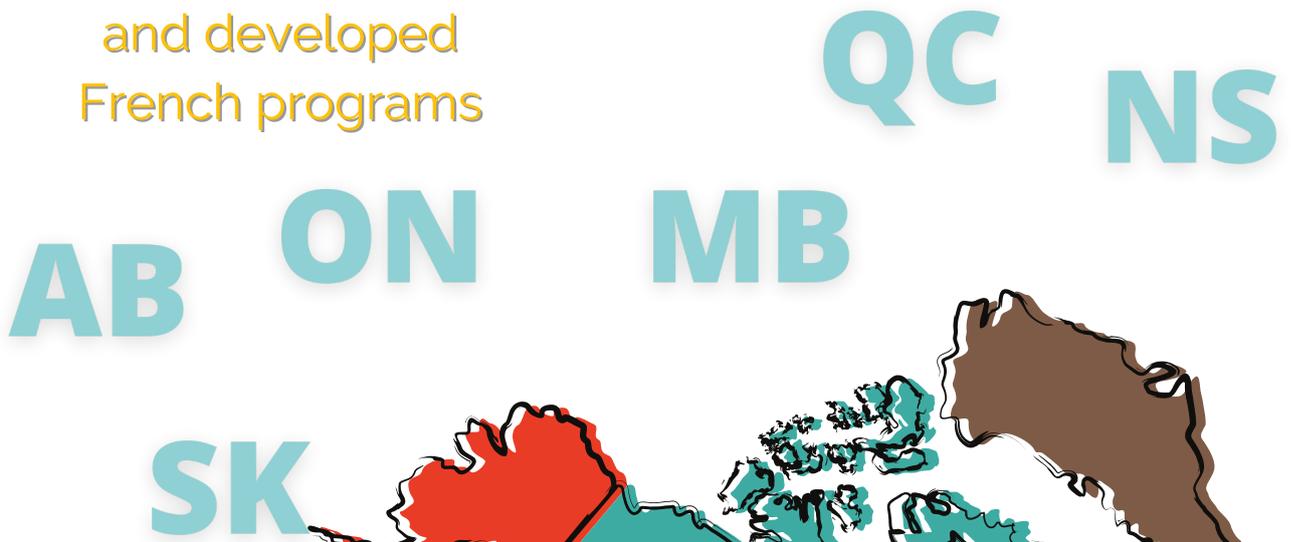


*Romania Program  
coming soon!*

Canada Data  
2,417 Participants  
6 Provinces  
64 Programs  
8 Colleges

and developed  
French programs

WHERE WE'VE BEEN  
NORTH AMERICA



US Data  
2,045 Participants  
10 States  
74 Programs  
18 Colleges/HS

and developed  
outreach materials in  
English and Spanish





# AUSTRALIA SUCCESS STORY

**NATIONAL CENTRE FOR FARMER HEALTH**

**GearUp**  
for Ag Health & Safety™

Empowering the next generation of agricultural workers



[Click to read more](#)

Agriculture and farming is widely recognised as one of the most dangerous industries in Australia.

**77%**

of students first started working/helping on farm before 15 years of age

Young people aged 15-34 years are increasingly involved in agriculture, either through paid or unpaid work [1]. Exposure to farm related health and safety hazards continues to significantly increase the risk of our young people experiencing short or long term illness associated with agriculture exposures or being killed, injured or permanently disabled.

The Gear Up for Ag Health & Safety program recognises young people are central to an innovative and sustainable future for agriculture and seeks to influence farm safety culture. The program provides an opportunity for students to reflect on their current farm safety practices and discuss important health and safety topics. Students are engaged in learning through various demonstrations and interactive activities to build their understanding of common agricultural hazards, promote health and wellbeing and empower them to improve their farm safety practices.

**79%**

of students rate their own health and safety practices on farm as very or extremely important

**32%** do not wear respiratory protection when working in a dusty environment

**26%** do not wear gloves when mixing, handling or applying chemicals



**76%**

of students have been exposed to loud noise in farm work over the last 12 months

**65%**

of students report experiencing ringing in ears or decreased ability to hear after being exposed to loud noise



Contact: Cecilia Fitzgerald  
Phone: 03 5551 8533  
Email: [nafh@wdhs.net](mailto:nafh@wdhs.net)  
or visit [www.farmerhealth.org.au](http://www.farmerhealth.org.au)

in partnership with



**2018- 2021**

**411**

**participants**

**18 programs**

**20 programs**

**scheduled for**

**2022**

**NATIONAL CENTRE FOR FARMER HEALTH**

**GearUp**  
for Ag Health & Safety™

**Morna Semmens**  
Lead Facilitator

**Sally Cunningham**  
Facilitator

**Scott Mullins**  
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**Tam Phillips**  
Lead Facilitator 2018-2020

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School Engagement

**Tracey Hatherell**  
Data Coordinator

[www.farmerhealth.org.au](http://www.farmerhealth.org.au)

**6 Gear Up for Ag™**

**facilitators**

**Read more on the**

**[National Center for Farmer Health website](#)**

# Partnerships with our colleagues from Denmark and Sweden allowed us to reach 142 students.

Check our [website Gallery](#) to see more photos.



**2018- 2019**  
**109 participants**  
3 programs  
2 Universities/Schools  
Danish Translation



## DENMARK STORY



**2018- 2019**  
**33 participants**  
2 programs  
SLU University  
Lund, Sweden



## SWEDEN STORY

# SPONSORS

Support from our sponsors comes in a variety of ways including program funding, product donations, student prizes, program development and promotion.



Ag Health and Safety education and training can be fun even though it can also be a tough topic to discuss. Our organization works with individuals, organizations, and sponsors who are interested in being part of our work to reach the next generation of agriculture. This partnership and support look different for everyone so we have many ways to be involved.

Program partners and sponsors have the opportunity to be in front of our next-generation audience by being visible in our educational presentations and all types of media and program delivery materials.

Read about our partnerships and sponsors in the following pages and learn more about becoming a program partner or sponsor [here](#).

## Individual and Family Donations

### Dale and Helen Swanson Memorial Fund



Dale and Helen Swanson were lifetime farmers in Northwest Iowa. Raising 5 children on a dairy farm, they believed in the importance of health and safety and mentoring the next generation of agriculture. This memorial donation provided funding for hearing muffs to be given to 1 student at each International Gear Up for Ag™ program.

[View more pictures](#)

# Farm Credit Canada generously supports the Gear Up for Ag Health and Safety™ program in six Canadian provinces.

FCC donation assists with program delivery expenses and additional protective equipment for the participants. Programs in different provinces continue to be customized to each region based on pre-survey results and conversations with the instructors prior to the program. In 2021, the program was extended to also include indigenous students at the University of Manitoba. Similarly to the U.S., many of these participants (over half) are involved in livestock production.

## THANK YOU Farm Credit Canada for funding all programs in Canada!

FCC has supported the development and inclusion of mental health as a safety topic in all Canadian programs. Following the program, >70% of participants felt more confident in seeking help for themselves or others experiencing mental health problems.



**Ag Health and Safety Alliance is at Assiniboine Community College.**  
Published by Carolyn Sheridan · February 8, 2020 · Winnipeg, MB, Canada ·

Assiniboine Community College has over 50 unique certificate, diploma and advanced credential programs and we were fortunate to speak with the Agriculture students this week! Interactive Kahoot quizzes and PPE demonstrations kept the students engaged for the gear up For AG day long program. A huge thank you to Assiniboine College and our sponsors for making the day successful!!  
#gearupforag #agriculture #3mcanada #farmcreditcanada #canada #assiniboineCommunityCollege





# 3M Canada, 3M US and 3M Denmark generously supports the Gear Up for Ag Health and Safety™ program

This 3M donation assists with providing each student with a Gear Up for Ag™ Personal Protective Equipment (PPE) kit. Kits vary depending on availability of PPE in each area.

## Gear Up for Ag PPE Kit

- 3M Reusable Respirator
- 3M P100 Cartridge
- N95 3M Respirator
- 3M Safety Glasses
- 3M Ear Plugs
- 3M Coverall
- Chemical Gloves



Coolibar contributes sun-safe hats to students in all programs in the US. These hats are an important part of our Sun Safety and Heat Illness message. Students are encouraged to "give up their baseball style hat for a sun-safe hat". In 2021 Coolibar donated enough sun-safe hats for each student to receive a hat.

**Coolibar Hats for Gear Up for Ag students.**  
**[Click](#) to see videos of students and their new Coolibar hats.**



We are thankful to the individual high schools and colleges that go the extra mile to provide additional funding for programs. The locations, below, have contributed full or partial funds to improve the delivery of programs by sponsoring trainings, food, or safety equipment for their students.

## HIGH SCHOOL AND COLLEGE SPONSORS

Thank you to colleges and high schools who provide funding to make the Gear Up for Ag™ programs possible.



## ACADEMIC PARTNERS

Partnership with academia is critical to the success of the program, giving us the ability to offer our Gear Up for Ag™ programs in many locations and test new evidence-based outreach strategies.



Ag Health and Safety Alliance™ works with multiple NIOSH-funded U.S. Agricultural Safety and Health Centers at Universities to deliver programs with the latest evidence based information. This partnership and support will look different for everyone so we have many ways to become involved.

In the past 4 years, our organization also successfully applied for several competitive grants and/or directly to organizations to fund our innovative ideas to improve educational programming. Typically, these grants or projects involve a great deal of evaluation and we look forward to publishing the results of our findings in scientific literature.

We are proud to work with many different partners across the globe to improve agricultural safety education.

**Thank you to our partners who  
have contributed to the success of  
the Gear Up for Ag™ programs.**



# Partners and Projects

## Story-telling tools in the Gear Up for Ag Health and Safety™ classroom: Emergency Preparedness

AHSA partnered with the Western Center to develop a story-card activity to highlight the importance of appropriate use of PPE in emergencies. These cards can be used by agricultural producers for safety discussions directly on the farm.

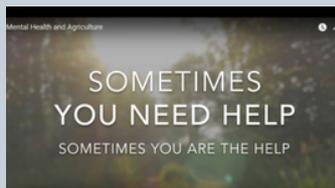
- 11 Story Card Concepts were developed (e.g., drought, earthquake, avian influenza, African Swine Fever)
- The cards and facilitator's guide were translated in English and Spanish
- The story card activity was piloted among 35 participants at the University of Arizona in 2021.



## Mental Health in Agriculture Motion Graphic Development

AHSA partnered with the Upper Midwest Center to develop a 2 min online graphic and facilitator's guide to start important conversations about mental health issues in agriculture. The project was a tremendous success.

- Over 5,000 young adults worldwide have viewed and discussed the graphic
- 50% of participants state they observe mental health signs and symptoms in friends/family in agriculture
- Mental health is now a staple topic in the Gear Up™ program
- Led to additional funding from Farm Credit Canada to promote mental health awareness



Collaboration with GPCAH led to additional funding where AHSA presented on PPE and respiratory health & protection at several agricultural safety & health courses in Nebraska, Missouri, and Iowa. These programs reached more than 500 professionals, including nurses, emergency responders, pharmacists, extension agents, safety managers, and public health students.

**In 2020 we worked with GPCAH to analyze data on 700+ young adult safety behaviors**, including roadway safety, sun protection, hearing conservation, and eye safety. This resulted in an academic manuscript. With GPCAH, we developed more curriculum on hearing conservation, sun safety, manure gas hazards (H<sub>2</sub>S), and cold weather safety—incorporating GPCAH outreach resources. To date, these topics have reached more than 2,000 students in GPCAH's region. We are currently analyzing participant feedback to evaluate the impact of GPCAH's outreach resources in the Midwestern U.S.



## Heat Illness Motion Graphic Development



In 2018, AHSA partnered with the Southwest Center for Agricultural Health, Injury Prevention, and Education to develop a Heat Illness Motion Graphic. The Graphic continues to be utilized at Gear Up for Ag™ programs - during the spring and summer months.

- The initial Heat Illness Motion Graphic was piloted among 47 agricultural participants at Texas A&M and 35 students and professionals at the Southwest Ag Center Agromedicine Course in 2019-2020
- To date, the Graphic has been displayed to more than 2,000 participants across the U.S.
- The Graphic was translated (in text and voice) to both English and Spanish
- Each summer, AHSA promotes the motion graphic on our social media channels
- The Heat Illness Motion Graphic is publicly available on YouTube and continues to be shared by the SWAG Center



## Prevention of Zoonotic Disease and Antimicrobial Disease



In 2020, AHSA partnered with a large animal veterinary resident at the University of Minnesota to develop more evidence-based content about the prevention of zoonotic disease and AMR. The new curriculum was delivered to 255 U.S. young adults in agriculture.



**92% of participants reported handling sharps on the farm**

Through this project, we learned that:

- Young adult participants in our programs are performing tasks where they interact with bacterial flora of animals.
- 29% participants said that they had gotten sick but were "unsure" if the illness was zoonotic
- The most common zoonotic diseases reported included e. coli, ringworm, and influenza
- 66% of students handling sharps started with they were <14 years old

## ATV Safety - Cultural Acceptance of Safer ATV Engineering Controls and Design



In 2019-2021, AHSA partnered with the Central States Center for Agricultural Safety and Health to design new curriculum on ATV engineering controls and to evaluate the cultural acceptance of the controls among young adults in agriculture.

- The new curriculum was piloted among 200 U.S. participants and 380 Canadian participants in 2020-21
- AHSA designed new 'ATV Safety: Engineering Controls' motion graphic
- The initial pre-survey analysis found that 65% of participants were using ATVs regularly on the farm and over half were doing before 14 years old
- Half the students reported previously rolling an ATV & several stories were shared in the classroom
- AHSA is currently working on the evaluation of the project findings with regards to changes in safety behaviors and cultural acceptance of these engineering features

**"My biggest take away from this training was the ATV Safety Features. It is really something we should be considering . . . ."**

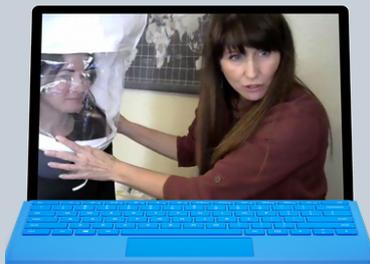
**- Female participant, IA**



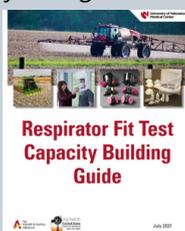
## Development and Piloting a Respirator Fit Test Train-the-Trainer Program

In 2019, AHSA staff worked with the Central States Center for Agricultural Safety and Health to develop a Respirator Fit Test Capacity Building Workshop Guidebook and deliver several workshops to provide training for respirator-fit testing for health care providers and safety professionals.

- AHSA developed a respirator fit test guidebook and workshop. The content was piloted among 200 students and professionals at the University of Iowa, University of Nebraska Medical Center, and the University of Missouri-Kansas City agricultural safety and health training courses in 2020.
- Following the pilot workshops, 86% of participants reported that they were now confident in recommending a respirator and performing a fit test. This was a large improvement since only 19% of participants were confident prior to the training.
- In 2020 AHSA partnered with Iowa's Center for Agricultural Safety and Health and Iowa State Extension to host additional respiratory protection and fit testing virtual workshops in the state of Iowa. There were 33 attendees, and the workshop significantly increased the state's capacity for respirator-fit testing agricultural workers.



AHSA executive director, Carolyn Sheridan, delivering a workshop virtually during the COVID-19 pandemic.



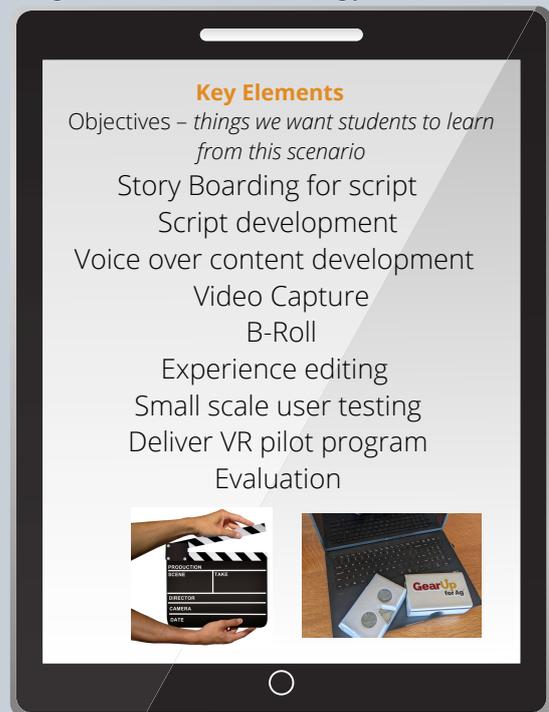
## Virtual reality tools for agricultural health and safety training

**Program Description:** Development of an Ag health and safety virtual reality-based learning tool.

Survey results from 1537 students who completed the Gear Up for Ag pre-survey indicate **66% of the students started working with large animals before the age of fourteen and 70% of the students continue to work with large animals.**

Based on these results the addition of virtual reality will add an innovative and unique method of getting the message to the participant.

The livestock handling topic will benefit from real-life experiences which can be depicted through immersive technology.



The article: *Virtual Reality in the Classroom is Becoming the New Norm* describes how new types of immersive learning technology are being used in the classroom. "From early education to graduate level programs, VR has been providing new learning experiences. The educational community has embraced VR with enthusiasm, with applications ranging from virtual field trips to hazard training."



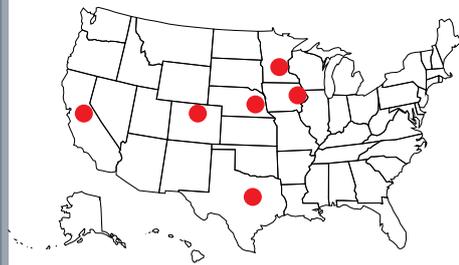
360 videos are accessible with cardboard viewers and a cellphone.



## Rapid Development of Respiratory Protection Guidance for the Agricultural Community During COVID-19

In 2020, AHSA personnel collaborated with four NIOSH-funded U.S. Agricultural Safety and Health Centers to develop two important resources in response to the pandemic. These included a "cloth face covering for agricultural workers" fact sheet and a guidance document about conserving respirators during the COVID-19 pandemic. The fact sheet highlighted differences between the face coverings and certified respirators. Both resources were disseminated on our website, to educational contacts, in trainings, and over social media.

**In 2018-21, AHSA received funding from SIX of eleven U.S. Ag Safety and Health Centers**



The first infographic shows risk levels for COVID-19 spread based on distance from a carrier. The second infographic details best practices for respirator use, including key points and a hierarchy of controls. The third infographic explains the limitations of cloth face coverings and provides additional resources.

### Development of Respiratory Resources

- Interactive educational resources in the ag health and safety classroom
- Motion graphic focusing on proper respiratory storage
- AHSA staff worked with young adults at the ISU Ag450 Farm PR team on a series of photos displaying proper donning and doffing of several respirator types for the infographics.
- In Spring 2021, ASHA developed interactive infographics titled 'Common Types of Respirators Used in Agriculture' and a motion graphic titled 'Proper Respirator Storage'.
- These graphics were initially piloted among student participants at the University of Missouri-Kansas City pharmacy program.

*Using my skills to promote safe practices in agriculture is an honor - I hope that my work will make an impact for future farmers.*

-Alex Beach, AHSA Graphic Design Specialist

**Motion graphic**



Interactive infographics allow the viewer to interact with the data by pointing, clicking, or scrolling



Iowa State University Extension  
Development of Respiratory Health  
Educational Content for  
Cooperative Extension  
[Click to read more.](#)

There was a tremendous need for more qualified people to perform respirator fit tests during the COVID-19 pandemic.

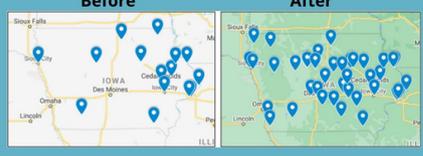
For healthcare workers...  but also workers in agriculture. 

**Respirator Fit Test Capacity Building Guide**



In 2020, we trained 33 individuals about respirators and how to fit test in the first virtual workshop of its kind.

**Before** **After**



The virtual workshop led to a dramatic increase in capacity for providing respiratory protection fit tests in Iowa.



**Before** **After**

12% → 75%

Increase in participants who felt confident in initiating a conversation with their agricultural clients/patients about selecting and using different types of respiratory protection.



Development and Delivery of  
Respiratory Health Outreach  
Materials for High Plains  
Intermountain Center



In 2019, AHSA staff worked with the High Plains Center for Agricultural Health and Safety to develop a fact sheet with tips on how to use an N95 filtering facepiece respirator. The factsheet was provided to 25 participants enrolled in Gear Up for Ag programs at Aims Community College and Colorado State University. It is now publicly available in both English and Spanish.

**BREATHE BETTER WITH AN N95 RESPIRATOR**

Dusty environments on the farm or ranch can irritate your nose and lungs. Exposures to dusts, molds, and germs can cause permanent damage to your lungs and respiratory system. Your two strap, NIOSH-approved N95 filtering facepiece respirator protects you by filtering out 95% of small particles in the air.



**Wear it during tasks that produce dusts or solid airborne particles:**

- Moving or cleaning grains or hay
- Changing animal bedding
- Working outdoors during wildfire events or controlled burns
- Clearing up after floods or in moldy environments



**An N95 respirator will not protect you from hazardous vapors, fumes or gases. You need a different respirator when:**

- Welding or painting in poor ventilation
- Entering manure pits or areas where oxygen levels may be low
- Applying pesticides that require more protection



**Make sure your N95 fits.**

- Make sure it fits your face, chin, and nose.
- Shave so it seals to your skin.
- Put the face piece on first, then pull the straps over your head.
- One strap should be over your ear, the other under.
- Air should come through the N95 when you breathe, not around the edges.

**DISPOSE OF YOUR RESPIRATOR IF IT BECOMES DAMAGED, SOILED OR WHEN IT BECOMES HARD TO BREATHE THROUGH IT.**



The Ag Health and Safety Alliance provided the Gear Up for Ag Health and Safety™ program in Ontario Canada through our collaboration with **Workplace Safety & Prevention Services (WSPS)**. The program provided agricultural-specific health and safety education, interactive demonstrations, distribution of PPE, and evaluation to students in 2018, 2019 & 2020. The **STOP, THINK, ACT** preventions strategies were added to the Gear Up for Ag presentation.

**Machinery Safety**



**What is Your Plan**




Collaboration with the U.S. Ag Centers has impacted outreach program success. Projects are funded through outreach partnerships, emerging issues grants, and pilot project grants from the Centers.

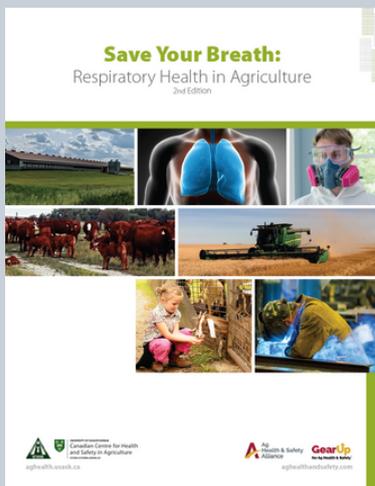
Many of these projects are conducted with support from the U.S. Agricultural Safety and Health Centers, which are supported in part by Grant Number 5 U54 OH007548 by CDC/NIOSH.



UNIVERSITY OF SASKATCHEWAN

Canadian Centre for Health and Safety in Agriculture

CCHSA-CCSSMA.USASK.CA



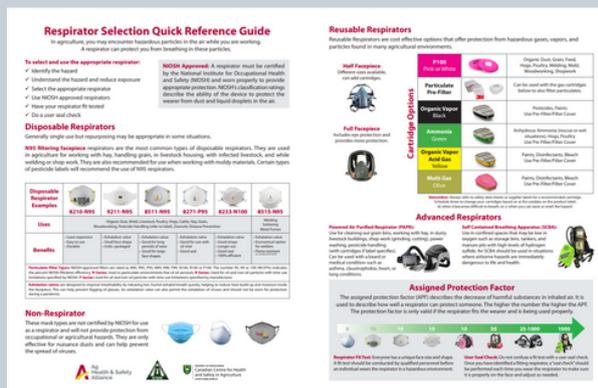
Ag Health and Safety Alliance partnered with the Canadian Centre for Health and Safety in Agriculture (CCHSA) to develop the 2nd edition of the **"Save Your Breath: Respiratory Health in Agriculture"** resource.

This is designed to be the main resource to accompany the respiratory portion of the Gear Up for Ag program and is also part of the Online Gear Up for Ag program. This includes 23 topics and is designed to help better understand respiratory hazards that exist in agriculture and assist in applying a combination of controls to protect respiratory health.

The online and printed version of the resource is available for students and the agricultural population. [Click here](#) to view the "Save Your Breath - 2nd Edition" resource.

The Save Your Breath resource includes a **Respirator Selection Quick Reference Guide** that is designed to assist the Gear Up for Ag students in selecting the appropriate respirator for the job. View this guide [here](#).

This two-page resource can be used independently of the larger resource and can be printed for distribution during all types of educational programs that address protection from respiratory hazards.



Look for the **US version of the Save Your Breath resource in 2022**. With the support of funds from CS-CASH, Ag Health and Safety Alliance will modify this resource to include US-based resources, links, and QR codes. The resource will be valuable for various agricultural health and safety programs and projects in printed and online format with clickable links.

Examples of these programs and projects include the annual CS-CASH Ag Health and Safety Course, University of Iowa Agricultural Health course, Respirator Fit Test Workshops (virtual and onsite), community events such as Husker Harvest Days, conferences, and other outreach activities.

This project was made possible through a partnership with the Canadian Centre for Health and Safety in Agriculture (CCHSA), Canadian Agricultural Safety Association (CASA), and Ag Health and Safety Alliance.



CASA | ACSA  
CANADIAN AGRICULTURAL SAFETY ASSOCIATION  
ASSOCIATION CANADIENNE DE SÉCURITÉ AGRICOLE

# Industry Projects

## National Pork Board

### Respiratory health symptoms and respiratory protection behaviors of young adults engaged in swine production.

In 2020-2022, the National Pork Board provided support for ongoing evaluation of young adult swine/livestock producers' survey responses on respiratory health, use of respiratory protection, and measured effectiveness of a respiratory health training program. This project funded the development of a survey databased of more than 700 young adults involved in swine/livestock production. This is the largest database to date with regards to this population.

Preliminary data analysis has found that the majority of these young producers are already wearing N95 respirators (70%) and cartridge style respirators (30%) on the job, and that the COVID-19 pandemic actually increased overall reported use of respirators and awareness of respiratory health. Most young adult livestock producers (78%) stated that they found value in receiving respirators as part of an agricultural education program. We look forward to continue our work with the Pork Board to modify and continue training this important group of young workers.



## Compeer Financial

In 2020-2021, Compeer Financial provided funding for three Gear Up for Ag programs in one high school and three community colleges in Illinois and Minnesota. Compeer provided funding for staff time related to curriculum development and program delivery, as well as the protective equipment given to participants.

We believe that more than 175 participants and 10 instructors benefitted from this support.



Our organization works with many public and private organizations to deliver our programs. Our team includes partnerships with individuals and organizations who are interested in this type of education and interaction to promote health and safety at the local, regional, national and international levels. In the last three years, our organization has successfully applied for several competitive grants and/or directly to organizations to fund our innovative ideas to improve educational programming. If you are interested in a potential collaboration, funding idea, or in a sponsorship, please reach out to the AHSA director of operations at [jennagibbs@aghealthandsafety.com](mailto:jennagibbs@aghealthandsafety.com).



# LIVE RADIO AL IN THE AFTERNOON

AM 1420 102.7 FM  
**KTOE**  
NEWS SPORTS TALK

**EVERY FRIDAY AT 4PM**

Carolyn Sheridan has been a weekly guest since March 2020 on the **Al in the Afternoon Radio Show.**

The show is a fun way to talk about important ag health and safety topics along with promoting resources and partner organizations. Look for Jenna Gibbs and other team members to join Al in the Afternoon in 2022. The show is streamed on Facebook and can be viewed later on our Facebook page. <https://www.facebook.com/aghealthandsafety/>

## TOPICS

- Respiratory Hazards
- Heat Illness
- Sun Safety
- Electricity Safety
- Farm Ponds
- Shop Safely
- Grain Bin Safety
- Farm First Aid

And Many  
More topics

- Eye Safety
- Arthritis/Older Farmers
- Harvest Safety
- Hearing
- Livestock
- Needle Sticks
- Hazardous Gases
- Cold Weather Hazards

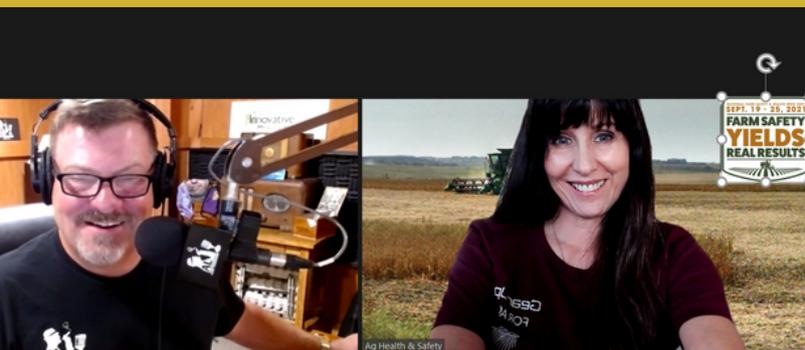
### HEALTH AND SAFETY FIRST

WITH CAROLYN SHERIDAN, BSN  
all things safety, in the fields and on the farm

“

Live as though you'll die tomorrow, but farm as though you'll live forever.

Jon Marsden

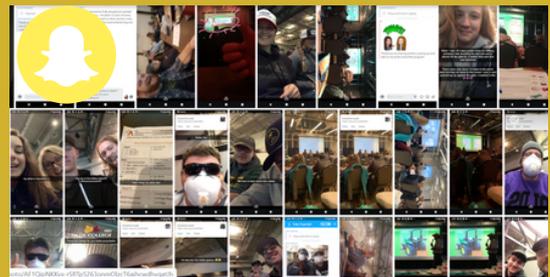


zoom

# OUR REACH

# SOCIAL MEDIA

- Each year, our social media accounts have reached **100,000 – 300,000** through Ag Health and Safety Alliance's Facebook and Instagram accounts.
  - As of December 2021, we have 878 followers and 790 people like us on Facebook
  - 300 followers on Instagram.
  - All posts and messages on these platforms are dedicated to the promotion of Gear Up for Ag™ programs and health and safety messages.
- In 2021, we added a LinkedIn Account to connect with young adults graduating high school or college with agricultural professional goals.
  - We are connected with more than 30 young professionals in agriculture on LinkedIn.
- We have endorsed several young professionals on the LinkedIn platform for their commitment to agricultural safety and health in their field after the completion of our program.



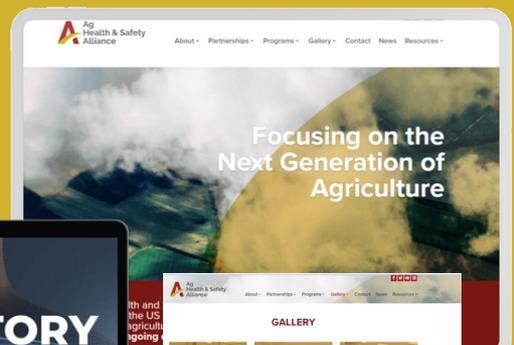
- **Facebook:** facebook.com/aghealthandsafety
- **Instagram:** instagram.com/aghealthandsafetyalliance/
- **Snap Chat:** GearUpForAg
- **Twitter:** @ahsa\_aghealth

# WEBSITE

AHSA website includes information about our organization, a large gallery of Gear Up for Ag photos, fun videos, sponsor and partner information, and many resources

- COVID-19 resources
- Topic-based resources
- Mental Health resources
- Youtube Videos
- Program planning assistance materials

**WEBSITE LINK:** [aghealthandsafety.com/](http://aghealthandsafety.com/)



# CONTACT US

Connect with us to find out more about our program and ways to partner to reach the next generation of agriculture.

[www.aghealthandsafety.com](http://www.aghealthandsafety.com)

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**Stefan Mandic-Rajcevic, Director of Digital Learning and Innovation**

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A special thank you to our board of directors who provide support to our nonprofit organization.

**Click to learn** more about our board members.