



The Agricultural Health and Safety Network

SPRING 2022 EDITION #51



UNIVERSITY OF SASKATCHEWAN
Canadian Centre for Health
and Safety in Agriculture
CCHSA / CCSSMA, USASK.CA



NetworkNews

THE NETWORK providing agricultural occupational health and safety information and programs to Saskatchewan farm families since 1988.

Let's make 2022 our safest season on the farm

Make 2022 your safest season on the farm yet! It is easy to fall out of safety habits after a winter of not being out into the field. As you head out this spring, take some time to refresh and review safety practices around the farm with your family and farm workers. In this edition of the Network Newsletter you will find quick tips on ATV and Road Safety along with a reminder that overhead power lines and large farm machinery don't mix. We are also highlighting current and ongoing research at the Canadian Centre for Health and Safety in Agriculture (CCHSA) in this edition, featuring articles on the Ergonomics Lab and the *Take a Break from the Shake: Farm Machinery Operator Interventions*.

As we move into more busy times on the farm, and potentially more stressful, don't overlook your mental health. When times are busy it can be all too easy to place your mental health on hold, but this is to our own detriment, instead take a step back and take time for yourself. The Agricultural Health and Safety Network has a variety of Mental Health resources available on our website aghealth.usask.ca.

The Network News



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SPRING 2022

Asthma and Farm Life

Article by Christianne Blais, 4th Year Medical Student, University of Saskatchewan

While spring marks the start of warmer weather and a new growing season, it can, unfortunately, provoke asthma and seasonal allergies.

Asthma is a chronic respiratory condition in which different triggers cause narrowing and inflammation of the airways. When air cannot move in and out of the lungs, as easily as normal, symptoms can develop such as chest tightness, cough, shortness of breath, and wheezing. Triggers can range from a few to many factors within our environment; for example, allergic asthma is caused by exposure to allergies like pollen, animal products (e.g. dander, feathers), dust, and insects (e.g. mites). Allergic asthma differs from non-allergic asthma based on the specific immune system response to triggers. The cause of non-allergic asthma remains unclear, but symptoms in these individuals can result from exposure to smoke (e.g. cigarette, wood), dust, animal feces, pesticides or other chemicals.

Research has shown that children raised on farms since before they were 1 year old, actually, have a lower risk of developing asthma. Regardless, the risk is never zero and people can develop this condition in adulthood. For those with asthma, farm life can be challenging in that many triggers surround them, and the workplace and home are one and the same. It is not as simple as avoiding certain animals or places; one still needs to make a living and moving is not a possibility. There are several options that can help to reduce trigger exposures and to prevent flare-ups:

QUICK TIPS

- 💡 Know what your asthma medications are, and when and how to use them
- 💡 Work in well-ventilated areas
- 💡 Use a respirator when cleaning, handling grain, or working in animal-housing areas
- 💡 Limit time spent in dusty areas or where chemicals have recently been used
- 💡 Regularly remove animal waste to reduce ammonia build-up
- 💡 Wash your work clothes regularly and avoid wearing them at home



Medications have a role to play in leading a healthy, comfortable life with asthma. Rapid-relief inhalers quickly treat symptoms by dilating the airways and allowing better airflow.

Long-term control inhalers work differently by hopefully preventing symptoms altogether.

These controller medications are typically combination products that provide anti-inflammatory effects while also relaxing muscles to open up the airways.

For more information, check our Respiratory Health in Agriculture resource or consult your family physician. Our resource features information on different respiratory health concerns as well as a quick reference guide of the many respirator options and how to choose the best one for you to work safely.



Farm ATV Safety



ATVs are used for a variety of tasks around the farm including checking and herding livestock, hauling small loads, and mowing grass in addition to recreational uses. However, ATVs, like all other farm equipment, pose a significant safety risk if not operated appropriately.



Most farm ATV incidents result from:

- Loss of control of ATV
- ATV rollovers
- Operator being thrown from the ATV
- ATVs colliding with a tree or other obstacles
- Operator not wearing a helmet or protective equipment
- Inexperienced operators

ATVs are different from other farm equipment and vehicles as they are driver active, meaning that the operator's body movements help to control the ATV similar to a motorcycle or even a bicycle. Driver-active vehicles such as ATVs require a combination of skill, good judgement, attention, and physical strength to safely operate.

ATVs have several characteristics that can contribute to increased risk factors compared with other vehicles:

- 👉 Large low pressure tires
- 👉 High centre of gravity
- 👉 Fixed rear axle
- 👉 Limited protection for operator



SCAN THIS CODE
AND CHECK OUT
THE ATV SAFETY
2-MIN VIDEO!

Created by Ag Health & Safety Alliance™



To help stay safe when operating an ATV on the farm consider the following tips:

1. Wear appropriate gear
 - a. ATV-appropriate helmet, NOT a bike helmet
 - b. Goggles
 - c. Sturdy footwear with the laces secured
 - d. Gloves
 - e. Suitable clothing that is not too baggy and could get caught on the ATV or environmental objects
2. Perform a Pre-Ride check to ensure the ATV is safe working order
3. Know how to safely operate an ATV

Children under the age of 16 have an increased risk of injury and death on ATVs.



Farm Work is Tough Enough: Musculoskeletal Disorders and Task Difficulty Among Rural Saskatchewan Farmers

Research Question:

How are work-related functional demands affected by musculoskeletal disorders (MSDs) in rural Saskatchewan farmers?



- Musculoskeletal Disorders (MSD) are injuries or disorders to the muscle, nerves, ligaments, or bones.
- Worldwide, 91% of farmers experience some type of MSD in their lifetime.
- MSDs are characterized by persistent pain and functional limitations.
- Repetitive motion, excessive force, awkward posture, and prolonged work can cause and worsen MSDs.
- However, the effect of pain and injury, and extent of functional limitations, is not well defined.

What we did:

Online survey measured:

- MSD location on body
- Work tasks
- Difficulty performing work



72 participants surveyed:

- Average age: 40
- 58% men / 42% women
- 80% grain
- 36% beef cattle
- 22% dairy cattle

What we found:

MSD Location

- Shoulder (75%)
- Neck (65%)
- Knees (61%)
- Lower back (58%)



MSD and Task Difficulty

Shoulder pain caused difficulty when:	Low back pain caused difficulty when:
Operating ATVs	Repetitive bending
Operating power tools with hands	Operating power tools with hands
Lifting objects above or below waist	Working with hands on the ground
Working with hands above waist	Shovel or pitchfork

Spotlight on Ergonomics



**Musculoskeletal
Health &
Ergonomics
Lab**

The Musculoskeletal Health and Ergonomics (MHE) Lab is a new research group housed in the Ergonomics Lab space in the CCHSA, led by Dr Angelica Lang. The vision of the MHE Lab is to improve musculoskeletal health and quality of life of people around the world, but with a focus on Saskatchewan.

Our goal is to understand how movement and biomechanics are related to injury, musculoskeletal health, and work. Most recently, we have surveyed farmers across Saskatchewan to understand how their current pain or injuries are influencing their work and the results are outlined in the proceeding infographic. In the future, we plan to visit Saskatchewan farms to measure motion during farm work to better understand how injuries could happen, how to prevent them, and how to best return farmers to work after pain or injury.



For more information, visit our website:

<https://research-groups.usask.ca/ergolab/index.php#AbouttheErgonomicsLab>

Spotlight on Electrical Safety

A friendly reminder this spring as you head out into the fields to Look Up and Live! Overhead power lines and large farm machinery don't mix. In the last 10 years there have been more than 6,000 powerline contacts in Saskatchewan. Overhead line contact accidents are preventable. Knowing where overhead lines are on the farm and the size of your machinery can help prevent overhead line accidents.

Check out the *Electrical Safety on Saskatchewan Farms Resource* available at <https://cchsa-ccsma.usask.ca/aghealth>

Electrical Safety on Saskatchewan Farms

KNOW THE HEIGHT OF YOUR EQUIPMENT

Record the height of your equipment for quick reference here:

Air Seeder (in/out of transport mode)

Sprayer (in/out of transport mode)

Cultivator (in/out of transport mode)

Tractor

Trackhoe/Backhoe

Other

Grain Truck

Silage Truck

Bale Hauler

Combine

Grain Auger (fully upright)

Other

Research Highlight: Long COVID-19

Some people experience symptoms that last for weeks or months with after an infection with coronavirus (COVID-19). This is known as Long COVID or Post-COVID Syndrome. The length of time it can take to recover from these symptoms can be different for everyone. Many people feel better in a few days or weeks, but for other people, the symptoms can last for much longer.

People who had very mild symptoms can still have long-term problems.

There can be many symptoms that occur after a COVID-19 infection. Common symptoms include extreme tiredness (fatigue), shortness of breath, headaches, brain fog (a feeling of being mentally slow, fuzzy or spaced out), dizziness, pins and needles, depression, anxiety, ringing in the ears, sleep problems, and heart palpitations. Because these problems can occur even in people who had not had a COVID infection, researchers at the University of Saskatchewan and the Vaccine and Infectious Diseases Organization (VIDO) have launched an app-based study to look at how often and how severe these symptoms are in Saskatchewan adults. We also are interested in the kinds of health care services and treatments people are using to manage their symptoms. This information will allow us to understand the specific needs of people with Long COVID so that we can better plan services to meet the needs of our population.

MORE INFO?

Contact us at:
sklongcovid@usask.ca

PARTICIPANTS NEEDED Help us understand COVID!

SASK LONGCOVID

We are looking for volunteers with various experiences with COVID-19 to participate in a Long COVID study. ALL adults aged 18 and over are invited to participate.

A team of researchers and clinicians from VIDO and the University of Saskatchewan have designed an app to understand the COVID-19 experiences of all people in Saskatchewan.

Who Do We Need?

- Those who have **never** had COVID-19
- Those who **have had COVID-19 but don't have any lingering symptoms.**
- Those who are **experiencing Long COVID**

Interested in Participating?

1 Download Ethica app
(Scan QR code below)

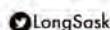
2 Create an account

3 Enter study code: **1913**



Need help? Contact us: sklongcovid@usask.ca

This study has been approved by the University of Saskatchewan Behavioural Research Ethics Board #2975



www.sasklongcovid.com



Mental Wellness Short Video Series



It is no secret that Saskatchewan producers experience many unique stressors that can have a negative impact on one’s mental health. Weather and uncertain crop yields, financial insecurity, and isolation are all common throughout the agriculture sector. As a result, farmers and their families are susceptible to high levels of mental health concerns, including chronic stress, depression, anxiety, and suicide. It is more important than ever to have appropriate tools and supports available as we continue to increase knowledge and awareness about mental health in agriculture.

The Canadian Centre for Health and Safety in Agriculture, in conjunction with Bridges Health, have developed these videos to provide information and helpful strategies on how to improve resilience and prioritize mental wellbeing. This resource was made possible through the Farm Safety Program, which is funded by the Governments of Canada and Saskatchewan through the Canadian Agricultural Partnership.

SHORT VIDEO SERIES INCLUDE:

- POSITIVITY PERSPECTIVE
- HEALTHY BOUNDARIES
- MINDFULNESS
- TOUGH TALKS
- POWER OF VULNERABILITY

WATCH THESE AND OTHER VIDEOS AT THE LINK BELOW

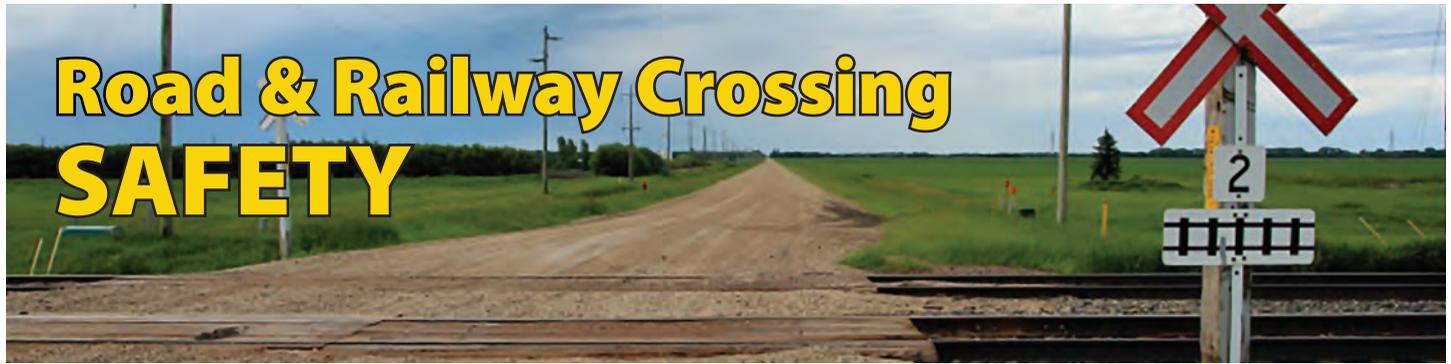


<https://cchsa-ccssma.usask.ca/aghealth/mental-health-in-agriculture/mental-wellness-short-video-series.php>

<p>HEALTHY BOUNDARIES</p> <p>Healthy boundaries are an important way to protect our time, energy, and overall mental health. Learn important tips of how to say “no” and maintain healthy personal boundaries.</p> <p>LENGHT OF VIDEO: 00:04:09</p>	<p>POSITIVITY PERSPECTIVE</p> <p>Keeping a positive perspective in the face of adversity and challenging times allows us to focus on hope, optimism, and gratitude. Identify ways to choose positivity each day and incorporate it into our regular routines.</p> <p>LENGHT OF VIDEO: 00:06:16</p>	<p>STRESS RESPONSE: BREATHING EXERCISES</p> <p>When we respond to stress, our bodies experience a number of physiological reactions, including increased breathing. Walk through guided breathing exercises, including coherent breathing and box breathing, which can be utilized to assist in relaxing and grounding ourselves during stressful situations</p> <p>LENGHT OF VIDEO: 00:06:49</p>	<p>MINDFULNESS</p> <p>Our bodies and brains are constantly on the go, quickly moving from one thing to the next due to all of the roles and responsibilities we have on the go. Mindfulness, which is the ability to be fully present and “pay attention on purpose,” can be practiced intentionally on a regular basis through these exercises.</p> <p>LENGHT OF VIDEO: 00:07:42</p>	<p>UNDERSTANDING & ELIMINATING STIGMA</p> <p>The stigma that exists surrounding mental illness still prevents individuals from speaking openly about their struggles and seeking support when they need it. Learn about the key elements of both internal and external stigma and how speaking openly can help break the cycle.</p> <p>LENGHT OF VIDEO: 00:05:57</p>
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Disclaimer: These videos are not intended to be utilized in crisis situations. If you or a loved one is experiencing a mental health crisis or thoughts of suicide, please contact one of the following helplines: **911, Saskatchewan Suicide Hotline: 1-306-525-5333, Farm Stress Line: 1-800-667-4442**





Road & Railway Crossing SAFETY

Spring means heading out into the field to kickstart the 2022 growing season. As you start shifting out of winter and hauling machinery into the field for seeding keep road safety in mind. To avoid collisions when transporting farm machinery on public roadways:

- 1 **Make sure** machinery is visible by utilizing lighting, reflectors and slow moving vehicle signs.
- 2 **Use** your safety equipment! Turn on lights especially at night, signal well in advance when turning so other motorists are aware. Keep reflectors and slow moving vehicle clear of dust and dirt so they are visible to others.
- 3 **Drive** defensively. Beware that traffic behind you will be trying to pass.
- 4 **Change** travel times to avoid peak roadway use or plan an alternate route where heavy traffic is less likely.
- 5 **Use** pilot vehicles.
- 6 **Occupy** the full lane, don't straddle the shoulder.
- 7 **Don't drive** with all field lights on as this may confuse other drivers.



Field to field yield to trains

Farm machinery operators need to stay alert where field and farmstead access roads cross train tracks. These farm crossings are largely passive (no warning lights, bells, gates or signs).

Stop safely at all farm crossings

- Because of their size, trains appear to be much further away and travelling much slower than their actual speed.
- Stop no closer than 5 metres from the nearest rail.
- While stopped, look carefully in each direction for approaching trains, moving head and eyes to see around obstructions such as mirrors, windshield pillars and implements.

Is it safe to go?

- Make sure there is enough room on the other side of the train track or tracks to fully clear without stopping.
- Make sure that any towed machinery does not become unhitched while crossing.
- Watch during the crossing that no loaded material becomes dislodged and falls onto the train tracks.

Remember!

- Some farm machinery does not transport well across farm crossings.
- Do not attempt a crossing with low-slung machinery that can become lodged on crossings.
- Before moving new machinery over farm crossings, make sure it can be safely moved over the crossing.

Source: CASA Road Safety



Canadian AgriSafety Applied Science Program



Take a Break from the Shake

Producers and farm workers are exposed to whole-body vibration (WBV) on a regular basis when operating farm machinery. The short term effects of WBV include: →



All of these effects can increase your risk of an accident or error during or following operation of farm machinery, including equipment and machine-related injuries, falls or crashes.

Short term effects of WBV

- Cognitive impairment
- Stress
- Loss of balance
- Reduced sense of self-movement and body position
- Reduced sensory and motor responses

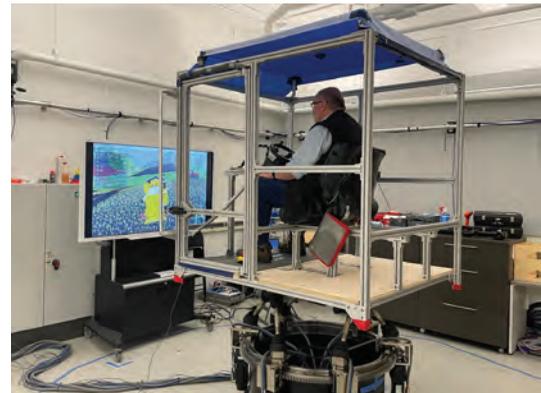
How to reduce the risks from WBV?

As producers, you need to operate farm machinery and often for long periods of time. There is no way to completely eliminate the hazard of WBV in agriculture, but there are ways to reduce your risk of exposure and injury when spending long days operating machinery.

A research project is currently underway at the Canadian Centre for Health and Safety in Agriculture's (CCHSA) Ergonomics Lab to determine how different types of activity breaks throughout the day could help reduce the risk of back and hip pain, egress injuries, and operator-error-related collisions that result from exposure to WBV.

An activity break provides a procedural control that is simple to implement on any farm with no additional cost for producers and may help to reduce the health and safety risks associated with long periods of exposure to WBV and sitting.

For more information on WBV, please visit:
<https://research-groups.usask.ca/ergolab/>



We need your help!

We are looking for agricultural producer volunteers to take part in two crucial parts of this project:

1. In-lab vibration testing
2. On-farm rest break activities

Please contact:
 Dr Dena Burnett
 306-241-8727 dena.burnett@usask.ca



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Contact: 306-966-1683 | nadia.smith@usask.ca | agrivita.ca

The Take a Break from the Shake: Development & Evaluation of Interventions for Farm Machinery Operators Project is one part of Agrivita Canada Inc.'s Canadian AgriSafety Applied Science Program, which is supported under the Canadian Agricultural Strategic Priorities Program (CASPP).

Agricultural Safety and Rural Health SARM 90th Anniversary Scholarship

Scholarship Winners

The winners of the 2021-2022 SARM Scholarships of \$1,500 each were announced at the 2022 SARM Convention. The proud recipients were **Danielle Dordu** from Shaunavon, RM No. 79 of Arlington and **Caitlyn McMunn** from Star City RM No. 428.

Background

Since 1996, The Canadian Centre for Health in Agriculture (CCHSA), University of Saskatchewan through its Founding Chairs Program has maintained the Agricultural Safety and Rural Health SARM 90th Anniversary Scholarship.

In 2013-2014 school year, CCHSA started offering two \$1500 Student Scholarships.

Who is eligible to apply for 2023?

The SARM Scholarship is open to all students enrolled in grade 12 in the fall of that particular year, who are planning on studying at a post-secondary school in Saskatchewan or out of the province, if, the course they're enrolling in is not offered in Saskatchewan.

A few of the requirements for eligibility also include completion of the last two years of high school in Saskatchewan, have a farm background or have parents or guardians who own or rent land and pay taxes to a rural municipality and live in a rural area. Students can apply using the online application forms plus writing and submitting a 1,000-word essay on either (a) *The importance of Safety and Health on Our Farm* or (b) *Safety and Health Hazards on Our Farm*.

HIGHLIGHTS FROM 2022 WINNERS



Danielle Dordu, highlighted on her essay titled **The Importance of Safety and Health on Our Farm**, that *"Safety and health are important to every aspect of the farm. Safety practices keep our farm running efficiently and help us make a profit. Even the best operations can make improvements and you should never*

stop learning. Seeing different operation's health and safety practices and taking those back to your operation helps you collect information to base your decisions on. Keeping people and livestock safe and healthy keeps our farm running and will help it continue in the future."

Danielle Dordu, Shaunavon, RM No. 79



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Caitlyn McMunn, with her essay on **Health and Safety Hazards on Our Farm**, emphasized that *"No farm is perfect when it comes to safety. Accidents do happen. However, investing time and resources to prevent future accidents is important. My family's farm safety strategies will continue to evolve as we learn and*

access more information. Utilizing PPE, understanding WHMIS, and keeping informed on diseases is worth the time spent. Communication is a great preventative and active measure to help everyone on the farm. In addition, making sure all personnel are properly trained and comfortable in operations is instrumental in keeping our farm safe. When safety is incorporated into everyday practices, risk of accidents is dramatically decreased."

Caitlyn McMunn, Star City RM No. 428

APPLICATION DEADLINE:

The deadline for the 2022-2023 SARM scholarship is on or before **JANUARY 14, 2023**, by midnight (CST). For more information on the SARM scholarship and/or our programs visit aghealth.usask.ca

APPLY FOR THE 2022-2023 SARM SCHOLARSHIP



If you are a grade 12 student planning on studying at a post-secondary Saskatchewan school in the fall of 2022, you should consider applying for our scholarship. This year there will be **two scholarships of \$1,500 available**. The deadline is **January 14, 2023** by midnight (CST). The application includes a 1,000 word essay on one of the following topics:

- a. The importance of Health and Safety on Our Farm
- b. Safety and Health Hazards on Our farm

For more information on the SARM scholarship and/or our programs visit: <https://aghealth.usask.ca>

DO YOU KNOW SOMEONE WHO HAS DEVELOPED A FARM SAFETY INNOVATION?

If so we want to hear about it!
Contact us with your story and innovation to be featured in our Network Newsletter.



Need more information?

There are a variety of resources available online at: agsafety.usask.ca

From the Editors: Send your ideas, comments and suggestions to the Network News



Agricultural Health and Safety Network
Canadian Centre for Health and Safety in Agriculture
University of Saskatchewan
104 Clinic Place PO Box 23, Saskatoon, Saskatchewan S7N 2Z4
Phone: 306-966-6644

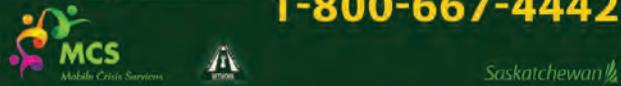
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Thank you to the Ministry of Agriculture for their support!



IF YOU ARE EXPERIENCING SYMPTOMS OF STRESS, THE FARM STRESS LINE IS AVAILABLE 24/7 AT **1-800-667-4442**



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Facebook: @AgricultureHealthSafetyNetwork

Moved? Retired? Not Farming?

To remove your name from our mailing list call (306) 966-6644 or contact the editor.

Would you like regular email updates from the Network?

If so, email us at aghealthandsafety@usask.ca