



The Agricultural Health and Safety Network

SPRING 2015



ROLL OVER

PROTECTIVE STRUCTURES (ROPS)



Network News

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

The Low Cost Roll-Over Protective Structures Intervention Project is one part of Agrivita Canada Inc.'s Canadian AgriSafety Applied Research Program, lead by a national team of researchers from the Prairie Agricultural Machinery Institute (PAMI), the Canadian Centre for Health and Safety in Agriculture (CCHSA), the University of Alberta, the Injury Prevention Centre (IPC, formerly ACICR), and the Canadian Agricultural Safety Association (CASA).

It has always been known that agriculture is one of the most dangerous occupations known to man. However, we have

options to make it safer. If your older tractor is not yet ready to retire, you may have the option to retrofit it with a ROPS safely and effectively at a minimal cost.

The best way to protect yourself in the case of a rollover is to pair a ROPS with seatbelts. This combination is 99% effective at reducing a possible fatality. Great news!

Read on to page three to find out how this new project will unveil itself right here in Saskatchewan lead by Prairie Agricultural Machinery Institute (PAMI) and a national team of researchers.

Return undeliverable Canadian addresses to: 104 Clinic Place Saskatoon, Saskatchewan S7N 5E5



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Letter from the Editor



Found in a Rural Saskatchewan home

This is an exciting year for the Agricultural Health and Safety Network. There were many 20 and 25 year awards handed out to Network member RMs at the SARM convention during our Annual General Meeting. These RMs have supported the network and participated in many safety events over the years.

The Network has, for a long time, acknowledged the stress that is related to the farming industry. *Difficult Times: Stress on the Farm* is one of our most popular resources. I was delighted to discover a copy hanging in the home of retired farmer who had been a member of the Network.

In this issue you will find information about depression. Sleeplessness is a symptom of depression. You will find 10 sleep tips to help you get a better quality sleep and ward off the effects of a stressful occupation.

You will also find exciting updates on the Saskatchewan Farmers Back Study.

I wish for all our readers a happy growing season. But don't forget to be careful in the sun! See page seven for information regarding the heat illnesses.

Bonita

CANADIAN AGRICULTURE

FARM SAFETY WEEK

Canadian Farm Safety Week awareness in the Health Sciences building on the University of Saskatchewan campus.



Network Staff attended a train-the-trainer workshop on safe farm practices. The workshop provided training on the best practices to communicate the message of agricultural safety and provide an overview of the basics of safety education.

This event was put on by the Canadian Farmers with Disabilities Registry with support from the FCC AgSafety Fund administered by the Canadian Agricultural Safety Association (CASA). Jonas Johnson of Evolutionary

Consulting Corporation taught this practical and interactive workshop.

Other events during Farm Safety Week included a display in the Health Sciences building to build awareness of the Agricultural Health and Safety Network, frequent posts on Twitter and Facebook.

NEW!

Hearing and Respiratory Clinics



Producers of Network Member RMs are invited to participate in our new "in house" clinics on the beautiful University of Saskatchewan Campus. If your RM has not chosen to host a clinic this year, you can make an appointment and come in for your session.

You will have your choice of a Respiratory Health Clinic, a Hearing Screening Clinic or to have both done

while you are here. You will also have the opportunity to browse in the new Network resource library, as well as ask questions about your safety concerns. For more information on what you can expect from your appointment, check out our website: aghealth.usask.ca.

The clinics are done by a registered nurse and if necessary you will receive a referral for follow-up by a physician.

To book an appointment, call Cheryl Leuschen, R.N. at 306-966-1148 or email: cheryl.leuschen@usask.ca

Rollover Protective Structures (ROPS)

Rollover Protective Structures (ROPS): Filling the Commercial Gap

The *Low Cost Roll-Over Protective Structures Intervention Project* is one part of Agrivita Canada Inc.'s Canadian AgriSafety Applied Research Program, lead by a national team of researchers from the Prairie Agricultural Machinery Institute (PAMI), the Canadian Centre for Health and Safety in Agriculture (CCHSA), the University of Alberta, the Injury Prevention Centre (IPC, formerly ACICR), and the Canadian Agricultural Safety Association (CASA).

The previous generation of agricultural equipment was built to last, with the life span of older tractors having far surpassed current safety advancements. This presents a challenge to ensure the safety of the user, especially when it is observed that 25% of all work-related deaths are tractor rollover events. We are faced with a commercial gap for retrofitting ROPS that the equipment industry has not been able to successfully fill at a reasonable cost and with minimal effort.

In a new project supported by The Canadian AgriSafety Applied Research Program, researchers from across Canada took a look at the previous work and information regarding ROPS to move the development forward and fill that gap

by developing user friendly, engineered ROPS fabrication design drawings for the majority of older tractors and provide them to farmers. The reliability of building them with typical farm shop equipment will be tested.

The ROPS Pilot Project will address regulations and liability, develop engineered drawings, conduct trial builds and installations, and provide the testing of farmer built structures. Trials will take place in Saskatchewan, Newfoundland, British Columbia, and Manitoba.

For more information: www.agrivita.ca

Hazard Control and Rollover Protective Structures (ROPS) on Your Farm

Many farmers perform formal or informal safety audits on their farms. The physical state of the farm workplace is associated with injury. Therefore, the goal is to improve the physical state through risk assessment and taking action to correct hazards by using the most effective hazard control. The Hierarchy of Control is a standard industrial hygiene approach. A typical hazard found on Saskatchewan farms are tractors without ROPS. In fact, 43% of tractors on Saskatchewan farms do not have ROPS.

The absence of ROPS on a tractor is a critical hazard meaning that in the case of a rollover, the condition could cause a loss of life or permanent disability. A rollover incident is preventable. The good news is that rollover fatalities are 99% preventable when combined with ROPS and the use of a seatbelt. Because of the high risk associated with rollovers and the impact on farm fatality statistics, correction of this hazard should take high priority.

If it is not possible to eliminate the tractor from use or substitute a safer one, the next best alternative is installing a retrofitted ROPS.

Proper training of workers and the appropriate personal protective equipment such as hearing and respiratory protection should still be a priority. As the farm manager set a good example and wear the seatbelt!

For more information on the Farm Safety Audit go to the Agricultural Health and Safety Network's website: agsafety.usask.ca

This document has been prepared by the Canadian Centre for Health and Safety in Agriculture (CCHSA) for Agrivita Canada Inc. and the *Canadian AgriSafety Applied Research Program*, which is supported under *Growing Forward 2 (GF2)*.



As Saskatchewan's agricultural industry grows, the amount of plastic waste generated on farms is increasing. While the use of new and innovative plastic products provides benefits to the agricultural community, farmers and ranchers need to be aware of the associated waste management responsibilities.

Saskatchewan agricultural producers use approximately 20,000 grain bags every year for the temporary storage of grain and silage. Each of these bags weighs 135-315 kg (300-700 lbs). These bags are intended for one-time use and are unsuitable for re-use. Other products, such as plastic twine, silage bags, bale wrap and netting, which are manufactured from plastics similar to the grain bags, constitute an additional portion of the waste management challenge.

So what do you do with a 300 kg plastic bag when you need to dispose of it? Unfortunately, some producers are burning the bags.

The chemical reactions that occur during the burning of plastics, such as polyethylene grain storage bags, produce an array of toxic substances that are detrimental to both human health and our environment. The residue from burning these bags releases highly toxic materials into the atmosphere and potentially into the soil where toxins could impact water and soil quality. When materials containing chlorine are used, dioxins and furans may form, which can



cause health effects ranging from cancer to nervous system disorders.

The Ministry of Environment is working with industry partners and stakeholders to develop a province-wide stewardship program for recycling agricultural plastics. Expected to start in 2015, the program will initially focus on the collection and recycling of grain bags, only.

Currently, farmers can recycle their grain bags through the Grain Bag Recycling Pilot Project, operated by Simply Agriculture Solutions and the Moose Jaw River

Watershed Stewards Inc. Collection sites are located across the province in Cudworth, Hirsch, Humboldt, Kelvington, Macoun, Mankota (twine only), Milestone, Moose Jaw, Mossbank, Oungre, Prince Albert, Rush Lake, Unity and Viscount.

If recycling is not an option, producers should check to see if their nearest landfill accepts used grain bags, or store the bags on the farm until a province-wide program is up and running.

For more information, please contact the Client Service Office at 1-800-567-4224.

**Open burning of products
such as grain bags
is prohibited under
Saskatchewan's Clean Air Act**

Zoonotic Diseases and Children

By Dr. Lanre Medu

The Centres for Disease Control and Prevention defines zoonotic disease as one that can be passed between animals and humans. They are also sometimes caused by viruses, bacteria, parasites and fungi. In the farm environment the likelihood of contact with various farm animals is inevitable and thus the risk of these diseases increases further. Additionally with children in the farm environment this risk also increases and may indeed be magnified.

Contact with zoonotic disease agents can occur in a number of ways including saliva, blood, urine and fecal waste of infected animals. Contact is also possible through vector transfer when an organism that carries the disease causing organism such as a tick or mosquito bites an individual. Disease transfer is also possible through ingestion of infected animal products such as unpasteurized milk, undercooked meat or unwashed fruits and vegetables.

Children are by nature adventurous and curious thus prone to exploring their environment. This may lead to increased exposure to zoonotic diseases. Generally these diseases are rare in Canada and Saskatchewan.



Influenzas are a common disease to both humans and animals and there have been cases of transfer of the animal variant of the disease to humans resulting in death in rare cases. Prion diseases include transmissible spongiform encephalopathy (TSE), bovine spongiform encephalopathy (BSE), and variant Creutzfeldt-Jakob disease.

Hemorrhagic fevers that are important international zoonotic disease include Crimean-Congo haemorrhagic fever (CCHF), Ebola, Lassa fever, Marburg fever and Rift Valley fever. Others include food borne zoonoses such as campylobacter, Escheria coli, Salmonella, Shigella species and

trichinella. There are also other diseases such as leptospirosis and tularaemia. Finally, other zoonosis include anthrax, bovine tuberculosis, brucellosis, cysticercosis, hantavirus and rabies. Rabies in Saskatchewan is still a concern because of the number of contacts with animals likely to carry the rabies virus. Skunks and bats are typical carriers in Saskatchewan.

There are many ways an individual can be protected along with the family and especially children. The following are suggested options:

- Always wash hands and follow proper hygiene
- Handle food safely
- Prevent bites from mosquitoes and ticks
- Know the simple things you can do to stay safe around your pets
- Be aware of zoonotic diseases both at home and when you travel

Saskatchewan Farmers **Back Study**

Why study back pain in farmers? Over 80% of farmers will experience back pain in their lifetimes as well as back pain being the most common reason for absence from work. This knowledge increases the need for understanding the environmental factors causing back pain as well as the need to consider the coping skills required while farming with chronic back pain.

The five year study lead by Dr. Catherine Trask at the Canadian Centre for Health and Safety in Agriculture is well underway. The research team will measure risk factors on farms in anticipation of making recommendations that would decrease back pain in the future. Work exposures will be assessed and patterns of vibration, awkward posture and manual handling will be determined. The ultimate goal is to develop an inventory of potential solutions that will be tested and shared with Saskatchewan farmers as a preventative measure against back injury and chronic back pain.



98% of farms
ARE FAMILY FARMS

Agriculture
more than ever

Source: The Real Dirt on Farming II, Farm & Food Care Ontario, 2010

Depression

By Tamara Tsang (3rd Year Medical Student)

What is depression?

Depression is a state of low mood and energy that we all experience from time to time. Depression can be a natural reaction, such as after the loss of a loved one. It can occur as a response to life stress, or sometimes without any identifiable reason. When depression lingers for an extended period of time, or when it becomes severe, it is beneficial to seek treatment. About 1 in 10 Canadian adults will experience major depression in their lifetime.

Some of the symptoms of depression:

- Feeling sad or irritable
- Not enjoying the activities that you used to love
- Feeling detached from the people around you
- Changes in your weight or appetite
- Changes in your sleeping pattern
- Feeling more tired than normal
- Frequently feeling guilty
- Difficulty concentrating or making decisions
- Thoughts of death or suicide

You don't need to experience all of the symptoms to have depression. It is different for each person. A person who is mildly depressed may feel tired all the time for months without knowing why. Sometimes people can get physical manifestations of depression such as reoccurring stomach aches and headaches.

What can you do if you know someone who is depressed?

It can be frustrating to deal with a depressed person. It may seem like they are choosing to be difficult. Recognize that the person's behavior may not be about you. Provide support by listening to the person's thoughts and feelings. Let the person know that they are acting differently than usual. You don't have to accept someone's bad behavior, but try to understand that it may be coming from an underlying problem. Suggest a visit to the family doctor. People often delay seeking help because they blame themselves for their depression. They may think that if only they could snap out of it things could be better. Depression is not a conscious choice people make. Let the person know that they should not feel ashamed of what they are going through and that it is ok to seek help.

What can you do if you think you are depressed?

There are many things one can do to treat or prevent depression. Starting treatment early can improve recovery time.

Exercise: Regular physical activity can improve concentration, energy levels, and overall wellbeing. Cardiovascular and weight bearing exercises also contribute to life span and bone health.

Nutrition: Make sure you are eating balanced and regular meals. Avoid overeating and undereating. Consider taking vitamins and supplements. Many Canadians have low levels of vitamins such as vitamin D.

Reach out to others: You may feel tempted to push everyone away when you are feeling lousy, but try not to. Spending time with the people you love can be therapeutic. Building social supports is a good way to cope with difficult times and enrich one's life.

Meditation: There are different types of meditation that one can try. Daily meditative practice can reduce stress levels.

Sleep: The average adult needs about 7 – 9 hours of sleep per night. Please see the following *10 Tips for a Better Sleep*.

10 Tips for *Better Sleep*

By: Rachel Peters (4th year medical student)

Sleep is vital for health and safety on the farm. For optimal energy and alertness, most adults need 7-9 hours of sleep per night. Here are ten sleep hygiene tips to help you make the most out of your time in bed:

1. Adopt a consistent sleep routine. Try to go to bed around the same time every night and get up around the same time everyday. The right time for bed is when you feel tired.
2. Avoid caffeine (coffee, tea, soft drinks and chocolate) within 6-8 hours of bedtime.
3. Avoid consuming large meals or beverages before bedtime.
4. Limit alcohol consumption and reduce or quit smoking.
5. Within an hour before bedtime, avoid stimulating activities such as talking on the phone, watching TV, or using a computer.
6. If you feel tired during the day, take a 20-minute nap. Avoid prolonged napping, which can interfere with nighttime sleep.
7. Try to wind down before bed with a calming activity, such as a warm bath, light reading, gentle stretching, or deep breathing.
8. Your bedroom should be reserved for sleep and intimacy. Avoid watching TV, working, or exercising in your bedroom.
9. Sleep in a room that is dark and quiet. Use eye masks and earplugs if you are sensitive to light and noise in your bedroom.
10. If you have trouble falling asleep or wake up during the night, avoid watching the clock. If you do not fall back asleep in 15-20 minutes, get up out of bed and do something else, like reading, until you feel tired again. Avoid TV and computer screens, which can make it harder to get back to sleep.

PREVENTING HEAT ILLNESSES

By: Dr. Jasmine Hasselback

Summer in sunny Saskatchewan may be beautiful, but with all the sunshine comes a lot of heat. Although for many, heat waves signal a welcome weekend at the lake, they can be very dangerous for certain people, and even lead to death.

Deaths during heat waves are often due to the body's inability to handle the added stress of heat on top of existing health conditions such as heart disease, diabetes, lung disease and kidney disease. But some of these tragic deaths are a direct result of the heat, known as heat stroke. Soaring temperatures throughout the world often lead to preventable deaths. The irony is many of those who rely on the sun's rays for their livelihoods are also most vulnerable to the harmful effects of those rays.

Farming continues to be a very physically demanding career, even with advances in technology. The combination of exposure to extreme heat and physical exertion puts added stress on the body (heat stress). Outdoor workers have long been identified as heat vulnerable, in other words, more susceptible to developing heat-related illnesses. Special steps need to be taken to reduce their risk.

Not only are they vulnerable by being outdoors most of the day, but many farmers and their families are at added risk for several other reasons. People will handle high temperatures differently depending on their age, any medical condition they may have, and when in the season they work outdoors. All of these factors should be considered when expecting anyone to perform tasks outside during extreme heat periods.

Older adults and young children are less capable of responding appropriately to high temperatures. Depending on their age and capacity, they may rely heavily on other people to manage their hydration by making sure they have enough cool fluids to drink. It's important the community take special care of these individuals during extreme heat events.

Most heat-related illnesses occur early in the summer, before there has been time to adapt to the heat.

Many chronic medical conditions make people more susceptible to the damaging effects of high temperatures. These include, but are not limited to, high blood pressure, heart disease, diabetes, obesity, kidney disease, lung diseases and mental illness. To make matters worse, the medications used to treat many of these conditions can often reduce the body's ability to cool itself, by decreasing sweat production or increasing dehydration. Anyone who has a chronic medical condition and/or someone who takes regular medications should talk to their doctor or pharmacist about extra precautions they should take during heat waves.

The majority of heat related illnesses happen at the beginning of the summer, or when someone first starts working an outdoor worker job. At these times, the body has not acclimatized--gotten used to--the combination of high temperatures and physical demands. Extra vigilance should be practiced early in the summer and at the very beginning of any heat wave.

Keep your body cool

- Schedule high intensity tasks for early or late in the day to avoid midday heat
- Cycle between heavy and light workloads through the day
- Take shade/cooling breaks as frequently as possible
- Wear a brimmed hat and loose, lightweight, light-coloured clothing
- Encourage those around you to take cool-off breaks

Avoid dehydration

- Drink more water than usual
- Do not wait until you are thirsty to drink (thirst means you are already dehydrated)
- Drink at least 2-4 glasses of water for every hour working outside
- Avoid sugar heavy drinks
- Encourage those you work with to drink lots of water

Stay informed

- Check local news for heat alerts and other heat information
- Environment Canada and Health Canada will declare a "heat warning" when the humidex value or temperature expected to reach or exceed 40°C and the dew point is at least 15°C
- Keep a close eye on the high risk people in the community
- If working alone, stay in touch with someone through the day so they know you are alright

Reduce the Risk of Hantavirus by Cleaning Buildings Before use

The Canadian Centre for Health and Safety in Agriculture suggests the following guidelines to cleaning buildings and work sites based on information from Occupational Health and Safety, Saskatchewan Labour.

- Ventilate closed buildings for 30 minutes before you start cleaning.
- Wear a proper, well-fitting mask (NIOSH-approved P100 disposable mask or respirator with P100 organic vapor filter).
- Eye goggles are recommended
- Wear plastic or rubber disposable gloves and rubber boots.
- Wet down contaminated areas with water, and spray debris and dead rodents with a solution of household bleach and water (at least 10% bleach). Scoop the debris into doubled plastic bags, close with twist-ties and dispose in regular garbage.
- Clean the area using wet methods (wet wiping, mopping or gentle hosing) using the disinfectant solution. Avoid dry cleaning methods.
- Disinfect gloves and rubber boots before removing them.

The use of personal protective equipment may significantly reduce the risk of contracting Hantavirus.



SYMPTOMS

Health Canada describes symptoms that can appear within 3-60 days after exposure. On average, symptoms appear 14-30 days after exposure:

- Fever
- Chills
- Muscle aches
- Headaches
- Nausea
- Stomach problems

Farm Stress Line
Toll Free: 1-800-667-4442
24 hours per day.
Seven days per week.

Calls to the Farm Stress Line are answered by Mobile Crisis Services, a non-profit, community based agency providing crisis intervention services in Saskatchewan since 1974.

Whether it is information, conflict or crisis, the first step is communication.

Call before the problem becomes a crisis.

Network Membership

There are currently 217 RM members in the Agricultural Health and Safety Network.

If your RM is not a member, and you would like to find out more about becoming a member, please call

306-966-6647

Moved? Retired? Not Farming?

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

Need more information?

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



Thank You to the Following Organizations for Supporting the Network News:



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

Network News:

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