



Farm Safety Newsletter

Let's Celebrate – Let's Live!

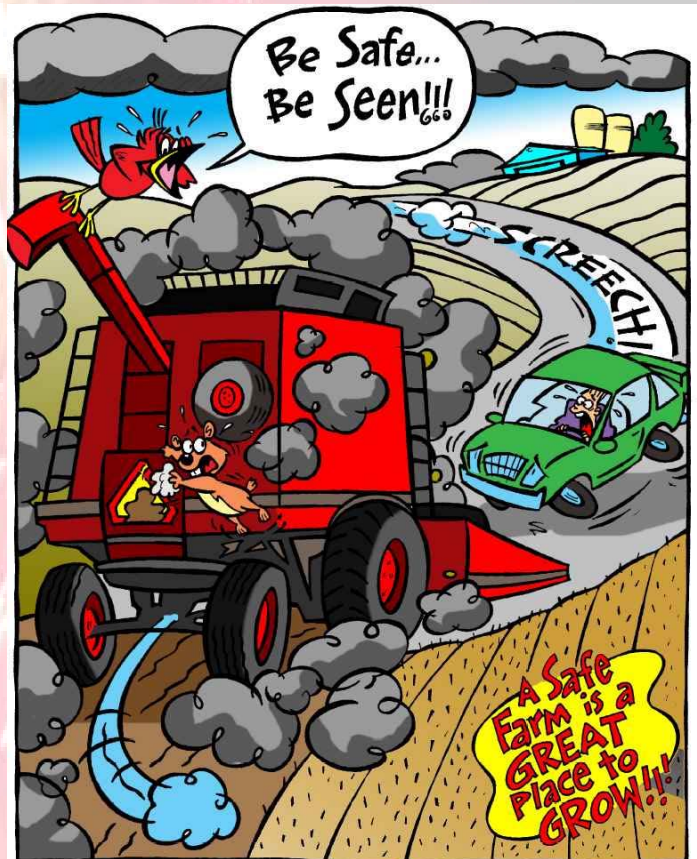
Happy Birthday Alberta! The entire province will be celebrating Alberta's 100th birthday on September 1st. Where will you be? On the swather? In a combine? Moving cattle? Yes, Alberta's centennial coincides with our busiest farming season but that doesn't mean you can't celebrate in a very meaningful way by staying injury free through the harvest season.

As one of 50,000⁺ farmers in Alberta, you are working against a tight deadline to get those crops in. It can be tempting to by-pass some basic safety procedures. However, taking that extra step or precaution can be a real lifesaver.

Alberta averages about 18 deaths per year including farm owners, employees and family. Well over 1000 more end up making a visit to the emergency room for injuries happening on the farm. As of July 2005, we have lost 9 Albertans to tragic, preventable deaths on the farm - lets put a stop to these tragedies starting now.

Ensure that safety is your #1 priority this season! Challenge yourself to celebrate Alberta's centennial with an injury free harvest season in 2005. It will take planning, preparation and a personal commitment by everyone on your farm. Happy 100th birthday Alberta!!

What a challenge and what a great reason to celebrate – an injury free centennial harvest!



Alberta Agriculture Farm Safety Program

J.G. O'Donoghue Building
200, 7000-113 Street
Edmonton, Alberta T6H 5T6

Laurel Aitken, Farm Safety Coordinator
Phone: (780) 427-4231
Fax (780) 422-7755
E-Mail: laurel.aitken@gov.ab.ca

Please help us stay current. If you would like to be added or removed from the mailing list, please fax (780) 422-7755 (attention Julie) or e-mail julie.splawinski@gov.ab.ca

We're on the web!!
www.agric.gov.ab.ca/farmsafety

Poultry farm workers: Reduce your risk of Campylobacter infection

What is Campylobacter?

Campylobacter is a microorganism (bacteria) often carried by domestic animals, including poultry. These bacteria can cause illness in humans, usually a severe diarrhea that lasts for several days. Symptoms start on average two to five days after being exposed to the bacteria. Often, more than 50% of birds in poultry flocks carry Campylobacter bacteria in their feces.

Are poultry farm workers in Alberta at risk for Campylobacter infection?

Yes; poultry farm workers often come into contact with the fecal material of the birds they handle, and are at risk for Campylobacter infection. This risk is illustrated in the following report of an actual outbreak investigated by Aspen Regional Health. In May 2005, a poultry farmer in central Alberta hired a group of approximately twenty temporary workers to assist in loading chickens onto transport trucks. Within three days, three of the temporary workers were ill with bloody diarrhea; one of the workers was admitted to hospital. Tests revealed that all three workers were infected with Campylobacter. It was learned that some of the workers did not wear gloves while on duty and/or did not wash their hands prior to eating a snack or smoking cigarettes after handling chickens.

How can poultry farm workers reduce their risk of Campylobacter infection?

Workers should assume that all birds in every poultry flock carry Campylobacter bacteria. Reducing the risk involves “common sense” precautions (summarized below) that help prevent poultry fecal material from getting into the mouth of the poultry worker:

- Wear durable gloves at all times while working.
- Remove gloves and wash hands thoroughly with soap and water and dry with paper towel before
 - o Taking a break
 - o Eating
 - o Drinking
 - o Smoking
- Shower and change clothes at the end of the work day. Do not take work clothes home if possible, or, bag work clothing and place in the washing machine upon returning home.
- Consider wearing a mask. Masks with higher fluid resistance offer the best protection.



This is not a comprehensive list of recommended poultry worker safety measures. However, following these precautions can help reduce the risk of Campylobacter infection.

Author: Lance Honish, Capital Health-Public Health

All-terrain vehicles: Safety tips for families

Over the years the role of ATV's has changed. Many years ago ATV's were mostly used for recreational use however today, ATV's have become very popular on the farm to make chores easier. ATVs are not safe for children and young teenagers as they require size, strength and coordination to operate safely. Still, many kids do use them, especially in rural or remote areas. And each year, many children and youth are seriously injured or even killed while riding an ATV.

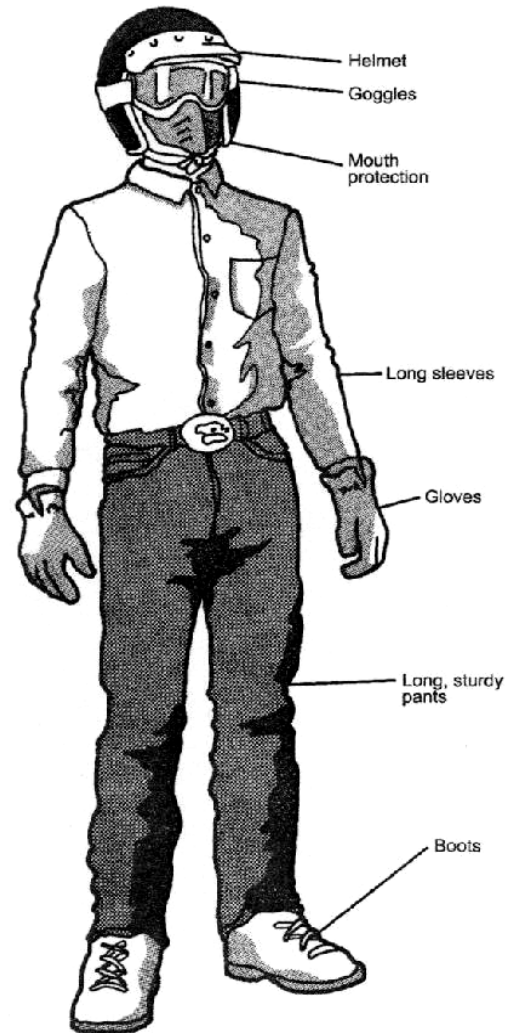
Did you know?

- In Canada, nearly 25% of ATV-related deaths are among children under 15 years old.
- More than one-third of serious injuries from ATV crashes are among children under 15 years old.
- ATV injuries have been reported in children as young as one year old.

How can ATVs be used safely?

You're more likely to be injured on an ATV if you don't use it properly. If you're a parent who owns or operates an ATV, you can model safe behaviour by following these guidelines:

- **Age and experience:** Driver error and loss of control are common causes of ATV crashes. Children younger than 16 years old should not operate ATVs. They don't have the strength, skills or experience to handle ATVs safely.
- **Passengers:** ATVs are meant to be used by a single driver. Passengers are not recommended because they can affect the balance and make it hard for the driver to stay in control. Children should never ride as passengers on ATVs.
- **Proper equipment:** ATV drivers should always wear an approved helmet for ATVs or motorcycles (such as a helmet meeting the Canadian Standards Association, not a bicycle helmet), eye protection, and proper clothing, such as boots, gloves and long pants.



Always Ride Safely and Responsibly!

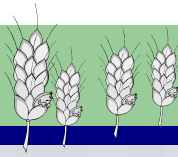
Sharpen Your Skills ...

Attend an ATV Rider Course

- **Center Point Performance** in Leduc offers children's half day ATV summer safety camps. Contact Tara Skolney at (780) 985-2747
- **Outdoor Safety Inc** in Barrhead certified instructors offer the Canadian Safety Council Approved ATV Rider Course. Contact David Horner at (780) 674-7630.
- **Alberta Safety Council** offers various ATV and motorcycle rider courses. Call 1-800-301-6407 for more information.



Kernels of Caution



When it's harvest time the pressure is on! Good weather and daylight hours always seem to be at a premium when trying to gather nature's bounty in top condition. Planned maintenance and skilled equipment operation can minimize downtime and reduce potential for mishaps during harvest. The most severe farm tragedies often involve machinery. Missing guards and shields, failure to recognize hazards, and careless operation are common factors in a majority of farm equipment related injuries.

Manufacturers attempt to build safety features into equipment. Some potential hazards can't be completely eliminated without interfering with machine function. For example, if the blades on a rotary mower were completely shielded, they would not cut plant material. Safe completion of any task depends on knowledge, alertness and hazard awareness.

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However, fatigue, drowsiness, and illness frequently contribute to mishaps in the field.

Here are a few tips that will help make your harvest season a safe one for the entire family:

- Carry out preseason maintenance and repair several weeks before harvest.
- Clear plugged equipment only after the power is turned off.
- All guards and shields should be secured before equipment is started.
- Wear comfortable close-fitting clothing, including sturdy, protective shoes.
- Kids are a "no-no" around machinery. Far too many tragedies occur when youngsters end up in the path of equipment from which the operator's view is restricted.
- Always let someone else know where you are.
- Check in regularly.
- Keep children off grain transportation equipment.
- Avoid sleep deprivation and extreme physical exhaustion.
- Drugs or alcohol can impede safety.

How sleep affects safety

Sleep is as basic to survival as food and water. Losing as little as **two hours** of sleep can negatively affect alertness and performance. Sleep deprivation affects a person's focus, concentration and ability to respond to an emergency. Symptoms can include: decreased judgement, decision-making and memory; slower reaction time; lack of concentration; fixation and worsened mood.

Kids and Harvest - Keep our next generation of farmers safe!



Children are at risk!

The farm is an inherently dangerous place for children if adults do not provide a safe place for young curious minds to explore and learn about the benefits

of farm and ranch living. Although parents cannot completely child-proof a farm, they need to make it as safe as possible. Machinery, equipment, grain, chemicals, structures and livestock are all associated with potential hazards. Combine these work place locations with young and curious people and the results may be catastrophic.

One way to prevent these tragedies from taking place is to create a safe play area.

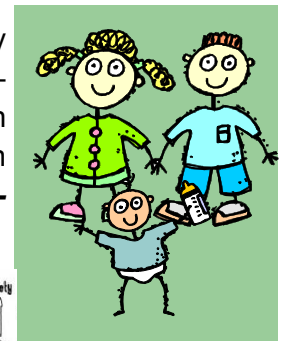
Designated play areas protect children by removing them from the farm work environment. Let children know what the play boundaries are and what consequences will be enforced if the boundaries are crossed. Rules are only effective if they are a part of daily life and consequences of breaking rules are enforced. Explain to them why off-limit areas are dangerous.

Rules need to be used in conjunction with supervision. Close supervision is an important aspect of keeping young kids safe on the farm. Children often put themselves in danger. Set restrictions for children and provide them with guidelines to keep them safe.

When determining a safe play area consider:

- A location separate from traffic and work areas.
- A location with easily identifiable boundaries.
- Fences are ideal.
- A location which can be easily supervised, such as looking out a back window.
- A location free from dangerous debris.
- A location with enough room to run and explore.
- A location with safe and age-appropriate play equipment.

A safe outdoor play area away from livestock, traffic, and machinery is essential for children to grow up safe and healthy on a farm. **Keep our next generation of farmers safe!**



Farm Safety 4 Just Kids • PO Box 458, Earham, IA 50072, (800) 423-5437 •



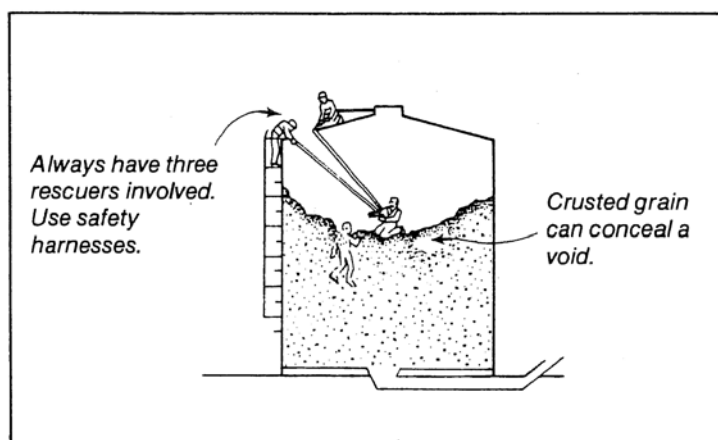
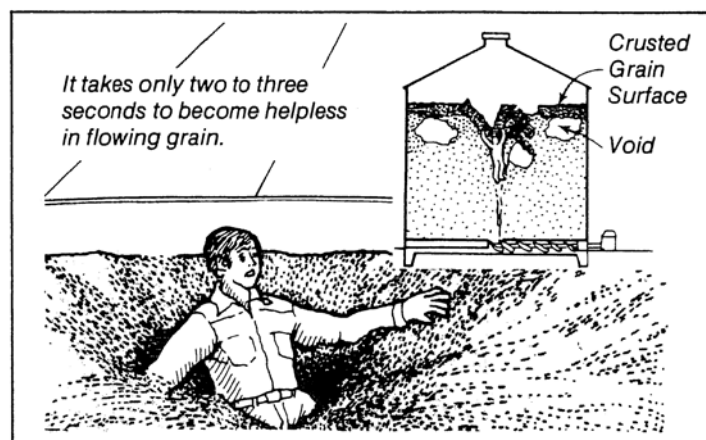
Did you know...

- It only takes **8 seconds** for a person, adult or child, to become submerged in grain and eventually die from suffocation.
- Research indicates that you **cannot** escape from the forces of moving grain on your own after getting trapped.
- Unloading grain from a wagon creates a 'pull' on grain similar to **quicksand**.
- As grain flows out the chute it creates a **funnel** that can drag a person down toward the opening.



The Alberta Farm Safety Program has a Gravity Flow Wagon available to lend out for demonstration purposes. The gravity flow wagon demonstrates the dangers of playing in grain.

Flowing Grain Entrapment



It takes only **two** or **three seconds** to become trapped in flowing grain. Within another **10 seconds**, you can be completely submerged! Innocent-looking grain storage bins have provided settings for hundreds of deaths and entrapments across North America. Victims are most commonly engulfed while walking across the grain surface during bin unloading. There is a simple way to avoid this tragedy - *never enter a grain bin while the unloading auger or suction tube is running!*

1. Engulfment in a flowing grain column

Grain flows in a funnel-shaped path to the unloading auger. This vortex of grain behaves very much like a water whirlpool. Velocity increases as grain flows from the bin wall at the top of the grain mass into a small, vertical column at the centre of the bin.

The vertical column flows down through the grain mass at close to the rate of the unloading auger. Essentially no grain flows in from the surrounding mass.

Rate of inflow at the centre top of a grain bin is so great that escape is impossible. *Once engulfed in the grain flow, a victim is rapidly drawn down toward the bin floor.*

The few survivors of this type of entrapment say they deliberately covered their mouths and noses with their hands and did not panic. All expressed amazement at the tremendous speed of their engulfment.

2. Entrapment in grain transport vehicles

Many entrapments and suffocations have occurred in high capacity grain transport equipment. Victims are either buried during loading from combine or storage, or drawn into the flow of grain as a vehicle is being unloaded. Most victims of this type of acci-

dent are under 16 years of age - *don't allow youngsters to enter grain transport equipment!*

3. Collapse of horizontal crusted grain surfaces

A thin layer of crusted, spoiled grain can conceal voids beneath the surface. A victim who breaks through this crust is quickly covered as an avalanche of grain collapses into the cavity.

4. Collapse of vertical crusted grain surfaces

Spoiled or caked grain can stand almost vertically. As grain is removed from the base of a caked mass, the potential for avalanche and engulfment increases dramatically.

5. Suction equipment hazards

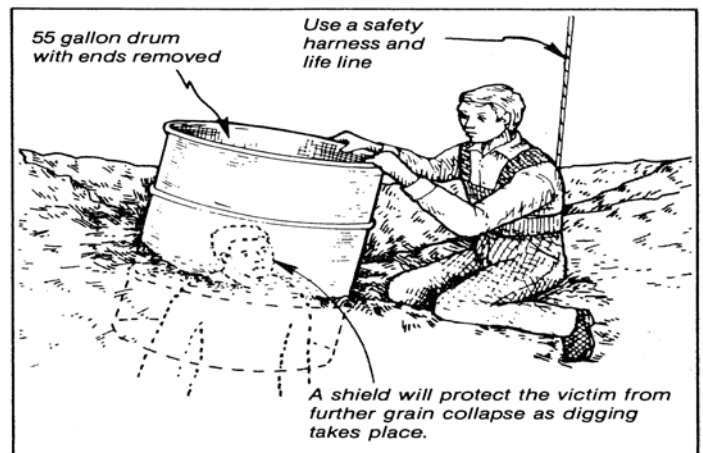
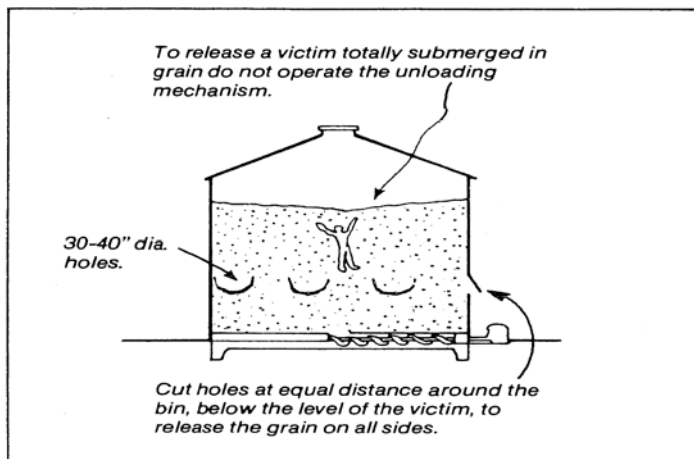
Recently, an Ontario transport driver was buried in an avalanche of grain as he attempted to empty a bin from the inside with conventional suction equipment. All bins should be equipped with properly designed doors to permit suction unloading from the exterior only.

Precautions for rescuers

1. Always assume that an entrapped victim is alive.
2. Under no circumstances should you start an unloading auger or open a gravity flow gate. The victim could be drawn into the auger or become wedged in the opening.
3. If bin entry is required, the rescuer who goes into the structure should wear a body harness and be tied with a safety rope to at least two rescuers on the roof of the bin.



Grain Bin Rescue Procedures



A. Victim completely submerged

1. First turn on bin aeration fans to provide as much air as possible to the victim. The extra air has been credited with saving several lives in grain bin rescues. Next, call the local rescue squad to get experienced help to the accident site.

2. Remove grain from the bin in the most rapid and orderly manner possible. Attempts to 'dig' a buried victim free are generally fruitless, because of the massive amount of material involved and the tendency of grain to back flow.

Large openings should be cut uniformly around the base of the bin. Cut with an abrasive saw, air chisel, or cutting torch. These openings will greatly speed up grain removal. (If a torch is used, be alert for fire.) If suitable cutting equipment isn't available, use the corner of a tractor loader bucket to ram holes in the bin wall.

3. Cut emergency openings four to six feet above ground to reduce the potential for a grain build-up around the outside of the bin - this would block the flow. Ideally, you should make semi-circular or v-shaped cuts 30 to 40 inches across to form valves which, when bent up, allow grain to flow freely. When bent back into place, they slow or stop the flow. This type of control protects rescue workers inside of the bin, who otherwise might be drawn into a rapid, uncontrolled flow of grain.

4. Space openings uniformly around the bin to reduce the risk of structural collapse and make it easier to remove grain from around the base. Once the victim has been uncovered, the bin openings can be closed to allow safe access by rescuers.

B. Partially submerged victim

1. If possible, lower a rescue squad member into the bin to reassure the victim and to attempt to attach a body harness or life line. *Don't* try to pull the victim free with the line. The tremendous drag of the grain could cause further injuries. The life line is only intended to prevent further sinking.

2. Check the victim's airway for grain. If he/she is experiencing breathing difficulties, administration of oxygen will help. Panic and Struggle may be the chief reasons for respiratory problems, so try to calm the victim.

3. Construct a shield if there is danger of further grain collapse. A steel drum with both ends removed, plywood and pieces of sheet metal formed into a circle have all been used successfully. You may need to remove a portion of the bin's roof to get material inside. Once the shield is in place, it may be possible to free the victim by scooping grain from the inside of the shielded area. Use a board or sheet of plywood as a work platform.

You can avoid entrapment by making it a policy to never walk on a stored grain surface. If entry is essential, use the life line and 'buddy' system.

The information and recommendations contained in this publication are believed to be reliable and representative of contemporary expert opinion on the subject material. The Farm Safety Association does not guarantee absolute accuracy or sufficiency of subject material, nor can it accept responsibility for health and safety recommendations that may have been omitted due to particular and exceptional conditions and circumstances.

Farm Safety Association Unit 101, 75 Farquhar Str, Guelph Ontario, N1H 3N4 Phone: 1-800-361-8855



Congratulations Shannon Blumhagen!!

Anissa Blumhagen from Halkirk, Alberta wrote to us about her Farm Safety Idol. **Shannon Blumhagen** is her farm safety idol because he:

- sets safety boundaries for me and my brother
- takes our whole family to farm safety day camps
- puts farm safety stickers on his tractor
- helped me write my farm safety speech last year
- designed our barn so it is safe for me and my brother watch cows have their calves
- shows us the dangerous parts of his machinery

- taught me how to operate the lawnmower safely and makes me wear ear plugs
- always takes a break while working long hours
- keeps safety guards on all his machinery
- wears a protective breathing mask while seeding, spraying, combining, haying and welding
- takes me to beef 4-H to learn proper cattle management



Do you know a farm safety idol? We want to let everyone know about Alberta's Leaders in Farm Safety. So tell us about **your** farm safety idol and what makes them **special**. Entry forms can be found on our website, www.agric.gov.ab.ca/farmsafety. Entries will be highlighted in this newsletter and other farm safety publications.

Farm Safety Photo Contest

A collage of farm safety photos. At the top left, a yellow starburst says 'For 13-18 year olds'. Below it, a blue banner reads 'Farm Safety Photo Contest'. The collage includes: a person in a tractor, a cow and calf, a family walking, a person with a horse, a tractor, and a large white ammonia tank with a red triangle warning sign that says 'CAUTION AMMONIA'. A red triangle with a white border contains the text 'Deadline: Sept 30, 2005'. At the bottom, a blue banner says '• Get SnApPiN', ClicKin', and ZoOm'iN with farm safety'.

Between 13 and 18 years old?? Enter the Farm Safety Photo Contest for your chance to **win a new digital camera worth \$500**. We are looking for photos that show 'living and working safely on the farm'. It could be a photo of someone wearing proper gear while spraying, driving a quad or mowing the lawn, kids playing in a safe designated area, proper decals on machinery, proper guards on machinery or chemicals stored in a proper shed. **So get out your camera, use your imagination, have fun and show off safety.** For entry forms and full contest detail, please visit Roping the Web at www.agric.gov.ab.ca/farmsafety or call (780) 427-4231. Entry deadline is **September 30th, 2005**.