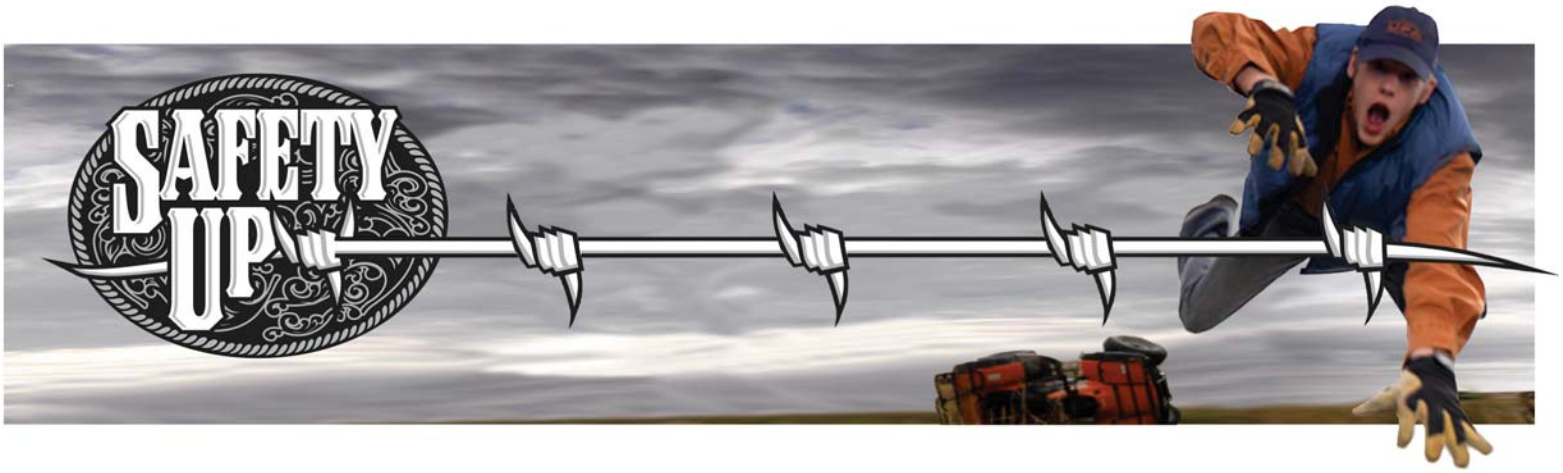

Safety Up – On Chemical Use

Fertilizers, herbicides, fungicides, insecticides, sanitizers, cleaners, crop preservatives, fuel, solvents, motor oil… and the list goes on. Chemicals come in so many different forms and strengths. They all serve an important purpose on the farm, but they are also toxic by design. Burnt skin hurts, puking isn't pretty, and chronic conditions like lung damage can affect you for the rest of your life. For your own health and safety, it's important to handle chemicals with care. **Know the job. Know the hazard. Know the drill.**

Three steps to safe farming

To keep farm safety top of mind, think of it as a three-step process that starts when you **know the job**. Knowing the job means getting properly trained ahead of time for each new task you perform. Next, **know the hazard** – stay alert for safety risks at all times during your workday. Finally, **know the drill** – learn how to handle the hazards you confront, either by managing them effectively or avoiding them altogether.

Training – who needs it?

Farm work is very often synonymous with chemical use. Pesticides and fertilizers are used for crop management, solvents, motor oil and fuel are needed to operate and maintain equipment, and sanitizers and cleaning products are used to keep everything in good condition. To use chemicals safely on the farm – whether you are transporting them, cleaning up spills or spraying crops – you need to start with the appropriate training. **Know the job.**

Label smarts

To get a handle on chemical use, read the entire product label before you even crack the seal. When it comes to chemical safety, the label is your best friend. It's a one-stop shop for everything you need to know to protect yourself from the toxins in the jug. Read it, make sure you understand it, and follow all the manufacturer's directions.

Understanding the safety concerns associated with chemicals requires a good knowledge of the warning symbols you'll find on the containers. Here's a quick review of what they look like and what they mean:


Corrosive: acetic, caustic.


Flammable: combustible, may catch fire in presence of spark or flame.


Explosive: dangerous, unstable, may explode in unsafe conditions.


Poison: toxic enough to cause death or disability if inhaled, ingested or absorbed through the skin in sufficient quantity.

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Alberta

Warning Words	Graphic	Meaning
CAUTION		Hazards that could result in minor to moderate injury, or will alert against unsafe practices.
WARNING		Hazards that could potentially cause death or serious injury.
DANGER		The highest level of hazard; indicates there is a high probability of death or serious injury if the hazard is not avoided.

Hazard alert

Once you have the proper training to work with chemicals, you need to learn to recognize related hazards and stay alert for them while you work. **Know the hazard.** Let's look at some specific chemical-handling issues that have the potential to be hazardous.

- **Transportation**: Never leave pesticides unattended in a parked vehicle, unless it is locked or parked where public access is denied. Post a warning sign on the vehicle if you leave it unattended or if you are transporting more than 500 litres of pesticides.
- **Storage**: Pesticides must be stored in their original labelled containers in a screened, ventilated area designated for this purpose, and far enough away from storage for other commodities that cross-contamination is prevented. Chemicals should be stored separately from each other, and the storage area must be cool and dry to prevent product breakdown or inactivation. Post a warning sign on the door, and keep it locked to control access.
- **Spills**: In the case of a chemical spill, only trained personnel wearing adequate protective equipment should be involved in the cleanup. Call the Alberta Environment Response Centre at 1-800-222-6514.
- **Handling**: Personal protective equipment (PPE) is essential – even if it wears like a bad fashion statement. Get over it! Never handle chemicals without first donning the appropriate PPE. You are working with substances that can seriously damage your health. Protective clothing is the barrier you use to prevent skin absorption. Wear chemical-resistant coveralls, gloves and boots. Proper equipment protects everything else – your hands, feet, ears, eyes, nose, mouth and lungs – against dust, vapours, splashes and sprays. Use an approved respirator, and goggles to protect your eyes from splashes.
- **Exposure**: Feeling queasy? Symptoms of chemical exposure include nausea, headaches, chills, stomach cramps, diarrhea, fever, fainting and death. Not so nice. Chemicals often look innocent, but they're complex formulas that can affect your health in the short or long term if you're not careful. If you feel symptoms of exposure at any time, take a break immediately – put some real distance between you and the source of the exposure. If symptoms persist, talk to your doctor.
- **Disposal**: Do not reuse empty chemical containers. Take them to an approved recycling facility. Discard measuring utensils properly. Call your local municipal office to find the nearest site.

Handle with care

Whenever you spot a chemical-related hazard in the workplace, you need to take personal responsibility to avoid it or find a way to manage it safely. Anytime you're unsure of how to handle the situations, ask questions first. **Know the drill.**

Some farm chemicals aren't immediately poisonous. The effects may not be obvious at first, but exposure over a long time can catch up with you in the form of chronic illness. The longer the chemical residue is on your skin, the more you absorb. Wash your hands before eating, smoking, chewing gum or urinating.

If you are interrupted while using chemicals, always close all containers properly and put them out of reach of children. Change into clean clothing after chemical exposure. Shower and wash up thoroughly. Wash chemical-soaked clothes separately from other laundry and run the load twice.

The last word

When you work on a farm, chemical use comes with the territory. But it's your future health on the line, so take personal responsibility for your safety on the job. Take time to understand the hazards of each new chemical you use, and get into the right gear before you get started.

Chemicals and kids can be a deadly combination. Thousands of children face potential injury or death through chemical exposure every year – by ingestion, inhalation, and skin or eye contact. Young children may be attracted to chemicals stored in appealing or familiar containers such as pop bottles or measuring cups – with disastrous results. Many chemicals look like other non-toxic substances. Gasoline looks like apple juice. Motor oil looks like syrup.

References

Chemical Safety Education for Children, Farm Safety 4 Just Kids, Earlham, IA, http://www.fs4jk.org

Strict rules apply to pesticide handling and storage, Farm Safety Association Inc., Guelph, ON, http://www.farmsafety.ca/factsheets/tips-e/pesticide_rules.pdf

Teach children the dangers of chemical exposure:

- Teach youngsters that chemical storage areas are "off limits."
- Clean and dispose of containers immediately. A poisoning can happen in the time it takes to turn your back.
- Instruct children about warning symbols and items they need to stay away from.
- Older children can be taught the distinctions between varying levels of danger based on warning symbols.
- Be a good role model – wear proper protective clothing when using chemicals.
- Keep children and toys far away from areas where you are applying chemicals.
- Keep the poison control centre number close to the phone.
- Instruct children about proper emergency procedures.