

Farm Safety Program



About This Publication

You will find this publication useful if you operate a farm or a ranch as a business. The *Farm Safety Program* is about management practices that will help ensure the health and safety of everyone on your farm.

The program provides:

- A 10-step plan to help you protect your employees, your family, and yourself from injuries and illness on your farm;
- Information on how the occupational health and safety legislation applies to farms and ranches; and
- References to publications and websites that can help you develop your farm safety plan.

If you have a specific question or concern about safety and health on your farm that is not covered in the *Farm Safety Program*, you can contact:

Ministry of Labour Relations and Workplace Safety
Occupational Health and Safety Division
300-1870 Albert Street
Regina, Saskatchewan S4P 4W1

Toll Free: 1-800-567-7233

Website: saskatchewan.ca

The *Farm Safety Program* does not replace *The Saskatchewan Employment Act* or *The Occupational Health and Safety Regulations, 1996*.

Table of Contents

| | |
|------------------------------------------------------------------------------|-----------|
| About This Publication | 2 |
| Introduction | 1 |
| Who is Responsible for Health and Safety? | 2 |
| Due Diligence | 3 |
| Insurance Coverage | 4 |
| The Importance of a Health and Safety Plan | 4 |
| Ten Steps of a Health and Safety Plan | 5 |
| 1. Demonstrate Commitment to Keeping Your Farm Healthy and Safe | 5 |
| 2. Involve Your Workers | 6 |
| 3. Train Workers and Supervisors | 7 |
| 4. Align Responsibilities | 8 |
| 5. Inspect Your Farm | 11 |
| 6. Identify and Control Hazards | 14 |
| 7. Control Chemical Hazards and Biohazards | 18 |
| 8. Prepare for Farm Emergencies | 20 |
| 9. Investigate Incidents and Near-Misses | 21 |
| 10. Continually Improve Your Plan | 21 |
| Legislation | 22 |

Introduction

As a business person and farmer, you understand that people (including family members who work on the farm) are your number one resource. Workplace incidents that result in serious injury or death can threaten the very survival of the family farm and jeopardize the future and well-being of all those who rely upon it.

Too many farmers, family members and farm workers are killed and injured on the farm each year as a result of incidents that could have been prevented. While less than one-quarter of Saskatchewan's working population lives on a farm, farm fatalities account for one-third of all worker fatalities in the province. Approximately 75 per cent of farm-related deaths are caused by machinery.

All of these incidents could have been prevented. Together, as a community, we need to make a commitment to eliminate all workplace injuries and illnesses and the needless suffering they cause.

The purpose of this publication is to provide guidance about how farmers and their employees can best meet their legal and moral responsibilities to create and maintain a safe and healthy workplace for the benefit of themselves and those who work with them or depend upon them.

Who is Responsible for Health and Safety?

The Saskatchewan Employment Act (The Act) and *The Occupational Health and Safety Regulations, 1996* apply to all workplaces, including farms.

The Saskatchewan Employment Act places responsibilities for health and safety on everyone who works in or in relation to the workplace. These individuals include employers, workers, self-employed persons, supervisors, contractors, prime contractors, owners and suppliers. The level of responsibility for each of these persons is based on the extent of their authority and control over the workplace.

Workers are also given three basic health and safety rights under *The Saskatchewan Employment Act*.

- The **right to know** about the hazards of their jobs. They should know how to recognize and deal with those hazards so they won't cause injury or health problems to themselves or to others in the workplace.
- The **right to participate** in health and safety in the workplace. Employers should consult with them about matters that affect their safety.
- The **right to refuse** work that they believe to be unusually dangerous to themselves and/or others in the workplace.

The employer has the most control over the business and has the greatest degree of responsibility to ensure health and safety standards are met. This includes duties to ensure equipment and work practices are safe and that workers are given the equipment, information, instruction, supervision and training they need to protect their own health and safety.

Workers' responsibilities are limited to what they can control. They are responsible to co-operate with others in matters of health and safety, to comply with health and safety instructions given to them, and to take reasonable care that they do not endanger themselves or others who could be affected by their actions.

A self-employed person, including a farmer who does not employ others, has the same responsibilities under *The Saskatchewan Employment Act* as both an employer and

worker combined. In short, they must give themselves and expect from themselves the same standards of health and safety, as is given to and expected from any other worker or employer. They cannot forget that they have a moral obligation not only to themselves, but to their family and community to keep themselves safe from harm.

Due Diligence

Due diligence means taking every precaution reasonable, in the circumstances, to avoid harm or to ensure compliance with a regulatory requirement. It describes both a duty to take care and a possible defense when an event or contravention occurs despite our best efforts.

Due diligence is important in occupational health and safety. Because legislation can't anticipate everything that can happen at work, due diligence requires employers to both comply with the regulations as well as to take every other precaution that may be reasonably practicable to ensure a safe and healthy workplace.

What must be done depends on the circumstances in each case. For example, consider the nature and extent of the risks present, opportunities for control, industry best practice, advances in understanding and technology and so forth. Meeting the duty requires a proactive, thorough, engaged and sometimes creative approach that reflects a thoughtful, planned and systematic response.

Due Diligence and Occupational Health and Safety Legislation

- 1. General duties:** Due diligence as a duty is captured in the general duties found in sections 3-8 to 3-15 of *The Saskatchewan Employment Act* and applies to employers, workers, self-employed persons, contractors, owners and suppliers. Employers have the broadest duty to take every reasonably practicable precaution to ensure their workers' health, safety and welfare while at work.
- 2. Reasonably practicable¹:** Taking every possible precaution unless it can be shown that the benefits of taking the precaution (usually a reduction in risk) are greatly exceeded by the cost in time, trouble and money. The greater the risk, the greater the health and safety measures required.
- 3. Proactive:** Due diligence describes a very high standard of care that is best achieved by a proactive and systematic approach to health and safety. This standard can best be met within a workplace by establishing and implementing a health and safety plan.
- 4. Continuous improvement:** An effective health and safety plan is continuously evolving. As things in the workplace change and as understanding increases with experience and assessment, needed improvements must be made to health and safety systems.
- 5. Defense of due diligence:** In addition to being a duty, due diligence can also be a defense. A person charged for failure to comply may be acquitted if they can show that they took every reasonably practicable precaution to ensure compliance, but that the failure occurred despite their best efforts because of reasons beyond their foresight or control.

¹ Under clause 3-1(1)(x) of *The Saskatchewan Employment Act*, "Practicable" means possible given current knowledge, technology and invention. Under clause 3-1(1)(z) of *The Saskatchewan Employment Act*, "Reasonably practicable" means practicable unless the person on whom a duty is placed can show that there is a gross disproportion between the benefit of the duty and the cost, in time, trouble and money, of the measures to secure the duty.

Insurance Coverage

Farms are covered under Part III of *The Saskatchewan Employment Act* and *The Occupational Health and Safety Regulations, 1996*. Most employers in Saskatchewan are automatically covered by *The Workers' Compensation Act, 2013*. Farmers and farm workers are not; instead, coverage is optional and an application must be made. Farmers who get workers' compensation coverage are entitled to benefits such as:

- Disability insurance for work-related injuries;
- Wage loss benefits;
- Lump sum payments if permanently impaired; and
- Freedom from legal action by an injured employee.

For more information, contact:

Saskatchewan Workers' Compensation Board

200 - 1881 Scarth Street
Regina, Saskatchewan S4P 4L1
Phone: (306) 787-4370
Toll Free: 1-800-667-7590

115 24th Street East
Saskatoon, Saskatchewan S7K 1L5
Phone: (306) 933-6312

The Importance of a Health and Safety Plan

As the employer, you hold the highest responsibility for knowing and applying the laws that ensure the health and safety of all people working on your farm. Just as you need to know the ins and outs of crop management, you also need to know what is required by Saskatchewan's Occupational Health and Safety legislation. Establishing and implementing a health and safety plan can help you meet your obligations as well as help you farm more safely and profitably.

An effective health and safety plan is developed in consultation with workers and is designed to:

- Identify hazards;
- Assess risks associated with these hazards;
- Implement measures to eliminate or minimize those risks; and
- Monitor each part of the plan to ensure that it is adequate and effective.

Ten Steps of a Health and Safety Plan

The 10 steps of a plan for a safe and healthy workplace are:

1. Demonstrate commitment to keeping your farm healthy and safe
2. Involve your workers
3. Train workers and supervisors
4. Assign responsibilities
5. Regularly inspect your farm, equipment and processes
6. Identify and control hazards
7. Control chemical hazards and biohazards
8. Prepare for farm emergencies
9. Investigate incidents and near-misses
10. Continually improve your plan

These ten steps are the basis for a solid health and safety plan. They are also supported by Occupational Health and Safety Legislation.

1. Demonstrate Commitment to Keeping Your Farm Healthy and Safe

You need a simple, concrete way of showing people who work on your farm that you're serious about health and safety. Demonstrate your commitment to health and safety through your actions and what you say. Here are some ideas:

- **Put your commitment to health and safety in writing:** Write down your intention to keep your farm healthy and safe and share it with everyone on the farm. Post it in a place where your workers can see it.
- **Set a good example:** Take the time to figure out how to do each job safely, and then make sure you do each job safely.
- **Define clear expectations:** Explain to workers or contractors, before you hire them, exactly what you expect in terms of health and safety. If you have a contract, put your expectations in writing. Make sure they know that they're responsible for doing the job safely and also doing it well. Insist that they follow all the legislation that applies to them. If someone is not meeting your expectations for health and safety, take steps immediately to correct the problem.
- **Maintain open communication:** Discuss health and safety with everyone regularly. Encourage and provide feedback on safety issues and performance. Show that you take safety concerns seriously. Reach an understanding about how hazardous jobs can be done safely. This will eliminate as much risk as possible before the worker starts the job.
- **React promptly:** Closely monitor the workplace for concerns about safety. Deal with your concerns and those of others promptly. Train and retrain your workers as soon as the need arises. Never take health and safety for granted.

2. Involve Your Workers

Involve your workers and family members in managing safety on the farm. Workers and those who live on the farm often have direct knowledge (if not direct experience) of the range of workplace hazards present.

Always take the issues workers raise about health and safety seriously. If your workers know that you value their opinions and ideas, they're more likely to be involved in health and safety on the farm. Their involvement will pay off for you with fewer incidents and injuries, and less money spent on needless repairs to equipment and training new workers who replace those who've been injured.

Have talks about health and safety with your workers on a regular basis. Encourage workers to give you their ideas about safety matters affecting the work; give them your ideas about safety and their performance as safe workers. Discuss the hazards of tasks before workers do them.

To eliminate as much risk as possible, make sure you and your workers agree on the safest way of doing all hazardous jobs before workers start on those jobs.

Give workers the opportunity to:

- Raise questions about health and safety as they come up;
- Discuss their safety concerns and receive support in finding solutions;
- Discuss incidents and near-misses;
- Conduct safety inspections with you;
- Do pre-operational checks on tools, machines and equipment;
- Read tool and equipment manuals and explain safe procedures to you or other workers;
- Take safety training and help apply it on the farm; and
- See their employer respond positively and promptly to their health and safety concerns.

3. Train Workers and Supervisors

Hiring Tips

Hire workers and supervisors who acknowledge that they can and will work safely. Ask them to discuss their previous training and work experience. Check their references to see if they have a positive safety record in their previous jobs. Ask them to demonstrate that they can safely complete those hazardous tasks on which they claim to be competent. Ensure that they don't get into trouble during the demonstration.

Responsibility for Training

Occupational Health and Safety Legislation requires employers to provide the training necessary to protect their workers' health and safety. New employees should start with a thorough workplace safety orientation. Information about how to hire, train, and manage employees can be found at saskatchewan.ca.

Training

Training is more than providing information. Successful training requires a demonstration that the worker has acquired the required knowledge or skills that they can do the job safely. It's your responsibility to teach employees or family members safe work practices and procedures as well as the skills they need to identify hazards and deal with hazardous situations that could arise.

Key elements of this training include:

- How to do the tasks safely
- Hazard identification and control
- Legislative requirements of a worker's job
- Rights and responsibilities of workers
- Who to approach with concerns
- Who to ask for help
- Where to go for first aid
- Emergency preparation plans
- What to do if there's an incident
- Location of chemicals and the Safety Data Sheet

4. Align Responsibilities

Safety is enhanced when everyone participating in the workplace knows their own and others' responsibilities for health and safety.

Assigning Responsibility

Occupational Health and Safety Legislation requires that the employer must ensure that everyone else knows their responsibilities for safety and how to act on them. Employers should assign clear and specific safety responsibilities to supervisors and workers. For good safety and management practice, it is essential to check regularly that each person is carrying out their responsibilities. If someone is not meeting your expectations for health and safety, take steps to correct the problem.

Duties of Farm Employers and Owners

- Knowing and following health and safety requirements;
- Providing a healthy and safe workplace;
- Providing and maintaining safe buildings, machinery, tools and equipment;
- Ensuring that employees operating powered mobile equipment or working in confined spaces (such as grain bins) are 16 years or older;
- Providing close supervision and ensuring clear lines of authority;
- Making sure supervisors are trained, supported and held accountable for meeting their health and safety obligations;
- Informing employees of existing hazards and training them to recognize other hazards;
- Making sure employees have the information, training, experience and supervision needed to do their job safely;
- Providing their employees with appropriate personal protective equipment (PPE) and showing them how to properly use it and maintain it;
- Ensuring that traffic routes, entrances and exits to your buildings, confined spaces and other work areas are safe;
- Safely handling, transporting and storing hazardous products such as chemicals, fuel, etc. and making sure adequate first aid facilities are provided; and
- Providing safe work processes and procedures, including written procedures when required (e.g., confined space entry, lock-out of equipment).

To view the legislation for the duties of employers and owners see sections 3-8 and 3-14 of *The Saskatchewan Employment Act*.

Duties of Supervisors

- Understanding and ensuring that workplace health and safety requirements are met;
- Making sure hazards are identified and proper steps are taken to control risks;
- Inspecting work areas and correcting unsafe conditions or unsafe acts before they lead to an incident;
- Making sure workers are properly trained and that they follow safe work procedures; and
- Understanding and implementing emergency procedures.

To view the legislation for the duties of supervisors, see section 3-9 of *The Saskatchewan Employment Act*.

Duties of Workers

- Understanding and obeying health and safety legislation and specific workplace health and safety requirements (such as operating tractors safely);
- Following safe work procedures;
- Using safety equipment, machine guards, safety devices, and personal protective equipment;
- Reporting unsafe conditions, workplace hazards, incidents, near-misses, injuries and illnesses immediately;
- Working and acting safely and helping others to work and act safely; and
- Co-operating with others on health and safety issues.

To view the legislation for the duties of workers, see section 3-10 of *The Saskatchewan Employment Act*.

Responsibilities When Contracting Work

Any person who hires a self-employed person or company to perform certain duties, is a “contractor” under Saskatchewan’s Occupational Health and Safety Legislation. Common examples of contracted work on Saskatchewan farms include custom spraying/harvesting, installing grain bins, electrical work, and welding.

Contractors share responsibility with subcontractors to ensure compliance with many Occupational Health and Safety regulatory standards. This means a contractor can be held responsible for the failure of a subcontractor to comply with Saskatchewan’s health and safety laws. A contravention or fine can be avoided if the contractor can demonstrate they took every reasonable precaution to ensure the subcontractor would comply.

The contractor is also responsible for any other matters not in the complete control of the subcontractor. For example, contractors share the responsibility for supervising the subcontractor’s workers while those workers are on the contractor’s farm. However, subcontractors are solely responsible for training their workers.

Contractors should:

- Determine who will be primarily responsible for what in relation to performance of the work, the work environment, and any other factors that could endanger workers;
- Control any health and safety hazards over which you, as the contractor, have some control. Keep in mind that the subcontractor is responsible for controlling hazards within his/her direct and complete control;
- Co-operate with subcontractors to control health and safety hazards that are not within your direct and complete control;
- Coordinate the health and safety activities and responsibilities of subcontractors and other workers on your farm;
- Provide subcontractors with any relevant information you have that could affect their health and safety, or anyone else's health and safety;
- Make sure subcontractors understand who is responsible for the health and safety activities that affect them; and
- Monitor subcontractors to ensure they comply with health and safety requirements and take action to correct any non-compliance you observe.

To view the legislation for the duties of contractors, see section 3-12 of *The Saskatchewan Employment Act*.

Responsibilities of Suppliers

The duties of suppliers (lessors and vendors) include:

- Supplying products that are safe when used according to instructions; and
- Making sure that products comply with the legislation.

To view the legislation for the duties of suppliers, see section 3-15 of *The Saskatchewan Employment Act*.

Employers' Responsibilities With Supplier Products

Employers have the responsibility for how products are dealt with and used in the workplace. Ask your supplier to provide you with information for the safe assembly, use, disassembly and storage of all products. Ensure that you read, understand and follow instructions for the products' safe use. You are responsible for communicating this information to your workers, and making sure they understand and follow these instructions.

If you, the employer, acquire a controlled product (hazardous substance) from a supplier to use on your farm, you should obtain a Safety Data Sheet (SDS) about that product. Also, ask for SDSs for exempt products such as pesticides. Make sure you train anyone who could come into contact with hazardous substances about how to protect him or herself. Closely supervise workers who work with dangerous substances to ensure their safety.

5. Inspect Your Farm

An effective farm safety system will include workplace inspections or ‘walkabouts’ that focus attention on farm hazards. Walkabouts prevent incidents by finding hazards before they hurt someone.

Employer and Worker Roles

Employers must regularly inspect any workplace they control. Many employers realize that workers are the most familiar with workplace hazards and designate workers and supervisors, after proper training, to carry out these inspections. Encourage everyone to regularly inspect his or her tools, equipment, and machinery. Everyone should carry out a pre-operational safety check before operating any machine.

Types of Inspections

Inspect your workplace regularly using both formal, planned inspections and informal inspections. Both are integral parts of your farm health and safety program.

Formal, planned inspections: A formal, planned inspection is a systematic examination of the workplace. In this type of inspection you evaluate the safety of all work areas, tools, machinery, equipment, jobs and work procedures. This inspection can be used to protect your animals and ensure that things are working efficiently and profitably. In formal, planned inspections you would normally use a checklist to cover all areas thoroughly. To protect the health and safety of everyone on the farm (workers, supervisors, and your family), use it frequently and regularly.

Informal inspections: These inspections refer more to specific tasks or jobs. They include pre-operational safety checks on all tools, equipment, machinery and personal protective equipment (PPE) before starting a job. Workers, supervisors, and managers conduct informal inspections everyday.

You should know the safety hazards and the condition of every part on each piece of equipment you use. A pre-operational safety check such as inspecting the equipment before starting to work helps ensure that you’ll get the job done without a dangerous breakdown. Typical situations where a preoperational safety check is essential include: when you are using a tractor, loader, or Power Take Off (PTO); when you’re refueling or hitching a load; and when you’re using farm equipment on the roads.

Know your equipment: Read the operator’s manual. Review the location and purpose of all the gauges and controls so you can react quickly in an emergency. Find out the meaning and relevance of all the danger, warning and caution decals on your equipment and machines.

Farm Safety Walkabout

The following checklist is a guide.

| | |
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| <p>Tractor</p> <ul style="list-style-type: none"> <input type="checkbox"/> Rollover protective structure used and seat belts installed <input type="checkbox"/> All shields and guards (e.g., PTO) installed <input type="checkbox"/> Proper hitching attachments (i.e., draw bar and safety chain) are used <input type="checkbox"/> Hearing protection available (tractor cab or ear protection) | <p>Orientation and Training</p> <ul style="list-style-type: none"> <input type="checkbox"/> Workers trained in work safety procedures <input type="checkbox"/> Workers receive adequate supervision <input type="checkbox"/> Workers trained in proper lifting, moving and repositioning |
| <p>Vehicles, Tools, Machinery, etc.</p> <ul style="list-style-type: none"> <input type="checkbox"/> Tools, machinery, equipment maintained <input type="checkbox"/> Vehicles maintained <input type="checkbox"/> Lockout mechanism available <input type="checkbox"/> All shields and guards installed <input type="checkbox"/> Hearing protection available <input type="checkbox"/> Hydraulic hoses in good repair <input type="checkbox"/> All warning decals and engine shut-off instructions visible <input type="checkbox"/> Lights and wipers working <input type="checkbox"/> Slow Moving Vehicle sign attached <input type="checkbox"/> Brakes in good working order <input type="checkbox"/> Battery in good condition <input type="checkbox"/> Operator's platform clear of debris <input type="checkbox"/> Visibility clear <input type="checkbox"/> Fire extinguisher on machine | <p>Fire Protection</p> <ul style="list-style-type: none"> <input type="checkbox"/> Isolate all sources of ignition <input type="checkbox"/> Extinguishers (full) in hazardous areas <input type="checkbox"/> No smoking signs in hazardous areas <input type="checkbox"/> Exits clearly marked in hazardous areas <input type="checkbox"/> Proper electrical installation <input type="checkbox"/> Flammable materials stored safely <input type="checkbox"/> Fire emergency numbers listed near telephone <input type="checkbox"/> Emergency fire plan posted |

| | |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>Chemical Hazard and Biohazard Protection</p> <ul style="list-style-type: none"> <input type="checkbox"/> Chemicals stored safely and labeled properly <input type="checkbox"/> Biohazards identified and dealt with safely <input type="checkbox"/> Warning signs posted <input type="checkbox"/> Proper Personal Protective Equipment (PPE) such as eyewear and protective clothing is available and in good condition <input type="checkbox"/> Emergency numbers posted | <p>Farm Yard</p> <ul style="list-style-type: none"> <input type="checkbox"/> Assigned play area for children away from work areas <input type="checkbox"/> Protection from enclosed spaces such as cisterns, wells, manure pits, feed silos <input type="checkbox"/> Protection from dugouts <input type="checkbox"/> Grain bins located away from electrical hazards <input type="checkbox"/> Identify and post all overhead power lines where high equipment (e.g., grain augers) is used |
| <p>Other Emergency Preparation</p> <ul style="list-style-type: none"> <input type="checkbox"/> Emergency plan posted <input type="checkbox"/> Emergency numbers posted <input type="checkbox"/> First aid supplies for all workplaces | <p>Work Environment</p> <ul style="list-style-type: none"> <input type="checkbox"/> Adequate lighting and ventilation for the work tasks <input type="checkbox"/> Protection from extremes of temperature |
| <p>Farm Buildings</p> <ul style="list-style-type: none"> <input type="checkbox"/> Fire exits clear <input type="checkbox"/> Aisles, stairs, ladders and floors uncluttered and in good repair <input type="checkbox"/> Light and ventilation adequate | <ul style="list-style-type: none"> <input type="checkbox"/> Buildings free of hazardous materials <input type="checkbox"/> Hazardous ladders/openings/protrusions guarded <input type="checkbox"/> Toilet/waste disposal facilities adequate <input type="checkbox"/> Electrical fixtures suitable |

6. Identify and Control Hazards

Hazard identification and control is key to preventing workplace injuries on the farm. Do not underestimate the significance of common, everyday hazards.

Everyday Hazards in Agricultural Workplaces

Machines: Machinery causes the most deadly injuries. The most hazardous machinery related tasks are:

- Transportation of family/workers (rollover, run over after falling may occur with tractors, trucks, all terrain vehicles, other farm equipment);
- Starting equipment/fueling up (bystander/operator run over, explosion);
- Using Power Take Off (PTO) (driven implements entanglement);
- Using farm equipment on public roadways (rollover, collision);
- Using machinery around power lines (electrocution); and
- Using loaders (electrocution, entanglement, crushing, falls).

Noise: Sustained exposure to high decibel noise produced by farm equipment and machinery can cause loss of hearing.

Confined spaces/water storage: Manure pits, grain bins, grain bags, septic tanks and other confined spaces are commonplace in agriculture and can cause asphyxiation and poisoning. Dugouts, wells and cisterns are very hazardous.

Chemical and biological hazards: See [Step 7: Control Chemical Hazards and Biohazards](#) for more information.

Working at heights: See [Working at Heights](#) for more information related to fall protection regulations.

Working with irritable, protective or hungry animals: Crushing and striking are risks.

Lifting, moving and repositioning: Inappropriate lifting and moving of heavy objects or loads causes back injuries. Ergonomic injuries arise from poor posture/positioning and repetitive motion.

Extreme Conditions of Weather, and Terrain: These make injury more likely. Extreme temperatures can cause immediate and/or long-term health problems.

Working Alone or in Isolated Places: These conditions may increase the risk of harm to the worker. Employers need to identify the risks to the worker in these situations and do what s/he can to eliminate or reduce the risks.

Hazards

A hazard is anything that can harm a worker and may produce serious and immediate (acute) affects, or cause long-term (chronic) problems. Occupational illnesses occur when someone is exposed to a chemical or a biological substance, a physical agent, or other stressors that can harm them. Someone with an occupational illness may not recognize the symptoms immediately. For example, noise-induced hearing loss is often difficult to detect until it is advanced and irreversible.

Hazards cause harm when workplace hazard controls are not adequate. Remember to check the adequacy of controls during your inspections.

A Hazard Control System

Using the following steps is a practical and effective way of controlling hazards. The system can work for a “formal” or “informal” inspection. The steps are:

1. Spot known and potential workplace hazards
2. Assess or identify the risk of these hazards
3. Make the changes that will eliminate or control the hazard

Step 1: Spot the hazard

A hazard is any situation, activity, procedure, equipment or animal that could harm someone. Focus on all farm tasks, equipment and substances when spotting hazards.

To identify hazards use:

- Observation and forethought to consider forces present and possible scenarios;
- Information from past incidents, near-misses and other experiences;
- Information from your family, employees and neighbours;
- Product literature and information from suppliers; and
- A job safety analysis².

Step 2: Assess the Risk

Next, determine the risk of harm for the hazard(s) you’ve spotted. The risk of harm is the chance (or likelihood) that the hazard will actually harm someone. Risk assessment mainly depends on **two** factors:

- The **likelihood** of an incident. Is it likely or unlikely to occur?
- The **severity** of the incident. Could it cause death, serious injury, or minor injury?

² Job Safety Analysis (JSA) is a process in which each basic step of a selected job is examined to identify potential hazards, assess the risks of harm and implement controls. For more information about how to conduct a JSA visit CCOHS at www.ccohs.ca/oshanswers/hsprograms/job-haz.html

To assess the risk of a hazard hurting someone, ask questions like:

- How many people come in contact with the hazard?
- How often are people likely to come in contact with the hazard?
- How seriously could someone be harmed?
- How quickly could a dangerous situation arise if something goes wrong?



Don't overlook low-risk hazards. They can also have fatal consequences.

This will help you to decide which hazards should be taken care of immediately. Also, you can use this information to help you decide what to inspect, when to carry out inspections and how often to do inspections.

The risk also depends on factors such as the physical and mental abilities of the individual (e.g., young operator), the weather and terrain (e.g., mud on a wet road), and how the equipment is used (e.g., working on uneven or hilly terrain).

Step 3: Make the change

There are several ways to control a hazard. Pick the way(s) that is/are reasonable and practical for the circumstances you face.

1. **Eliminate hazards** posed by equipment, animals, and the environment if at all possible. You could, for example, get rid of a faulty machine, sell a bull that is difficult to handle, put hilly terrain into pasture land rather than cultivate it.
2. **Substitute something safer** by using a different machine, material or work practice that poses less risk to perform the same task. For example, you could substitute a safer chemical for a hazardous chemical, or always use your safest tractor in steep terrain to minimize the risk of a rollover.
3. **Use engineering/design controls** when it's not possible to eliminate hazards or substitute safer materials or machinery. PTO and auger guards, rollover protective structures (ROPS) and brake locks are good examples of blocking controls used on farms. Design controls that isolate the worker/family from the hazard including childproof locks on pesticide sheds, fenced safe play areas away from the immediate work environment and locating grain bins away from electrical lines.
4. **Protect the workers** if other controls are inadequate. Protect workers through training, supervision and personal protective equipment (PPE). For example, you should supervise new workers until you're sure they're competent to deal with hazardous situations. Use and provide proper clothes and masks for handling dangerous chemicals or biohazards. Ensure someone at the worksite is trained in giving first aid.

The most desirable step in making a farm environment safe is to eliminate the hazard. To adequately control hazards in many situations, however, several different types of controls may be needed.

| Hierarchy of Control | |
|-----------------------|-------------------------------------------------------|
| Eliminate | remove from use |
| Substitute | use other machine, pesticide |
| Barriers/instructions | modify, repair, work procedure |
| Training/supervision | wear hearing protection, marks, goggles, gloves, etc. |

Using the Hazard Control System

Next are examples of how this system is used. Tractors are a good example because using a tractor is a very dangerous farm task. Tractor hazards have a high risk of death or disabling injury.

| Spot the Hazard | Assess the Risk | Make the Change |
|---------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Extra riders on machinery | <ul style="list-style-type: none"> • Serious injury or death from falling off and being run over or otherwise injured | <ul style="list-style-type: none"> • No extra riders |
| Bystanders near machinery | <ul style="list-style-type: none"> • Serious injury or death from run over after jump starting or crushing injury caused by faulty hydraulics | <ul style="list-style-type: none"> • Install mirrors, improve sight lines, stop look and listen, keep children and spectators away from work area, check area before starting, install backup beeper |
| Equipment in poor condition, jump starting | <ul style="list-style-type: none"> • Serious injury or death from run over after jump starting or crushing injury caused by faulty hydraulics | <ul style="list-style-type: none"> • Do regular maintenance • Always do a pre-operational safety check • No jump starting |
| High/poor hitching | <ul style="list-style-type: none"> • Serious injury or death from backwards rollover, rollover caused by a too heavy load for the tractor, going in the ditch, runaway loads | <ul style="list-style-type: none"> • Never hitch above drawbar, use proper draw pin/clevis, extra weight for tractor front end, use engine for braking when going downhill with heavy load |
| Front end loader improper, too large or too high | <ul style="list-style-type: none"> • Serious injury or death from large hay bale that can topple onto driver or bystander. • Excess weight can cause rollover, particularly in uneven terrain; high bucket can result in contact with power lines | <ul style="list-style-type: none"> • Ensure proper sized bucket for size of tractor, don't use manure bucket for moving large bales, use restraining devices or tines, drive with bucket low to the ground |
| Unguarded Power Take Off (PTO) | <ul style="list-style-type: none"> • Serious injury or death from step | <ul style="list-style-type: none"> • Avoid PTO, use tight clothing, tie shoes, keep children from work area, disengage PTO where possible |

7. Control Chemical Hazards and Biohazards

Everyone on the farm must know about chemical hazards and biohazards they may be exposed to. While hydrogen sulfide, silo gas, and carbon monoxide (generated by using equipment in shops) are examples of hazards typically encountered on the farm, there are a great number of chemical products, such as fertilizers and pesticides, that can endanger the health of people exposed to them. There are also a number of viruses that are a concern for worker health (e.g., H1N1, Hantavirus, West Nile). Use the same steps to control all of these hazards.

Spot the Hazard

Exposure to a chemical or biohazard might happen as:

- **An accidental exposure to the hazard:** Spilling during storage, transport or disposal of a hazardous substance.
- **A routine exposure to the hazard:** During the time a chemical or biological substance is applied or after application.
- **An unforeseen exposure to the hazard:** Exposure to a variety of viruses, or exposure to moulds or their spores while cleaning a contaminated, enclosed area.

Silos, manure pits, and dugouts are work areas that can expose people to biological hazards. Risk caused by farm chemicals increases if containers are not labeled or are labeled improperly.

Assess Risk

The health risks of chemical and biological hazards are often ignored because the effects may appear only after long-term exposure. The long-term consequences, however, can be severe and even deadly. Some chemicals, including anhydrous ammonia, and some viral agents, such as hantavirus, can be life-threatening.

Obtain information from suppliers (e.g., Safety Data Sheet [SDS], product information), from health and regulatory authorities (e.g., hazard alerts, educational material), from neighbours and associations. SDSs and labels are required by law for most hazardous products under Workplace Hazardous Materials Information System (WHMIS) requirements. Use this information to assess the risk.

Make Necessary Changes

Employers must protect workers from chemical and biological workplace hazards. The following steps are very important:

1. Keep an up-to-date inventory of hazardous chemical and biological substances.
2. Use obtained information for training, to develop work procedures, and to conduct workplace monitoring and inspections.
3. Use safe work procedures and processes:
 - Use personal protective equipment suitable for the job and store the PPE separate from chemical holding areas;
 - Know how to use the PPE and its limitations;
 - Store chemicals in containers that cannot be mistaken for something else;
 - Do not store incompatible chemicals together;
 - Do not store explosives near detonators;
 - Follow manufacturers' recommendations;
 - Secure hazardous substances during transport;
 - Assign responsibilities to those who order, purchase, receive and transport hazardous substances for ensuring that adequate hazard information is obtained; and
 - Prepare for emergency spills, leaks or releases.

Develop emergency response procedures for any possible situation. Know and use the Workplace Hazardous Materials Information System (WHMIS). For additional information about WHMIS please visit saskatchewan.ca.

Where there is an infection hazard, you must examine the risk of infection and prepare an infection control plan. See regulation 85 of *The Occupational Health and Safety Regulations, 1996*.

8. Prepare for Farm Emergencies

To prepare for medical emergencies, develop an emergency plan and review it with everyone who might have to deal with an emergency. This will reduce confusion in a real emergency. Review the plan with your local emergency responders.

Important parts of your emergency plan:

- **Listing possible emergencies:** Identify any emergencies that might occur, such as bad weather, fire or explosion, chemical spill, someone pinned by rollover while working alone, etc.
- **Providing a communication system:** How will you know when people need help? Consider providing two-way radios, phones or cellular phones for communication. Check in with your workers regularly through frequent visits or other means of contact.
- **Planning for Action:** Write out a plan for each potential emergency. Specify the role of each individual. As injured persons won't be able to carry out their roles in an emergency, list persons who can substitute for each role in your plan. For example, make sure everyone knows how to shut off machinery. Go over the plan with everyone involved.
- **Identifying Resources:** List everything needed to deal with possible emergencies in all areas of your farm. You should have adequate first aid supplies (restocked periodically) in all work locations and a way to call emergency help. Have emergency information, including directions to the farm, near all phones. Let local emergency service people know the best route to take to your farm.

Ensure that you have a way to evacuate a person who may be difficult to reach, for example, in a muddy field. Working in remote locations and alone is one of the greatest hazards in farming. Locating incident victims quickly and administering first aid on the scene can lessen the impact of an injury and greatly improve the chances of survival in some cases.

9. Investigate Incidents and Near-Misses

To investigate an incident or near-miss, you need to find out:

- What caused the incident (immediate events leading up to the incident)?
- What contributed to the incident (such as unsafe activities and conditions)?
- The root causes that set the stage (such as inadequate safety policies, procedures, or attitudes).
- Ways to prevent a similar incident.

Do not disturb evidence. If necessary, take photographs of the incident scene or make drawings. Interview anyone who saw the incident or was involved. Use these six questions to get the basic information about the incident.

- Who was involved?
- Where did the incident happen?
- When did it happen?
- What were the immediate causes?
- Why did the incident happen (root cause)?
- How can a similar incident be prevented?

Factors to think about include:

- Inadequate planning, training, orientation or supervision;
- Poorly designed work areas or job procedures (for example, repairing hydraulics on a front end loader without blocking the bucket);
- Inadequate, defective, or obsolete tools, machinery and equipment;
- Unusual circumstances, such as an emergency that requires workers to perform jobs they don't normally do; and
- Jobs that are rarely performed (for example, silo repairs).

10. Continually Improve Your Plan

Your farm health and safety plan should be reviewed regularly. Ask your workers to suggest improvements and help you detect and fix problems. Agriculture work is always changing. New technologies and/or problems may require you to:

- Re-examine workplace health and safety hazards;
- Update work processes in response to changes in knowledge or technology;
- Update supervisor/worker training;
- Change how supervising is done;
- Reassign responsibilities for safety; and
- Review your workplace inspection procedure and conduct safety inspections differently.

Legislation

Using legislation to help prevent injury in the farm workplace

Occupational Health and Safety Legislation was written to help employers and workers deal with safety concerns. The following tables outline some of the regulations affecting agricultural workplaces. Consult *The Saskatchewan Employment Act* and *The Occupational Health and Safety Regulations, 1996* for more details.

Examples of Regulatory Requirements in *The Occupational Health and Safety Regulations, 1996*

| Hazard | Reference |
|---------------------------------------------------------------------------------------|-------------------------------------|
| Aerial devices and elevating work platforms | Part XII |
| Air quality and general health requirements | Part VI |
| Chemicals and biohazards | Part XXI, XXII, regulations 85 |
| Confined spaces | Part XVIII |
| Extreme temperature | Part VI, regulations 115-127 |
| Fire and explosion | Part XXV |
| Inform workers about hazards at your workplace and their rights under the legislation | Part III |
| Inspect your workplace regularly | Regulation 28 |
| Investigate and report incidents causing serious bodily harm | Regulations 8 and 29 |
| Investigate and report dangerous occurrences | Regulations 9 and 31 |
| Involve your workers in health and safety | Part IV |
| Lifting hazards | Regulation 78 |
| Machinery hazards | Part X, regulations 134-152 |
| Noise | Part VIII |
| Powered Mobile Equipment (PME) | Part XI, regulations 153-167 |
| Prepare an emergency response plan | Regulations 360, 467, 481 and 22 |
| Provide training | Regulations 19, 22, 116.1, 154, etc |
| Working from ladders | Part XVI |
| Working alone or in isolated places of employment | Regulations 35 |
| Working at heights | Part IX, regulations 115-116.3 |

Farm Safety Program

For more information, please contact the Ministry of Labour Relations and Workplace Safety Occupational Health and Safety Division at:

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