Safe Farm

Promoting Agricultural Health & Safety

Farm emergency and first aid kits

Farming is a dangerous occupation, not just in the number of deaths but also the high rate of injuries that occur on the job. Many injuries are the result of modern farm equipment that is more powerful and specialized to handle specific tasks. To deal with these dangers, farm workers must be prepared to handle medical emergencies.

According to the Iowa Department of Public Health, 2,433 farm-related injuries received medical attention in 1994. Although farm-related injuries vary according to season and type of operation, the three most common causes are livestock, machinery, and slips or falls. More than half of all farm injuries (54 percent) in Iowa are caused by these hazards.

How you respond to farm-related injuries is critical. Certain conditions exist on a farm that can turn a minor injury into a life-threatening situation before professional medical treatment is available. Agricultural accidents often occur in remote locations and go undetected for long periods of time. Being prepared for medical emergencies and knowing the basics of first response can help minimize the extent of injuries.

Preparation includes having the right materials available. A farm emergency / first aid kit should contain everything needed to handle a medical crisis where you work. Keep in mind the following tips as you put together your farm emergency / first aid kit.

• **Know what's in the kit and how to use it.** Don't rely on gut instinct in a crisis situation. Get appropriate training and renew periodically. Take refresher courses. Play "what if" with family members. Set up scenarios and decide what you would do.

• **You'll need more than one kit.** Most farmers have several work environments that change as seasons and conditions change. Consider developing several kits specific to the hazards and potential injury. For example, a first aid kit for the dairy barn would contain different supplies than the kit you keep on your tractor in the spring.

• **Be selective.** A farm emergency kit should not be relied upon for day-to-day or minor injuries. Select items to help you handle a major trauma. You have limited space to store materials, so an emergency kit filled with small bandages for minor cuts would not help you after an entanglement. Small cuts should be taken care of, however, these conditions are not life-threatening and do not require first aid.

• **Pack items for individual needs.** Make sure your emergency kit contains personal medical information and supplies for those with special medical conditions. A sting to someone who's allergic to bee venom could be life-threatening, so appropriate items must be included. The name and telephone number of a family doctor for everyone who might be involved in a medical emergency also should be included.

• **Always include emergency numbers.** A card should tell you how to contact an ambulance, hospital, or fire department, and have written directions about how to get to the farmstead, field, or work area. Remember that "911" numbers may not be a standard service in some locations.

• **Remember communication and heat.** Flares and a flashlight will help you signal for help if you're caught after dark or in an isolated area. Don't forget to pack matches

Emergency response

How much do you know ?

1. Farm first aid kits should be used to help treat day-to-day injuries. True or false?

2. Which item(s) would you expect to find in a first aid kit?
 a) large garbage bag
 b) triangular bandage
 c) sugar packets
 d) disposable rubber gloves
 e) all of the above

3. According to 1994 reports at the Iowa Department of Public Health, how many farm injuries that required hospitalization were fractures?
 a) 5 percent
 b) 15 percent
 c) 25 percent

4. First aid kits should be checked every three months. True or false?

See answers on back.

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(water-proof). Flares also can generate heat until help arrives.

• **Check kit every three months.** Inspect for expired supplies. Replace items that are dusty (an air-tight container helps). Make sure supplies fit the season (e.g. source of heat in winter).

• **Pack Red Cross manual or first aid chart.** This information is invaluable during a crisis when it's difficult to think clearly. First aid charts and Red Cross manuals list neccessary steps to care for victims of various accidents, such as drowning, shock, fractures, or burns, and how to avoid additional injury. What you cannot place in this kit is practical knowledge gained by completing a course in first aid and cardio-pulmonary resuscitation (CPR).

• **Label all kits.** Store in a large nylon travel or sports bag with a visible label.

This publication provides only a general overview of first aid supplies for farm use. First aid manuals and a basic course of instruction are available from your local chapter of the American Red Cross. Pocket-sized first aid reference guides and basic first aid kits also can be purchased from the American Red Cross.

For more information, contact your local Iowa State University Extension office for a free copy of another publication in this series, *How to respond to farm accidents,* Pm-1518l.

Another helpful publication is *First on the scene,* NRAES-12, available from any extension office. There is a fee.

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Specialty kits

Some farm work requires special supplies in emergency kits, such as being prepared for major trauma, treating fractures, preserving severed limbs, and to handle poisonings. The most common need is for fractures, involved in 15 percent of all farm-related injuries that require hospitalization. About four percent of those injuries are for amputation. Keep similar items in small, labeled plastic bags.

Dressing supplies—to handle major trauma:
- ☐ sterile compress (2X2 and 4X4 inches)
- ☐ gauze roller bandages (1, 2, and 6 inches wide)
- ☐ adhesive tape (various widths)
- ☐ triangular bandage
- ☐ tongue depressors
- ☐ heavy duty scissors (to cut clothing)
- ☐ ice packs (chemical)
- ☐ small sugar packets
- ☐ disposable rubber gloves and goggles
- ☐ soap
- ☐ bottled water (if in heated area)
- ☐ tweezers
- ☐ safety pins
- ☐ pocket mask for resuscitation
- ☐ emergency blanket

Amputations:
- ☐ one large plastic bag (trash can size)
- ☐ 4 medium plastic bags (tall kitchen size)
- ☐ 8 small plastic bags (bread loaf size)
- ☐ Store all bags in a closed container to keep as clean as possible. Amputated tissue should be placed in bags during transport. Ideally, place tissue in a moist (not wet) wrapping, cover with a clean plastic bag, and place in a cool bag of ice.

Fractures—to immobilize injured limbs:
- ☐ wooden, plastic splints (¼ X 3 X 12-15 inches), or air inflatable
- ☐ roll of elastic wrap (to attach splint)

Poisonings—to use during pesticide application season or to keep where dangerous substances are stored:
- ☐ emergency and/or poison control center number
- ☐ syrup of Ipecac (use only if advised by doctor or Poison Center)
- ☐ two one-quart containers of clean water
- ☐ tongue depressors (to stir with or for seizures)
- ☐ two small, plastic empty jars with tight-fitting lids
- ☐ can of evaporated milk (attach opener to can with rubber band)
- ☐ blanket (for treating shock)
- ☐ plastic bandages and tape (to cover contaminated areas)
- ☐ disposable rubber gloves and goggles

Answers to quiz: 1-False; 2-e; 3-b; 4-True

A first aid kit for tractor or combine

This is a basic kit that can be used to treat small wounds, stop bleeding, support a fracture or sprain, or preserve a severed limb.

- ☐ basic first aid manual
- ☐ two triangular bandages (36 inches) to make slings, control bleeding, splint fractures
- ☐ antiseptic spray (not in pressurized can) to disinfect contaminated wounds (use before dressing)
- ☐ 12 large adhesive bandages for small cuts, puncture wounds, abrasions
- ☐ 4 safety pins to anchore triangular bandages
- ☐ 4 sterile compress bandages (2 X 2 inches) to dress wounds, control bleeding
- ☐ 4 sterile compress bandages (4 X 4 inches) to dress wounds, control bleeding
- ☐ roll of tape (2-inch width) to anchor dressing (do not constrict circulation)
- ☐ 6 pressure bandages (8 X 10 inches) to control bleeding, splint fracture
- ☐ scissors to cut clothing or bandages
- ☐ 2 rolls of elastic wrap to anchor dressings (use care not to stretch too tightly)
- ☐ 5 clean plastic bags (one garbage, 2 kitchen, 2 bread-sized) to transport amputated tissue

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