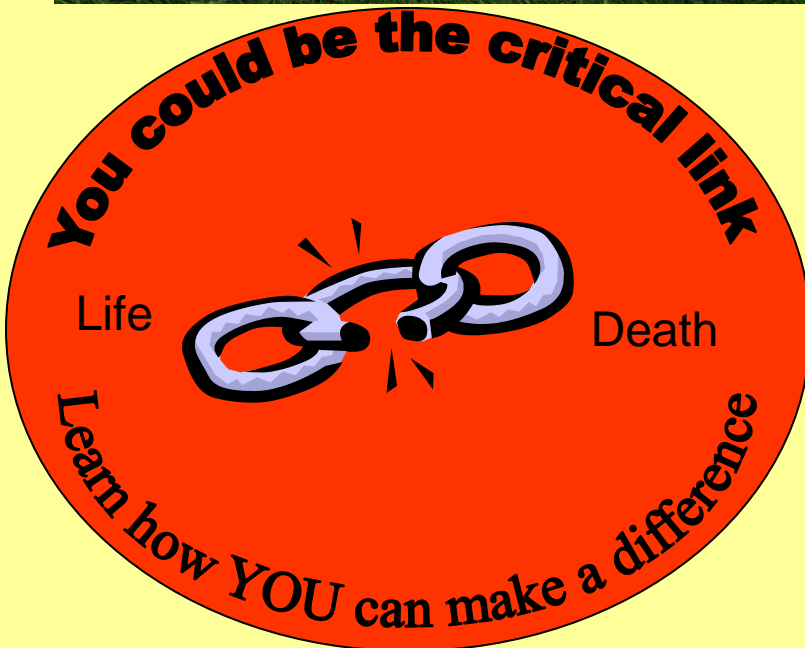


Emergency First Aid Care For Farm Families



**INSTRUCTOR
MANUAL**

Emergency First Aid Care for Farm Families

Instructor's Guide

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Financial support for the Emergency First Aid Care for Farm Families program was provided by the USDA Fund for Rural America Grant #2001-36201-11285 directed by Dennis J. Murphy, James W. Hilton, and Malcolm L. Legault.

Emergency First Aid Care for Farm Families Administrative Manual

Table of Contents

	<u>Pages</u>
Chapter 1 Introduction & Instructor Suggestions	A-C
Chapter 2 Presentations & Overheads/Narrative & Key Points	
Module 1. Patient assessment	1.1-1.6
Module 2. Bleeding & blood control	2.1-2.5
Module 3. Musculoskeletal injuries	3.1-3.4
Module 4. Chemical injuries	4.1-4.3
Module 5. Burns	5.1-5.4
Module 6. Heat emergencies	6.1-6.3
Module 7. Cold emergencies	7.1-7.4

Emergency First Aid Care for Farm Families

Introduction and background:

Each year across the United States and Canada, many farmers are involved in a serious injury on the farm. Often the outcome of the victim depends on the actions of the person who discovers their misfortune. Although in many cases, especially those involving serious injury, emergency medical providers will arrive and provide care for the injured; they typically will not arrive on scene immediately and critical care will need to be given before they arrive. Farm trauma can be very serious. Appropriate action in injury care prior to the arrival of emergency personnel can mean the difference between life and death for the victim.

Besides the obvious benefits to the victim, providing care will also occupy the family member that discovered the injury and is now waiting for the arrival of emergency responders. In many rural communities, it may be longer than 30 minutes before EMS personnel arrive on scene. This time can seem like an eternity to someone that's just waiting, but the time can pass quicker if they are kept busy.

Goals of the Emergency First Aid Care for Farm Families program:

1. Recognize what are the most important conditions to correct or maintain to keep a person alive.
2. Understand how to control bleeding that is not under control.
3. Understand how to determine if a person is bleeding inside the body.
4. Describe and demonstrate how to provide "comfort" treatment to an injured person.
5. List materials found around the home and farm that might assist with treating various injuries.

Instructor materials:

These materials were developed to help teach farm family members and employees how to manage an injured person. Some farm people will not enroll in structured patient care courses. This program is designed for those individuals. With a wide range of different hazards on many farms, the likelihood that there will be an injury emergency on most farms is pretty high. Knowing the correct actions can improve a stressful situation. The examples shown are typical farm injury examples. The suggested first aid resources are those typically found around the home and farm.

Instructor qualifications:

We anticipate that this program will be sponsored and delivered by either a community based hospital or EMS agency or a health care affiliate. The ideal instructor should have a strong background in patient care and be knowledgeable in agricultural practices. If an individual has limited knowledge in these areas, it is suggested to team up with someone that can help in the weak areas.

Program delivery:

This program is intended to be audience-driven. In other words, the Instructor should not stand up and lecture. The curriculum is intended to be followed in sequence. We strongly encourage you to begin any new program with the patient assessment and blood control modules as these modules discuss the importance of maintaining and controlling the A-B-C's. Experience has shown that most audiences want a program that will last no more than two hours. This is why some of the other standard first aid courses have not been successful with farm families. The modularized nature of this program makes it easy to emphasize a particular topic in a relatively short amount of time.

Key points:

When you review the instructor materials, you will notice three columns. The right most column is called the "key points". This is the "key" information that you want to get out. In the center column, you will see various "key questions (also called instructor narrative). These questions are asked to the participants to get them to arrive at the "key points". A skilled Instructor will be able to keep asking appropriate questions until the key point is derived at. The Instructor should not give the answer to the class before giving them the opportunity to come up with the answer on their own. The Instructor needs to become familiar with the curriculum and the key points of each module. The column on the left is the picture that is used to create the "sight" sense.

Practical experiences:

Many people remember only about 20% of what they hear but 80% of what they experience. An effective Instructor will help solidify the key points by having participants actually do the skills discussed. Bringing CPR manikins to the Assessment module to show and practice the modified jaw thrust and rescue breathing will anchor these important topics in their minds. Likewise, having students practice bandaging and splinting each other and finding each others various pressure points can best be taught in a practical sense rather than lecture. Even though this will make the class longer in length, you will be able to keep their interest longer.

Setting up your presentation:

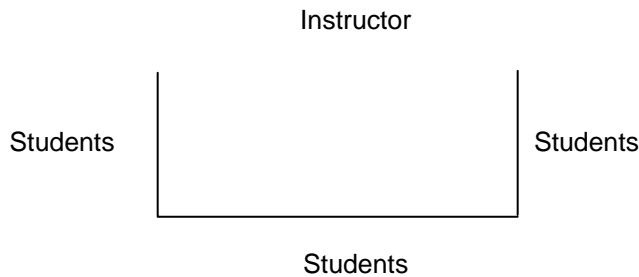
It is important to become very familiar with the program materials as well as how the program was designed to be delivered. If you are a health care provider, it should be relatively easy for you to comprehend the important topics and key points. A working knowledge of farming and farm people will make your presentation even smoother.

Class set up strategies:

An ideal classroom set up for this program is in a U shape. This shape gives everyone an opportunity to see each other and allows the Instructor to maintain eye contact with participants. This may not be possible with large crowds but for the average presentation in front of 15-30 participants, this is an ideal setting.

All lecture materials are on PowerPoint. Set the computer and projector up about halfway across the semi-circle so none of the participants have to strain to see the screen. Make sure the table you use is large enough to efficiently hold your necessary materials, such as your Instructor manual and any other resources you will need during your presentation.

Set up your instructor book with the Key Questions/Key Points near the projector and review the materials that you plan on going over during the session. Do not stand in front of the your gathering with a slide on the screen and turn around to read the picture to your students. They can read the text themselves. If necessary, read off your notes or Instructor book. It is more professional to look down than to turn your back on your students.



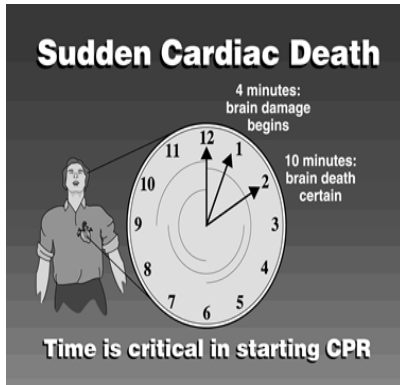
Decide where you will fit in different practical experiences and make a note in your instructor book. Prepare the practical tools and props before you begin the presentation so the practical experience flows naturally. You should arrange for appropriate helpers with these hands-on sessions.

Keep it basic-remember, you are not training people to be EMT-s in this class, so don't be overly critical of improper procedures or "sterile" supplies and techniques. Certainly you will stress cleanliness and proper technique, but remember that in this program we are talking about actions that can save a life using materials found around the home and farm. If it comes down to using an unsterile shirt or towel to help control serious bleeding or nothing, the shirt or towel is the right choice.

Emergency First Aid Care for Farm Families

Module 1: Patient Assessment & CPR

KEY QUESTIONS INSTRUCTOR NARRATIVE



How long can people live without breathing?

- *After 4-6 minutes of not breathing brain death begins. After 10 minutes of not breathing, brain death is certain.*



Once you can safely access the victim, how should you determine how he/she is doing?

- *Remember the C-A-B:*
- *Chest compressions: Does he/she have a pulse? Do you see any obvious bleeding?*
- *Airway: Is the airway clear?*
- *Breathing: Can you feel air coming out of their nose or mouth? Can you see the chest rise and fall?*
- *Open the mouth and look into it. If you notice any foreign material and you can reach it easily, remove it. Never attempt to remove an object that is deep in the throat. If you cannot reach it to easily remove, you could cause further complications by pushing it deeper. A clear airway is necessary for breathing to be effective.*



How do you determine if the airway is clear?

Besides the obvious foreign matter (gum, loose teeth, blood, vomit, etc.), what else may be blocking the airway?

- *The tongue is the most common cause of airway obstruction in the unresponsive victim.*

Emergency First Aid Care for Farm Families

Module 1: Patient Assessment & CPR

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



What position should the head be in to check for breathing?

- *The “sniffing” position. Because the tongue is attached to the lower jaw, moving the lower jaw forward will lift the tongue away from the back of the throat and open the airway. Using the head tilt/chin lift maneuver is the easiest way to achieve this. If you suspect neck injuries, you should perform the modified jaw thrust maneuver.*



What is the quickest way to check if a person is breathing?

- *Talk or call out to them. If they talk to you, then you know they are breathing. If they talk to you and answer questions appropriately, you know that they are breathing and their nervous system is working.*

If a victim that is trapped under an object is having difficulty breathing because of the weight of the object and you cannot safely lift the object off of him, is there anything else you can do to help make breathing easier?

- *After blocking or stabilizing the tractor in some way, try digging beneath him/her to allow expansion of the chest cavity to the rear. Be careful not to dig a deep hole beneath the victim as this will complicate potential spinal injuries.*

Should you attempt to remove the load from the victim?

- *Never remove the load from the victim unless doing so is the only way for the victim to breath. Doing so could complicate bleeding (internal or external) and/or spinal injuries. You may also injure yourself or cause additional injuries to the victim and can be dangerous to you and the victim.*

Emergency First Aid Care for Farm Families

Module 1: Patient Assessment & CPR

KEY QUESTIONS INSTRUCTOR NARRATIVE



How do you determine if the victim is breathing or not?

If the victim is NOT breathing, what should be your next step?

If you are unable to give two breaths because of position (face down or sideways, what should you do?



You have just given two breaths to your non-breathing victim, what is next?

KEY POINTS

- *Kneel at the victim's side: 1) Look for chest rise and fall, 2) check for pulse.*
- *This evaluation should take at least 5 seconds but no more than 10 seconds.*
- *Perform chest compressions at a rate of at least 100 per minute.*
- *For adults compressions should be at least 2 inches in depth.*
- *After 30 compressions deliver 2 breaths.*
- *Deliver breaths slowly, each breath should take two seconds to deliver, allowing the air from the first breath to escape before giving the second breath. If you see the chest rise as you are delivering the breath, you are breathing hard enough.*
- *If there is a way to safely remove the victim from under the load, doing so may be the best. If you cannot do this, your best option is to call for additional help.*

- *Continue compressions at a rate of at least 100 per minute. Compression to breath ratio is 30 to 2.*
- *Any assessment for breaths or pulse should take at least 5 seconds but no longer than 10 seconds.*

Emergency First Aid Care for Farm Families

Module 1: Patient Assessment & CPR

KEY QUESTIONS INSTRUCTOR NARRATIVE

If there is movement, but no normal breathing, or if breathing is abnormal and weak, what should you do?



How long should you continue rescue breathing?

If the victim is not breathing normally, coughing, or moving, what should you do?

KEY POINTS

- *You will assume that there is a pulse and you will continue providing rescue breaths to the victim. You will deliver one breath every 6 seconds to the victim. Each breath should take about 2 seconds to deliver. Stop when you see the chest rise.*
- *Until the victim starts to breath on their own, if someone else is available to take over for you, or you just cannot continue any longer. As long as the heart continues to beat, your breaths are providing adequate oxygen to the body. If you stop, the heart will soon stop.*
- *This generally indicates that there is no heart beat so you should provide chest compressions if it is safe for you to do. When rescue breathing is provided and blood is circulated to the lungs by chest compressions, the victim will likely receive enough oxygen to keep the brain and other vital organs oxygenated for several minutes. More than likely however, defibrillator will be needed to reverse this situation. Use an AED quickly if possible.*

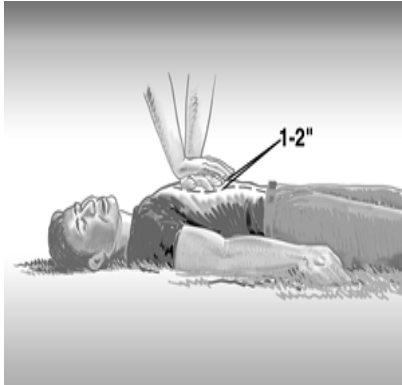
Emergency First Aid Care for Farm Families

Module 1: Patient Assessment & CPR

KEY QUESTIONS

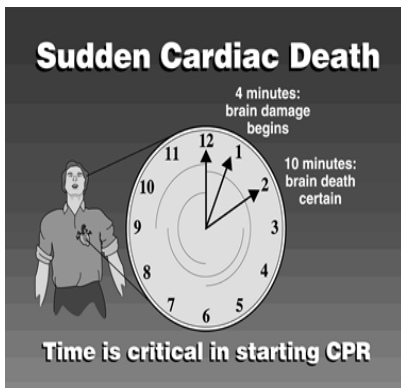
KEY POINTS

INSTRUCTOR NARRATIVE



How far do you compress the chest of a typical adult victim?

- *Normally 2 inches. This is a skill that will be taught in the practical section. You will compress the chest 30 times before giving two more rescue breaths.*



How long should you perform CPR?

- *Critical decision: In a rural area you may want to begin CPR for a minute or two and then go for help. In essence, this may bring the clock back to zero and may buy you some time. AHA recommends that you immediately call for help and request an AED before you begin CPR.*
- *Continue CPR until the victim moves, makes a sound, help arrives, or you cannot physically continue.*

Can all non-breathing people be saved?

- *No. If a person has not been breathing for an extended time (technically greater than 10 minutes), there is little hope for a recovery.*

Can you tell if your efforts will be futile?

- *The victim will exhibit signs of rigor mortis (stiffness) and may also show signs of blood pooling. Blood pooling results in the skin becoming purplish in color. The majority of cardiac arrest situations following a trauma have a poor survival outcome.*

Emergency First Aid Care for Farm Families

Module 1: Patient Assessment & CPR

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS

Module 1 Practical

- Sniffing position
- Head tilt/chin lift
- Modified jaw thrust
- CPR

For practical experiences in this module, show participants how to perform the tasks listed under the key points.

- *Sniffing position, specifically for infant patients.*
- *Head tilt/chin lift*
- *Modified jaw thrust, is specifically used for trauma victims.*
- *CPR*

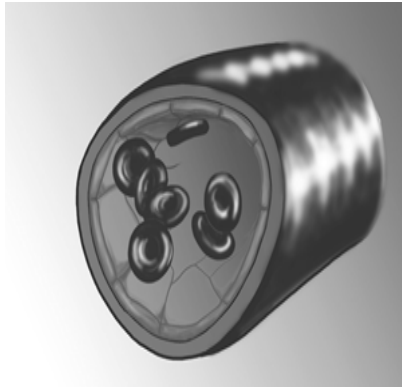
Emergency First Aid Care for Farm Families

Module 2: Bleeding and Blood Control

KEY QUESTIONS

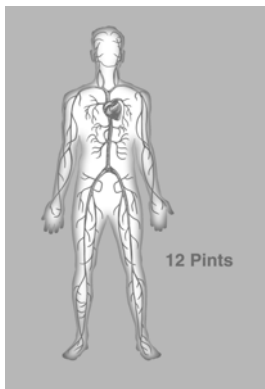
INSTRUCTOR NARRATIVE

KEY POINTS



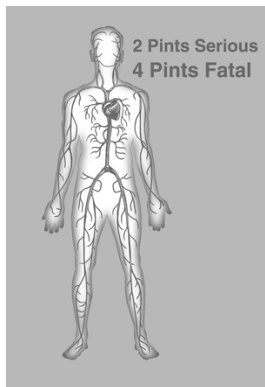
What is one of the biggest roles of blood in our body?

- *Blood is used to carry oxygen to the cells of the body as well as to transport waste products from the cells.*



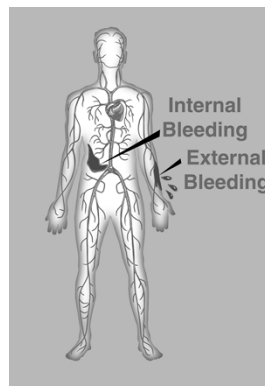
How much blood does an average adult have in their body?

- *12 pints or approximately 7% of a person's bodyweight. 2 pints equal one quart.*



How much blood can an average adult lose before it becomes serious?

- *In an adult, over one pint begins to be serious and over 2 pints begins to be critical. 4 pints or more is often fatal.*
- *In a child, loss of 1/4-1/2 of a pint can be catastrophic.*



What are the two ways people can bleed?

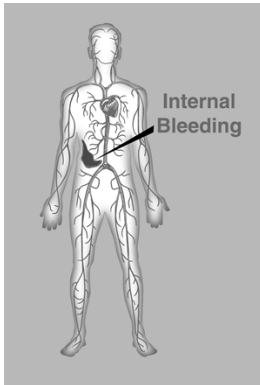
- *Internally or externally.*

Emergency First Aid Care for Farm Families

Module 2: Bleeding and Blood Control

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



Which can be more serious?

- *Internal is more serious because the care giver cannot see it or do anything about it.*

What is the most critical action when you see a person that is bleeding severely?

- *Stop the bleeding.*



What is the quickest method of controlling external bleeding?

- *Direct pressure to the wound.*

What can you use to apply direct pressure?

- *Preferably a clean, sterile dressing, but other things such as a towel, shirt, even a dirty rag will suffice. The main priority is to stop the bleeding. Even the bare hand will work.*

Emergency First Aid Care for Farm Families

Module 2: Bleeding and Blood Control

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



If direct pressure will not work to control bleeding, what should be done next?

- *Elevate the wound if possible. This may slow the bleeding rate down. Also apply a pressure bandage.*

If after applying a pressure bandage, bleeding has still not been controlled, what can you do?

- *You could put pressure on the appropriate pressure point. This is an area where an artery runs close to the skin surface and by squeezing the artery, you slow the rate of bleeding to the site.*

When should a tourniquet be used?

- *If all other efforts to control bleeding fail, a tourniquet may be the only method to control bleeding.*

What should a tourniquet be made of? What should it NOT be made of?

- *A piece of cloth, about 2 inches wide makes an ideal tourniquet. Avoid using thin material such as baler twine, wire or rope as these will tend to cut through the skin and blood vessels without stopping the blood flow.*

Emergency First Aid Care for Farm Families

Module 2: Bleeding and Blood Control

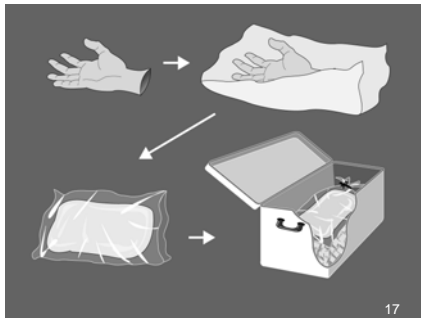
KEY QUESTIONS

KEY POINTS

INSTRUCTOR NARRATIVE

Once a tourniquet is applied, how long do you leave it in place before you loosen it?

- *Once a tourniquet is applied, you never loosen it. The physician in the hospital will remove it.*



How do you care for an amputated part?

- *Wrap the part in a clean cloth such as a towel. Put that in a plastic bag then put the bag on ice in a cooler. Never put the part directly on or in ice as this will freeze the tissue cells. Also, never add ice or water to the bag. Have the part transported with the victim if possible.*



What is shock?

- *Shock is a condition that the body enters as a result of some malady. It is a natural state and its purpose is to correct a life threatening condition such as excessive bleeding. A person in shock that is not conscious could mean this person is quite serious, as their compensatory mechanisms could be overwhelmed.*

How can you tell if a person is in shock or going into shock?

- *Typically a person that is in shock will be pale, cool, sweaty, thirsty, and may have fast heart and breathing rates. They may also feel dizzy and nauseous.*

Emergency First Aid Care for Farm Families

Module 2: Bleeding and Blood Control

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



What can you do for a person that is in shock?

- *Have the person lie down and reassure them, cover them to keep them warm but be careful not to overheat them. Possibly raise their legs 10-12" if this will not cause discomfort or additional spinal injury.*



If the person in shock is thirsty, should you give him/her anything to drink?

- *Never give an injured person that is in shock anything to eat or drink. One of the conditions of shock is a shut down of the blood flow to the stomach which means there will be no digestion, therefore anything given by mouth will most likely come back up and this may cause airway blockage.*



What is the best treatment for shock?

- *Shock patients need advanced medical care quickly. Pre-hospital care will include oxygen therapy and fluid replacement with I.V.'s. In-hospital care will involve finding and correcting the problem that is causing the shock. This may include surgery to repair internal bleeding and/or fluid replacement.*

Practical experiences for this module include those listed in the key points column.

- *Bleeding control via direct pressure, elevation, pressure bandaging.*
- *Care for amputations.*
- *Care for shock patients.*

Emergency First Aid Care for Farm Families

Module 3: Musculoskeletal Injuries

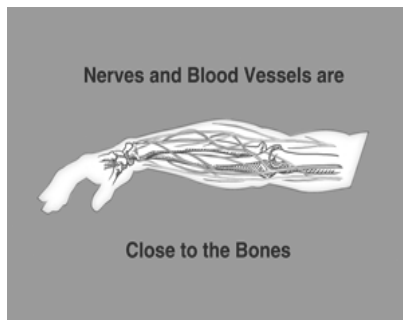
KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



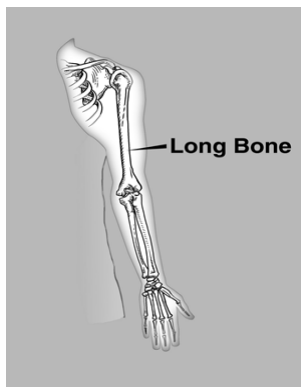
How can you tell if bone has been broken or fractured?

- *Pain to the area. There may also be deformity, swelling, or the victim states he/she heard it pop or can feel it grating with movement.*



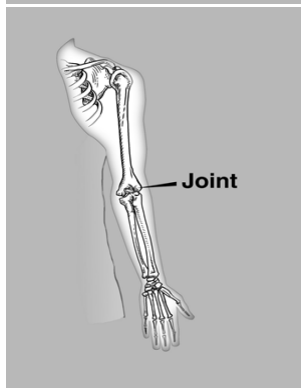
Why is it critical to not allow a broken bone to move?

- *Nerves and blood vessels are located next to bones and the broken bones may damage these.*



How can you keep a long bone from moving?

- *Immobilize it to the joint above and below it.*



How do you keep a joint that is injured from moving?

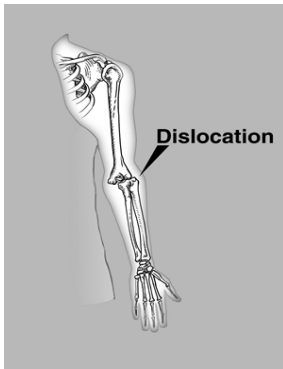
- *Immobilize it to the long bone above and below it.*

Emergency First Aid Care for Farm Families

Module 3: Musculoskeletal Injuries

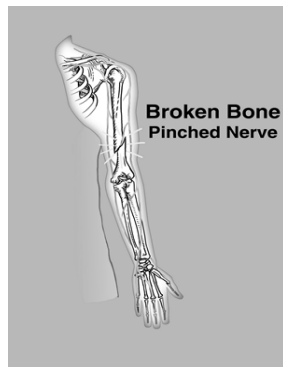
KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



How does treatment of a dislocation, sprain or strain differ from a fracture or break?

- *In your setting on the farm the treatment for these is the same as you cannot rule out the need to keep the injury from moving. It is best to treat for the worst case.*



Besides immobilizing a fracture site, what other benefit is there to splinting an injury?

- *It often relieves pain by keeping the nerves from rubbing on the injured bone or joint.*



What can you use as a splint?

- *Slats of wood, magazines, pillows, blankets, or anything that is not too bulky and keeps the injured parts from moving.*

Should ice be put on a fractured or injured site?

- *Putting ice on an injury will never harm and will work to reduce the swelling. Always put a towel between the ice and the skin so the ice does not freeze the tissue.*

Emergency First Aid Care for Farm Families

Module 3: Musculoskeletal Injuries

KEY QUESTIONS INSTRUCTOR NARRATIVE

Should warm compresses be used on an injured site?

KEY POINTS

- *Normally warm compresses will not be used in the initial stages of an injury. Warmth dilates the blood vessels which would enhance swelling.*



How do you treat an object that is impaled into a person?

- *You leave the impaled object in place and immobilize it as much as you can.*



Is it ever safe or advised to remove an impaled object?

- *The only time you should remove an impaled object is when the impalement is in the mouth (or cheek) and is resulting in an airway compromise.*



Why don't you remove an impaled object?

- *The impaled object may be controlling bleeding and removing it may start uncontrollable bleeding. Also, while removing the object, nerves and blood vessels could be damaged. These need to be surgically removed. Immobilize the site as best as you can, using bandaging and splinting material.*

Emergency First Aid Care for Farm Families

Module 3: Musculoskeletal Injuries

KEY QUESTIONS

INSTRUCTOR NARRATIVE

Practical experiences with this module include those listed in the key points column.

KEY POINTS

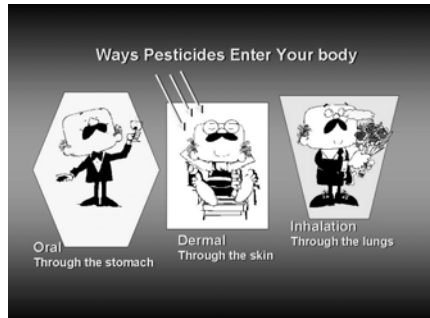
- *Splinting long bones and joints using a variety of items that could be found around the home and farm.*
- *Stabilizing an impaled object.*

Emergency First Aid Care for Farm Families

Module 4: Chemical Poisoning

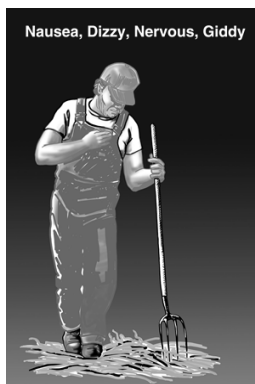
KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



How can chemicals enter the body?

- *Ingestion-through the mouth;*
- *Dermal-absorption through the skin, eyes or mucous membranes;*
- *Inhalation-breathed in.*



How can you tell if a person has been poisoned?

- *They may feel nausea, dizzy, appear nervous or giddy. Later signs may include drooling, pinpoint pupils, sweating, vomiting and/or lack of energy.*



What is the first thing you should do if you suspect someone has been affected (poisoned) by a chemical?

- Assure your own safety, wear appropriate PPE (personal protective equipment) if this is warranted, then if safe to do so, separate them from the chemical exposure.



How do you separate a victim of a chemical exposure from the chemical hazard?

- *If the chemical has been spilled on their clothes or body, remove the clothing and flush the body area with water for at least 15 minutes; if they are inside a building and have breathed in the chemical, get them out of the building into fresh air.*

Emergency First Aid Care for Farm Families

Module 4: Chemical Poisoning

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



How can you determine how to treat a person that has been poisoned by a chemical?

- *Contact the poison control center. The national poison control number is 1-800-222-1222.*

What kind of information do you need before you call the poison control center?

- *The name and concentration of the chemical and the E.P.A. Registration Number.*



Where can you find this information?

- *The label on the container of the chemical.*

Should you induce vomiting when a patient has ingested a poison?

- *Not always. If the material has a petroleum base, you will not induce vomiting. The label and/or poison control center has this information.*

Emergency First Aid Care for Farm Families

Module 4: Chemical Poisoning

KEY QUESTIONS INSTRUCTOR NARRATIVE

What does charcoal do in relation to poisoning?



When should an ambulance be called to transport a poisoned victim to the hospital?

Practical suggestions for this module are listed under the key points.

KEY POINTS

- *When charcoal is administered to a person that has been poisoned, the poison is absorbed by the charcoal in the stomach and it remains there instead of being absorbed into the bloodstream.*
- *For most severe poisonings, the victim should always be transported by ambulance. The effects of the chemical can progress and victim could quit breathing enroute to the hospital. You will not be able to control this situation but an ambulance crew will.*
- *Simulate a chemical incident using a manikin where participants need to identify the material, read the label, remove the patient's clothing, and wash off the patient with water and detergent without contaminating themselves.*

Emergency First Aid Care for Farm Families

Module 5: Burns

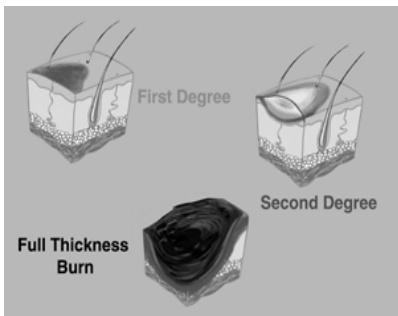
KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



What are three ways a person can be burned on the farm?

- *Thermal-with heat*
- *Electrical*
- *Chemical*



What are the three levels of thermal burns?

- *First degree and second degree burns are sometimes referred to as partial thickness burns.*
- *A third degree burn is often referred to as full thickness burn.*



Of the three levels, which is the worse?

- *A third degree burn is the worst as it is a full thickness burn; it burns all layers of skin and tissue. It may actually be the least painful because the nerves are usually burned, but it still is the most damaging.*



How do you manage a burn victim?

- *First assure your safety by making sure the source of heat (or power) is off and controlled, then remove the source of heat from the victim. Stop the burning process by removing clothing and cool the burn site down with water.*

Emergency First Aid Care for Farm Families

Module 5: Burns

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



Are there precautions to cooling the burn site down?

- *Yes. Normally the skin provides insulation and helps to regulate heat. Now that system has been damaged. Applying a large volume of cold water to a large area of burned tissue will cause hypothermia so be careful with this practice. Apply just enough to cool the area.*



What should happen next to the victim?

- *After the burn area has been cooled, the burn should be covered with a clean, dry cloth such as a linen sheet. Be careful not to break any blisters that may be forming on or around the burn site.*



Should you apply burn cream to the burn site?

- *Under no circumstances should burn cream be used on second or third degree burns. If creams or salves are put on, they will need to be removed in the emergency room and this process will be very painful.*



Should burn victims be transported to the hospital via ambulance or private vehicle?

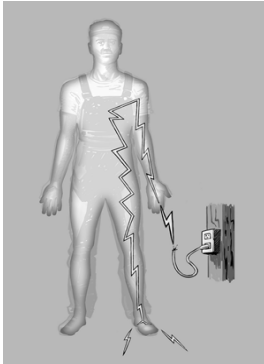
- *Most burns will not be life threatening but greater comfort can be given to a burn victim in an ambulance. Valuable fluid replacement can take place and pain management as well. Complications are always best left to experienced people.*

Emergency First Aid Care for Farm Families

Module 5: Burns

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



How does an electrical burn differ from a thermal burn and how does it cause damage to the body?

- *A thermal burn is visible because it burns from the outside to the inside while an electrical burn burns from the inside out. You may not see the worse damage from an electrical burn.*

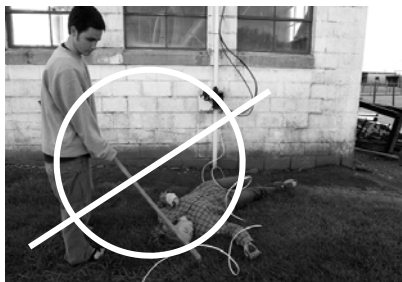
What are two serious complications from an electrical burn?

- *The electrical path can burn nerves, blood vessels, tissue and organs.*
- *The electrical current can affect the heart's pacemaker cells, which in turn could affect the natural heartbeat. The victim could have a heart attack as a result of this.*



How do you treat a victim that has received an electrical burn?

- *First assure your own safety. If you can and know how, shut off the power source that is causing or did cause the electrical current.*



Should you attempt to pull the wires off the victim, even with a stick?

- *Not unless you know for sure the electrical current has been shut off from the source. Electricity seeks the path of least resistance and that could easily be through a stick and through you.*

Emergency First Aid Care for Farm Families

Module 5: Burns

KEY QUESTIONS INSTRUCTOR NARRATIVE



How should you treat the victim?

KEY POINTS

- *Handle the victim very carefully and keep them quiet. Any additional stress or excitement can cause a serious heart attack. They must be taken to the hospital by ambulance as the electricity could have an effect on their heart. Watch for a drop in heart function and/or breathing. Be prepared to do CPR. Cover any obvious open electrical burn areas with clean dry cloths.*

Emergency First Aid Care for Farm Families

Module 6: Heat Emergencies

KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



How does the body cool itself in hot weather?

- *A person will sweat when they become too warm and this sweat will evaporate which will cause the body to cool.*



How does this system get out of control and cause problems for people?

- *Excessive sweating can cause a person to become dehydrated. When this happens, the natural cooling mechanism is compromised, thus inner core body temperature will continue to climb.*



What is the condition called when a person is sweating profusely and feels weak with flu like symptoms and feels cool to the touch?

- *This is called Heat Exhaustion.*

Emergency First Aid Care for Farm Families

Module 6: Heat Emergencies

KEY QUESTIONS INSTRUCTOR NARRATIVE



What should be done about this?

- #### KEY POINTS
- *Remove them to a cool place even if in front of a fan. Remove excess clothing and sponge with cool water. Have them lay down with legs elevated. Later on, have them drink lightly salted water or a sports drink if they are not too nauseated.*

What if these conditions deteriorate or do not get better?

- *Seek medical attention if improvements are not observed. This condition can progress to heat stroke.*



What is the condition called when a person feels warm or hot to the touch, with or without sweating; acts disoriented or confused; may even appear agitated or aggressive; comatose or have seizures?

- *Heat Stroke.*

Emergency First Aid Care for Farm Families Module 6: Heat Emergencies

KEY QUESTIONS INSTRUCTOR NARRATIVE



How should heat stroke be treated?

KEY POINTS

- *This is a true emergency. Immediate rapid cooling is critical. Remove the person from the hot environment; remove clothing, sponge to cool the body; consider ice packs wrapped in towels and placed in the groin, armpits, and back of neck. Seek immediate medical attention, even if it appears the condition is improving.*

Are there other heat related conditions that might be a concern?

- *Heat cramps are painful muscle spasms that come on suddenly after exertion. Adequate fluid intake and rest should make this condition improve.*

Emergency First Aid Care for Farm Families

Module 7: Cold Emergencies

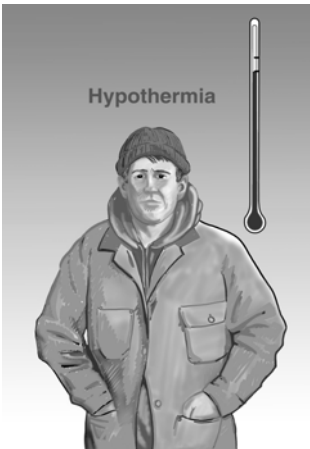
KEY QUESTIONS INSTRUCTOR NARRATIVE

KEY POINTS



What is the worst cold emergency to worry about?

- *Hypothermia.*



When does hypothermia occur?

- *When the core body temperature falls to below 95 degrees.*

How does a body maintain or produce heat?

- *Shivering starts when the body temperature drops 1 degree and can produce more heat than many rewarming methods. The body's ability to shiver usually stops when the core temperature reaches 90 degrees.*

Emergency First Aid Care for Farm Families

Module 7: Cold Emergencies

KEY QUESTIONS

INSTRUCTOR NARRATIVE

How can you tell if a person is hypothermic?



What should you do with a hypothermic patient?

Are there other cold emergency situations?

KEY POINTS

- *Besides shivering, look for changes in their mental status such as disorientation, apathy or aggressive behavior. Also, if their abdomen feels cooler than your hand does, consider them to be hypothermic. If these symptoms are present without shivering, consider this to be a true emergency!*

- *Get them out of the cold. Treat them very gently. Rough handling can lead to cardiac arrest.*

- *Remove wet clothing and cover with blankets, towels, pillows, newspapers or other insulating material. Cover the head (50-80% of body heat is lost through the head).*

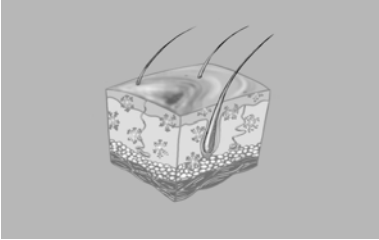
- *Contact EMS.*

- *Frostbite.*

Emergency First Aid Care for Farm Families

Module 7: Cold Emergencies

KEY QUESTIONS INSTRUCTOR NARRATIVE



What is frostbite?

KEY POINTS

- *Freezing that extends deeper through the skin and into the flesh.*

How can you tell if a person has mild frostbite?

- *Their skin is white, waxy, or grayish yellow.*
- *The affected part feels numb to the touch.*
- *The skin surface feels stiff or crusty and the underlying tissue is soft.*

How can you tell if a person has deep or severe frostbite?

- *The affected part feels cold, hard and solid and cannot be depressed.*
- *The affected part is cold with pale and waxy skin.*
- *A painfully cold part suddenly stops hurting.*
- *Blisters occur after rewarming.*

Emergency First Aid Care for Farm Families

Module 7: Cold Emergencies

KEY QUESTIONS INSTRUCTOR NARRATIVE

How do you treat frostbite?

KEY POINTS

- *Get them out of the cold.*
- *Remove anything that may constrict blood circulation such as clothing, rings, etc.*
- *If over 1 hour from medical help, place the part in warm water. This process will take from 20-40 minutes. Water temperature should not exceed 105 degrees. Do not allow the part to be re-exposed to cold.*