First Aid in Agriculture

Mario works at Orange Peel Farm. His job is to bend over, pick up boxes of oranges, and place the boxes on a truck. A few days ago, he twisted his knee as he lifted a box. He felt a sharp pain, and then his knee got swollen and bruised. The crew leader trained in first aid, told him to rest the leg, then applied ice, wrapped the knee with a bandage and put his leg up. Later, he sent Mario home with some instructions on how to care for his knee. Yesterday, Mario was moving his knee again, and it didn't hurt as much. He will be able to come back to work soon.

Pedro is a fruit picker at Onion Creek Farm. He has to climb up on a ladder to do his job. Yesterday, the wind was very strong and as Pedro was climbing up, he lost his balance, fell along with the ladder, and broke his leg. Pedro was in a lot of pain, but his coworker knew about first aid for broken bones. First, to prevent him from moving the leg and hurting it more, he put a splint on it. Then he took Pedro to the urgent care center.

Injuries like these happen all the time in agriculture. In fact, agriculture is one of the most dangerous occupations. Injuries may happen for different reasons.

• Accidents can be caused by weather conditions, or the use of machinery, equipment or vehicles.
• Some work tasks can be really hard on the body, like bending over and picking up objects over and over again.
• Not knowing or not following the safety rules can lead to injuries.

No matter what the dangers may be at your work site, you should be prepared in the case of injuries or accidents. The best way to be prepared is to learn first aid.
So, what is first aid?

First aid is the care that you give to a person that gets injured or gets ill very suddenly, before emergency medical care is available. First aid can include many different things, from cleaning a cut, to helping someone who is having a heart attack. First aid can:

• save the person’s life if he or she is seriously injured or ill
• prevent an injury from becoming more serious, like in Mario’s case
• reduce the amount of medical treatment the person needs and the time it will take to recover
• reduce time lost from work

The person that provides first aid should always first make sure he is safe. Then, he should call someone else for help or call 911, if needed. Then, he can provide care for the injured person while help is on the way.

What you should know about first aid at work

The U.S. Department of Labor requires all employers to have at least one person trained to provide first aid if the work place is not close to a hospital or clinic. The employer should also have first-aid kits available with the right supplies for the most common injuries that can happen. So, make sure you ask your employer:

• who are the people trained in first aid,
• what you should do if a coworker gets injured or ill, and
• where the first-aid kits are in case you need them.

Also make sure you have the telephone numbers for medical emergency services such as firefighters, police or ambulance (EMS).

Now that you know the importance of first aid at work, keep reading to learn about three of the most common work injuries in agriculture. The next articles will show you first aid steps for these injuries, but REMEMBER, taking first aid classes and practicing with a trained instructor is the best way to be prepared. Look for classes offered by health centers, hospitals, community colleges or other organizations in your community.
Two common injuries that occur in agricultural work are called strains and sprains. These injuries can happen when you suffer a fall, lift heavy objects, or make the same movements over and over. Usually these injuries are minor but if you don’t take good care of them they can get more serious. First aid can help heal the injury much more quickly and make sure you don’t lose more time from work. So let’s learn more about strains and sprains, what to do if these injuries happen to you or someone else, and when you should go to the doctor.

**What is a strain?**

A strain is an injury to a muscle or a tendon. A tendon is a thick cord that attaches the muscle to the bone. A strain happens when you twist, pull too much, or tear a muscle or a tendon. You know you have a strained muscle or tendon when:

- You feel pain and/or have swelling
- You have trouble moving the muscle
- You feel weakness in the muscle
- You feel cramps on the muscle

**What is a sprain?**

A sprain is an injury of the ligaments of a joint. Ligaments are short bands of tough and flexible tissue that connect two bones. A sprain happens when you stretch too much or tear the ligament. You know you have a strained ligament when:

- You have pain and/or swelling
- You see a purple bruise around the injured area
- You cannot move the joint where the injured ligament is
**Health Tips**

**What to do in case of a strain or sprain?**
Follow these steps right away if you think you have a strain or a sprain injury.

1. **Control the swelling**
   An easy way to remember how to control the swelling is to think of the word RICE. RICE stands for:
   - **Rest** the sprained or strained area for 2 days
   - **Ice** the area as soon as possible after the injury
   - **Compress** the area by wrapping an elastic bandage or sleeve around the injured area
   - **Elevate** the area above the level of your heart

2. **Treat your pain and swelling**
   Take over-the-counter medicine that can help relieve your pain and swelling, like ibuprofen (brand names Advil or Motrin) or acetaminophen (brand name Tylenol). Follow the instructions on the label when taking these medicines.

3. **Use the injured area**
   As the pain and swelling get better, start using the area that is injured little by little. Visit your doctor if your sprain or strain is not getting better after two or three days of doing these things.

**When should you go see a doctor right away?**
Make an appointment to see a doctor right after the injury happens if:
- You feel a lot of pain when you move or touch the injured area
- You feel that the area is numb or you feel like “pins and needles”
- You have no strength in the part of your body that is injured
- There is a lot of swelling and pain, the area feels hot, and you get a fever (these could be signs of infection)
Broken Bones: What to Do and What Not To Do

Another common injury at the workplace is breaking a bone, also called a bone fracture. Fractures usually happen because of a fall from high places, like vehicles, equipment, loading docks, buildings or ladders. So let’s learn about the types of fractures that can happen and what to do when helping someone who has a fracture.

About fractures

There are two types of fractures:

**Closed fracture**
When the broken bone has not come out through the skin and is not showing.

**Open fracture**
When the broken bone has come out through the skin and is showing.

In the case of an open fracture, it will be easy to know that a fracture has happened. If it is a closed fracture, you won’t know for sure, but you should treat the area as if it is a fracture.
First aid in case of fractures

All fractures need medical attention, so make sure you call 911 or get the person to a doctor, urgent care facility or hospital as soon as possible. But before moving the person, or while you wait for emergency services, follow these first aid steps to avoid making the injury worse:

1. **If there is an open fracture, try to stop the bleeding.** If available, use gloves to avoid contact with the blood.
   a. Apply pressure over the broken skin with a piece of clean cloth.
   b. Then wrap the wounded area with more clean cloth.

2. **Put a splint in the injured area.** A splint is any strip or stick made with a strong material, like wood, to give support to a broken bone and prevent it from moving.
   a. If your first-aid kit does not have a splint, you can make one from materials that are easy to find.
      For example:
      - For splint: use two strong objects such as poles, sticks, or tree branches
      - For padding: use a blanket, soft leaves, or a shirt filled with grass
      - For ties: use belts or strips of clothing, towels or blankets
   b. Place and secure the splint:
      - Place one tie over the closest joint that is above the area of the fracture. Do not wrap yet.
      - Place another tie between the upper joint and the fracture. Do not wrap yet.
      - Place another tie over the closest joint that is below the fracture area. Do not wrap yet.
      - Place one more tie between the fracture and the lower joint. Do not wrap yet.
      - Place the two objects that you will use for the splint on each side of the injured area.
      - Place padding between the injured area and the splint.
      - Now, wrap the ties around the splints to prevent from moving.

**Careful! In fracture cases DO NOT:**
- massage the affected area
- try to straighten the broken bone
- move the person unless it is necessary to avoid further injury
- move the person if you think the injury is to the spine (on back or neck)
- let the injured person have anything to drink or eat until they are under medical care

**Call 911 right away if...**
- The person had a major accident, like a truck accident
- The person is not breathing or moving
- The person is bleeding a lot
- You think a bone is broken in the neck, head or spine
- The bone has broken the skin
- The toes or fingertips of the injured arm or leg are numb or turning blue
Let’s Check What You Have Learned...

A. **Select** the correct word from the word bank below and fill in the blank:
   1. A strain is an injury to a ____________ or a ____________.
   2. A sprain is an injury of the ____________ of a joint.

   **Word bank:** bone, ligament, muscle, tendon

B. Put the steps to treat a strain or sprain **in order** from 1 through 4:
   ___ Elevate
   ___ Ice
   ___ Rest
   ___ Compress

C. Mark with an X the statements that are **true**:
   ___ 1. First aid can help prevent an injury from becoming more serious.
   ___ 2. All fractures need medical attention.
   ___ 3. Not being able to move the area is a sign of a fracture.
   ___ 4. You do not need to call 911 if the fracture causes heavy bleeding.
   ___ 5. You should not move the person if you believe there is a possible injury of the neck.

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**Answers:**

A. 1) muscle, tendon 2) ligament 3) ice 4) Compress 5) Elevate

All are true except #4
D. Fill in the crossword:

**Down**
1. A break on a bone
2. Emergency medical services
3. Medicine to relieve pain

**Across**
4. It happens when you twist, pull too much or tear a muscle or a tendon
5. Care given to an injured person before medical care is available