

LECCIÓN LESSON 2

Trabajando con seguridad con el ganado

Working Safely with Cattle

Seguridad en las lecherías

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LESSON 2

SUMMARY OF INSTRUCTIONS

Lesson Objectives

This lesson will help participants to:

1. **Recognize cattle behavior to make working with them safer**
2. **Describe hazards involved in working with cattle**
3. **Identify safe practices when working with cattle**

Materials

The following are the materials you will need during this session:

- » **Sign in sheet**
- » **PowerPoint Presentation and/or Flipchart with slides of presentation**
- » **Blank Flip Chart**
- » **Markers**
- » **Examples of personal protective equipment (PPE): gloves, eye protection**
- » **Cow bell (if feasible)**
- » **Gloves for every participant and trainer**
- » **Yes / No Flash Cards**
- » **Pens or Pencils**
- » **Handout: How Pablo Learned to Work with Cattle Comic Book**

Optional Handouts:

Stretching Exercises

Needle Stick Prevention on the Farm

Optional

Clip boards
Glo Germ Kit
Prizes or “giveaways”

Time

This lesson will take about 1 hour.

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BACKGROUND INFORMATION

Why is important to learn the risks when dealing with cattle?

Dairy farming revolves around the production of milk. Almost 24 hours a day, seven days a week, workers feed, push, milk, clean, and treat cows. Workers may also work with bulls and young stock. Cattle are the primary cause of injuries and illnesses on dairy farms. Most injuries happen to workers when they are milking cows. Bulls can also cause serious injuries and deaths. Therefore it is very important for all workers to understand how to effectively work with animals and understand animal behavior.

More than half of injuries on dairy farms happen when milking cows. One out of every four cattle-related injuries is caused by bulls.

Injuries, illnesses and deaths affect not only farmers, but also workers' families, co-workers and the farmer. Workers are impacted financially because they might not be able to work and support their family. The farm may experience decreased milk production because the milking routine is disrupted; additionally, time is lost hiring and training a new worker or covering the injured worker's shift. There may be costs involved with looking into the cause of the injury. The injury, illness or death can also take a toll on the mental wellbeing of the worker, co-workers and the farmer.

What are the reasons workers get sick or injured when working with cattle?

Dealing with cattle is the main source of injuries and illness for workers on a dairy farm. Injuries and illnesses can be as minor as small cuts, bruises, or allergic reactions or severe such as broken bones, bites, back and wrist pains, diarrhea, liver problems and abortions. Some injuries can even cause death. The main risks involve:

- » **Cattle behavior**
- » **Diseases transmitted from cattle to workers**
- » **Repetitive body movements**
- » **Contact with chemicals**
- » **The farm environment**
- » **Lack of knowledge and safety practices**

1. Cattle Behavior

Cows are social animals and look for comfort and safety. They like to stay in groups and follow a leader. Generally, cows move according to rank: middle rank cows lead the march, followed by the dominant cows, and lastly by the low rank cows.

Cows see people in three ways: as part of the herd, as a safe part of the environment, or as predators. Workers must avoid being seen as a threat by cows. Understanding cows and how they see their surroundings will help workers stay safe. The following are important things to know about cattle:

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Blind spot: A cow sees very well to the sides, but they do not see as well directly to the front. It can **not see** what is directly behind it. This area is called the blind spot. Cows turn their heads from side to side to see what is behind them.

Work calmly and quietly when cleaning the cow's teat and milking them, especially with fresh cows. Stay behind the protective bars to be safe in the blind spot while milking cows. In the parlor, one way to approach a cow when in her blind spot is to gently touch the back of her thigh.

Vision: Cattle are generally color blind and have poor depth perception. They are very sensitive to contrast. Eliminate blind turns, dark shadows and swinging/dangling items in their path to make movement easier for the cows.

Flight zone: The flight zone is the space around the animal where the animal feels safe. Usually animals will start to move away when someone or something enters their flight zone. The size of the flight zone depends on the animal, what it is used to, and how tame it is. Some animals do not have a flight zone. Bulls usually have a bigger flight zone than cows. Heifers have a bigger flight zone than older cows.

Point of balance: The point of balance is an area located near the animal's shoulder. A worker can get a cow to move forward or backward simply by moving in relation to the animal's point of balance. If a worker wants the animal to move forward, he should position himself behind the point of balance. If he wants the cow to turn around or move backwards, the worker should be in front of the point of balance. There is no need to use hands or prods to move the animal.

Stress: Cows may be dangerous when they are stressed. They get stressed when they feel threatened, when they are sick or when they are mad. They may also show signs of stress when separated from the herd. A cow may feel threatened while protecting her calf. A new cow being introduced to a group can be aggressive as she must establish herself in the group's pecking order. Bulls have unpredictable moods and can be hostile at any given moment. They are territorial especially when a nearby cow is in heat. Older bulls are usually more aggressive than younger bulls.

Workers should look for these signs of stress in cows and bulls:

- » Head is held very high and upright or lowered and shaking
- » Eyeballs are protruding
- » Ears are raised and pointing backwards
- » Neck muscles are flexing
- » Hair is standing up along the back bone (the hackles)
- » Bellowing or snorting loudly
- » Pawing the ground or kicking dirt into the air
- » Tail is either held straight up, tucked under or arched out away from the body
- » Standing broadside with the back arched

Physical pressure: It is a natural instinct for cows to push towards pressure if they have no way to avoid it such as when they are restrained. If a worker is between two restrained cows and applies pressure to one of the cows with their full body or hand, the cow will push back toward the point of pressure and the worker could become trapped between the cows.

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Workers can do the following steps to stay safe and to handle cattle safely:

- » **Keep calm, be patient, and avoid sudden noises.**
- » **Gently handle cows and their calves. Cows remember fear from bad experiences.**
- » **Avoid walking between cows and chasing cattle.**
- » **Never make cattle run. Running can stress animals and cause animals to slip and fall.**
- » **Never turn your back or work alone with a bull, or interfere when he is mating. Bulls sense fear, never work with a bull if you are afraid of it.**
- » **Always identify the escape route-exit before approaching a cow or herd.**
- » **Wear steel-toed boots and avoid bright colors and loose clothing.**

Communication is very important to prevent injuries and illnesses. Be aware of and take extra caution with stressed, sick, and fresh cows, and tell the supervisor and co-workers when a cow is sick or stressed. Place signs or notifications to communicate these risks.

2. Diseases Transmission

Diseases can be transmitted from cattle to humans and from humans to cattle. Even when animals do not appear to be sick, they can still transmit diseases. Germs that cause diseases can be transmitted through:

- » **Feces, urine, saliva, mucus and blood**
- » **Raw milk or milk that is not pasteurized**
- » **Contaminated food and water**
- » **Open wounds**
- » **Insects such as mosquitoes, ticks, flies, cockroaches**

Germs can enter the body by breathing them in, swallowing or eating them, or absorbing them through the eyes and skin. Workers can be exposed to illnesses when the germs get on their hands and skin. Workers can also get sick if their hands touch their mouth or touch something they eat or drink.

Objects such as boots, clothing, cattle equipment, and vehicles like tractors and skid steers can be contaminated. Workers can take some of these illnesses home when they wear contaminated boots and clothes in the home. Taking home raw milk or milk that is not pasteurized can be dangerous, particularly for children of workers.

The following infections can be found on farms:

Ringworm – this is fungus spread by direct skin contact between animal and humans. It is an itchy rash that can appear anywhere on the body. This is easily treated with medical attention.

E. coli diarrheal infection – this is spread by infected manure that enters through the mouth by contaminated hands, food, and water. It causes diarrhea and urinary tract infections.

Salmonella infection – this is picked up from food contaminated with manure. Symptoms include diarrhea, fever and abdominal cramps. Some workers may carry these bacteria without symptoms.

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Rare diseases include *Brucellosis*, which causes muscle pain that may last for years; *Tuberculosis* that can cause persistent and bloody cough, and *Q-fever* which is acquired by breathing in barnyard dust contaminated by infected milk or waste from cows. It causes fever and heart disease. *Listeria* can cause abortions in pregnant women and blood poisoning.

Some workers are immune to certain diseases because they have developed immunity over time. However, other workers are at higher risk of getting sick such as new workers, very young and older workers, and workers with certain health conditions such as HIV/AIDS, cancer, diabetes, and pregnant women.

Workers can prevent getting sick or prevent family members from getting sick by taking some steps to stay healthy.

Personal hygiene is the most important way to prevent diseases. Wash hands before and after handling cattle and when using chemicals with cattle, especially before eating, handling food, using tobacco products, or going to the bathroom. Washing hands will not cause pain or problems in the joints or muscles. These are the 5-step to wash hands correctly:

1. *Wet hands*
2. *Apply soap*
3. *Rub hands together for 20 seconds (clean between fingers and under nails)*
4. *Rinse thoroughly under running water*
5. *Dry with clean towel*

Workers should wear gloves and safety glasses when dealing with sick cows and notify the supervisor and co-workers of a sick cow. They should wash and disinfect boots, change shoes when going home or take boots off before entering the home. They should shower or wash thoroughly, and change clothes before touching or hugging a family member, and wash work clothes separately. Workers should never take raw milk home. If they do drink raw milk it is very important to boil the milk before drinking it. This is especially important for kids.

6. Chemicals Used with Cattle

Farms use chemicals and medicines to prevent or treat diseases in cattle. Medicine comes in various forms such as liquid, powder, spray or ointment. They are given to animals in different ways including through injections, as feed supplements or applied directly onto the animal's skin.

Workers can be exposed to these chemicals in a number of ways. Medicine can be absorbed through the skin, breathed in, ingested through contaminated food or drink, or injected accidentally. Exposures can happen when workers are directly treating the animal or when medications contaminate things that workers come into contact with such as when food and medications are stored in the same refrigerator. Workers are also at risk from injuries caused by needle sticks when used to inject medication into the animals.

Other chemicals used on dairy farms can cause serious injury or illnesses to workers. These include formaldehyde and copper sulfate used in foot baths to prevent infectious diseases like hairy warts and foot rot that cause lameness. Disinfectants used to sanitize milking equipment to prevent diseases from spreading can also be harmful to workers. Lesson 5 teaches more about chemicals and how to reduce exposures.

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It is important to do the following to prevent injuries when using medicines and chemicals: read the label, use personal protective equipment (PPE) and clothing such as gloves, safety glasses, long sleeves and pants, and use repellent against mosquitoes and ticks.

When using needles, it is important to:

- » **Slow down - don't rush with injections**
- » **Restrain animals properly and get help from coworkers as needed**
- » **Use the correct equipment and techniques**
- » **Never recap needles**
- » **Never keep needles/syringes in pockets**
- » **Never put caps in your mouth**
- » **Discard bent or dull needles**
- » **Use approved sharps containers to throw away needles**

7. *Repetitive Movements*

Dairy work, particularly milking, often involves doing the same task over and over again and using the same muscles to do the task. This repetitive motion and overuse of the same muscles can cause pain and injuries. Carpal tunnel syndrome, a painful wrist condition, is more common among milkers than other workers on the farm.

Changing tasks and positions or taking breaks from doing the same task over and over may help prevent injuries. Stretching your body during breaks may help your muscles feel better.

8. *Farm Environment*

Certain situations on the farm increase the risk of injuries and illnesses to workers, such as the lack of clear safety rules and communication procedures; lack of safety training; poorly maintained farm facilities; unmarked escape routes; and, pressuring workers to work fast, for long hours or multiple and varying shifts. The farm environment includes wet and uneven surfaces that can cause slips, trips and falls. Farmers can create a safer environment through the following:

- » **Develop, communicate, and monitor the farm safety and health rules.**
- » **Train workers.**
- » **Clearly mark the escape exits and routes.**
- » **Check yard and parlor fences, gates, and doors for frozen or broken parts.**
- » **Maintain and secure gates, doors and floors to avoid entrapment by cows and other injuries.**
- » **Keep floors clean to prevent slips and falls.**
- » **Keep all entrances to manure handling area gated and secured at all times.**

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9. *Workers Beliefs*

The risk of getting hurt on the job can be influenced by how workers think. Workers sometimes downplay the risks they face on the job. Commonly, workers think nothing bad is ever going to happen to them. Some workers may feel that it is not brave to be so careful. Machismo or showing people that one is “manly” can sometimes add risks to the job because workers might feel being safe is not being macho.

Workers may also believe that the time it takes to do things more safely, takes time away from getting their job done quickly. Workers might be concerned that slowing down, even if it makes the work safer, may be seen as lazy or not efficient. They may fear that this puts them at risk of losing their job.

Immigrant workers have increased risks for several reasons. They may not understand English well or instructions are not provided in Spanish. They may be willing to take risks and not report hazards because they fear losing their job or being deported. Even if workers are experienced, they may be unfamiliar with modern industrial farms.

Yes, you can do it!

Remember, your life and the wellbeing of your family and coworkers are in your hands. You can reduce the chances of being injured or getting sick when handling cattle by doing the following:

- ♦ **Watch cattle behavior**
- ♦ **Practice safety at all times**
- ♦ **Use protective equipment**
- ♦ **Practice good hygiene**
- ♦ **Report hazards and injuries**

Always Think Safety!!

Facilitator Guide and Presentation

LESSON 2

Working Safely with Cattle

Safety in Dairy

National Farm Medicine Center

Midwest Dairywise Network
MCN

UMASH
University of Minnesota
Animal Health and Safety

1

Say:

On a dairy farm, workers deal with cows all the time. Today we will learn how to keep from getting hurt or sick when dealing with cows.

Conduct an activity to create a comfortable learning environment.

Say:

During this class, we would like to hear from all of you. All of you have valuable experiences and ideas to share. Just like last time, we ask that each of you listen carefully and respectfully to ideas of all participants.

We will Learn

- Cattle behavior in order to work more safely
- Main hazards when working with cattle
- Practices to keep you safe when working with cattle



2

Say:

Today we will learn about:

- Cattle behavior in order to work more safely
- The main hazards when working with cattle
- The practices to keep you safe when working with cattle

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Hazards of Working with Cattle



3

Ask:

There are many ways workers can get hurt when working with cattle. On the farm, where is the most common place that workers are injured when working with cattle?



Risks of Injuries in the Parlor

4

Say:

Most workers are injured in the parlor.

Ask:

Who would like to share a story about being hurt or sick while working with cattle? It can be someone you know or yourself. Let's hear one story and how the person was hurt.

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Say:

Indeed, workers can be kicked, stepped on, bitten, crushed, pinned or get sick. Animals can be the cause of crushed or broken bones, bruises, muscle strains and illnesses. Workers can even die from injuries caused by cattle.

Ask and write responses on a flip chart.

Besides being hurt, what other things happen to the worker, to his or her family, and to the farmer when a worker is injured?

Look for answers such as:

Worker is unable to work

Worker has to spend money on medical bills, hospital

Worker feels bad, experiences pain

Worker loses their job, no or less income

Worker has to return to country of origin

Family doesn't have money to pay for bills

Farmer loses a worker and work is delayed

Farm costs increase (insurance and training of new/additional workers)

Farm is fined due to injury-causing hazards

Say:

As you mentioned, an injury caused by a cow or a bull affects the worker in many ways. It also impacts the worker's family and the farmer.

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Say:

Understanding cow behavior is an important first step workers can do to protect themselves from injuries.

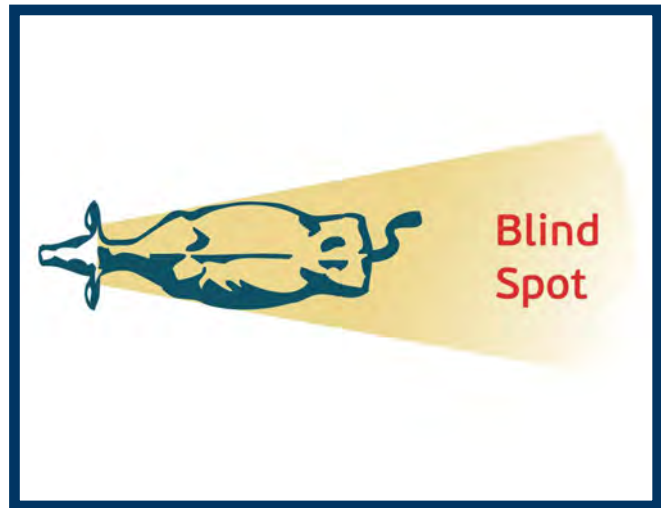
The Blind Spot

7

Ask:

Can anyone explain what a blind spot is?

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8

Say:

A cow sees well to the side, but not that well directly to the front. It does not see what is directly behind it. This area is called the blind spot.

Ask:

Why should workers be concerned about blind spot?

Explain:

If you approach the cow from behind, it will only be able to hear the noise. It cannot see what is coming. This may surprise or startle the cow. A startled cow may kick you.

Ask:

When do you work in the cow's blind spot?

Look for answers such as:

When bringing up the cows

When pushing the cows

When milking the cows

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Explain:

There are many instances when workers are working in the cows' blind spot. It is important to be aware and make sure the animal knows that you are there.

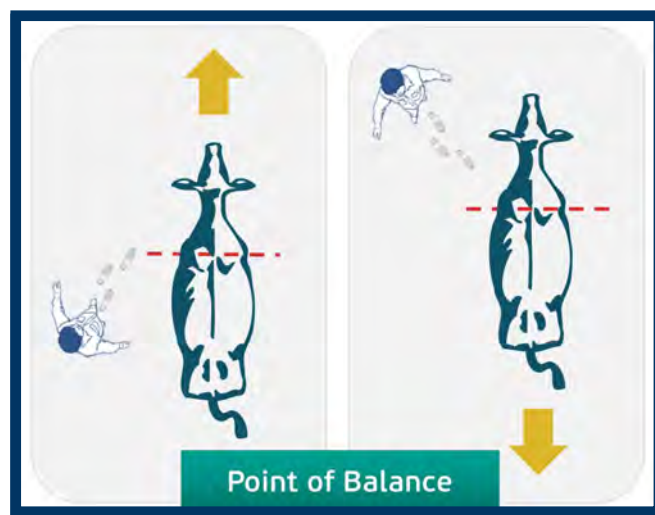
Point of Balance

10

Ask:

How is it possible to get animals to move without having to touch them or shout at them?

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Explain:

The point of balance is located near the animal's shoulder. A worker can get a cow to move forward and/or backward simply by moving in relation to the animal's point of balance. If a worker wants the animal to move forward, he should position himself behind the point of balance. If he wants the cow to turn around or move backwards, the worker should be in front of the point of balance. There is no need to use hands or prods to move the animal.

Ask:

Who would like to volunteer? I will pretend to be the cow and you will be the worker. I am going to stand just like a cow. I want you to make me move without touching me just like in the picture.

Ask:

How does understanding the point of balance help protect workers?

Explain:

If workers understand the cow's point of balance, then they can move cows without touching them. This will lessen the risk of getting kicked or pinned and will help lower animal stress.

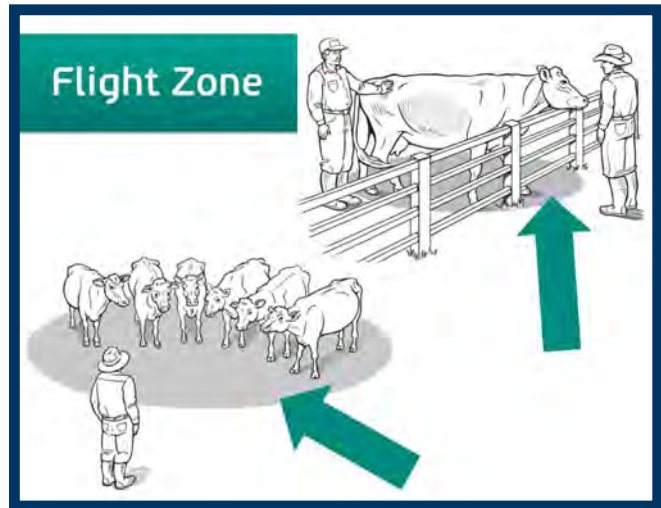
Flight Zone

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Say:

Cattle are like people and can feel uncomfortable when someone unfamiliar gets too close. Cows have a safe area around themselves. This is called the flight zone.

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Say:

When a worker enters the flight zone, the animal will move away in order to keep a certain distance. The flight zone gets smaller as the cow is tamed or when it gets more comfortable around a person.

A barrier like a fence can also make the cow more comfortable and the flight zone smaller.

A heifer has a bigger flight zone than a cow. The younger the cow, the bigger the flight zone.

Ask:

At what point in your work is it important to think about the flight zone?

Answers likely include:

When we get the cows for milking

When pushing the cows into the parlor

When the cows are in the pen

When the cows are in the holding area

When working around cows in general

When working in the calving area

When working with fresh cows

Cattle Reacts to Pressure



14

Say:

Cows will respond to physical pressure by pushing into that pressure if they have no way to avoid it like when they are restrained, such as when in headlock. If you apply pressure with your full body or hand, the cow will move into the direction of the pressure. If you are between two cows and apply pressure to a cow she will push toward you and you could be trapped between the cows.

Ask:

At what point in your work might you get caught in between cows? What should you avoid doing in order to protect yourself?

Answers likely include:

When they are restrained like when they are being vaccinated, given a shot or another treatment

When cows are in their headlocks or locked up

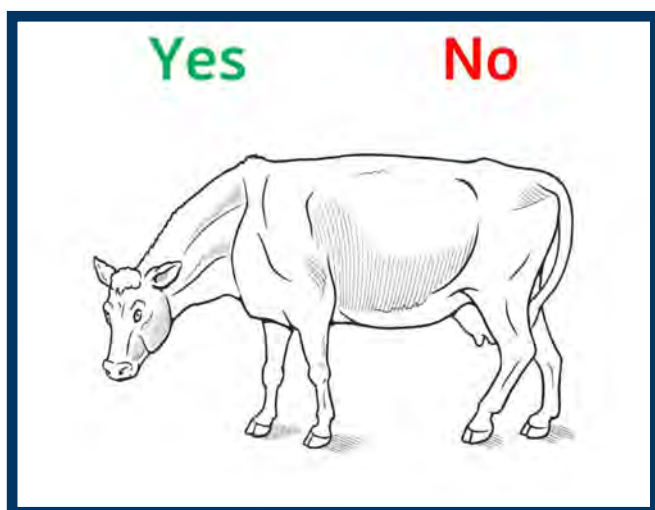
When between two restrained cows, avoid applying pressure to the cows

Stress

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Say:

Cows and bulls are more dangerous when they are stressed. There are several ways that cattle show they are stressed.



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Ask:

Do you think this picture shows a stressed cow?

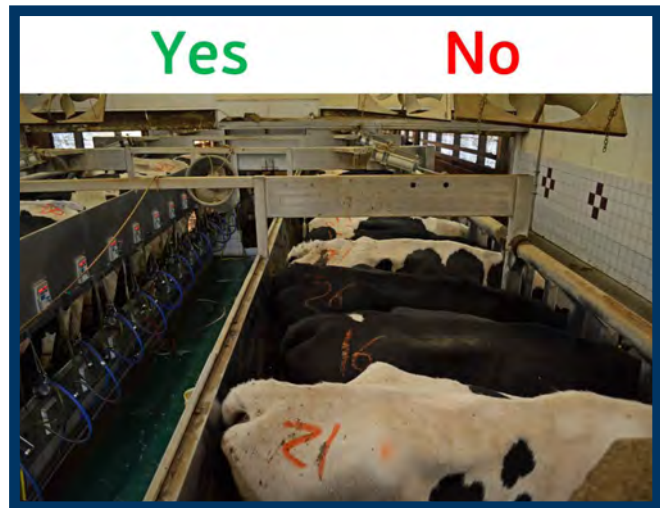
Raise the YES (green letters) card if you think the cow is showing a sign of stress.

Raise the NO (red letters) card if you think the cow is not showing a sign of stress.

Say:

Yes. This cow with its tail between the legs is a stressed cow. The tail between the legs is usually a sign of sickness. She may be stressed due to being sick. It might be a bit harder to tell with a docked tail. A docked tail will be pressed up against their backside. A lowered head is also a sign of sickness.

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Ask:

How do you identify fresh cows on your farm? Is it a good idea to mark a new cow?

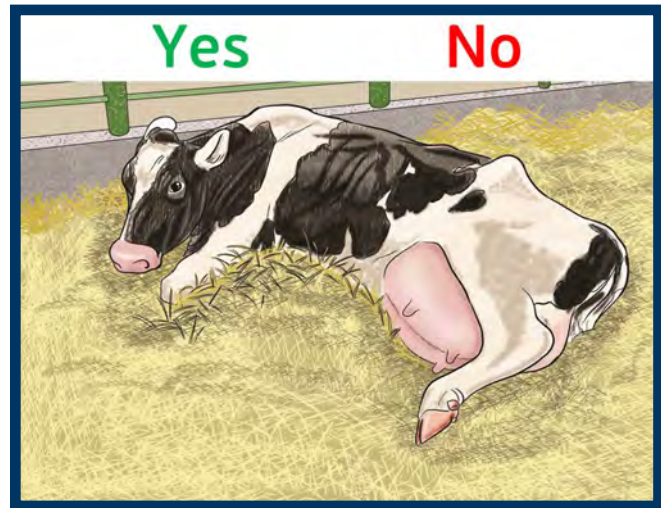
Raise the YES (green letters) card if you think this helps inform workers.

Raise the NO (red letters) card if you don't think so.

Say:

Fresh cows and sick cows can behave differently or dangerously. Marking them can help workers know if they are fresh or sick. Be careful when handling these cows.

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Ask:

Do you think this photo shows a stressed cow?

Raise the YES (green letters) card if you think the cow is stressed.

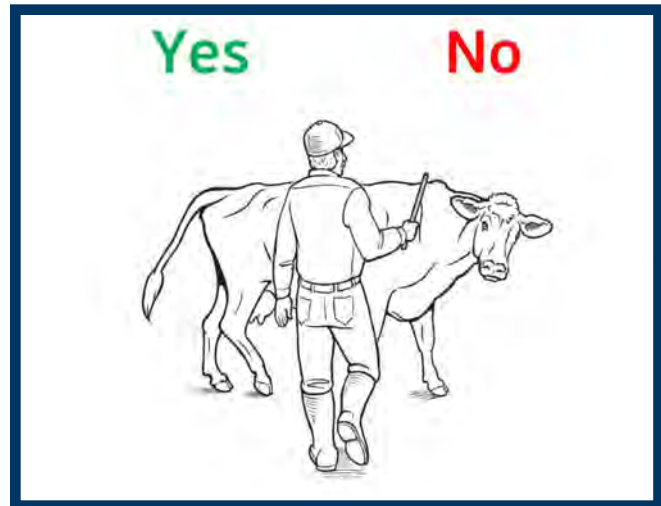
Raise the NO (red letters) card if you think the cow is stressed.

Say:

Something may be wrong if the cow is lying down and it does not try to move away when you get near.

These are signs of stress. She might be hurt or sick. Don't try to get her to move by yourself. She may feel threatened and make this a dangerous situation for you.

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Ask:

Do you think showing a cow a prod might make the cow stressed?

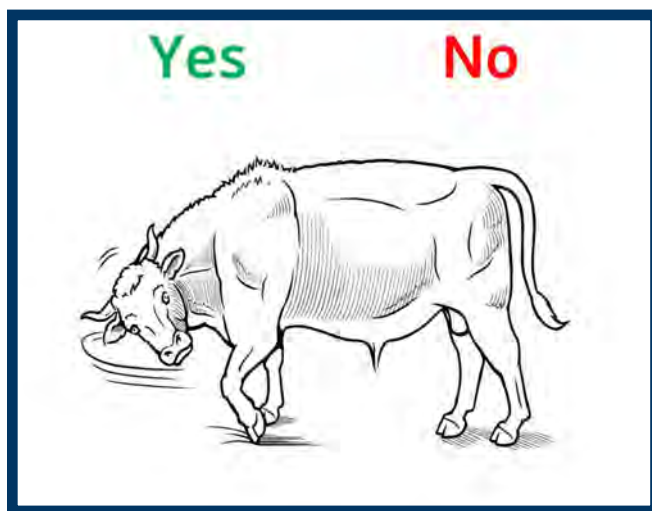
Raise the YES (green letters) card if you think showing the cow a prod will make it stressed.

Raise the NO (red letters) card if you do not think that showing the cow a prod will make it stressed.

Say:

Cows and bulls have excellent memories and remember bad experiences. If a cow was once hurt by a prod, just seeing the prod might make the cow stressed again.

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Say:

Do you think this photo shows a bull with signs of stress?

Raise the YES (green letters) card if you think the bull is showing signs of stress.

Raise the NO (red letters) card if you think the bull is not showing signs of stress.

Say:

Yes. This bull looks stressed because it is showing signs of aggression.



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Ask:

What tells you that the bull is showing signs of stress or aggression?

Explain:

Kicking, butting and/or bellowing, and the hair standing up along the back bone are important signs of stress or aggression. Pay attention to these signs especially around bulls. This means that they are getting ready to charge.

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Ask:

What happens when animals are separated from their group?

Explain:

Dairy cattle are herding animals. They feel safer in groups rather than apart and separated. Separating a cow from the herd can make it stressed. When possible, move cattle in groups. This is safer for you because it helps keep them calm.

Review

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Ask the first part of each sentence below. Let the participants respond. As needed, read the rest of the sentence with them.

Let's review what we just learned about cattle behavior...

A Blind Spot is...?

It is the area behind the cow. Remember that cows are more comfortable when they can see you. Be aware of the blind spot and that cows see best to the side.

Point of Balance is...?

The point of balance is located near the animal's shoulder. Remember that you can move cattle without touching them depending on how you move in relation to the point of balance.

Flight Zone is...?

It is the imaginary area around the cow that makes her feel safe. Remember that animals, particularly ones that do not know you, are more comfortable keeping a certain distance from you.

What happens you push or apply physical pressure...?

The cow will push back to the origin of the pressure. Remember that cattle move into the direction of the physical pressure. When in between two cows, applying pressures might cause you to become pinned between the two cows.

Signs of stress in cows are...?

Remember a cow with its tail between its legs, ears pointed, lying down, kicking, butting or bellowing is stressed and is likely to be dangerous. A cow that gets separated from the herd is also likely to be stressed.

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How to Work Safely with Cattle



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Say:

Now that we know about animal behavior, let's look at some other ways to protect yourselves when working with cattle.



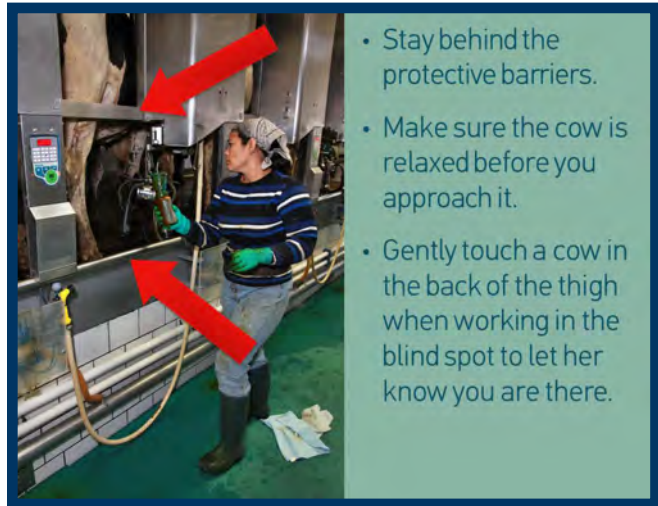
In the Parlor

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Ask:

In the parlor, you work directly in the blind spot. What protects the worker in this picture?

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Explain:

It is important to be careful when working in the blind spot. Watch your hands and arms. Stay behind the protective barriers as much as possible. Make sure the cow is relaxed before you approach it. In the parlor, one way to approach a cow when in her blind spot is to gently touch the back of her thigh.

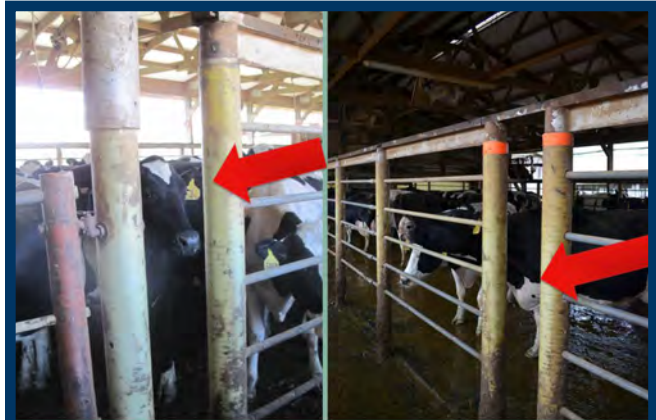


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Ask:

What do you see in this photo that will help keep workers safe?

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Know where the exit route is

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Explain:

Before entering holding areas or areas where cattle are kept, always look for a way to quickly get away or escape if you need to. Know where the escape route is before you enter.



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Ask:

What steps can you take to lessen risks when working around bulls?

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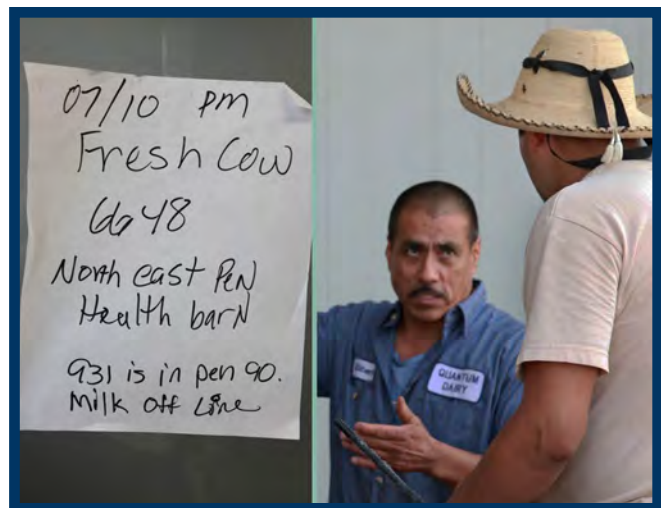
- Know all areas where bulls are kept.
- Avoid working alone around a bull.
- Never turn your back to a bull.
- Leave bull alone when he is mating.

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Explain:

Know all the areas where bulls are kept. It's helpful if the farm clearly marks bulls such as with a cow bell or makes sure areas where bulls are kept are clearly marked.

- Avoid working alone around a bull.
- Never turn your back to a bull.
- Leave the bull alone when he is mating.

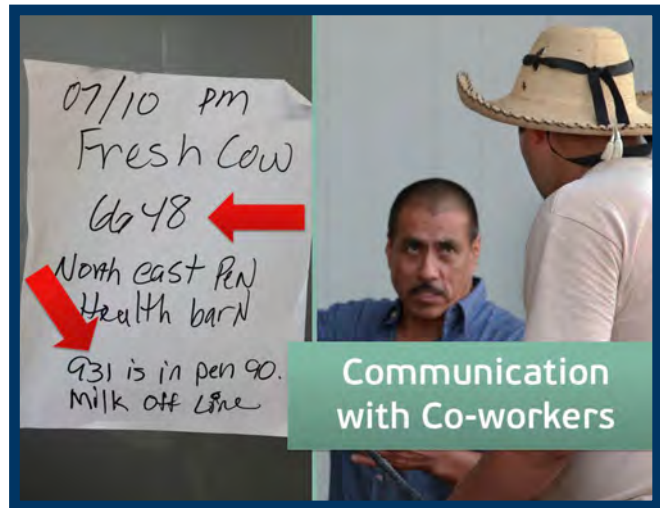


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Ask:

What are the men in this photo talking about that could help lessen the chance for injuries?

LESSON 2

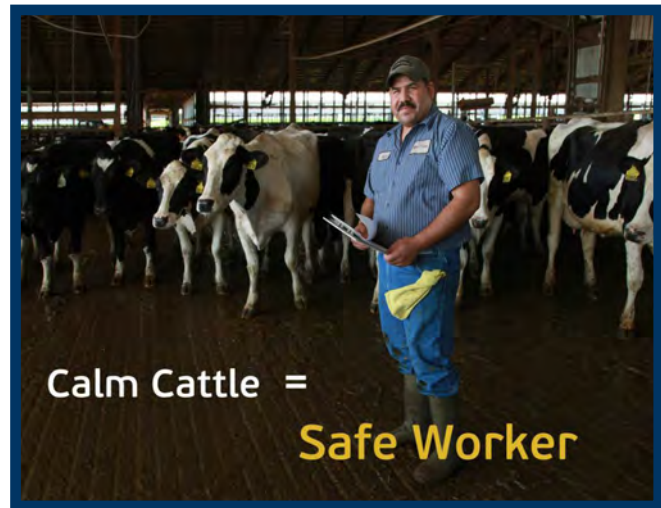


32

Explain:

They are talking about which cows are fresh and which cows are sick. Always communicate with your supervisor and coworkers about new, stressed or sick cows. When changing shifts, tell your coworkers about stressed cows or problems you have seen in the cows.

LESSON 2



33

Ask:

Why is it important to work quietly, and be calm and patient when working with cows?

Explain:

Work quietly, avoid a lot of noise, keep calm and be patient to avoid stressing the cows. Loud noises from the radio, people shouting and unfamiliar equipment will cause the animals to become stressed. When moving cows, walk at an even pace and talk in a normal voice. When separating a cow from the herd, move them with 1 or 2 other animals as far as possible before you single out the one you need. The cows should move at an even pace and NOT run.

LESSON 2



34

Ask:

What is the worker wearing in this photo that will protect his feet?

Explain:

It's a good idea to wear boots especially steel toed boots when working around cattle.

Other Hazards when Working with Cattle

How to Stay Safe and Healthy

35

Ask and write their responses on the flip chart:

Let's brainstorm for other hazards that cause injuries and illnesses to workers when working around cattle.

Look for answers:

- Repetitive body motions of the worker
- Diseases transmitted by cattle
- Needle sticks and medicines
- Chemicals used in cattle

LESSON 2



36

Say:

Injuries involving the hands and wrists are very common to people who milk. Milkers get injured because they do the same movements over and over during long periods of time.



37

Say:

This image shows a hand with carpal tunnel syndrome. This is a common injury for milkers where nerves in the wrist are damaged. This can cause a lot of pain, weakness or numbness in the hand and wrist and sometimes the arm.

Ask:

What can you do to help prevent this injury?

Explain:

Changing tasks every couple of hours, taking short breaks, and stretching and relaxing your muscles may help prevent this injury and reduce pain.

Optional: Distribute Handout: Exercises to stretch and relax muscles. Ask everyone to stand up. Demonstrate each step in the hand out. Ask the group to follow your lead and do each exercise with you.

LESSON 2



38

Ask:

What do you think these images are?

Explain:

Animals can give people diseases and people can give animals diseases. Workers can get a number of diseases such as ringworm when coming into contact with animals that have it. The images on top show ringworm and the images on the bottom show pseudocowpox.

LESSON 2



39

Say:

People can also get stomach illnesses from being around animals. Cattle can transmit germs to workers.

Ask:

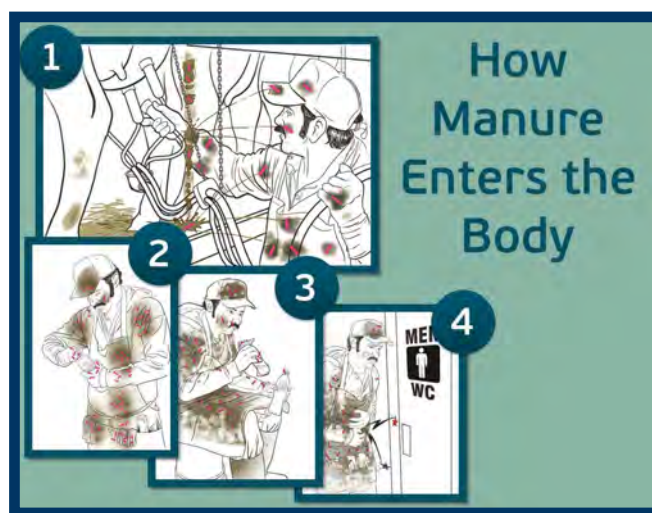
How do these germs get from the cow to the worker?

Look for answers such as touching the cow, eating or drinking contaminated food, and touching the mouth and eyes with contaminated hands.

How do the germs enter to your body?

Look for answers such as through the skin, eyes, MOUTH.

LESSON 2



40

Explain:

People can get some diseases from just touching or being in contact with cows. A lot of the diseases that can cause stomach pain and diarrhea are transmitted through manure, urine, placentas, and sometimes by raw milk.

Depending on the disease of the cow, people can be exposed to germs through the skin, including the eyes, breathing through the nose or mouth, or through swallowing. Germs can enter the mouth by having contaminated hands and touching food or mouth, such as when eating.

Ask:

What can be done to prevent transmission of diseases, to keep from getting sick?

Look for answers such as washing your hands, wearing gloves and avoiding touching the mouth, face, or food with contaminated hands or gloves.

Explain:

You can reduce the chances of being sick three ways: washing your hands often, wearing gloves, and avoiding touching the mouth, face or food with dirty hands or gloves.

Ask:

What are the steps for proper hand washing?



Say"

To wash hands correctly, follow these 5 steps:

1. Wet hands
2. Apply soap
3. Rub hands together for 20 seconds (between fingers and under nails)
4. Rinse thoroughly
5. Dry with clean towel

Optional: If the training room has a sink, this exercise can be done through a demonstration. Ask for volunteers. Put a little bit of Glow Germ (TM) on their hands. Have them rub it all over their hands. Ask them to wash their hands the way they normally do. Then shine a black light on their hands and ask them to observe the glow spots in their hands. This means they DID NOT wash their hands correctly. Then ask them to wash their hands again but now following the proper technique. Then shine the black light again on their hands to demonstrate the reduction of glow germ after washing hands correctly.

Note: This exercise can also be done by asking the participants to follow along with you demonstrating how to wash your hands.

Ask:

When is it important to wash your hands?

Look for answers that include before eating, after working, before and after going to the bathroom, after using chemicals or animal medicines, etc.

Say:


Washing hands will not cause pain or problems in the joints or muscles.

Ask:

To what other hazards or risks are workers exposed when working around cattle?

Look for answers that include chemicals, medicine

LESSON 2



What to Do if You Get Stuck with a Needle:

- Wash the area on your skin thoroughly with soap and water.
- Report to your supervisor the needle stick and the type of medicine.

42

Say:

Workers can be exposed to medicines and can get stuck with needles when giving cows injections.

Ask:

Be careful when using needles with cows. What should you do if you get stuck with a needle?

Explain:

- 1) Wash the area on your skin thoroughly with soap and water.
- 2) Report the needle stick to your supervisor and report the type of medicine you were using.

Safe Needle Disposal



43

Say:

Be sure to throw away the needles in a proper needle disposal container like the pictures shown. Both of these containers are safe because they are covered and made of hard plastic. The red sharps disposal container is safer because the lid makes it very hard to get the used needle out.

Protection from Chemicals

44

Ask:

What can workers do to protect themselves from chemicals?

Look for answers that include wearing personal protective equipment like safety glasses and gloves, wearing long sleeves and aprons, and reading the label before using chemicals.

LESSON 2



45

Explain:

Workers can reduce exposure to chemicals by wearing gloves and safety glasses, reading labels before using the chemical, storing and getting rid of chemicals safely and only using chemicals that you have been trained to use safely. Lesson 5 will give you more information about chemicals and ways to protect yourselves.

Distribute a pair of gloves to each participant. Ask one participant to put the gloves on and show how he/she takes off the gloves. Ask everyone to observe.

Demonstrate slowly how to take off gloves. Explain each step as you show them.

- Pinch the glove in palm of one hand
- Pull the glove totally off
- Use gloved hand to hold 1st glove
- Use a finger of the hand without the glove to go underneath the second glove, avoiding touching the outside of glove to take off the second glove

LESSON 2



46

Say:

To review, these are the correct steps to take off gloves.

- Pinch the glove in palm of one hand
- Pull the glove totally off
- Use gloved hand to hold 1st glove
- Use a finger of the hand without the glove to go underneath the second glove, avoiding touching the outside of glove to take off the second glove

Explain:

Gloves should be worn by workers to help prevent some diseases spreading from cows and when working with chemicals. You will learn more about ways to protect yourselves from chemical exposure in Lesson 5.

Workers' Beliefs

47

Ask:

Let's think about what workers believe or feel about taking risks. Why do you think workers take risks?

Look for answers such as: Workers think nothing will happen, they think they know how to do their job safely; they want to show bravery/machismo, they think they will lose their job if they don't take risks.

Try to direct the answers that go from general external pressure (such as pressure to work fast) to internal issues such as workers' own beliefs.

Say:

Workers may increase their risk of being hurt because they minimize or downplay the risks, they think nothing will happen, or they want to show that they are brave or macho. They also take risks because they believe that doing the task safely will slow them down, and they are afraid they will seem lazy and lose their job.

Immigrant workers may take more risks because of their limited understanding of English, lack of experience on large farms and fear of deportation.

Ask:

What would happen to you if you took a risk to get the job done and you get hurt?

Let's say a gate is stuck and you leave the parlor and go into the holding area to try to fix it. All you are thinking about is getting your job done.

You don't look to see the escape route, you are not paying attention to the fact that you are in the blind spot of several cows and you get pinned. You break a few ribs and can't work for a few weeks. How does that affect you? How does it affect your family?

Look for answers such as: can't work, can't earn money, lose job, can't maintain the family, the farmer needs to find and train a new worker, etc.

Say:

You all are right. As we mentioned at the beginning of this lesson, injuries and diseases have consequences not only for the worker but also for the family and the farmer.

LESSON 2

Yes, You Can Do It!

- Observe and learn cattle behavior
- Practice safety at all times
- Use personal protective equipment
- Practice good hygiene
- Report hazards and injuries

Always Think Safety!

48

Thank participants. Show Slide 1 and summarize by saying:

Yes, you can do it: You can reduce the chances of being injured or getting sick:

- Watch and learn cattle behavior
- Practice safety at all times
- Use personal protective equipment
- Practice good hygiene
- Report the hazards and the injuries

Always Think Safety!!

Thank you for your participation

Contact Information:

Upper Midwest Agricultural Safety and Health
Center (UMASH)

612-625-8836



49

Distribute Handout: “How Pablo Learned to Work with Cattle” comic book and Optional Handout: “Needle Stick Prevention on the Farm”.

Say:

Thank you for your participation. You were a very active and enthusiastic learners. Now I would like to invite you to our next lesson on ____ day and at _____

DAIRY HEALTH AND SAFETY TRAINING ATTENDANCE RECORD

Registro de Asistencia Entrenamiento de Salud y seguridad en Lecherías

Farm Name: _____

Nombre del Rancho

City, State: _____

Ciudad, Estado

Training Location on Farm: _____

Lugar de Entrenamiento en el Rancho

Date: ____ / ____ / ____

Fecha

Time: _____ AM / PM

Hora

Duration: _____ mins

Duración

Trainer Name: _____

Nombre del Entrenador

Observer Name: _____

Nombre del Observador

Lesson Topic: _____

Tema Lección

☐ 1: Hazard Identification & Control
Identificación de Peligros & Control

☐ 2: Animal Handling
Manejo de Animales

☐ 3: Machinery & Equipment
Equipo y Maquinaria

Language: ☐ English
Idioma Inglés

☐ Spanish
Español

☐ 4: Workers' Rights & Responsibilities
Derechos & Responsabilidades de los Trabajadores

☐ 5: Chemicals, Confined Spaces & Silos
Químicos, Espacios Cerrados & Silos

☐ Other: _____
Otro

Employee Names (please print)

Nombre Empleados (escriba nombre)

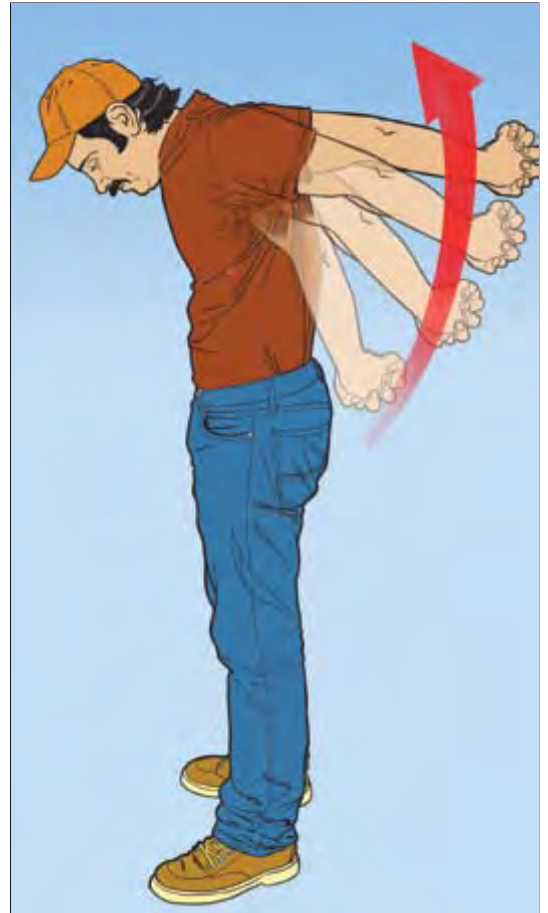
1.	13.
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11.	23.
12.	24.

Handouts

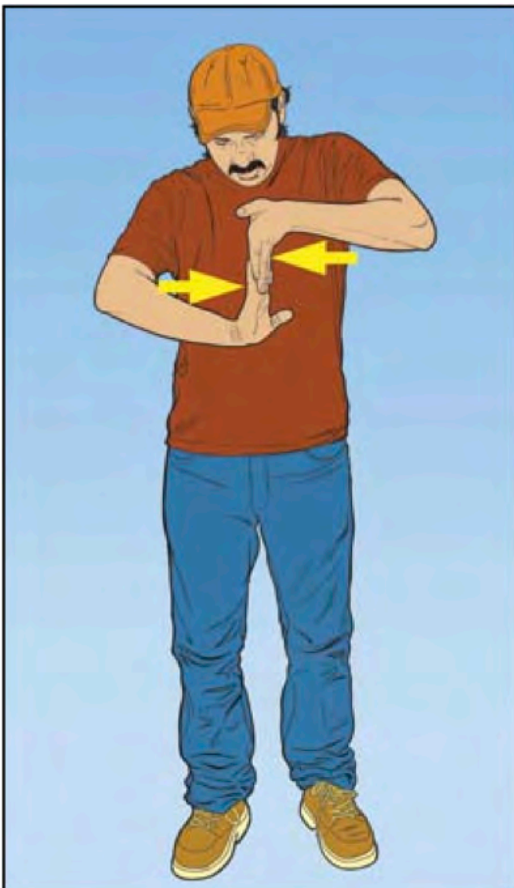
If you bend or twist your neck for a long period of time, try these stretches:



- 1- Touch the base of your neck with one hand.
- 2- Bend head forward and slightly to the other side until the stretch point is felt.
- 3- If the stretch point is not felt, reach up behind the head and gently pull the head downward until the stretch point is felt.



If you use your forearms or fingers repeatedly to grip things, try these stretches:



NEEDLESTICK PREVENTION

OUCH!

ON THE FARM

Needlestick injuries are usually minor, but they can be serious.

Most common injuries

- Skin infections
- Allergic reactions
- Deep tissue wounds that require surgery

Don't Get Stuck

- Slow down - don't rush with injections
- Restrain animals properly
 - » Get help from coworkers
 - » Use the correct equipment and techniques
- Don't recap needles
- No needles/syringes in your pockets
- Don't hold caps in your mouth
- Discard bent or dull needles
- Use approved sharps containers

Did You Know?

- Over 80% of farm workers vaccinating animals have accidentally stuck themselves.
- Vaccines are the most common type of drug involved in needlestick injuries.

Got Stuck?

- Wash the skin with soap and water immediately
- Report injury to your supervisor
- Call your healthcare provider

Be Careful Especially with these Products

Tilmicosin (Micotil®)
Sedatives (e.g., Xylazine)
Oil-based products or vaccines
Brucella abortus Strain RB51 vaccine
Modified live vaccines (e.g. Erysipelas vaccine)
Johne's vaccine
Hormones - especially if pregnant
Antibiotics - especially if allergic

MORE INFORMATION:

umash.umn.edu/needlestick

www.cdc.gov/nora/councils/hcsa/stopsticks/whattodo.html



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How Pablo Learned to Work Around Cattle



WORKER OCCUPATIONAL SAFETY AND HEALTH
TRAINING AND EDUCATION PROGRAM

COMMISSION ON HEALTH AND SAFETY AND WORKERS' COMPENSATION

This fotonovela is part of the Dairy Safety Package developed by the Western Center for Agricultural Health and Safety (WCAHS), University of California, Davis. These materials are part of the Worker Occupational Safety and Health Training and Education Program (WOSHTEP), which is administered by the Commission on Health and Safety and Workers' Compensation (CHSWC) in the Department of Industrial Relations through interagency agreements with the Labor Occupational Health Program (LOHP), University of California, Berkeley, the Western Center for Agricultural Health and Safety (WCAHS) and the Labor Occupational Safety and Health Program (LOSH), University of California, Los Angeles.

Users are encouraged to photocopy or adapt this information as needed for educational purposes. Please credit CHSWC, WCAHS, LOHP and LOSH.

Pablo is a young man,
and this is his first
week working at a
dairy.



José is an experienced
worker at the same
dairy.

1

Are you OK, Pablo?
You look pale!

Yes, it is only a bruise.
I was trying to help
move some cows
when one pushed me
against the fence.



2

Sorry, Pablo. It sounds like you need
some more training. Let's take you to
get checked. When you are back, we
will review some basic concepts.

Thanks, José!



3

The following day...

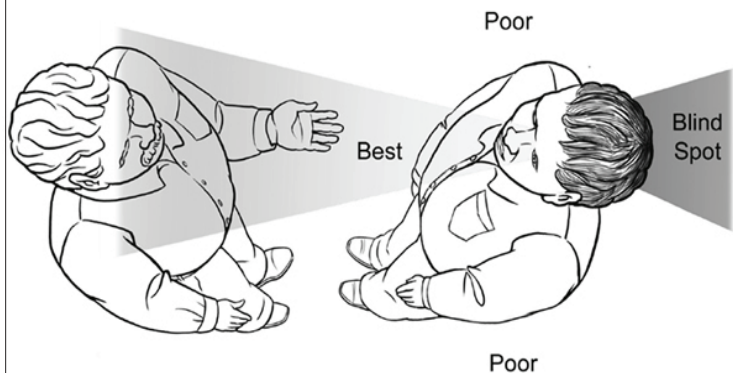
To work safely around cattle, you need to un-
derstand them. Let's talk about some important
things: (1) the blind spot; (2) the flight zone;
(3) signs of stress; and (4) the point of bal-
ance.



4

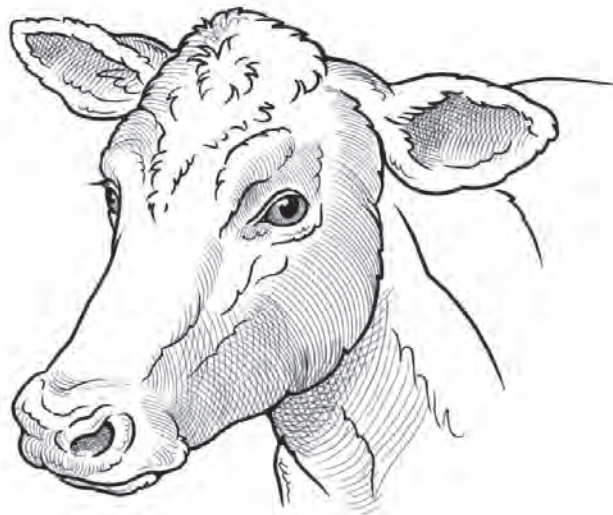
Face me, Pablo. What is the area you can see well?

In front of me.



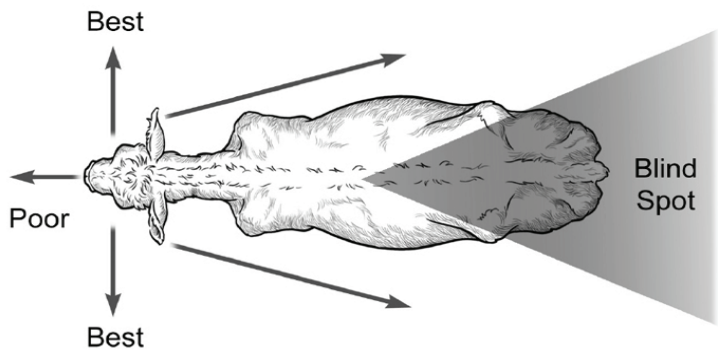
5

This is because your eyes are at the front of your face. But take a look at the cow's head; its eyes are on the sides.



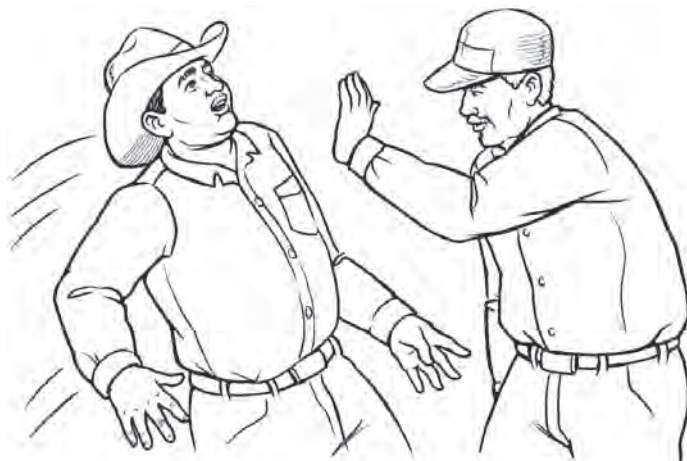
6

A cow can see well to its sides, but not very well to the front. Like you, a cow cannot see what is behind it; this area is called the **blind spot**. If you approach a cow from behind, it will not see what is coming; it only will hear the noise. A startled cow may kick you.



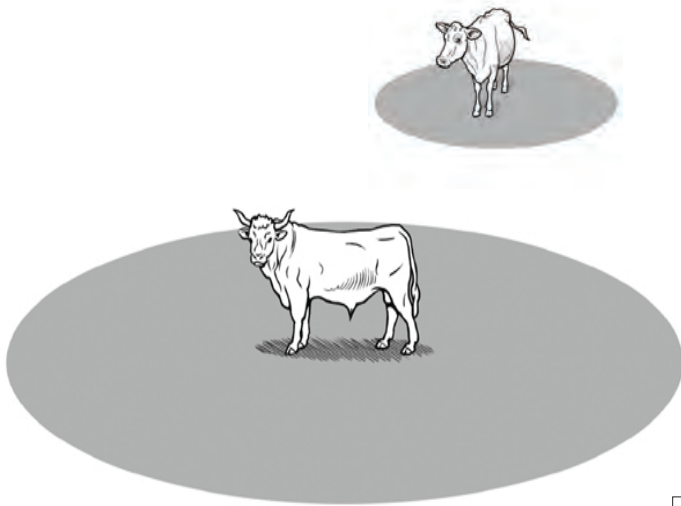
7

Now, let's talk about the **flight zone**. What would you do if suddenly I try to come too close to you? You move away, right?



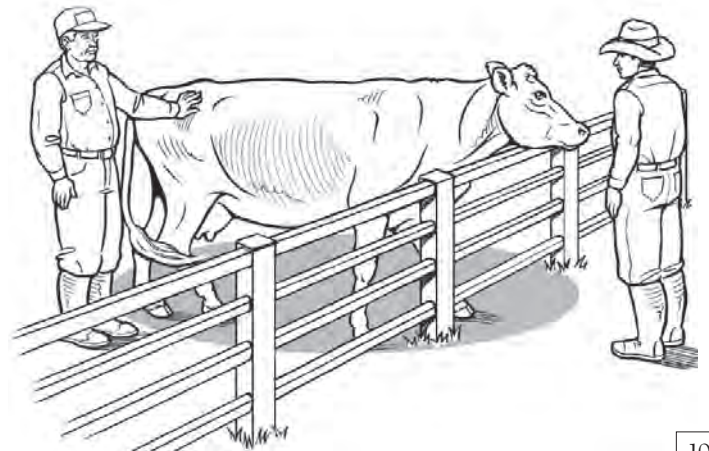
8

In the same way you tried to move away when I came too close, a cow will also feel uncomfortable if someone unfamiliar is too close. Cows determine an imaginary safety area around themselves. This area is called the **flight zone**. A bull's flight zone is larger than that of a cow. For a bull, it will generally be about 20 feet around.



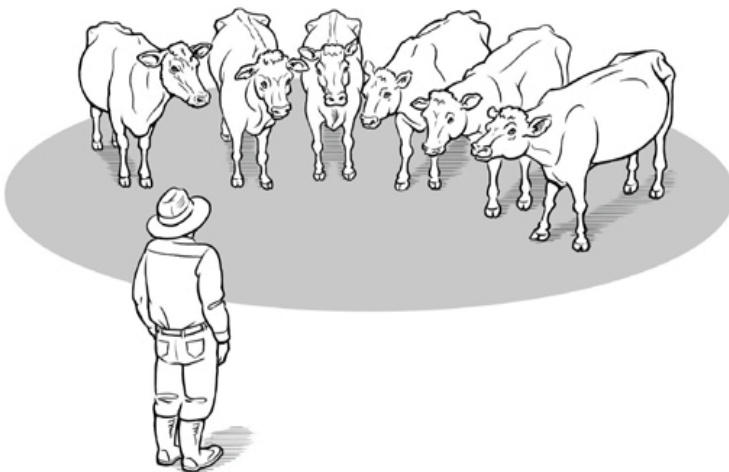
9

When the handler enters the **flight zone**, the animal moves away, trying to keep its distance. The more comfortable a cow feels with the handler (or when there is a barrier in between), the smaller the flight zone will be.



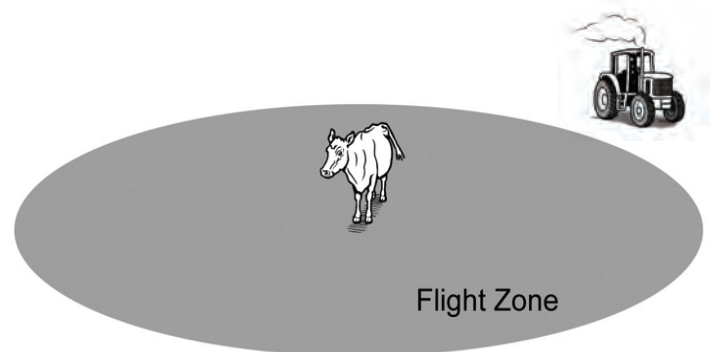
10

When the handler is **outside the flight zone**, cows/bulls will turn their bodies, keeping an eye on him. Cows are curious animals; they want to see what is around them.



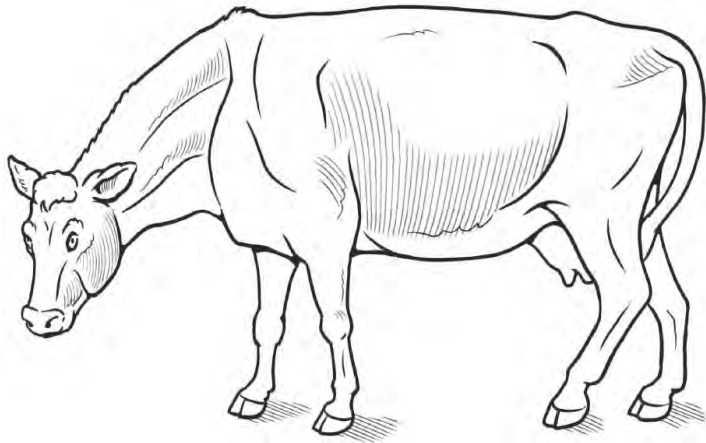
11

When cows/bulls are agitated, the flight zone is wider. For signs of stress, look at their **tail and ears**; when the tail is relaxed, the animal is relaxed. Look to see if their ears are pointing; cows point their ears toward a source of concern.



12

When its tail is tucked between its legs, the animal may be sick or frightened. The more stressed a cow/bull feels, the longer it will take for the animal to calm down, and the more hazardous it could be to handle.



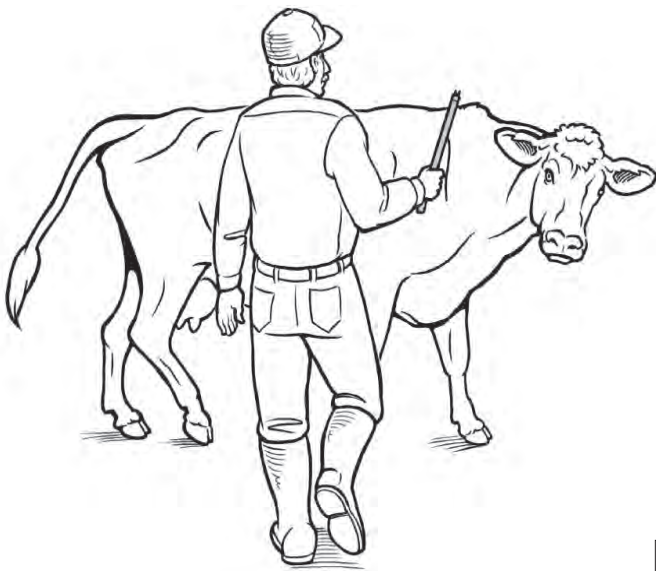
13



If an animal is lying down and does not try to move away when you are approaching, something is wrong. Do not try to move it by yourself, because the animal may be sick or hurt. You do not know how it may react if it feels threatened; you could be kicked, crushed or bitten.

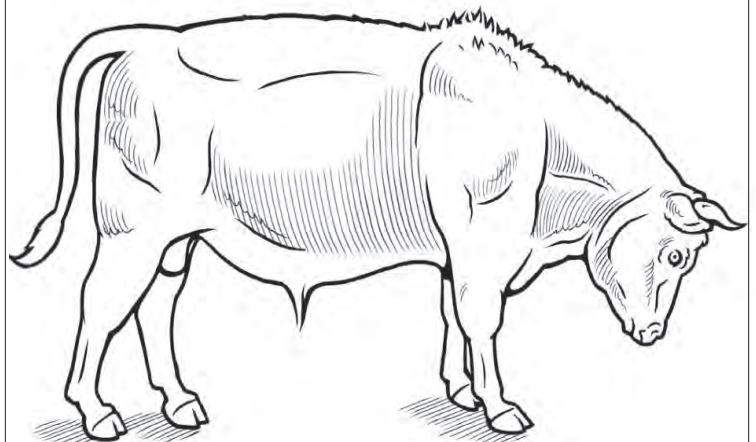
14

Cows/bulls have an excellent memory for good or bad experiences. For example, once an animal is hurt with a prod, just seeing the tool may cause it to feel stressed again, and you will not know how it may react.

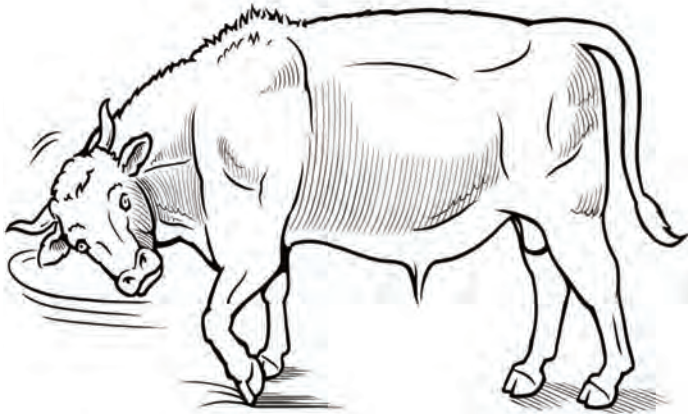


15

Other signs of stress are butting, bellowing and kicking. Paying attention to these signs is important, especially around bulls – **it means they are ready to attack!** When a bull is getting ready to attack, it may also display a broadside view, with his head lowered, its back arched, and its neck curved towards the threat.



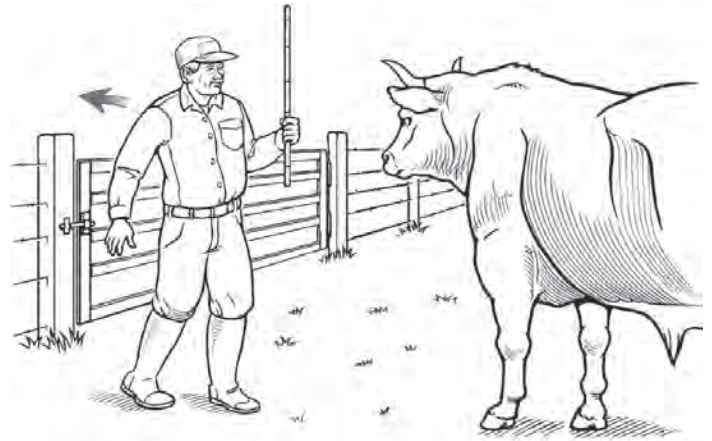
16



Other signs of a bull getting ready to attack are shaking its head rapidly from side to side and pawing the ground with energy.

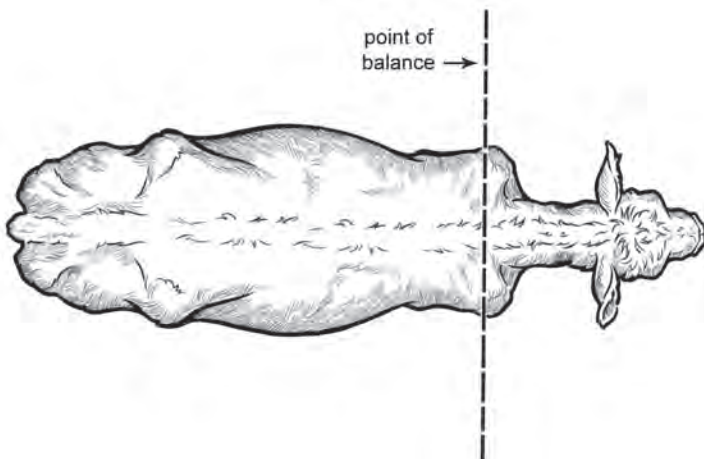
17

If you see a bull displaying attack signs, **NEVER** try to run because running may start a chase. Also, **NEVER** turn your back to the bull. Move away from its flight zone calmly, always facing the animal. You may use a cane or plastic pole to look bigger.

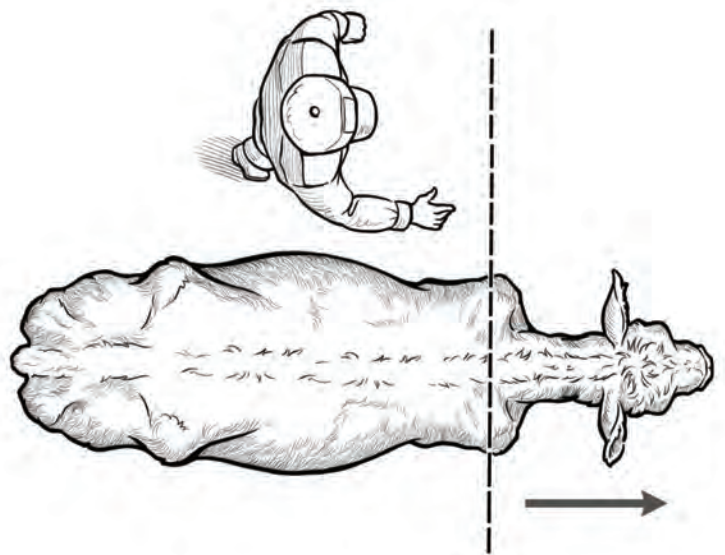


18

The next important thing to understand is how to move the animals without touching them or shouting. To do this, you need to know where the **point of balance** is. The point of balance is at the animal's shoulder.



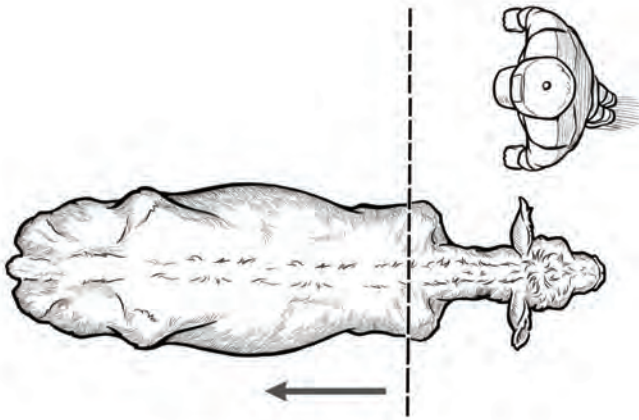
19



All species of livestock move forward and/or backward as the handler moves in relation to the animal's point of balance. If you want an animal to move forward, **position** yourself behind the point of balance.

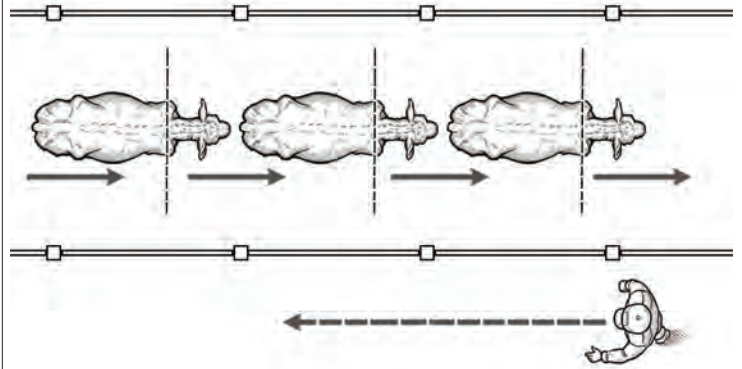
20

If you want it to move back, **stand** in front of the point of balance.



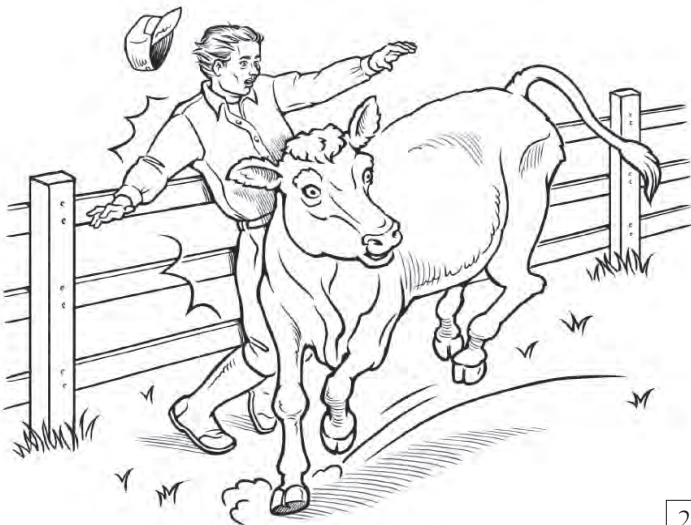
21

When going through a chute, groups of animals will often move without prodding when the handler walks past the point of balance in the opposite direction he wants the animals to move. The handler could also tap on the chute as he walks by. It is not necessary to prod the animals.



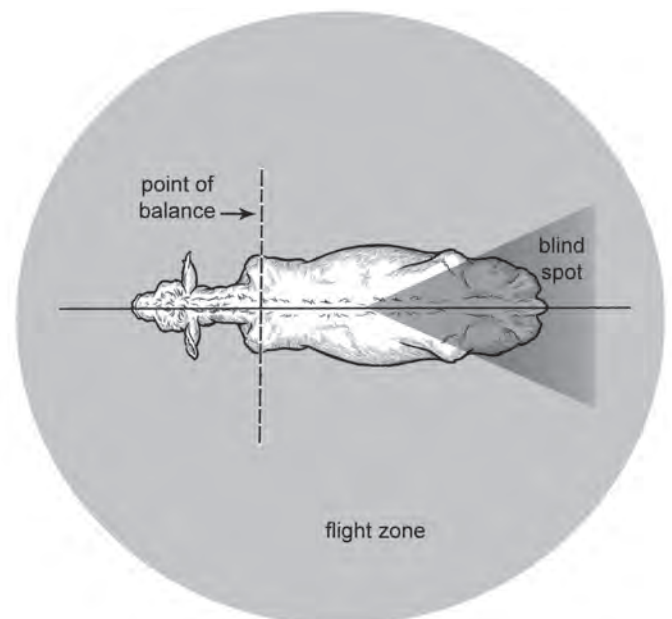
22

When moving an animal, **always have an escape route**, in case something happens. Do not place yourself between an animal and a fence or a wall; they are big animals and can hurt you when moving.



23

Remember, to work safely around these animals, you need to understand (1) the blind spot; (2) the flight zone; (3) signs of stress; and (4) the point of balance.



24

Cows are herd animals – this means that they want to be together and will follow each other. Once one of them walks in the direction you want, the rest will follow. Just reposition yourself in relation to the next animal; they will keep moving. Remember to keep your movements slow and controlled because sudden movements may cause them to become frantic.



25

Thank you, José.
Your advice was
very helpful.

These are usually gentle animals.
**Good handling practices will
reduce their stress and reduce
your chances of getting hurt.** Do
not be afraid; you are in control!



26

For More Information

Western Center for Agricultural Health and Safety

University of California, Davis

One Shields Avenue

Davis, CA 95616

(530) 752-4050

<http://agcenter.ucdavis.edu>

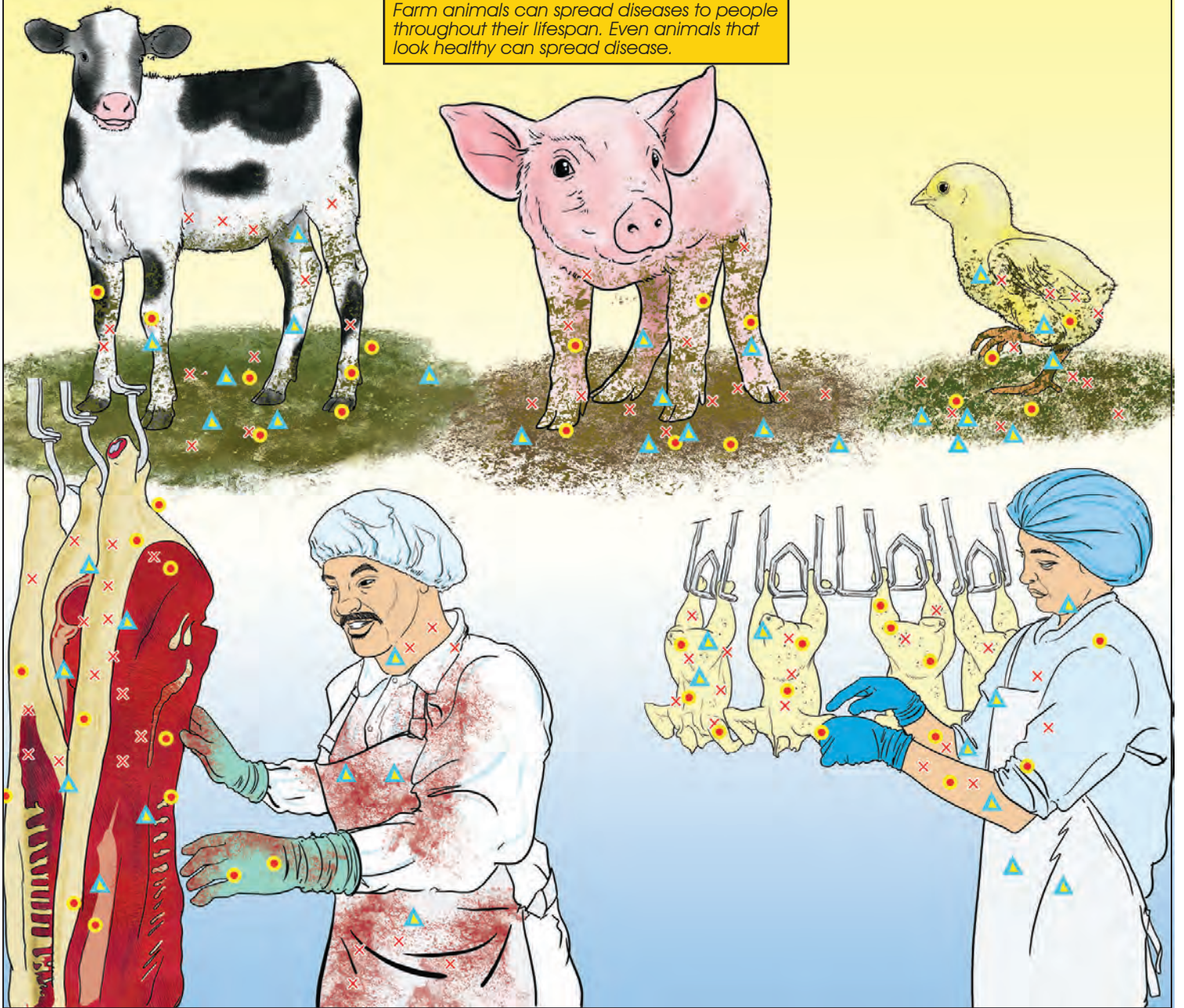
Working with farm animals

Keeping yourself, your family and your community healthy

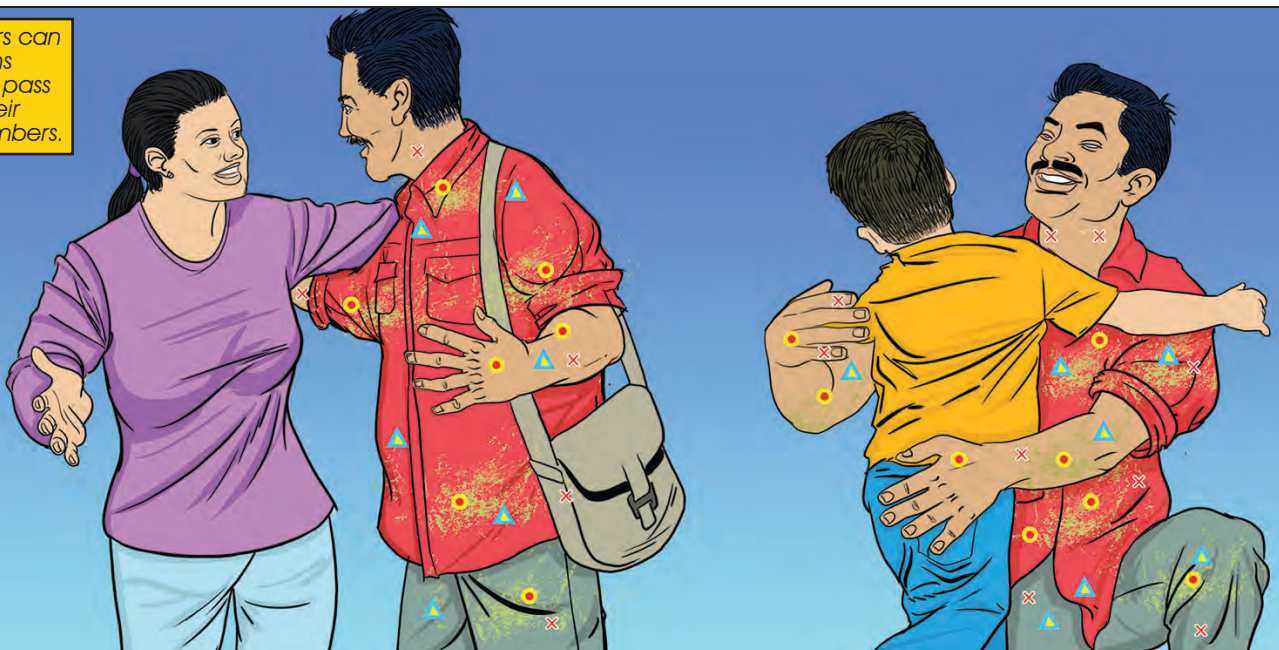




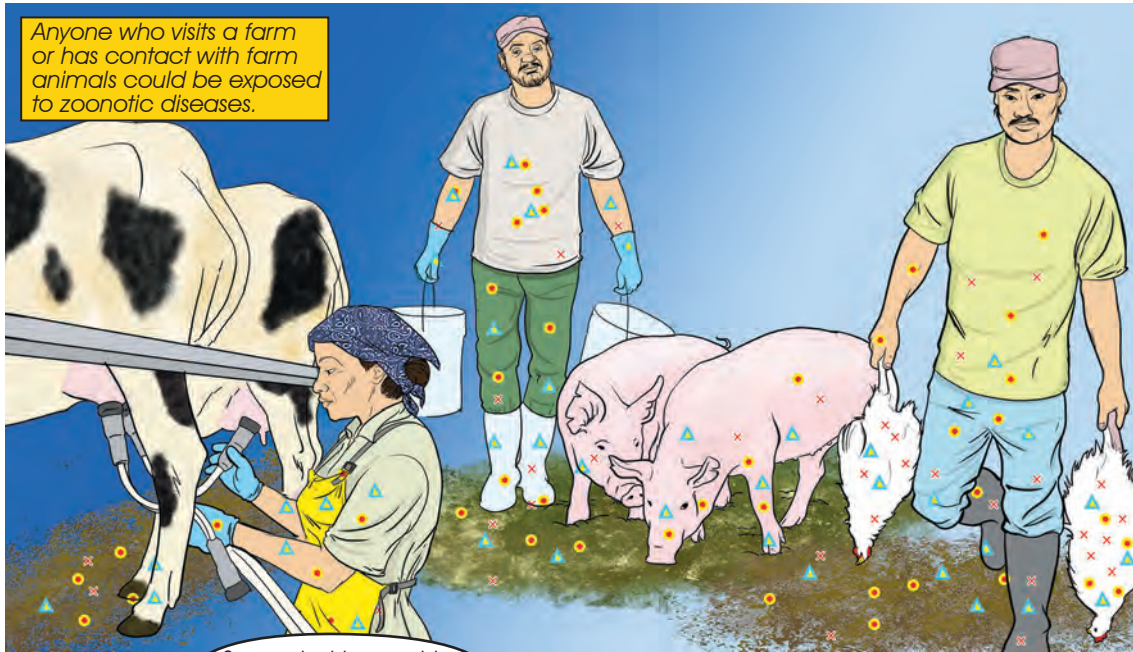
Farm animals can spread diseases to people throughout their lifespan. Even animals that look healthy can spread disease.



And workers can bring germs home and pass them to their family members.

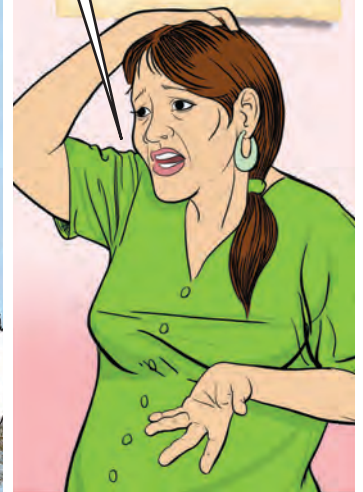


Anyone who visits a farm or has contact with farm animals could be exposed to zoonotic diseases.

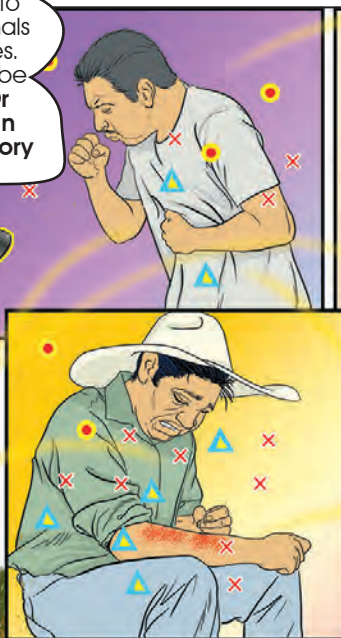
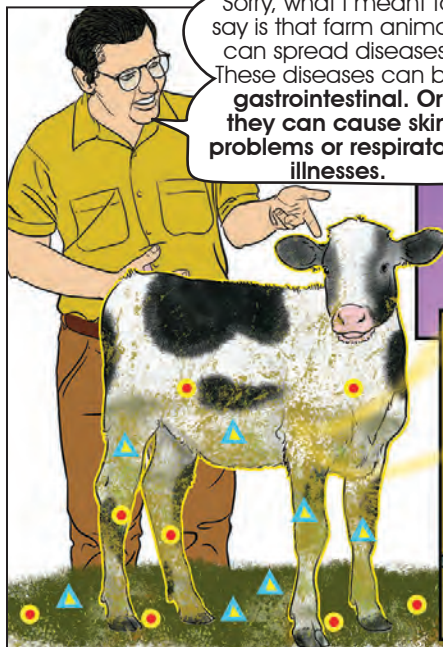


ZOONOTIC?...WHAT?

Zoonosis: diseases that can be transmitted from animals to humans.



Sorry, what I meant to say is that farm animals can spread diseases. These diseases can be **gastrointestinal**. Or they can cause skin problems or respiratory illnesses.



I'm going to the bathroom now!

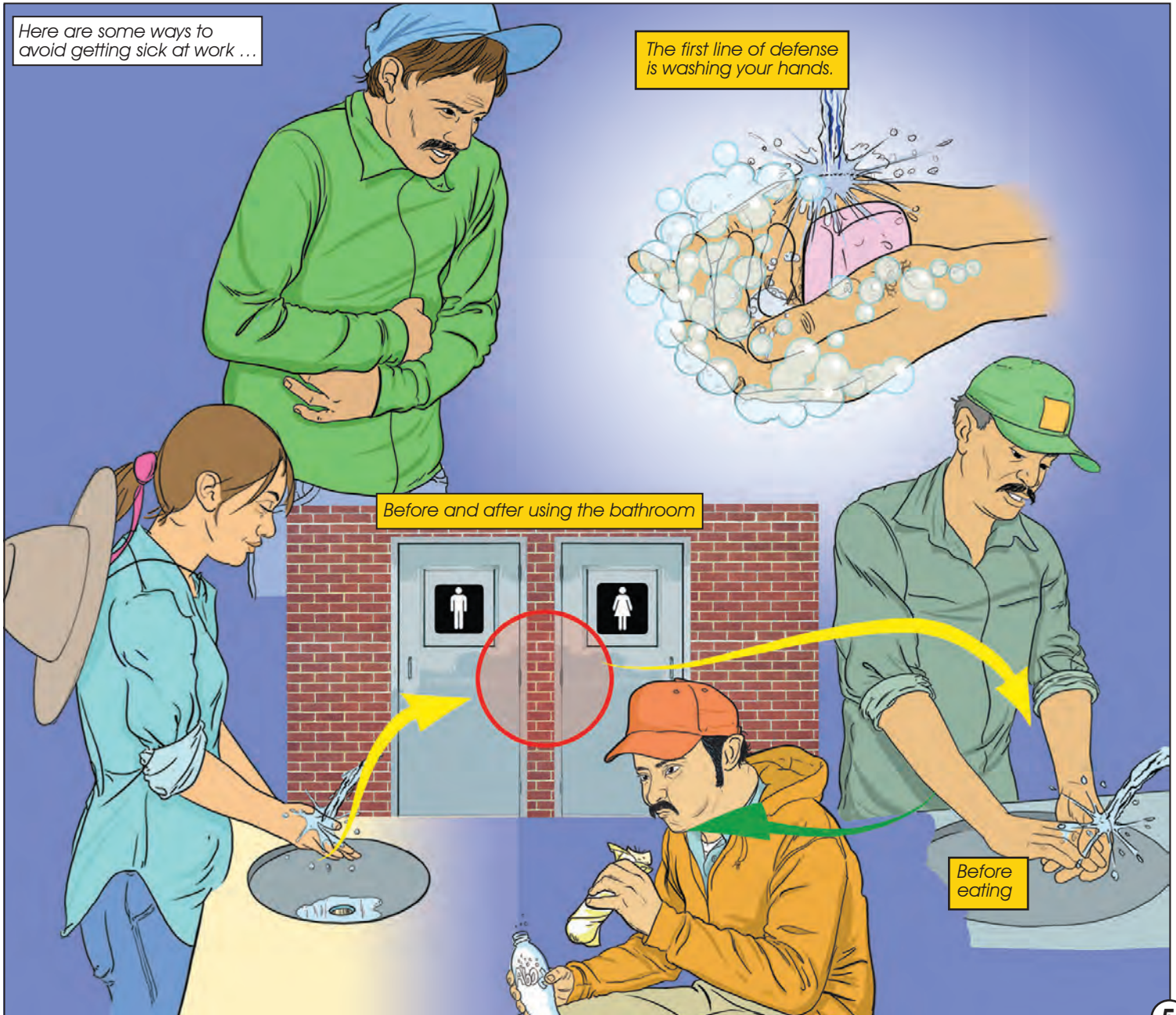
Don't forget to wash your hands, Lupita!

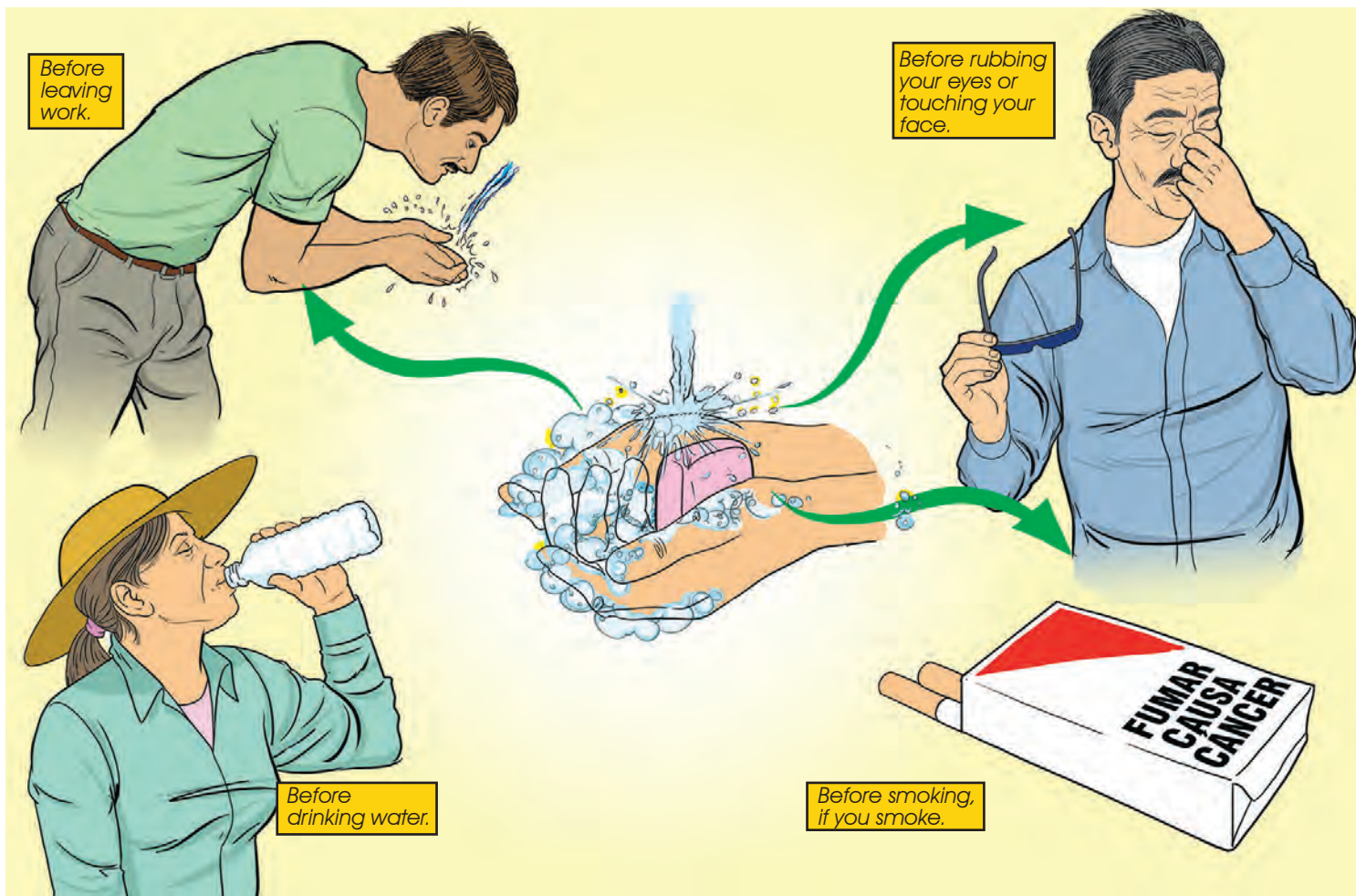
Maybe that's how Lupita and Betito got sick.

Many of us are probably exposed to these diseases. Almost everyone here works on a farm!

Wait! There are things we can do to avoid getting sick and to keep ourselves healthy.







As you are leaving work, remember that you are bringing home germs that can make you or your family sick. You can get the germs from touching animals, and from the farm's facilities, surfaces, or tools.



That is why you must also practice preventive measures at your home.





**THE OHIO STATE
UNIVERSITY**

MIGRANT CLINICIANS NETWORK



P.O. Box 164285 Austin, TX 78716
(512) 327-2017
www.migrantclinician.org

Story: Salvador Sáenz, Amy K. Liebman, Juliana Simmons, Patricia M. Juárez-Carrillo, Kerry Brennan, Jeffery LeJeune
Illustration and Design: Salvador Sáenz **Color and Artistic Support:** Uriel Sáenz

FOR MORE INFORMATION:

(materials available in English and Spanish)

Common Zoonotic Diseases from Farm Animals:

<http://umash.umn.edu/wp-content/uploads/2015/12/Zoonotic-MDH.pdf>

Additional materials:

<http://umash.umn.edu/resources/>

<http://www.migrantclinician.org/seguridad>

