The Vet's Visit:
Staying Healthy Around Your Animals

Background Information (for Facilitators only)

Veterinarians

Veterinarians are medical doctors who are trained to examine, diagnose, treat, and perform surgery on animals. They also provide animals preventive care in ways that are similar to the services a physician provides to humans. Veterinarians care for the health of animals and also work to protect public health since many diseases are able to spread from animals to humans (these are called **zoönotic** diseases). Many veterinarians work in private animal clinics or hospitals to treat dogs, cats, and other pets. Some veterinarians travel to farms, ranches, or other locales to examine and treat large animals and livestock. Other veterinarians work with exotic animal species in zoos or wildlife rescue and rehabilitation centers.

Most veterinarians are general practitioners and provide health care for an animal's routine needs. Some veterinarians have additional education, training, and certification in a specialized field; these veterinarians may be consulted when an animal has a complex or unusual medical issue.

Disease in Animals

Some common signs an animal may show when it is sick include:

- Loss of appetite
- Diarrhea
- Not able or willing to stand
- Difficulty breathing or actively struggling to breathe
- Change in water intake (drinking more or less than normal)
- Discharge from the eyes or nose (snot or eye crusting)
- Cough
- Drooping or shaking of head or ears
- Increased scratching; kicking or biting at skin
- Skin rash or hair loss
- Not as active or playful as usual
- A change in **fecal matter (poo)**; it may look or smell different when the animal is ill.

Animal Care

Animals need regular check-ups with a trained health professional just like humans do. During an animal's check-up, a veterinarian will often:

- Perform a physical examination
- Check the animal's temperature
- Listen to the heart, lungs, and gut

- Look in the eyes and ears
- Observe the animal walk or trot
- Take samples of blood, urine, milk, or feces for laboratory testing

Check-ups help ensure that an animal is healthy and that owners are doing what they can to help keep their animal free from disease. Like humans, animals should receive vaccinations to prepare their immune system to prevent specific diseases. Vaccines are available for many common diseases of animals, and a veterinarian can help to determine which ones are right for a given animal. A veterinarian may need to perform a thorough health examination and complete a form attesting that the animal is healthy before it can be relocated, sold, or used for food.

When an animal is sick, a veterinarian examines the animal, uses specialized medical equipment, and runs tests to diagnose disease. A veterinarian will prepare a plan to help a sick animal get well. That plan may include medications that are taken orally; injected into the animal's blood or muscle; or applied to its hair or skin. A veterinarian may also recommend changes in diet, rest, and rehabilitation. If an animal has a severe illness, a veterinarian may recommend that the animal be hospitalized for more intensive care, or that an operation be performed to correct a problem. If an animal is suffering and there is no chance that it will recover, a veterinarian can assist the animal to a humane death.

Tips for Animal Care

- People who keep and raise animals should understand and engage in the basic elements of animal care and understand the role a veterinarian plays to keep animals healthy. Establish a relationship with a veterinarian as early as you can. Know how to contact your veterinarian in case of an emergency.
- Ask your veterinarian for advice on the best diet, housing, exercise, and care for your animal.
- Keep animal areas clean and free from manure – like humans, animals need clean living areas.
- Always make sure animals are provided with fresh, clean water and quality feed.
- All animals should have routine check-ups by a veterinarian – at least once per year – and additional visits if they are sick.
- Isolate sick animals from other animals and humans. Sick animals need time and rest to heal. Sick animals can also transmit pathogens to other animals and humans, so it is best to keep them separate from healthy animals.
- Follow your veterinarian's instructions for caring for a sick animal. Treat animals with medication only after your veterinarian approves of the treatment.

Antimicrobial Resistance

Antimicrobials are medicines that kill or stop the growth of microorganisms such as bacteria, viruses, or fungi that cause disease in animals and humans. Antimicrobial resistance occurs when microbes (especially bacteria) develop the ability to survive or grow despite being exposed to antimicrobials designed to kill them.

Antibiotics, a type of antimicrobial, can save lives of both humans and animals by killing or stopping pathogenic bacteria from multiplying. But any time antibiotics are used, they can contribute to the development and spread of **antibiotic resistance**. Therefore, it is very important to treat each animal with the proper amount of medication and for the correct amount of time. The veterinarian's instructions on how to use a medication should be closely followed. Too much medicine can be toxic and can cause harm to the animal, while too low of a dose of medication may not cure the illness and could cause bacteria and other organisms to become resistant to the medication. Antibiotic resistance spreads among people, animals, and the environment (like soil and water). Antibiotic resistance can be reduced by using antibiotics only when necessary, in only the amounts and for the time required to control the infection, and, most importantly, only under the direction of a veterinarian.

Learning Objectives

At the end of this activity, participating youth will understand:

- What a veterinarian is, and the role a vet plays in helping keep animals healthy.
- There are signs one can observe that help tell if an animal is sick.
- Explain what a veterinarian is and how a veterinarian helps keep animals healthy.
- Different ways to prevent disease in animals.
- What to do if an animal is sick.

Experiential Learning Cycle

This activity is designed around the three-step learning cycle: Experience, Reflection, and Application. To help youth achieve maximum learning and transfer of knowledge and skills, it is important to complete all three steps of the learning cycle.

**The Activity Starts Here:*

Opening Questions

- Describe for me how you can tell if your animal (a pet or a farm animal) is sick.
- Tell me what you know about veterinarians and what they do.
- Explain how you think veterinarians are similar to or different from human doctors.
- Describe why you think it's important to have your animals receive regular veterinary care.

Experience: Watch the video

Reflection I:

- Tell me what you liked about the video.
- Describe your favorite character, and why.
- Tell me one thing you learned from the video.
- As a group, let's try to retell the story from the video from the beginning and decide upon the most important points/information the characters were trying to share with you.

Experience (Repeat): Watch the video a second time

Reflection II:

- After watching the video again, tell me one or two more things you learned, if anything.
- Identify any words that were unfamiliar to you. What were those words?
- As a group, let's try to retell the story from the video again. We'll start from the beginning and decide upon the most important points/information the characters were trying to share with you.

*Terms/Concepts Introduction/Discovery (Facilitated discussion with the youth)

*During Reflection periods I and II of the activity, it is important that the facilitator listens carefully for understanding (or misunderstanding) of concepts and terms put forth through the video. The goal is for youth to develop a correct understanding of concepts and terms using their own words. If concepts and terms are not discovered by the youth after Reflection I and II, the facilitator should first ask open-ended questions to prod understanding; subsequently, concepts and terms can be introduced. Misunderstandings should also be corrected.

- **Antibiotic**: An antimicrobial compound that kills or inhibits the growth of bacteria.
- **Antimicrobial resistance**: When bacteria, viruses, fungi, and/or protozoa develop the ability to survive or grow despite being exposed to antimicrobials designed to kill them.
- **Antimicrobial**: A natural or synthetic chemical compound that kills or inhibits the growth of one or more microbes, including bacteria, viruses, fungi, and/or protozoa.
- **Bovine**: Relating to cattle; an animal of the cattle group.
- **Germ**: Microscopic-sized organisms that can cause a disease.
- **Microbe**: Microscopic-sized organisms; many are beneficial.
- **Pathogens**: Bacteria, viruses, and other microorganisms that can cause disease.
- **Vaccination**: The stimulation of the body's immune system ahead of time so that it is prepared to protect against infection with a particular disease.
- **Veterinarian**: A medical doctor who provides health care to animals.
- **Veterinarian-Client-Patient-Relationship**: A relationship built when a veterinarian knows an animal well enough to be able to diagnose and treat medical conditions the animal develops, and the owner authorizes the veterinarian to take those actions.
- **Zoönotic (zoh-Uh-NAH-tick) Diseases**: Illnesses that can spread between animals and people.

Application

The application phase of this curriculum activity could be a farm or fair visit. This would occur ideally after all video-based experiences have been completed. Facilitators can ask youth open-ended prompts that link video content to the farm or fair visit. Examples of prompts include:

- Explain the behavior of any animals you observed on the farm or at the fair that might have indicated they were not feeling well.
- Explain if you observed a veterinarian on the farm or at the fair. If so, describe what the veterinarian doing to help the animals.

- If you did not see a veterinarian on the farm or at the fair, describe any evidence that the animals had received health checks or vaccinations (e.g., health record sheets; electronic ear tags linked to vaccination records).