

CATCH ME IF YOU CAN (OR CAN'T)

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GROUP SIZE: Can be adapted for any size, ideally 10 to 40

TIME FRAME: 20 to 30 minutes

OBJECTIVES: This activity will help youth:

Understand what a vaccine is

Understand what an antibiotic is and what disease(s) it might treat

Understand how to prevent animal diseases

Learn about animal diseases

Materials and supplies:

Copies of disease cards

Copies of prevention methods cards

Activity Directions:

1) Discuss these questions with the large group or have a small group discuss each question and report back.

What is a vaccine?

Vaccines are dead or inactivated organisms or compounds that are used to provide immunity to a particular infection or disease. It contains a little amount of an agent, which resembles the virus it is used to defend against. This agent enters the body and interacts with the immune system and stimulates it so that it can recognize the microorganism and destroy it. Once it is recognized, the immune system remembers it and destroys these microorganisms in later encounter.

Depending on the vaccine, the defense will last the lifetime of an animal or need to be updated at certain intervals.

What is an antibiotic?

An antibiotic is a compound or a substance that inhibits or kills the growth of bacteria, fungi or protozoa. It belongs to the group of antimicrobial compounds, which is used to treat the infections caused by microorganisms. Antibiotics are normally only used when an infection is suspected or to prevent the spread of the infection on a short-term basis. Typically, the antibiotic will leave an animal's body in a few days and does not provide long-term resistance to the illness.

How are vaccines and antibiotics different or similar?

Antibiotics will do nothing to stop an illness caused by a virus.

Over use of antibiotics can cause the bacteria to develop resistance against the antibiotic, thus making the antibiotic useless.

Both vaccines and antibiotics work with a body's normal defenses to prevent

illness.

Parasites:

Gastrointestinal (GI) parasites, or parasites of the stomach, small intestine, large intestine, and colon, are common in all types of animals. Without treatment, these GI parasites can cause weight loss, anemia, failure to thrive, intestinal compaction or blockage, or diarrhea. In addition, some of these intestinal parasites can be transmitted to humans and other animals through the ingestion of parasite eggs. Many dewormers are available for treatment of these parasites. Unfortunately, none of the dewormers will kill all of these parasites. Thus, dewormers must be chosen according to the type of parasite that is present. Dewormers should be used at regular intervals in herds and a clean environment free of urine and feces is important to stop the transmission. What vaccinations has your animal had?

What can you do to prevent the spread of disease in an animal population?

Checking animals frequently for illness and symptoms of disease can help avert spreading of the disease throughout the herd.

Many illnesses can be combated by clean conditions, hand-washing, clean tools and appropriate shelter for animals.

If an illness is suspected, owners can quarantine (separate) the animals infected. Know which vaccines your animal has had and how frequently they need to be vaccinated for certain illnesses.

2) Divide youth into two groups of equal numbers. Designate one group as the "disease" and one group as animal who has been exposed to one of the prevention techniques.

Give each youth in the disease group a card that has a disease; Give the other group of youth a card describing a prevention or treatment technique. You may have more than one youth with a certain disease or prevention technique, depending on the number of youth in the groups.

3) Ask the group to mingle and have a person from the disease group to match up with a partner from the prevention/treatment group. Once the two youth meet, they each must describe their disease and prevention technique to each other.
--If the animal has the appropriate prevention or treatment technique for the disease, the disease person must sit out of the game. The animal is able to match up with a new disease.
--If the animal does not have the appropriate prevention or treatment, the animal must leave the game and the disease can continue to spread to other animals.

After the first round, there will be an uneven number of animals to match-up with diseases. At this point you can begin matching with two or three to a group. Continue matching animals and diseases for a certain period of time or until there are no more animals to be infected.

4) You can modify the game by limiting the number of prevention technique cards handed out to the youth. In this case, a disease or set of diseases will spread quickly throughout the herd.

Reflection Questions:

1. Imagine you view your animal looking lethargic (sleepy, slow) and not eating. What is something you can do immediately to prevent the spread of the illness or help your animal?

Possible answers:

- a. Isolate the animal
- b. Review the history of immunizations and antibiotic treatments

2. Imagine you are working with a younger youth and teaching them about animal handling. What are two things you should make sure you tell him or her about proper animal handling techniques.

- a. Make sure to wash your hands often and keep a clean environment
- b. Keep track of immunizations your animal has had.
- c. Observe your animals daily to look for an illnesses (watch what they eat or if they have diarrhea)

3. What can you do when handling animals to help prevent disease?

- a. Don't share grooming or fitting equipment. If you do, wash or disinfect upon return.
- b. Clean and disinfect trailer, fitting equipment, etc.. upon return from a show.
- c. Isolate the animal, quarantine the animal from other animals.

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DISEASE Any animal	PREVENTION OR TREATMENT
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HAND WASHING AND CLEAN ENVIRONMENT	RINGWORM
HAND WASHING AND CLEAN ENVIRONMENT	PINK EYE
ANTIBIOTICS	PNEUMONIA
TETANUS VACCINE	TETANUS

DISEASE Any Animal	PREVENTION OR TREATMENT
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CLEAN ENVIRONMENT	COCCIDIOSIS
DE-WORMER	PARASITIC WORMS

DISEASE Cattle	PREVENTION OR TREATMENT
DISEASE Cattle	PREVENTION OR TREATMENT
DISEASE Cattle	PREVENTION OR TREATMENT
DISEASE Cattle	PREVENTION OR TREATMENT

BRUCELLOSIS VACCINE	BRUCELLOSIS
Lepto Vaccine Annually	LEPTOSPIROSIS
ANTIBIOTICS	FOOTROT
CLOSTRIDIAL VACCINE	BLACKLEG (CLOSTRIDIUM)

DISEASE	PREVENTION OR TREATMENT
Cattle	

BVD VACCINE	BOVINE VIRAL DIARRHEA (BVD)
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DISEASE Sheep	PREVENTION OR TREATMENT
DISEASE Sheep	PREVENTION OR TREATMENT
DISEASE Sheep	PREVENTION OR TREATMENT
DISEASE Sheep	PREVENTION OR TREATMENT

SOAK HOOF IN ZINC SULFATE	FOOTROT
TYPE C AND D ANTITOXIN VACCINE	OVEREATING/ ENTEROTOXEMIA
ECTHYMA VACCINE	SORE MOUTH (contagious ecthyma)
Healthy Diet	URINARY CALCULI/WATER BELLY

DISEASE	PREVENTION OR TREATMENT
Sheep	

**CLEAN
ENVIRONMENT &
FITTING
EQUIPMENT**

**CLUB LAMB
FUNGUS**

DISEASE Swine	PREVENTION OR TREATMENT
DISEASE Swine	PREVENTION OR TREATMENT
DISEASE Swine	PREVENTION OR TREATMENT
DISEASE Swine	PREVENTION OR TREATMENT

SHADE/INDOOR AREAS	SUNBURN
SULFONAMIDE OR DESTROY ANIMAL	RHINITIS
DESTROY ANIMAL	BRUCELLOSIS
LEPTO VACCINE VACCINATE ANNUALLY	LEPTOSPIROSIS

DISEASE Swine	PREVENTION OR TREATMENT
DISEASE Swine	PREVENTION OR TREATMENT

ERYSIPELAS VACCINE VACCINATE ONCE PER LIFE OF ANIMAL	ERYSIPELAS
PRRS VACCINE	Porcine Reproductive & Respiratory Syndrome (PRRS)

MAQA: Catch Me If You Can (or Can't) **Activity Key**-all Species

ANIMAL	DISEASE	PREVENTION OR TREATMENT
Any Animal	Coccidiosis	Clean Environment
Any Animal	Parasitic Worms	De-wormer
Any Animal	Pink Eye	Hand Washing and Clean Environment
Any Animal	Pneumonia	Antibiotics
Any Animal	Tetanus	Tetanus Vaccine

ANIMAL	DISEASE	PREVENTION OR TREATMENT
Cattle	Black Leg	Clostridial Vaccine
Cattle	Bovine Viral Diarrhea	BVD Vaccine
Cattle	Brucellosis	Brucellosis Vaccine
Cattle	Footrot	Antibiotics
Cattle	Leptospirosis	Lepto Vaccine

ANIMAL	DISEASE	PREVENTION OR TREATMENT
Sheep	Club Lamb Fungus	Clean Environment and Fitting Equipment
Sheep	Footrot	Soak Hoof in Zinc Sulfate
Sheep	Overeating/Enterotoxemia	Type C and D Antitoxin vaccine
Sheep	Sore Mouth	Ecthyma Vaccine
Sheep	Urinary Calculi	Healthy Diet

ANIMAL	DISEASE	PREVENTION OR TREATMENT
Swine	Brucellosis	Destroy Animal
Swine	Erysipelas	Erysipelas Vaccine
Swine	Leptospirosis	Lepto Vaccine
Swine	Porcine Reproductive & Respiratory Syndrome (PRRS)	PRRS Vaccine
Swine	Rhinitis	Sulfonamide or Destroy Animal
Swine	Sunburn	Shade and Indoor areas

