



Driving Germs

Routes of Transmission

Activity Objectives:

- ◆ Define Zoonotic Diseases
- ◆ Understand the different ways diseases can spread from animals to people: Routes of Transmission
- ◆ Describe steps you can take to prevent infections and keep you, your family and your pets healthy

Skill Level: Beginner

Materials:

Printed pictures

Vocabulary words printed separately



Activity:

- ◆ Print and cut out the pictures and vocabulary words. Then mix them up.
- ◆ Allow students to match each route of transmission and mechanism of transmission with an image that represents .
- ◆ Discuss ways to prevent transmission given the picture scenarios.



**Love Animals,
Not Germs**

Introduction– Animals, Germs, and You:

- ◆ Did you know that 60% of animal diseases can be spread to people? Diseases that spread from animals to people are called zoonotic diseases.
- ◆ Your pets can carry bacteria that could be passed to you or anyone that touches or cares for them?
 - ◆ Examples: salmonella infections and outbreaks have been linked to pets including small turtles, reptiles, amphibians and live poultry.
 - ◆ Even if an animal may appear healthy, they could carry bacteria that is harmful to people.
- ◆ Disease causing agents can be spread from animal to animal, or animal to human and vice versa, through a variety of transmission routes.

Transmission Route Definition



Routes of transmission can be from animal to animal, human to human or animal to human (and vice versa). Often times animals can be carrying germs, but not appear sick!

Aerosol—Droplets are passed through the air from one animal to another.



Example: Cover your Cough!

Oral—Consuming disease causing agents in contaminated feed, water or licking/chewing on contaminated environmental objects. (food borne disease)



Example: Cooking food, washing vegetables, preparing meat and vegetable separately.

Direct contact—A susceptible animal becomes exposed when the disease agent directly touches them.



Example: Washing hands!

Indirect Contact (Fomite)—A inanimate object carrying disease agent from one susceptible animal to another.

Traffic—a subtype of fomite transmission in which a vehicle, trailer or human spreads organic material to another location.



Example: Washing and disinfecting surfaces

Vector-borne—An insect (e.g. mosquito or tick) acquires a disease agent from one animal and transmits it to another.



Example: Wearing bug spray!

Environmental contamination— the environment becomes contaminated and can pass a disease agent. People and animals depend on clean air, water and a healthy and balance environment.

What are some ways to you can stop me from spreading?

Check out Tips for keeping People and Pets and Healthy and Safe from Germs.



Route of Transmission (Print 4 Copies of Each)

Eating

Touching Animals

Touching Something Animals have Touched

Breathing

Modes of Transmission (Print 4 copies of each)

Direct Contact

Food borne

Vector borne

Indirect Contact

Oral

Inhalation/ Aerosol



1



2



3



4



5



6



7



8



9



10



11



12



13



Marlin

14



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17



16



18



Answer Key



These pictures may represent many different ways germs can be transmitted. Therefore, there may be more than one correct answer.

1. Oral, Food borne, Touching something animals have touched.
2. Direct Contact, touching animals
3. Inhalation/ aerosol, breathing
4. Inhalation/ aerosol , breathing
5. Direct contact, touching animals
6. Vector-borne
7. Oral, food borne, eating
8. Oral, food borne, eating
9. Oral, direct contact, food borne, eating, touching
10. Indirect contact/ fomite, touching something an animal has touched
11. Inhalation, breathing,
12. Vector borne
13. Inhalation/ aerosol, breathing
14. Vector borne
15. Direct Contact, touching animals
16. Direct Contact, touching animals
17. Indirect Contact/ fomite, touching something animals have touched
18. Indirect Contact/ fomite, touching something animals have touched.

