

Infectious Disease Epidemiology, Prevention, and Control 625 Robert Street North P.O. Box 64975 St. Paul, MN 55164-0975 651-201-5414



Keeping Visitors Safe at Your Agritourism Business

Are farm tours safe?

Farm tours give people of all ages an exciting opportunity to interact with animals face-to-face. This allows people to learn more about animals and agriculture, but it can also put people at risk for becoming ill from farm animals. This fact sheet is meant to help you understand the risks and then give you ways to minimize them. We encourage people to interact with animals while at the same time taking the appropriate precautions.

What are zoonotic diseases?

Zoonotic diseases are infectious diseases that can be spread between animals and people.

What are some examples of germs from animals that can cause illness in people?

- Campylobacter
- Salmonella
- E. coli O157:H7
- Yersinia enterocolitica
- Cryptosporidium

Is it common to find these types of germs on a farm?

Yes, some germs occur naturally in the intestines of healthy livestock and poultry and are passed in the animals' feces. Even if an animal appears healthy, it could still pass these germs to people. Some of these germs, like *Cryptosporidium*, can also make animals sick.

How do people get sick from these germs?

People get sick from these germs by swallowing them. They may end up on your hands after contact with typical farm and petting zoo animals and their environments. Once the germs are on your hands, you can accidentally transfer them to your mouth while eating, drinking, or during other hand-to-mouth activities such as smoking or thumb sucking. Young animals are especially likely to have these germs because they haven't had a chance to become immune to them.

What are the symptoms in people?

The most common symptoms are diarrhea and abdominal pain. Other symptoms may include fever, vomiting, cramps, and bloody diarrhea. People with mild symptoms usually recover without treatment. However, these illnesses can lead to hospitalization and severe complications also can occur.

How can I reduce my visitors' risk of getting sick from animals while at my business?

- Ensure that hand washing stations with running water and soap are positioned where guests will use them after visiting the animals. These should be accessible for children and persons with disabilities. Also, have a plan in place for restocking paper towels, soap, and water.
- Hand sanitizer should be used as a supplement to soap and water, but does not replace soap and water because it doesn't kill parasites like Cryptosporidium.
- Visitors should <u>not</u> be allowed into pens. Petting of animals should only be allowed <u>over/through</u> <u>barriers</u> (fences).
- Manure/soiled bedding should not be transported through public areas.
- Animals showing signs of illness such as diarrhea, skin lesions, or coughing, should not be a part of the exhibit.
- Your operation should have transition areas at the entrance between non-animal and animal areas. Signage should be at the entrances (i.e., animals can carry germs that make people sick, no food or drink allowed in animal areas). Exit areas should have hand washing stations so that visitors can't miss them.
- Keep food, drinks, baby bottles, pacifiers, toys, and strollers out of animal areas.
- Children younger than 5 years old should be supervised while interacting with the animals and during hand washing and they should not have any direct contact with calves. Young children are more likely to get sick because they often touch surfaces contaminated with manure and are more likely to put their hands in their mouth.

What animals carry which germs?

The tables below outline what animals carry which germs, as well as symptoms to watch out for in both animals and humans.

Table 1. Types of germs commonly found in farm animals.

Species of Animal	Bacteria	Parasite	Fungus	Virus
Cattle	Campylobacter	Cryptosporidium	Dermatophytosis	
	Salmonella		(Ringworm)	
	Escherichia coli O157:H7			
	Leptospira			
	Coxiella burnetii (Q fever)			
Sheep	Campylobacter			
	Salmonella			
	Escherichia coli O157:H7			
	Coxiella burnetii (Q Fever)			
Goats	Campylobacter			
	Salmonella			
	Escherichia coli O157:H7			
	Coxiella burnetii (Q Fever)			
Llamas	Campylobacter			
	Salmonella			
	Escherichia coli O157:H7			
Pigs	Campylobacter		Dermatophytosis	Influenza
	Salmonella		(Ringworm)	
	Leptospira		, ,	
	Yersinia enterocolitica			
Chickens, ducks,	Campylobacter		Dermatophytosis	Influenza
turkeys	Salmonella		(Ringworm)	
Rabbits			Dermatophytosis	
			(Ringworm)	

Table 2. Common symptoms in animals and humans.

Germ	Symptoms in Animals	Primary Symptoms in Humans
Campylobacter	Diarrhea (cattle, sheep, and goats may have abortions)	Diarrhea, fever
Salmonella	Cattle may have fever, diarrhea, and abortion	Diarrhea, fever
E. coli 0157:H7	None	Bloody diarrhea, cramps
Cryptosporidium	Calves may have diarrhea and scours	Watery diarrhea, fever, nausea, vomiting

For more information, please visit the Minnesota Department of Health website at www.health.state.mn.us or contact Carrie Klumb at 651-201-5414. For more information on the Upper Midwest Agricultural Safety and Health (UMASH) Center, please visit the website at www.umash.umn.edu.