

ZOONOTIC DISEASES

Zoonotic diseases also known as zoonoses are caused by germs that spread between animals and people.

Animals provide many benefits to people. Many people interact with animals in their daily lives, both at home and away from home. Animals provide food, fiber, livelihoods, travel, sport, companionship, and education for people across the globe. Millions of households in the United States have one or more pets. We might come into contact with animals in either urban or rural settings, during travel, while visiting animal exhibits, or while enjoying outdoor activities.

However, animals can sometimes carry harmful germs that can spread to people and cause illness – these are known as zoonotic diseases or zoonoses. Zoonotic diseases are caused by harmful germs like viruses, bacterial, parasites, and fungi. These germs can cause many different types of illnesses in people and animals, ranging from mild to serious illness and even death. Animals can sometimes appear healthy even when they are carrying germs that can make people sick, depending on the zoonotic disease.

Zoonotic diseases are very common, both in the United States and around the world. Scientists estimate that more than 6 out of every 10 known infectious diseases in people can be spread from animals, and 3 out of every 4 new or emerging infectious diseases in people come from animals. Because of this, CDC works 24/7 to protect people from zoonotic diseases in the United States and around the world.

GERMS SPREAD BETWEEN ANIMALS AND PEOPLE

Because of the close connection between people and animals, it's important to be aware of the common ways people can get infected with germs that can cause zoonotic diseases. These can include:

Direct contact: Coming into contact with the saliva, blood, urine, mucous, feces, or other body fluids of an infected animal. Examples include petting or touching animals, and bites or scratches.

Indirect contact: Coming into contact with areas where animals live and roam, or objects or surfaces that have been contaminated with germs. Examples

include aquarium tank water, pet habitats, chicken coops, barns, plants, and soil, as well as pet food and water dishes.

Vector-borne: Being bitten by a tick, or an insect like a mosquito or a flea.

Foodborne: Each year, 1 in 6 Americans get sick from eating contaminated food. Eating or drinking something unsafe, such as unpasteurized (raw) milk, undercooked meat or eggs, or raw fruits and vegetables that are contaminated with feces from an infected animal. Contaminated food can cause illness in people and animals, including pets.

Waterborne: Drinking or coming in contact with water that has been contaminated with feces from an infected animal.

HIGHER RISK OF SERIOUS ILLNESS FROM ZONOTIC DISEASES

Anyone can get sick from a zoonotic disease, including healthy people. However, some people are more at risk than others and should take steps to protect themselves or family members. These people are more likely than others to get really sick, and even die, from infection with certain diseases. These groups of people include:

- Children younger than 5
- Adults older than 65
- People with weakened immune systems
- Pregnant women

PROTECT YOURSELF AND YOUR FAMILY FROM ZOOONOTIC DISEASES

Information on the benefits of pets, disease risks, keeping pets and people healthy, and outbreaks. People can come in contact with animals in many places. This includes at home and away from home, in places like petting zoos, fairs, schools, stores, and parks. Insects, like mosquitoes and fleas, and ticks bite people and animals day and night. Thankfully, there are things you can do to protect yourself and your family from zoonotic diseases.

- Keep hands clean. Washing your hands right after being around animals, even if you didn't touch any animals, is one of the most important steps you can take to avoid getting sick and spreading germs to others.
 - Always wash your hands after being around animals, even if you didn't touch the animals.
 - Many germs are spread by not washing hands properly with soap and clean, running water.
 - If soap and water are not readily available, you can use an alcohol-based hand sanitizer that contains at least 60% alcohol.
 - Because hand sanitizers do not get rid of all types of germs, it is important to wash your hands with soap and water if they are available.
- Know the simple things you can do to stay safe around your pets.
- Prevent bites from mosquitoes, ticks, and fleas.
- Learn more about ways to handle food safely—whether it's for yourself or your family, your pet, or other animals.
- Be aware of zoonotic diseases both at home, away from home (such as at petting zoos or other animal exhibits), in childcare settings or schools and when you travel.
- Avoid bites and scratches from animals.

Illnesses Associated with Animal Contact

Rabies

Rabies is a disease that affects the nervous system of mammals. It is caused by a virus and is typically spread by an infected animal biting another animal or person. Rabies is a fatal disease; it cannot be treated once symptoms appear. Luckily, rabies can be effectively prevented by vaccination.

Blastomycosis (*Blastomyces dermatitidis*)

Blastomycosis is a rare fungal infection usually acquired by inhaling the spores of a fungus (*Blastomyces dermatitidis*) that can be found in wood and soil.

Psittacosis (*Chlamydophila psittaci*, *Chlamydia psittaci*)

Infection with *Chlamydophila psittaci* (formerly known as *Chlamydia psittaci*) is the cause of systemic illness in companion birds (birds kept by humans as pets) and poultry. This illness is often referred to as avian chlamydiosis (also known as psittacosis, ornithosis, and parrot fever) in birds.

Intestinal Illness Acquired From Animals

Including *E. coli* O157:H7, *Cryptosporidium parvum*, *Campylobacter*, and *Salmonella*.
Spotlight on specific animals:

- Reptiles and Amphibians: *Salmonella*
Some reptiles and amphibians can make cool pets, but they can also be a source of illness. Reptiles (e.g., lizards, turtles, snakes) and amphibians (e.g., frogs and toads) carry *Salmonella*.
- Chicks and Ducklings: *Salmonella*
Those cute little chicks and ducklings can be a great attraction for children this time of year, but they can also be a source of illness, so it's important for those who handle them to take steps to prevent infection.

Bioterrorism Diseases

List of diseases that may be used in a bioterrorism event, divided into categories depending on the ease of spread and the severity of illness or death they cause. Including Anthrax, Plague, Brucellosis, and Q fever.