



PARENTS PACK

MONTHLY UPDATES ABOUT
VACCINES ACROSS THE LIFESPAN

FEATURE ARTICLE: PEOPLE, ANIMALS AND THE DISEASES THEY SHARE

April 2026

We spend a lot of time discussing the spread of diseases from one person to another, but sometimes diseases can be shared between animals and people. These can be diseases that are generally understood to be associated with animal interactions, like rabies, or they can be less obvious, such as headlines that emerged in 2020 when it became clear that our pets could get COVID-19 from us. (Notably, it is less likely for us to get COVID-19 from our pets.) As spring arrives with summer soon to follow, it seemed like a good time for a refresher. Keep reading to find more about vaccine-preventable diseases (VPDs) that we can get from animals, updates on a few VPDs that have recently made headlines, and some tips for lowering the risk of exposure when around animals.

Animals as a source of vaccine-preventable diseases in people

Three situations are worth considering when it comes to animals and infections in people. First, animals can be the only source of infections in people, meaning even once infected, a person will not spread the infection to another person. Second, animals can be the main source of infection in people, but once infected, people can spread the infection to others. Third, person-to-person transmission can be the main way an infection spreads, but animals still play a critical role in what we need to consider when it comes to protecting ourselves. Let's consider each of these.

Situation #1: Spread occurs only from animals

Examples of VPDs in which animals are the sole source of infections in people include anthrax, Japanese encephalitis virus (JEV), Lyme disease, rabies, tick-borne encephalitis (TBE) and yellow fever. People do not get infected by other people with these infections.

Situation #2: Spread occurs most often, but not always, from animals

Examples of VPDs in which most people are infected by exposure to animals, but some can get infected from others include:

- **Chikungunya** — mostly spreads by infected mosquitoes but can be spread by exposure to an infected person's blood or from a mother to her fetus.
- **Dengue** — most often spreads by infected mosquitoes but can be spread through exposure to blood or organs from an infected person or from a mother to her fetus.

Situation #3: Spread occurs most often from one person to another, but animals play a critical role

Sometimes people are the primary source of spread, but animals still play a key role in the disease and its potential to cause harm. This is particularly true of some viruses that can infect a wide array of animals. In these situations, if an animal is infected with different types of the virus at the same time, the genes from the two viruses can mix leading to the creation of a novel virus. If a novel virus has the ability to infect people and spread from one person to another, the new virus can cause a pandemic. Common examples of VPDs that we need to monitor for these kinds of developments include influenza viruses and coronaviruses.

Ebola is another virus to consider in this category. Most often Ebola outbreaks are started by "spillover events," meaning the virus spreads from an infected wild animal to a person. However, the virus then continues to spread among people, causing regional outbreaks known as epidemics. Spread among people occurs through exposure to body fluids from someone who is infected or by contact with objects contaminated with body fluids from an infected person, such as bedding or medical equipment. Two other points about the spread of Ebola make containment more difficult. First, even after someone has died, exposure to their body fluids can spread the infection. Second, even after men have recovered, they can spread the virus in their semen. The same has not been found for vaginal fluids.

Updates related to recent headlines

Because infections occurring in or spread by animals can lead to emergent situations in populations of people, ongoing surveillance is important. Monitoring what is happening in animal populations can provide important clues about potential health effects in people, and the earlier we become aware, the better prepared we can be in an emergent situation. To some extent, we saw this with COVID-19. On one hand, once scientists around the world understood what was happening, they worked together to develop treatments and vaccines in record time. On the other hand, because officials in China were not forthcoming with critical details at the outset, precious time was lost, decreasing the global ability to contain the virus.

Some infectious diseases that have made headlines in recent months for their potential risk to people include:

- **H5N1 influenza** — Also known as "highly pathogenic avian influenza (HPAI)" and sometimes referred to simply as "bird flu," this virus has been causing illness in large groups of birds and poultry throughout the country since 2024. It has also spread to some mammals, like cattle and elephant seals. While about 70 people have been infected, and at least two have died, the current risk to people remains low.

TRIVIA CORNER

What vaccine-preventable disease kills almost everyone it infects?

- A. Polio
- B. Rubella
- C. Chickenpox
- D. Rabies

- **Rabies** — In the fall of 2025, reports of six fatal cases of rabies in the previous 12 months emerged. While outbreaks tend to center on particular animal species in a region, two points are important. First, as animals and people live closer together, the risk for exposure to rabies increases. Second, some families are questioning the safety of vaccines for their pets and, therefore, forgoing vaccination. This decision can indirectly increase the risk to people because sometimes pets are exposed to the virus unknowingly while they are outside, and if a pet becomes infected, they can expose family members or other people with whom they have contact.
- **Yellow fever** — The Pan-American Health Organization (PAHO), which oversees health in the Americas, recently reported sustained transmission of yellow fever in some countries in South America. Of particular concern is that the disease has been seen in urban areas, where spread is easier due to the number of people living closely together. Even though people don't spread the virus to one another, mosquitoes can more readily be infected and infect people.

Practical tips for lowering risk

We interact with animals and products made from animals regularly. In some cases, such as with mosquito bites, the interactions are not intentional. However, families can decrease their risk for many of the infections introduced by animals by following these practices:

- Wash hands using soap and water after being around animals, even if you didn't touch them.
- Wear appropriate protective clothing if working with or near animals (e.g., gloves, goggles, masks).
- Take precautions to decrease the chance for insect bites (e.g., wear long-sleeved clothing and pants, use insect repellents, decrease standing water).
- Avoid animal bites and scratches and thoroughly clean any wounds resulting from such.
- Vaccinate pets and livestock.
- Get treatment for ill pets and livestock, and don't allow pets to lick you or family members.
- Wash and cook food properly.
- Clean surfaces and sink areas where raw meat was handled.
- Only drink bottled or treated water, especially if traveling to areas where sanitation standards may be damaged or limited.
- Limit exposure to injured, sick or dead animals.
- Avoid touching animal droppings as well as objects, foods or plants that could be contaminated with such.

For links to resources, please visit bit.ly/Apr2026FA.

FEATURED VIDEO: UNPACKING THE RECENT COURT DECISION ABOUT VACCINES

If you have heard something about a court case and vaccines, but you haven't been following what happened closely, you can find out more in this 5-minute video with Dr. Offit.

- Watch the video, bit.ly/Apr2026FV.

NEWS & NOTES

It's "National Public Health Week"

Public health has gotten a bad rap since the COVID-19 pandemic, especially as some people have been falsely led to believe that we must choose between public health and individual freedom. However, this is a logical fallacy called a false dichotomy because these ideas are not mutually exclusive.

Public health oversees health concerns at the community and population level. Their efforts are typically directed toward issues that are affecting the health or quality of life for groups of people within those communities or populations. This means public health officials aren't just focused on vaccines and infectious diseases. They are also involved in efforts related to safety in workplaces, school nutrition standards, clean air, violence prevention, chronic disease, mental health and more.

Find out more about public health, and if you know someone who works in this field, take a moment to celebrate them this week.

Get updates on infectious diseases

Since it's "National Public Health Week," we wanted to highlight this public health program from Boston University. The Biothreats Emergence, Analysis and Communications Network (BEACON) publishes information and updates on infectious disease-related situations occurring around the world. Each post includes a link to more information and previous posts related to the topic.

People can stay abreast of what is happening by:

- Checking alerts on the program website.
- Signing up for their newsletter, which is offered in daily and weekly cadences. Subscribers can also choose which areas of the world they want to receive updates regarding.

For links to resources shared in the "News & Notes" section, please visit bit.ly/Apr2026NN.

TRIVIA ANSWER

The correct answer is D. Rabies is typically transmitted to humans through the bite of an infected animal. Rabies virus infects the brain causing encephalitis and ultimately death within days of the onset of symptoms.

Go to vaccine.chop.edu/trivia to play Just the Vax, the Vaccine Education Center's trivia game, where you can find this question and others like it.

