



ZOONOTIC DISEASES ARE THOSE THAT can spread from animals to humans through several routes of transmission.

Some things shouldn't be shared

Create a culture on-farm that prevents the spread of zoonotic diseases.

by Whitney Pennington

YOUR health and the health of your employees likely crossed your mind more frequently in 2020 than ever before. While there's currently no evidence that COVID-19 easily spreads between people and livestock, there are numerous zoonotic diseases that present a threat to your business.

Zoonotic diseases, those diseases that can be spread between people and animals, are caused by pathogens like bacteria, viruses, and fungi. Unlike animal diseases that only impact cow health and milk quality, zoonotic diseases can also impact the productivity of your staff. Controlling and preventing zoonotic diseases can reduce the number of sick days taken by employees, enable staff to be healthy and do their best work, and allow you to retain a talented team.

How do diseases spread?

Zoonotic disease is a broad category that includes many different illnesses. These diseases spread primarily in four ways. Reviewing these pathways can help you identify the areas on your farm and the specific tasks that put someone at risk of exposure to a zoonotic pathogen.

Direct transmission: This occurs when a person comes in contact with pathogens directly in a body fluid. Body fluids include feces, urine, blood, and milk, but don't forget about respiratory droplets and birthing fluids. Researchers have discovered zoonotic pathogens on the

gloves, boots, and clothing of dairy workers in a study in Colorado.

Indirect transmission: This is when someone contacts a pathogen indirectly through a contaminated environment, surface, or tool. This happens because some pathogens can survive outside of a living being. The bacteria that causes Anthrax, for example, can survive in dirt, wools, and hides for decades!

Vector-borne transmission: This occurs when a pathogen is spread between animals and people by a vector: a tick, mosquito, flea, or fly. These pests are not only irritating — they can also carry disease.

Foodborne and waterborne transmission: Food and waterborne transmission occurs when a pathogen is spread through food or water. On the dairy, you should be concerned with potential pathogens in water troughs.

Utilizing a traditional safety approach, known as the hierarchy of controls, can help you determine effective solutions to prevent and mitigate disease spread among the people who live and work on the dairy. The hierarchy of controls framework prioritizes steps that eliminate and separate workers from the hazard before implementing policies that rely on people to do tasks the right way.

Prevention and control

One of the most effective means to prevent zoonotic diseases is to ensure animals and people are up to date on their vaccinations. Make sure you follow the recommendations of your veterinarian and ask questions if you are concerned. Know where your employees can get low-cost health-care, like at a migrant health clinic

or community health center. Some health services may provide mobile clinics that bring their services to the dairy. This makes it easier for them to get care and gives you the peace of mind that your people are healthy.

Pathogens can survive on dust particles and be breathed in when dust is stirred up, so implement dust control practices. Make sure employees practice good hygiene by having handwashing stations, soap, and

when it comes to safety. Still, it is a vital last resort, especially when caring for animals known to be sick.

Utilize training activities to reinforce prevention. Train employees on proper animal handling techniques to avoid being bitten, and provide needle stick prevention training. Finally, teach employees about the signs, symptoms, and spread of zoonotic disease as part of onboarding and during regular safety meetings.

Motivate for better health

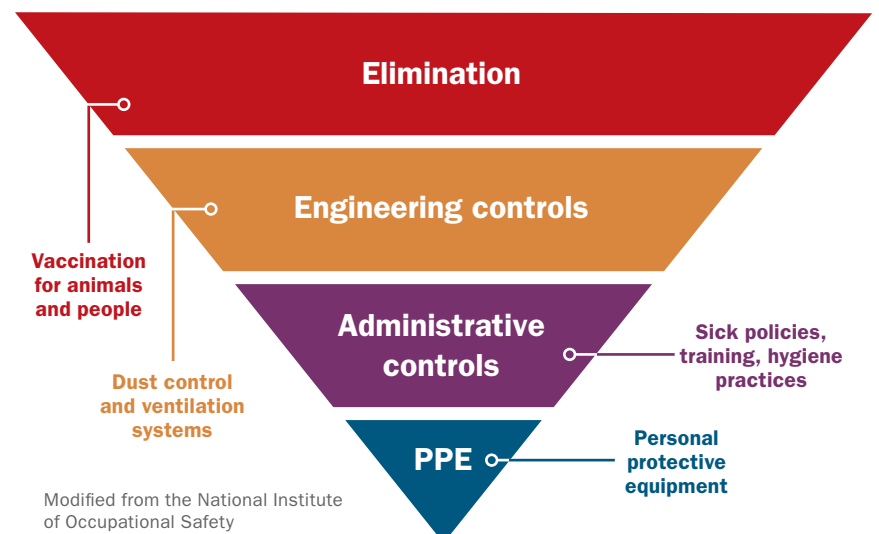
An effective training motivates workers to follow procedures — report sick animals, wear personal protective equipment, and wash their hands regularly — because they understand that not doing so is a risk to their health. For dairy farm workers, one major motivator is limiting the potential spread of pathogens to their home and preventing a spouse, child, or other family member from getting sick.

Supervisors play a critical role in establishing a culture of safety and prevention. Positive relationships between supervisors and employees, relationships that cultivate trust and open communication, facilitate the adoption of protocols.

Cultivating positive people management skills in your supervisors will take time. The good news is that you have additional options. Research done with Hispanic and Latino dairy workers shows that trust is also very strong among peers. Tap into this trust by utilizing your veteran employees to influence prevention: Pick someone who is doing things right and have him or her explain and demonstrate during a safety meeting.

You don't have to do this alone. There are several training programs, biosecurity templates, and resources to help you. The U.S. Agricultural Safety and Health Centers have numerous dairy safety training

Hierarchy of controls



water readily available. Have protocols for cleaning tools and equipment, including how to clean it and how often it needs to be cleaned.

Provide your employees with information on when to wear personal protective equipment (PPE) and how to put it on and take it off. This includes gloves, respirators, face shields, goggles, overalls, or boot covers. Keep in mind that personal protective equipment is a "last resort"

videos in multiple languages available for free on YouTube. The Center for Food Security and Public Health at Iowa State University provides specific information on numerous zoonotic diseases. Contact your local extension service and veterinarian for ideas.

On a dairy farm, everything is connected. By implementing zoonotic disease prevention programs, you can ensure the safety of animals, milk, and people. 🐄