Don't Forget the Other Biosecurity Threats

By Charles E. Gardner, DVM

We have recently heard a great deal regarding a new threat to biosecurity on dairy farms. The avian flu virus has mutated into a form that can infect dairy cows and cause reduced appetite and milk production. Severe illness is rare. The virus is usually referred to as HPAI, standing for Highly Pathogenic Avian Influenza.

We all need to be aware of this disease and follow the published guidelines for protecting our dairy herds. Regulations have been established for bringing animals into Pennsylvania. So far, it has not been diagnosed within our borders, but it may be here anyway. Our state labs are prepared to test for it, so if you are bringing in animals you should discuss matters thoroughly with your veterinarian. Lactating cows are much more of a threat than non-milking ones, because the virus is shed primarily in milk. It is not a threat to humans consuming pasteurized milk.

My primary goal with this column is to remind us not to lose awareness of the other, more common biosecurity threats. Bovine Virus Diarrhea (BVD), Johne's disease, contagious mastitis, and respiratory illness can all be introduced into your herd from outside sources. The most likely sources are purchased animals, or heifers raised by a custom grower who has animals from other farms co-mingled with yours.

BVD is the most complicated of these threats. It usually comes onto a farm as an infected fetus carried by a healthy cow. So even if all of the new animals test negative for this agent, the calves they deliver several months later may be infected, and then spread the disease within your herd. Testing the calves when they are born is more important than testing the mothers. Despite the name, BVD seldom causes diarrhea, but can impair fertility, cause abortion, and lower the immunity of infected animals.

Johne's disease is somewhat similar in that testing the animals before or at the time of arrival at your farm may not reveal all of the ones that are infected. Cows and heifers can be carriers with no clinical signs, and they may test negative during the early stages of the disease. As they age, their production tends to suffer, and eventually they will test positive. They may also develop chronic diarrhea with weight loss. Milk production and cull value drop dramatically. Their manure and milk can carry the infectious agent, and young animals are most susceptible to infection.

There are several types of contagious mastitis. Mycoplasma, Staphyloccocus aureus, and Streptococcus agalactia are the most common. These germs are spread from cow to cow by milking equipment and milker's hands. You should always milk new animals last until you have had time to evaluate their udder health.

Contagious respiratory disease has several types of bacteria or viruses that can infect dairy animals. The stress of shipping often brings it on in the new ones, and these animals then spread it to the rest of the herd. If possible, keep new ones in a separate building for two weeks after bringing them onto the farm. Providing excellent ventilation and having your herd up to date on vaccinations will also help.

Besides the diseases described above, Hairy Heel Warts, Ringworm, and Salmonella are also threats when you bring in new animals. You should always discuss biosecurity with your veterinarian if you plan to buy cows, or if you have your heifers at a custom heifer raiser. Disease outbreaks can be devastating, both financially and emotionally.

It is very important to understand the threat posed by HPAI virus in dairy cows, and precautions should be followed to protect your herd. Equally important is staying up to date on other contagious diseases that have been with us for many years. Keep in mind that the most likely source of any of these illnesses is not people or vehicles, but rather cows and heifers that come on to your farm from other farms.