

More Information on Avian Influenza

We've been following the Avian Influenza outbreak to give you the most up to date information as we learn it. Here is more on Avian Influenza outbreak:

- Raw milk from infected cattle kills cats. It takes a few days but if your cats start dying and you are feeding raw milk, it might be the first sign.
- Cats can also get it from eating infected raw meat.
- Cats can get it from scavenging sick and dead infected wild birds.
- The virus kills wild cats living in the wild like bobcats. It also kills big cats like lions in captivity when they are fed infected meat or milk.
- People can get it from drinking raw milk. To date only one person has been hospitalized and so far, there has not been any human-to-human transmission.
- The Avian Influenza virus is much simpler than the Covid virus is, it mutates and changes much more frequently. It now causes abortions in cattle. Calves can get infected from drinking unpasteurized milk.
- The poultry industry is fighting using vaccines because it affects the export market. I think they will lose the fight. With eggs at \$6 a dozen, I'm not sure there is an export market.
- Dead wild birds should be something to be concerned about. Handle them with gloves and dispose of them ASAP. Dispose of them in a burn barrel, garbage can, or anywhere cats can't get them.
- Wisconsin is working on joining the national surveillance program. It will take time. Last I heard, the milk sample taken from bulk tank or trucks for milk quality will be used.
- Freezing does not hurt the virus. It preserves it in an infective state.
- Start thinking about your biosecurity with regards to shows, fairs, and other animal movements. If you lost 30% of milk production for 3 months and 20% of your cows had to be replaced, is that a risk worth taking?
- The virus broke in 2022, it moved to cattle in 2024. As of January 31, there are now two different genotypes in cattle.
- USDA wants eradication. With a reservoir in wild birds, I would not bet on eradication, at least without a vaccine.

My lawyer friend always said the definition of a sinking ship with 50 lawyers on it was, "a good start." But on a more serious note, 96.5% of lawyers give the rest a bad name.

Internship Project Tests ParlorPal Product

Last summer we hosted two veterinary students for four-week internships. Our internship program requires each student to do a self-study project on a topic that we hope will benefit clients either directly or indirectly. Here are the results of one of the projects done by our intern Brock Roy.

Brock's project involved studying the reduction in ammonia levels in calf housing using a product called ParlorPal, which is applied to bedding in calf hutches or pens. This product is commonly applied to bedding in chicken housing facilities to reduce ammonia levels which when elevated contribute to calf pneumonia.

Unfortunately, the results didn't show much for sustained pneumonia reduction when used at the levels we tried, and the cost was over \$3 per calf per week. The good news is that we aren't going to recommend producers use this product, at least at the levels we studied.

Dr. Smith from South Dakota still believes the product use can have an impact on large dairies, perhaps when buildings are closed up in the winter to conserve heat?

Poison in Pasture Cause of Dead Animals

Our vets recently had an interesting case involving root worm poisoning resulting in one dead heifer and another sick one. They were able to figure out the cause of the poisoning after thinking back on a similar case we had in the 90s on a different farm.

Before the BT gene was inserted in corn seed genetics, corn planters commonly had three application boxes, including fertilizer, seed, and a small box on the back to meter rootworm insecticide.

In vet school toxicology classes, we learned the signs and treatment for organophosphate poisoning because it commonly happened. The story I like to tell young vets involved spilled Thimet® back in the 90's. One spring, a farmer spilled a partial bag of Thimet in his granary, which at that time he used more for junk storage, extra seed, etc. He asked his wife to clean it up, which she did. She swept it up and dumped the sweepings onto a pile of wood ash next to the granary. The wood ash was from the home wood burner. Supposedly, the amount of Thimet spilled fit into her dustpan.

Seven years later, we diagnosed Thimet poisoning in several bred heifers on that farm. We lost a couple of heifers and treated a couple that survived. The state sent an investigator out who came up with a plausible (not very) explanation of contamination from a corn planter.

The following spring, a group of 10 bred heifers in the same pen had the same symptoms. Again, we treated the heifers, lost a couple and the same investigator returned. He was upset with himself, blaming himself for doing a poor job of investigating, and saying he hadn't liked his explanation the prior fall. He ended up crawling around the heifer lot, in the dirt, on hands and knees and finally under the feed bunk he exclaimed, "here it is."

The soil was contaminated, and a person could smell the Thimet if you got on your hands and knees. The granary was 20 feet uphill from the heifer lot, right uphill from the feed bunk. The feed bunk had a salt and mineral box on one end. Both the prior fall, and that spring, the salt box had been out of salt for a couple weeks.

The Thimet had been leaching downhill with rainwater, perhaps the wood ashes kept it from breaking down. Eventually it contaminated the soil under the salt box. In both the spring and fall when animals were poisoned, the heifers had started licking the dirt under the box where the Thimet had contaminated the soil. Supposedly, Thimet has a salty taste, although it's so toxic I can't imagine how that premise could be tested.

The state had the farmer dig up truckloads of soil and spread it thinly out in his field. The solution to pollution is dilution, right?

I saw a couple other cases of rootworm insecticide poisoning in that era. In one case empty Thimet bags contaminated a pickup bed which was later used to transport oats and corn for grinding into heifer feed. Another time younger heifers broke into an old shed and licked a

Furadan® bag lying on the floor. Today, we don't even stock treatment medications for these poisons.

We recently saw this again, associated with an old corn planter on the side of a field with a rusted-out insecticide box. Evidently the residual insecticide in the box had been protected from the elements for years.

Pastures can harbor all kinds of dangerous equipment and old toxic chemicals. I've seen old lead batteries kill animals. I've seen lead painted Kentucky gates kill animals, and I've seen animals get entangled in old farm equipment and get injured. One heifer had her stomach and intestines out when she tried to jump over a disk.

Pieces of wire can wrap around feet and small bits of metal can be consumed by bored animals resulting in hardware disease. Pastures need to be occasionally walked with an eye to risk. Just because something has been there for years doesn't make it safe. Put junk in a pile away from animals, or recycle, or bury it. I always wonder about what we bury getting into our wells, just like I always wonder about that Thimet getting into that farmer's well.

And please, if you have any old chemicals, or unknown bags of unknow products, take them to a clean sweep program.

"Pastures can harbor all kinds of dangerous equipment and old toxic chemicals,"

- *Dr. Al Martens*