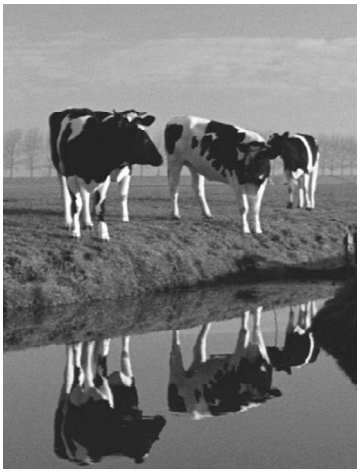
True stories of Johne's disease in Michigan herds

(All names and breeds have been changed to protect the innocent and obscure the guilty!)

The water was the culprit!

A small Simmental seedstock breeder in Michigan, Pete, buys a registered heifer at the Beef Expo. The heifer comes from JAB Cattle Co, a herd with an excellent reputation, and the price is reasonable at $1,500.00. The heifer is a little harder doing than some, but not unusual for the breed. She calves at two years of age and is nursing a bull calf that is growing well. The heifer appears to loose condition, and is fed supplemental grain. She is bright and alert, has a voracious appetite, and seems to be always drinking water. The heifer then developed profuse diarrhea. The veterinarian diagnoses Johne's disease on a blood test. The cow is culled and the seller is notified.

JAB offers to replace the heifer and tests all their cows with the ELISA. It turns out that all the two year-old registered cattle are Johne's test-positive. Interestingly, none of the registered Simmental cows are test-positive, but many of the commercial cattle are test-positive. Seems that two years ago, after calving, the registered herd was mixed with the commercial herd. All the cattle and calves drank from the same pond. This pond was contaminated with Johne's bacteria from the commercial cattle.



Although they look beautiful standing by a pond, manure contamination of the water is great way to transmit Johne's disease

The moral of the story – a pond contaminated with the Johne's disease bacteria is a great way to infect calves. Protect your investment – keep your cows out of your pond!

The breeder was the culprit!

A Michigan producer, Fred, with a small herd of registered Shorthorn cows wants to make rapid genetic improvement. He is interested in using semen from one of the most popular bulls in the breed, a bull with calving ease, balanced EPDs, eye appeal, and a National Championship. But you can't buy the semen, you can only obtain the genetics by purchasing bred heifers from the bull owner. The bull owner has the reputation for progressive marketing and excellent genetics. Fred buys three bred heifers, due to calve in four months and takes out a loan to cover the $30,000.00 cost.

In the spring, the three heifers calve without difficulty. One of the heifers doesn't maintain condition. She develops profuse diarrhea, rapidly goes down hill, and Fred's veterinarian diagnoses Johne's disease on clinical appearance and a blood test. The heifer is found dead two days later. One of the other heifers is positive on blood test and fecal, the third heifer is negative on the first test.

Fred contacts the seller and is told that they do not have a problem with Johne's and that the heifers must have gotten it at his place. The seller assures Fred they do not have Johne's disease, but no, they don't test – they don't need to test, because they don't have a problem. The seller offers no compensation or no replacements. To recoup his losses, Fred sells all the calves, including those from the positive cows, as replacements at an Expo.

The moral of the story – beware of herds that say they don't have a Johne's disease problem and don't test. Beware of buying cattle form herds of unknown Johne's disease status.

The dirty udder did it!

A Michigan Angus breeder, Simon, with 75 cows buys and sells cows, embryo recipients, show heifers, and breeding bulls. The herd has some exceptional cows and excellent genetics. Close-up cows are kept in a cement lot that is scraped several times per week, is not bedded, and has several round bale feeders for hay. In the winter, scraping is more sporadic and cows often lay in manure. Udders are often manure-covered. Cows ideally calve in separate pens, although sometimes they calve early in the lot. Cows spend most of the time in the lot, but are moved into the calving area to nurse their calves. After several weeks, depending on the weather, cow/calf pairs are moved to another area where there is a straw bedded barn for both cows and calves.

Clean udders can markedly decrease the risk of Johne's disease.

Several years later, after calving, Simon notices that Beauty the cow, one of his best embryo donors, is thin and has diarrhea. She has clinical Johne's disease and tests positive on the blood test. Beauty's dam was purchased as a bred heifer and Beauty was born on the farm. Her grandam was purchased sometime later as a bred cow. Simon is concerned about Beauty's offspring, and the rest of his herd, and asks his veterinarian for a risk assessment and to test the herd. The risk assessment reveals the primary risks are the exposure of calves to manure from contaminated udders and purchase of animals from herds of unknown Johne's disease status.

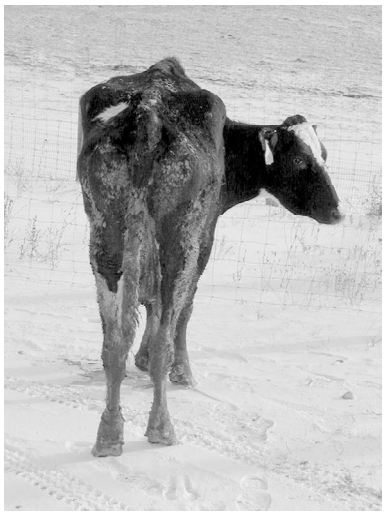
Testing reveals that Beauty's dam and grandam are fecal culture test-negative. Beauty's first calf is test-positive, as are the two-year-old natural calf is dam and grandam. One ET calf born on the farm is test-positive, but two born elsewhere are test-negative.

The moral of the story –
a little bit of manure can infect a calf! Keep those udders clean.

The recipient was the bad doer!

A small Limousine breeder, Amanda, was able to purchase some excellent genetics in frozen embryos. Since all her cows are bred, she decides to use her neighbor's dairy cows as recipients. Amanda and the dairy farmer reach an agreement, and a dozen embryos are placed in Holstein cows of unknown origin and unknown Johne's status. Eight embryo calves are born. After the cows and calves have been together for a few days, Amanda takes them and raises them on her farm. She feeds milk replacer. The heifers are pretty nice and her kids show them successfully. They are kept as replacements. Amanda's veterinarian suggests that she have a Johne's risk assessment done. The major risk factors are purchasing animals from unknown sources and use of dairy cattle for recipients. Testing reveals that one of the ET calves (now four years old) is high test-positive on the blood test. The dairy recipient is no longer in the herd and cannot be tested. The dairy herd does not test.

The moral of the story – don't put your embryos in cows of unknown status, it is like putting diamonds in the sewer!



An ET calf from this MAP infected cow is at high risk for developing Johne's disease"

Thanks

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