

Tuberculosis

The states with TB cases within the past few years (TX, CA, NM, MI) have not always been able to find the source, so that needs to be kept in mind.

Currently, MI has the federal status of Modified Accredited and CA is Modified Accredited Advanced. VT is Free. Animals located in states not designated as Free have interstate movement restrictions that require more TB testing, often whole herd testing every year to every two years.

Michigan's TB issues relate to TB in their deer population. TB testing being conducted in MI would be based on the following needs:

- 1) Testing within the state as part of a control and eradication program (test and remove or test and depopulate).
- 2) Testing requirements by other states for Michigan origin cattle being imported into those other states.

Overall, herds in Michigan (and CA) will need to do more TB testing to move animals because their state is not TB free. VT does not require TB testing from states that are TB free; we would from CA and MI because they are not TB free. Most states have similar requirements.

The majority of on-farm testing that is done for TB and Brucellosis is state import driven (so a farmer in VT will have cattle that he is sending to another state tested for TB because that state of destination requires the testing) or is required by sales events (annual Syracuse Carousel Sale) or herd dispersals.

There is also slaughter surveillance that is done jointly between VS and FISIS – samples are taken at Federally designated slaughter plants for TB, Brucellosis, or both.

1. What are the federal standards for TB and Brucellosis testing? – The standards can be found in the 30 page document titled Federal Tuberculosis Uniform Methods and Rules for TB Eradication.
 - a. What types of tests, retests, confirmation etc. – veterinarians in private practice perform the caudal fold test; any suspects are tested by state animal health officials using the comparative cervical test; any suspects on that test are either retested 60 days later or are slaughtered for lymph node collection and culture, which takes up to 60 days to confirm organism growth; there is also a blood test that can be performed instead of the caudal fold test – this test tends to have more false positives. This test is not used in VT. While a farm has a suspect animal and is undergoing confirmatory testing, they are quarantined. The gold standard ultimate confirmatory test is culture, TB is slow growing, hence the 60 day time frame. No testing on milk for TB.
 - b. Representative sample for large herds – most often it is whole herd tests that are required, particularly if the testing is for an outbreak or for those herds located in states that do not have federal Free status.
 - c. Anything else? I think it is very important to keep in mind that the recent herd outbreaks in other states cannot always trace the source of infection, meaning that another source of infection besides deer or Mexican origin cattle could be to blame. Further meaning TB testing cattle in VT shouldn't be dismissed because we don't have TB in deer or because we don't get Mexican origin cattle – we may, who knows. We don't have a national animal identification system.

CSA for Meat

If a CSA is providing meat as part of the share:

- The CSA owner must obtain a retail meat license –paid and subject to inspection. If CSA owner raises poultry under the VT limit then can provide poultry as part of CSA.
- CSA cannot sell meat to another CSA without a Wholesale distributor's license.

For raw milk and or raw milk products – could interpret that CSA owner if not the producer of raw milk/products should obtain a milk handlers or milk distributors license – BUT both require products that are pasteurized.

Laboratory

1. Can our laboratory do TB and Brucellosis testing on milk? Why or Why not? If we cannot is there a lab in this state that can? Out of state?

Our lab can do brucellosis testing of both milk and blood samples. The milk test is only appropriate for species where the cream rises (groups of Cattle) and does not work for goats. The blood test is done with blood samples from individual animals, is more accurate and works on cattle, sheep or goats.

TB see information above. TB testing not done on milk.

2. Why would the agency want two 2 ounce vials of milk if changed to vial instead of jars that milk is sold in
BobWhite lab states that they only need 5 ml for testing – why do we need two 2 ounce vials?

All official samples are required to have a temperature control that is the same size and general product as the samples being submitted (water if submitting water samples, milk if submitting milk samples). This is used to take a temperature of the product. The Second vial in our lab is used for bacterial testing. We made an exception for the quart bottles of raw milk as the farms were willing to take the risk of the sample getting contaminated while the temperature is taken. The smaller the volume the more the risk of contamination. If we were to change to 2 ounce containers the risk is too high compared to the cost of the second vial of milk.

Agency of Ag Laboratory is using official FDA methods to test raw milk. However, our lab is using a couple of different tests than the Bobwhite Systems Lab. We are using an electronic Somatic Cell Count method which requires a larger volume of milk than the Direct Microscopic method and the Delvo antibiotic test requires additional milk for the confirmation step if the initial test is positive. These methods are more cost effective for our laboratory due to the larger workload.