1. What is Bovine Tuberculosis (bTB)?

Bovine TB is a contagious, chronic disease caused by *Mycobacterium bovis*. The infection commonly involves the lung and may spread to other organs. Animals often do not show signs until the infection is advanced and affects multiple organs. Typically, infected cattle are asymptomatic and are only detected by skin testing or at slaughter.

2. What species are susceptible to Bovine TB?

Most warm-blooded animals, as well as humans, can get the disease. Some species, such as horses and sheep, are less susceptible.

3. How is the organism that causes Bovine TB transmitted?

Bovine TB is spread by inhalation from nose-to-nose contact between animals or by ingesting contaminated feed or water. Herds become infected by either introducing new infected animals or being exposed to infected cattle or wildlife.

4. What is the history of Bovine TB on Moloka`i?

Bovine TB (bTB) is known to exist on Moloka`i since the 1940s.

Moloka`i was completely depopulated of cattle in 1985 in an attempt to eradicate bovine TB from cattle on the island.

Moloka`i remained free of bTB until 1997 when a single beef cattle herd on the East End was found infected and depopulated.

Historically mongoose, feral swine and axis deer have been found infected with bTB.

Although infected axis deer have been found on Moloka`i, slaughter and hunter surveillance indicates the prevalence of bTB in axis deer on Moloka`i has been very low.

The current bTB outbreak was detected in a small beef herd in central Moloka`i in June 2021. To date five cattle herds and one mixed herd (cattle, swine) have been found infected in this outbreak. One Axis deer submitted by a hunter from the West End of Moloka`i was found infected in April 2022.

5. How long would TB-affected properties be under quarantine?

Herds considered exposed to TB remain under quarantine until all exposed animals are tested. Any herd in which a positive is found will remain under quarantine until the property has met all the requirements set forth by the USDA as part of the federal disease eradication program. If
federal indemnity funds are available depopulation of infected herds is the preferred method to rid a herd of infection.

6. Where did the bovine TB that was discovered in the 2021 Moloka`i Outbreak come from?

The source of infection is still under investigation and remains undetermined. However, genomic studies show that all of the herds infected are related to the Moloka`i strain that trace back to feral pigs on the East End of Moloka`i.

7. What are recommendations for hunters?

It is recommended that hunters always wear rubber/nitrile gloves when dressing game animals and wear a mask. If you observe a carcass in poor condition or detect lesions in the carcass, hunters should not consume the meat from that carcass or feed it to other animals. Hunters should contact the Hawai`i Department of Agriculture (HDOA) Livestock Inspector Gene Ross Davis at 808-852-8185 for instructions on submitting samples for testing.

8. Are beef, pork and venison produced from Moloka`i livestock and deer safe to eat?

Yes. Beef, pork and venison produced on Moloka`i and inspected by the USDA Food Safety Inspection Service is safe to eat. Cattle, swine and deer processed at federally inspected facilities are evaluated for any signs of illness before slaughter. After slaughter, the carcass and internal organs are inspected for any signs of disease, such as tuberculosis, that would make the affected meat unacceptable for human consumption.

Hunters should examine or turn in to the HDOA livestock inspector the heads and lungs, heart and trachea of hunted game animals for examination and testing. (Contact listed in #8 above)

As an added safety precaution thoroughly cooking meat destroys the bTB organism and its infectivity.

9. What can livestock producers do to protect their herds from bTB?

- Follow the Quarantine Order and do not move livestock into or out of your herd without knowing their status, test first, obtain a permit from the State Veterinarian okaying the movement. To view the Quarantine Order, click here.
- Because we know wild animals can serve as reservoirs for bTB and have historically been found infected with bTB on Moloka`i, wildlife proof fencing is recommended to keep them out of your herd or flock.
- Do not feed livestock in areas wildlife can also access.

10. What other actions are being taken for bTB on Moloka`i?

A bill introduced this legislative session, SB2621 SD1 HD1 CD1 - Relating to the Department of Agriculture. Appropriates funds to the HDOA to establish bovine tuberculosis control operations on Moloka`i, including staff, land, and equipment. Introducers: Sens. DeCoite, Baker, Gabbard, Keith-Agaran, Kidani, Misalucha, and Rhoads.
11. What is the immediate plan?

- A quarantine order is in place to restrict movement of ungulates other than horses, to control disease spread.
- The first round of testing all livestock on Moloka`i will continue to rule out other potentially infected herds.
- Infected herds are being depopulated and associated herds are being tested to determine if spread has occurred.
- HDOA and USDA-APHIS-Veterinary Services are working together to develop a long-term disease management plan for Moloka`i.
- Hunter provided game samples will be submitted to the National Veterinary Services Laboratory in Iowa to assist with disease detection and evaluate the prevalence of bTB in wildlife.
- If Senate Bill 2621 SD1 HD1 CD1 is signed by the Governor, HDOA will have additional staff on island and stand up a livestock testing facility to address the bTB outbreak.
- HDOA has requested assistance from the Department of Land and Natural Resources and they will be collecting wildlife samples for submission for bTB testing.
- The State Department of Health will be addressing public health topics relating to the bTB outbreak through outreach and information distribution.

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