Bovine tuberculosis (TB) is a contagious and infectious granulomatous disease caused by the bacterium Mycobacterium bovis. Although commonly a chronic debilitating disease, bovine TB can occasionally assume an acute, rapidly progressive course. While any body tissue can be affected, lesions are most frequently observed in the lymph nodes, lungs, intestines, liver, spleen, pleura, and peritoneum. Although cattle are considered to be the true hosts of M. bovis, the disease has been reported in several other species of both domestic and nondomestic animals, as well as in humans.

At the beginning of the past century, bovine TB caused more losses of livestock than all other livestock diseases combined. This prompted the establishment of the National Cooperative State/Federal Bovine Tuberculosis Eradication Program for livestock. Laws enforcing this program define the criteria for attaining and maintaining the Federal bovine TB status levels for States or zones which are accredited-free, modified accredited advanced, modified accredited, accreditation preparatory, and non-accredited. The laws also include the testing and movement requirements for cattle, bison, and captive cervids leaving States or zones of a particular status level.

Bovine TB has a significant impact on animal health, public health, and international trade. The program to eradicate this disease from cattle in the US has made significant progress since its inception in 1917. However, several challenges impede eradication, and the USDA/APHIS/VS and the US Animal Health Association (USAHA) have held listening sessions and forums to provide industry personnel, veterinarians, regulators, diagnosticians and wildlife experts the opportunity to review and update the bovine TB program. Their recommendations have been used to produce a concept paper, “A New Approach for Managing Bovine Tuberculosis: Veterinary Services’ Proposed Action Plan” for the future of this program. This concept paper presents the USDA/APHIS/VS thoughts about changes for the TB program.

The concept paper provides an action plan to:

1. **Reduce the introduction of TB into the US national herd from imported animals and wildlife**
   
a. **Apply additional requirements to cattle imported from Mexico.** The majority of TB-infected cattle detected in the US originated in Mexico. These TB-infected cattle pose a significant threat to US breeding cattle. Suggestions to control this risk include enhanced testing of imported animals, and creating a tiered feeding system where breeding cattle will not be exposed to certain feeder cattle.

   b. **Enhance efforts to mitigate risks from wildlife.** Establish ways to detect TB in wildlife, reduce the prevalence of the disease in wildlife, and mitigate the transmission of TB between livestock and wildlife.

2. **Enhance surveillance**
   
a. **Craft a comprehensive national surveillance plan.** Include live animal and slaughter surveillance standards for cattle, domestic bison, and captive cervid herds, and targeted surveillance in wildlife. The plan may include minimum levels of herd surveillance and increased testing in certain areas.

   b. **Accelerate the development of diagnostic tests to support surveillance.** Skin testing for TB, developed in the late 1800s, continues to be the primary diagnostic tool in both human and animal medicine – but this test has its limitations. Several new technologies are being developed and evaluated.
3. Increase options for managing TB-affected herds
   a. Conduct epidemiological investigations and assess individual herd risk. Develop a standard tool to evaluate and classify the risk of TB transmission associated with a herd.
   b. Apply whole-herd depopulation judiciously and develop alternate control strategies. Use standard criteria to determine if whole-herd depopulation is economically viable, and standards for evaluating test and removal protocols that evaluate each herd individually.
   c. Apply animal identification (ID) standards. Require official ID and certificates to ensure that high-risk cattle move to slaughter or terminal feeding operations, and allow low risk cattle to move out of the zone.

4. Modernize the regulatory framework to focus resources where the disease exists

Structure the regulatory framework to allow the program rules to change with new scientific knowledge, and respond to changes in the livestock industry.

5. Change the State classification system to a science-based zoning approach

Replace the current TB State status system with a risk-based approach that imposes testing and movement restrictions on a zone (if wildlife are involved) or on an individual herd, rather than affect livestock in an entire State. This approach will focus resources on geographic areas where the disease exists and minimize the economic impact on the entire State’s industry.