

Progress & Challenges to Eliminating TB in Livestock in the USA

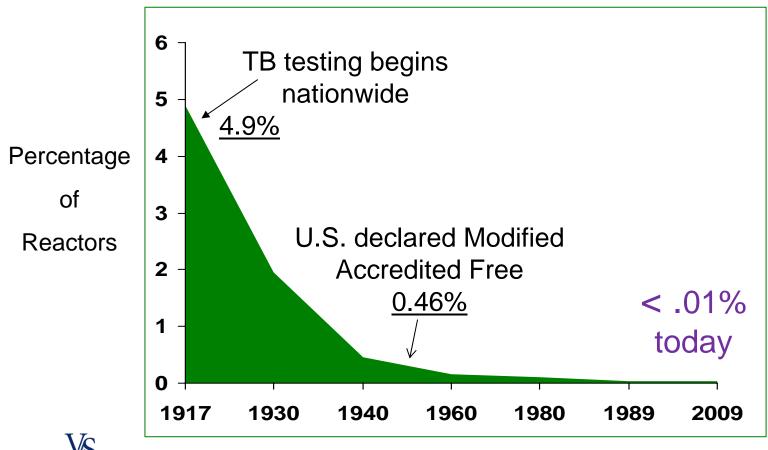


Presented by
Robert M. Meyer DVM, MS
Regional Epidemiologist
USDA APHIS Veterinary Services





Percentage of U.S. Cattle Reacting to the TB Test 1917 - 2009







Strategy Used to Combat TB

- Cooperative effort between
 USDA States Industry
- "Down-the –Road" Herd Testing; 1917 – 1950's
- Dairy herds tested initially
- Expanded to beef cattle herds quickly





Safeguarding Animal Health





Additional Surveillance added...

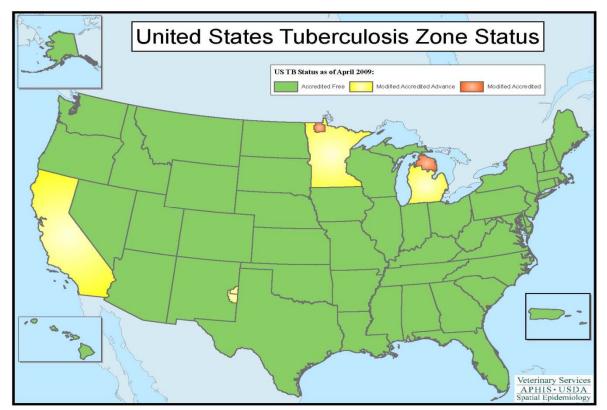
- In 1960's Slaughter surveillance added
- Epidemiologic investigation of TB-positive cases
- Tracing & testing of origin herds to confirm infection
- Incentive program started for inspectors finding last few cases of TB







US Cattle Free of TB by OIE Standards Herd prevalence ~ 0.0009%







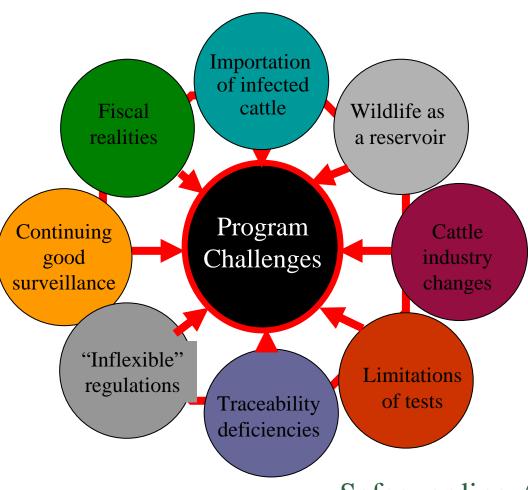
TB Outbreaks in U.S. Livestock Herds 2008 - 2010







TB Program Challenges



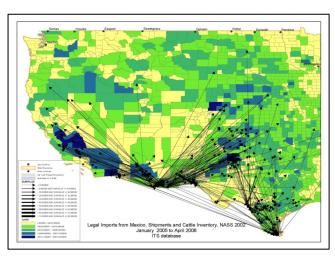




Importation of Infected Cattle

- 1,000,000 Mexican-origin steers imported yearly
- Reside on pasture prior to finish feeding in TX & other western U.S. states
- Concern: Exposure & reinfection of U.S. cattle herds









Mitigating the Risk

- DNA evidence supports that "spill-over" infection has occurred.
- Rodeo-type cattle are higherrisk of infection.
- Mixing of heifers in feedlots.
- <u>Challenge:</u> Reduce prevalence of TB in imports & prevent mixing without impacting trade.





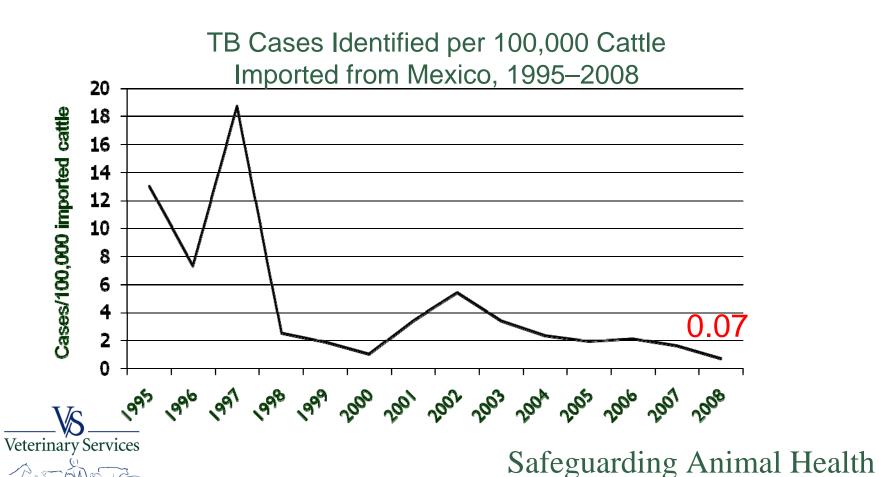








Prevalence Rates Decreasing in Imported Cattle



AND THE



TB in Wildlife

• TB detected in wildlife in two locations in continental US.



Animals found with TB in Michigan





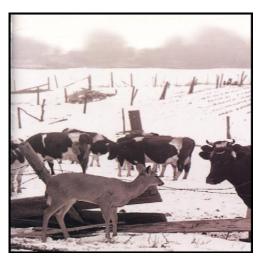
Wild deer with TB in Minnesota



TB in Feral Pigs in Hawaii

Historically, TB found in Axis deer & feral pigs on Molokai island





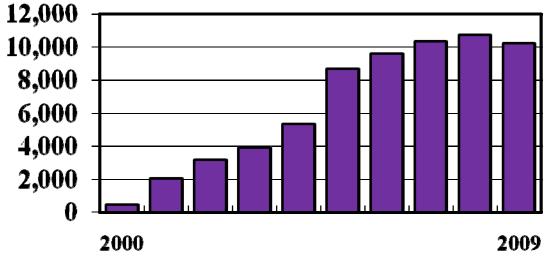
- No easy solutions to eliminate TB in wildlife!
- <u>Challenge:</u> Develop new tools; Vaccines, better tests, and improve methods to reduce interface between species





Continue Good Surveillance

- Campaign started in 2000 to submit more suspicious "granulomas" for diagnosis from adult, slaughter cattle
- Significant increase: $\leq 1,000$ in 2000; $\geq 10,000$ in 2009







Changes in Industry Practices

- Tendency toward fewer, but larger agricultural enterprises
- TB disease management requires more \$\$ now than ever!
- Must re-evaluate TB disease management policies
- Develop new tools









Questions?



