

Report from Minnesota Meeting on Bovine Tuberculosis

Minneapolis, Minnesota

December 10, 2008

The Animal and Plant Health Inspection Service held a series of public listening sessions on the future of the national bovine tuberculosis (TB) program. In attendance were various State agriculture and wildlife officials, industry representatives, producers, public health officials, and members of the general public. This document summarizes comments and suggestions from focus group sessions at the Minnesota meeting (held December 10, 2008), public comments from the meetings, and written comments to USDA officials.

Description of Respondents

Representation at Meeting

16	State Agriculture
4	Producers
4	Wildlife Officials
9	Industry Representatives
4	Public Health Officials
<u>10</u>	<u>Other</u>
47	Total

Public Comments

Bill Hartmann, Minnesota Board of Animal Health
Susan Keller, North Dakota State Vet
Shawn Shaffer, North American Deer Farmers Association

Written Comments

Sam Holland, South Dakota State Vet
Shawn Shaffer, North American Deer Farmers
Joe Martin, Minnesota Department of Agriculture
Kevin Paap, Minnesota Farm Bureau Federation

Biosecurity

APHIS Summary/Interpretation of Comments and Suggestions:

There is an overall lack of biosecurity measures in place. The lack of clarity in definitions and regulations is a source of the problems and frustrations for States and stakeholders. Some suggested clarifying the definition of “feedlots” and the regulations surrounding their uses, in addition to writing biosecurity measures into Memorandums of Understanding (MOUs) involving TB as a way to ensure the necessary procedures are carried out.

Comments from Focus Groups

- A few participants did not like the definition’s lack of clarity, which allowed breeding animals and slaughter animals to commingle.
- One producer thought the same lack of clarity extended to newly created herds, which could be assembled from many sources, increasing the possibility of exposure.
- Participants agreed that the program needs consistent definitions set by USDA, but they wanted facilities to self-designate and States to enforce compliance.

Comments from Public and Written Comments

- Animals that are high-risk must go to slaughter only—not just on paper but in fact.

Suggestions from Focus Groups

- Clarify the definition of “feedlot” to eliminate grass feeding and make it plain that any animal in a “feedlot” can go only to slaughter.
- Develop a grower/developer option to keep these animals out of feedlots. As an alternative, spay animals heading to feedlots.
- Obtain funding for fencing; shared feed is also a problem.
- Have stricter penalties for illegal movement, such as movement out of feedlots where animals commingled.

Suggestions from Public and Written Comments

- Biosecurity measures should be: (1) written into MOUs involving zoning of TB eradication areas, and (2) required of producers involved in the zones.
- Biosecurity measures should also be written into MOUs providing for State status. Examples would be to restrict breeding cattle in feedlots and restrict high-risk cattle from breeding herds.

Control vs. Eradication

APHIS Summary/Interpretation of Comments and Suggestions:

While the majority of comments are in favor of eradication, it is understood that at the current funding level eradication is not possible. A disease has to be controlled before it can be eradicated, and preemptive control measures (such as inspecting animals at the border) should be in place at all times. Considering the current level of funding, a control program in the short term is the best option, with eradication as the long-term goal once more funding becomes available.

Comments from Focus Groups

- The participants agreed that USDA should eradicate bovine TB.
- Eradication is preferable, but resource limitation and tools may make control the only viable option in the near term. The \$15 million a year is totally inadequate to get the job done. If that is all we have, then we are obliged to have a control program for the short term.
- Eradicate TB in Minnesota! An aggressive program can eradicate TB in deer; depopulation of wild deer is not possible.
- Control should be the first goal; eradication should be the main goal.
- A control program in the short term; an eradication program in the long term.
- Focus on accurately identifying positive animals; need better testing in the short term.
- Federal Government should set minimum requirements, with the States having criteria above the minimum requirements.
- Some participants felt that the incidence is so low that the terms eradication and control may not apply. The United States already meets the OIE definition of tuberculosis-free, and 0.0 percent may not be achievable. However, others felt that eradication should be the long-term goal, with aggressive attention in the short term to localized areas of infection (i.e., “hot spots” and “point introductions”). If the disease is not eradicated, we will be battling it forever.
- One industry representative said that eradicating TB will take a fundamental change in industry practices in regards to ID, herd size, and movement. He questioned why cattle need to move so much and issued a call for leadership.

Comments from Public and Written Comments

- This must be an eradication program; we don't want a control program. It needs to be an eradication program.
- I don't think that the tools we have available to us now are going to make it possible for us to eradicate this disease.
- Producers and veterinary practitioners have optimistically and naively envisioned the TB program was taking us towards eradication. Unfortunately, that's not where we are at today.

- Currently, the question that needs to be answered is: Do we want to eradicate TB or just live with it? We haven't heard CDC promote living with TB within our human population.
- Eradication of this disease must remain the goal. Eradication strictly through blind and absolute depopulation of all herds, irrespective of the risk and financial costs, is not good program management and cannot be pursued indefinitely. All resources must be used with prudence.
- Federal preemption of States' control measures: a huge issue that must be resolved and recognition made that virtually all disease control programs have been initiated by States and have been successful due to States' cooperation with industry and USDA.

Suggestions from Public and Written Comments

- Restructure overall TB program to more effectively control and eradicate.

Education and Outreach

APHIS Summary/Interpretation of Comments and Suggestions:

It is necessary that all stakeholders have the same goals and understand the program direction. Currently, there are many producers still in need of better education regarding the dangers of TB.

Comments from Focus Groups

- In addition to shoring up the science of TB, producers, veterinarians, and animal health and wildlife officials, etc. all need to get on the same communication-and- information page regarding the disease. A coordinated, collaborative effort will be needed to fight this tough organism.
- We collectively need to have the same goals and communicate much better. The collective whole needs to understand the direction the program is going in (i.e., control vs. eradication).
- Also, there are many small producers out there who don't even know what TB is and accordingly are not concerned about it. We need to find a way to educate them about TB, even when they are not concerned about it personally.

Funding

APHIS Summary/Interpretation of Comments and Suggestions:

More prioritization needs to be done regarding the TB budget. USDA needs better strategic planning and improved ways to use resources during an outbreak. It was suggested that if Congress is reluctant to act on bovine TB, the industry will have to start investing in cooperative TB health programs. The suggestions include imposing a TB tax that could be applied to imported cattle and to fund more research that would lead the USDA to more efficient program management.

Comments from Focus Groups

- USDA is trying to do too much with TB and other programs given the limited funding.
- More prioritization is needed regarding what truly needs to be worked on, then allocating funding accordingly. The \$15 million available each year is totally inadequate and necessitates that TB be a control, rather than eradication, program for the short term.
- Reliance on Federal government for funding is unstable and decreasing.
- More funding; more pressure on Congress from industry
- Government response will be based on public perception, and the public is sure to view humans with TB as more important than livestock with TB.
- We need to ensure that bovine TB is not overlooked in government funding.
- USDA needs to plan better about what is needed and how to use the assets it deploys during an outbreak.
- Attendees have previously witnessed a lot of bungling in this regard.
- It is detrimental to the producer to send in inept people or use resources poorly, because word of such mishaps spreads quickly in local circles.
- Along this line, it is frustrating to producers when USDA sends new people to get experience in testing cattle in an outbreak situation. Such events should not be a training ground. Such situations require our best professionals. If APHIS wants to train people, it should bring in two teams: the pro team and the training team.

Comments from Public and Written Comments

- Alternatives are limited, and without core funding for animal health programs we will face very limited success. Industry may eventually be forced to decide, should Congress fail to act, as to the method and amounts producers are willing to invest in cooperative animal health programs versus individual operation programs.

Suggestions from Focus Groups

- A more entrepreneurial approach to funding is needed. Funds for the TB (and other) programs may need to come from other sources. For example,

perhaps a TB tax could be applied for people importing high-risk Mexican cattle or having risky practices.

- Cooperative State and industry funding could supplement the program. Minnesota has a cooperative program of a \$1/head to fund the TB program for the Board of Animal Health. This approach could be applied nationwide, and even raised to \$2-3 dollars/head.

Suggestions from Public and Written Comments

- Provide adequate funding for TB research that would improve the effectiveness of efforts to contain, control, and eradicate the disease.

Imports and Mexican Cattle

APHIS Summary/Interpretation of Comments and Suggestions:

Most participants strongly support tighter controls over Mexican imports. Until USDA can prevent the introduction of TB at the border, and appropriate control measures are in place, the disease will never be eradicated from the U.S. Once cattle are imported they should be placed in quarantined feedlots until they are proved to be free of disease.

Comments from Focus Groups

- Most participants strongly supported tighter controls over Mexican imports. These included improved identification and movement controls, particularly to stop “laundering” Mexican-origin cattle by sending them through TB-free States.
- Many participants worried that Mexican-origin cattle such as rodeo animals can easily mix with domestic animals.
- The problems created by Mexican imports are eating into a huge slice of the financial pie. If the Mexican import issue is addressed, more money will be available to fund the domestic program. APHIS should either not allow these animals in or charge a tax to import and quarantine them at specific feedlots.
- More consideration should be given by APHIS to the excessive numbers of cattle we are allowing in from Mexico.
- Domestic animals being “backgrounded” are being exposed to Mexican cattle at feedlot/pasture locations.
- Must change movement of Mexican cattle.
- Until Mexican cattle, Canadian cattle, and rodeo livestock are taken care of, you will not have an eradication program.
- All Mexican cattle should go to quarantine.
- All participants expressed frustration with continuing TB cases imported from Mexico.
- Participants wondered what is not working.

Comments from Public and Written Comments

- We must stop allowing the disease in from other countries. We should have stronger controls to make sure this disease doesn't get in from other countries. If we are going to eliminate TB from the United States, we need to make sure we're not letting it in again.
- It appears to some animal health officials that, for the sake of ease of trade and animal movement, we have not put nearly enough restrictions on known high-risk animals from known high-risk areas and countries.
- Trade is not inherently bad, but when left unchecked, it will become a huge risk to the health of animals.

- North Dakota had an 'M' branded roping steer that someone wanted to import that turned out to have come into the U.S. on an international health certificate several years ago that said for slaughter. At the time the animal was to be moved to North Dakota, it was over six years old. Inventory accountability and movement to and from quarantine feedlots is the only way that high-risk animals should be moving.
- New TB program must effectively control the disease in the U.S., and prevent any possible foreign introductions. Only after appropriate control measures are in place is disease eradication possible.
- An effort should be made to harmonize State importation requirements for TB.
- Individual States not recognizing Federal import requirements, or States that place onerous additional restrictions, may not be eligible for Federal cooperative/ grant/ cost-share dollars.
- Each year, it is expected that some TB-infected cattle will enter the U.S. from Mexico; such an expectation is unsuitable and should mandate changes in the importation regulations.
- Discourage professional rodeo associations from using only Mexican cattle.
- Imports are obviously responsible in a huge way for the failure to eradicate TB from the U.S. to date. While this is inexcusable, action must be taken now. State animal health officials have long expressed concerns over USDA import allowances and are increasingly being limited by USDA in their ability to assist their industries in protecting their herds. Cattle that are high-risk as imports must be restricted just as cattle that are high-risk from zones within the State must be restricted. This too can be done through MOUs with States as TB risk measures are developed and implemented.

Suggestions from Focus Groups

- Tighten identification and movement requirements for Mexican cattle.
- On arrival, they need to be held in areas where they do not threaten domestic cattle.
- There should be a tax for producers importing high risk Mexican cattle ... in their efforts to make a profit they are costing the country, States, and fellow producers money.
- More needs to be done with the Mexican roping steers. Either prevent their entry into the country or do more to prevent the diversion of Mexican cattle from feedlots to become roping steers.
- Mexican cattle should go to quarantined feedlots in order to prevent commingling, but instead they can go to pasture where commingling can occur. This is a very risky practice.
- The placing of Mexican cattle on pasture and the subsequent commingling with domestic animals needs to be addressed.
- Also we need to differentiate between backgrounding facilities and strict finishing facilities for animals going to slaughter.
- Quarantined feedlots for Mexican cattle are definitely needed.

- Of note, some rodeo rules recommend Mexican cattle for the events. Maybe the organization sponsoring these events should develop rules that prevent outsourcing of cattle from other countries and only allow domestic cattle.
- Suggestions included stricter import requirements.
- Re-evaluation of the effectiveness of 60-day pre-export testing.
- More frequent pre-export whole-herd testing is needed, especially in herds with high turnover.
- Work with Mexico to reduce its TB prevalence.

Suggestions from Public and Written Comments

- Adopt a zero-tolerance policy for TB-infected animals entering the U.S. from other countries.
- Improve import requirements to limit the incursion of the disease.

Indemnity/Depopulation

APHIS Summary/Interpretation of Comments and Suggestions:

Indemnity is viewed as the best option currently. However, it is an expensive option to continue under an increasingly tight budget. Some suggestions regarding indemnity policy included using a sliding scale and giving a higher rate to producers who took steps to reduce risk, providing indemnity once per premises, and using local appraisals for depopulation. The test-and-removal strategy should be re-evaluated and considered an option without affecting State status.

Comments from Focus Groups

- All agreed that USDA should speed up the process; one participant recommending using local appraisers.
- Speed and smooth appraisal and indemnity methods.
- Without indemnity you will not get a “buy-in”; if owners/producers are compliant they should get full indemnity; suggest sliding indemnity based on participation.
- In regards to indemnity, the incentive is already there. If you don’t test cattle you don’t sell cattle.
- Most participants felt there still is a place for using depopulation with indemnity as a tool.
- One participant said it is “the way to go” for eradication; test-and-remove may work for dairies, but depopulation is a necessity for other premises and infected deer.
- One participant said that depopulation is too expensive to continue under tight budgets.
- The test-and-remove strategy should be re-evaluated.

Comments from Public and Written Comments

- Expedite the appraisal and depopulation process for infected herds. Shortening this timeframe will reduce the nonreimbursed expenses for feed and care of the cattle and reduce the chances of infected animals transmitting the disease to wild deer in the area.

Suggestions from Focus Groups

- One participant suggested that USDA pay producers a set amount when it becomes available, while allowing producers to immediately dispose of the animals.
- Another suggested a stipend to be paid until the State is TB free.
- All agreed that the State as well as USDA needs industry input.
- At least one producer wanted to send healthy animals to slaughter rather than having to put them down, to minimize financial loss.

- Use a sliding scale for indemnity and give a higher rate for producers who took steps to reduce risk.
- Allow indemnity one time per premises; no indemnity for repeated detections.
- If indemnity is provided, livestock should not be permitted back on the premises for five years. However, producers may need a support program (social and psychological) if that occurs.
- Use local appraisals for depopulation so that the process moves quickly.
- Include destruction of all feedstuffs and hay in indemnity costs.

Suggestions from Public and Written Comments

- Expedite appraisal and indemnity process.
- Consider use of local appraisers.
- Shorten timeline for appraisal completion.
- Assist producers with feed costs while awaiting depopulation, or allow producers to sell cattle prior to identifying a source of funding.
- Link herd traceability and proper risk management practices to indemnity payments.
- The use of limited indemnities could be decided by a “national TB control board.”
- Test-and-removal should be an option without affecting State status.

Multisite Herds

APHIS Summary/Interpretation of Comments and Suggestions:

Commuter herds are seen as problematic around the country. The groups were split on the actions that should be taken. Some believe that the States should oversee this, while others believe that the Federal government should provide rules and guidelines.

Comments from Focus Groups

- Regarding commuter herds, it is hard to write policy that is proscriptive on what to do, but it seems too open-ended to just leave to States. Commuter herds are an ongoing problem around the country.
- The stricter disease control officials become with a State or industry, the more illegal movement subsequently occurs. USDA needs to work with the State and industry to make things workable if you want them to do something.

Suggestions from Focus Groups

- The TB program cannot be too proscriptive because there are so many different situations that vary by geographic region. Much of how to address the complex commuter herd and TB issue must be left to the respective State.
- Since TB is a national disease, there also needs to be Federal rules providing a safety net (otherwise, when something goes wrong, the Federal Government will say the States followed their own rules and it is the State's fault).

Public Health

APHIS Summary/Interpretation of Comments and Suggestions:

USDA needs to help raise awareness of possible animal-to-human transmission of the disease. Also, consideration should be given to testing farm workers who have close contact with the disease.

Comments from Focus Groups

- Several participants mentioned possible human-to-animal (or human-to-human) infection, briefly discussing the possibility of testing workers throughout the food chain.
- Help raise awareness of the historical and continuing significance of bovine TB and human exposure.

Comments from Public and Written Comments

- When it's a zoonotic disease, there's a risk to humans also.

Suggestions from Focus Groups

- One participant suggested creating a pool of educational materials that all States could access.
- From a biosecurity perspective, consideration should be given to testing farm workers for TB, in that many have been around TB positive cattle and may carry TB themselves.

Regulations

APHIS Summary/Interpretation of Comments and Suggestions:

It is strongly believed that there must be a balance between State and Federal regulations. Both parties need to work together to create regulations that will encourage progress and not stifle it. A suggestion was to improve the import requirements to limit the incursions of the disease.

Comments from Focus Groups

- USDA should modify the TB regulations to allow States to set their own movement restrictions and make other necessary control decisions quickly.
- The regulations have to support what the industry is already doing so industry members can adapt to them.
- Re-evaluate the Code of Federal Regulations (CFR).
- There must be a balance between State and Federal regulations; how do we control movement without papers?

Comments from Public and Written Comments

- I think that the important point that I want to make at this meeting is that our regulations regarding how we dealt with TB as we were eliminating it from the United States were very effective. We went from five percent of our cattle infected with this disease, or at least responding to tests for it, down to almost nothing. So it was very successful, but it doesn't work very well for reintroductions of the disease.
- It appears the rulemaking process for enacting and amending disease programs is nearly paralyzed and not effective as a means for industry, State, and Federal agencies to manage the TB program. However, cooperative management of disease programs can occur using standards developed cooperatively through the United States Animal Health Association (USAHA) and implemented in Memorandums of Understanding between USDA and the States. This process would/could include standards for surveillance, tracing, and eradicating the disease.
- It is vitally important that as the regulatory framework changes, State animal health agencies maintain their ability to safeguard their industries through movement controls, testing requirements, and other mitigating measures.
- It is vitally important that as the regulatory framework changes and zones are established in a State with a given status, all other State animal health agencies as well as USDA, must be presented in a timely fashion with surveillance dates, herds infected, and all epidemiology within the zone.
- It is vitally important that as the regulatory framework changes, consideration be provided for large dairy operations with multiple sites or even combination of dairy operations. Perhaps zones could be created and regulated in a manner that would provide for long-term testing and eradication while

mitigating the risks of transmission from the zone and allowing States to maintain their status.

Research

APHIS Summary/Interpretation of Comments and Suggestions:

USDA needs to fund and provide more support to research programs. The national TB program needs better diagnostics and improved understanding of disease spread. USDA should cooperate with more States and universities, and work to find the best practices in all areas.

Comments from Focus Groups

- Most of the participants agreed that the program needs better diagnostics, with more accurate, faster, and simpler tests.
- Participants asked that USDA fund testing research.
- Currently we do not know whether individual animal, whole-herd, or slaughter surveillance testing is the best method for detecting TB-positive cattle.
- Overall, attendees believed individual animal testing to not be very effective, with whole-herd and slaughter testing being better ways to find the disease. However, no one knew for sure and felt studies should be done to identify the most appropriate testing strategy for TB.
- Academicians would like to see more data from recent TB outbreaks, including traceback results, sensitivity and specificity information, etc. Such information, if available, would help to direct TB-related research and policy development. More State and university collaboration on the sharing of this data would be useful.
- More money for research

Comments from Public and Written Comments

- As we are thinking about how to spend the money, I think we need to look at investing in research to improve the tests that we have for this disease and some of the other things that we have.
- We have solid DNA and epidemiologic information which provide clear direction on urgently needed actions. Based on the scientific information at our disposal today, there are no more excuses allowing us to continue our indiscriminate trade practices with respect to bovine tuberculosis.

Suggestions from Focus Groups

- It should be determined whether the TB program disease management strategies should vary based on herd type and location (for example, a 12,000-head dairy herd in California with no surrounding deer population, may need to be managed differently than a smaller herd in Michigan with a surrounding deer population). For example, in some herds/cases, it may make no sense to depopulate, clean and disinfect, and re-populate based on the surrounding risk factors.

Suggestions from Public and Written Comments

- Provide adequate funding for research in the following areas; pasture, mineral, screening test, blood test at slaughter, vaccine
- Diagnostics: All current diagnostics must be thoroughly reviewed and quality assurance methods verified. Laboratory errors or nonvalid assays cannot be tolerated.
- Research/Validation: Renewed efforts must be directed to stimulate the development and validation of tools for TB control in a timely focused manner.

State Status

APHIS Summary/Interpretation of Comments and Suggestions:

Too much time and money is being spent on either changing or maintaining State status. Money would be better spent testing at known locations and not spreading thin resources throughout the State. TB is not a disease that knows State boundaries, and therefore a different approach is needed. Some options to consider include regionalization or zoning, quarantines on high-risk herds, risk assessment upon introduction, and treating new TB cases as foreign animal diseases. A national cattle TB control board with representation from Federal, State, and industry could be created to handle the new approaches.

Comments from Focus Groups

- Two producers thought States spent a lot of time and money on maintaining (or trying to change) status (i.e., conducting testing in areas away from disease outbreaks, such as in southeast Minnesota) instead of locating and attempting to eradicate the disease where it existed.
- Stop addressing TB based on State geopolitical boundaries.
- Do not dilute limited resources by testing in sections of the State that are removed from where the TB case occurs.
- We must do the TB work where the disease is, and not spread limited resources over broad geographic areas. Testing at more remote locations should only occur if linked to a trace from the original herd.
- There needs to be a disease radius, not a State status.
- Disease knows no State boundaries. We need to change the way we define TB- infected areas.
- We need to be able to identify risky areas.
- Re-evaluate current regulations concerning interstate shipment of milk;
- Focus resources on risky areas.
- Identify risk factors and spread of TB in a herd (risk analysis) if a producer has a positive animal in a herd; what can he do not to spread it to others?
- The group strongly agreed that the five levels of State status are confusing and irrelevant to how the disease spreads and how infection can most effectively be addressed.
- One participant said that clarifying the status levels would help solve the problem of other States' refusal to take cattle from TB-affected States.

Comments from Public and Written Comments

- State boundaries are not useful in defining areas for reintroduction of disease. California is a pretty long State. Minnesota is a pretty long State. And to have State boundaries define how we deal with this disease is not useful.
- Reintroductions of bovine tuberculosis should not affect a State's TB status.

- This process would/could include continuing to establish a State status that would be the basis for risk determination and cattle movements.
- This process would/could also provide the zones for management for TB within a TB-free State, with epidemiology-determined borders and numbers of affected animals/herds. MOUs for TB control could be developed and managed through the USAHA and a national cattle TB control board could be made up of State, Federal, and industry personnel.
- Streamline the process for obtaining split-State status.
- States must harmonize their import regulations. If Minnesota, New Mexico, Michigan—if any State—goes through and spends all the time, energy and money to get split-State status or, as we move ahead, maybe regionalization of areas of infection, other States need to accept that status.

Suggestions from Focus Groups

- As a way to involve States with eradication and make eradication science-based rather than politically motivated, participants advocated moving to a regional/zoning approach that's centered on the areas where the disease existed.
- Most participants supported this idea, although they disagreed regarding the initial size of the zones. A couple thought the areas should start out big and then compress (as more likely to find diseased animals), while others thought the areas should start small and spread out if officials detected additional diseased animals (as a more economical approach).
- All participants who discussed this wanted the zoning regulations to be flexible and science-based to allow States to expand or shrink regions as needed
- Modify the regulations to allow a regional/disease location-based approach, rather than emphasizing State status. Recognize that the industry differs from State to State.
- Identify the index herd, draw a circle around it and begin test neighboring herds and requisite wildlife populations.
- When a TB positive animal/herd is found, it should be treated like a foreign animal disease finding. The herd should be managed very fast and in a localized area.
- One participant suggested regionalization, especially for States that have had recent outbreaks, but expressed concern as to whether this could happen in the short term due to the time it takes to change regulations.
- In the event of a point introduction, conduct a risk assessment to determine the best way to respond.

Suggestions from Public and Written Comments

- The disease response should be handled as a foreign animal disease, allowing for faster reaction.
- Boundaries and restrictions should be based on disease area, not State boundaries.

- Traces and area testing should be stressed due to epidemiological disease importance.
- Quarantines should be placed on high risk herds, not areas.

Surveillance

Comments from Focus Groups

- Improve slaughter surveillance and recordkeeping (animal ID).
- Personnel in non-USDA inspected plants need more training.

Testing

APHIS Summary/Interpretation of Comments and Suggestions:

If USDA is to eradicate TB, then it must use the best testing methods available. Blood testing should be explored as a better option than the current skin test. USDA should focus testing (a better use of resources) on the high-risk areas surrounding a breakout and not in low-risk areas across the State. Another suggestion is to make the test results valid for 120 days instead of 60. In addition, USDA should provide improved training for personnel administering the tests.

Comments from Focus Groups

- One participant observed that blood testing would probably be more accurate and less expensive than the current skin testing methods.
- Another participant complained that USDA sends unqualified people to help with testing, diagnosis, and control during outbreaks. He thought that USDA would save time and money if it sent appropriately qualified personnel to handle livestock.
- Two participants expressed concern over veterinary accreditation. They believed that USDA put pressure on veterinarians to “find” positive cases/responders or lose their accreditation. A State Veterinarian participant assured them that State/Federal officials would just check with the veterinarian to make sure he/she knew how to test correctly.
- Fund research to improve diagnostic tests.
- The current testing process is too complex for producers to comprehend, and is labor-intensive and expensive. A simpler testing process that is easier to understand and work with is needed to garner producer buy-in.
- Do not dilute limited resources by testing in sections of the State that are removed from where the TB case occurs. We must do the TB work where the disease is, and not spread limited resources over broad geographic areas.
- Testing at more remote locations should only occur if linked to a trace from the original herd.
- More funding for testing is needed.
- All participants agreed that new tests are needed to detect TB in all species; the current technology is especially limiting when considering ways to address imported cattle.
- One participant said that the lack of a good test “trumps everything.”
- Participants agreed that more resources and restrictions, including aggressive testing, should be directed at high-risk areas, while low-risk areas, or herds with less movement, should require less testing.

Comments from Public and Written Comments

- With the limited amount of money that we have to deal with this disease, we need to be very sure that we're spending it effectively. Spending it on testing

in areas where we know we have the disease or areas where we know animals have moved out of infected herds is a very wise expenditure of the money. Random testing in other parts of States, I think, is not a very productive way of spending the money. We spent \$1.5 million in Federal dollars in Minnesota doing statewide surveillance.

- The surveillance is probably the most significant thing right now. We can't find the disease quickly enough to be able to stomp it out before it spreads. So finding improved tests and improved surveillance is important.
- I think it's time we throw some more money towards research and, you know, look at possibly new diagnostic tests. Coming from the cervid industry, the skin test, we know, just does not work and perform as well as we wish it would.
- We know there are many new promising blood tests out there, and to get those blood tests validated without having the numerous positive animals that it takes to validate the tests is almost an impossible thing. So we need to look at the validation process as well as just the research. Throw research dollars at it, instead of throwing the money towards indemnifying for and depopulating herds.
- We need to spend the money actually on developing some better diagnostic tests and moving forward in that direction.
- More funding is needed for research of a TB blood test.
- Conditionally license Stat-Pak test from Chem Bio; validation process takes too long and is hard to obtain without positive animals.

Suggestions from Focus Groups

- One participant advocated making test results valid for 120 days.
- Several participants also supported allowing different veterinarians to administer and to read tests, rather than requiring the same veterinarian who administered the test to remain in the area to read it.
- One participant suggested that accredited veterinarians as well as State (and Federal) personnel administer and read tests.
- Several participants discussed educating all officials or veterinarians to administer tests consistently. One participant suggested incorporating such training into the National Veterinary Accreditation Program.
- The producers then pointed out that USDA needed to better control the public message regarding vet accreditation.
- A more sensitive serologic test would enhance the speed of finding positive herds. Research and development is needed to develop tests that allow the program to be able to perform test-and-removal and avoid whole-herd depopulations.

- Regarding the Federal requirement for a 60 day TB test: producers are just waiting during this time for the market to improve, exceeding their 60 days and Federal law requires retesting. This is probably not necessary. We need some flexibility here because this is both redundant and wasteful for the producer from a labor and financial perspective.

Suggestions from Public and Written Comments

- Alter Federal requirements allowing an individual TB test to be valid for 120 days for feeder cattle with a whole-herd test.

Traceability

APHIS Summary/Interpretation of Comments and Suggestions:

There is overall support for a national ID program, with people realizing both that it provides a fast and easy way to track the movement of livestock, and that timely traceback is important for the long-term goal of eradication. The USDA should clarify standards for the national animal ID program (National Animal Identification System, or NAIS) and improve its message by explaining to the industry the benefits that will arise from tagging livestock. Recommendations were: 1) cooperation between government and industry officials to implement the national animal ID program, and, 2) bringing producers and stakeholders together to frankly discuss animal ID.

Comments from Focus Groups

- A couple of participants supported national animal ID as an effective tool to track disease (by making it easier to find where a reactor animal came from and what animals it may have exposed).
- One participant thought that USDA caused the biggest “hang-up” with national ID by telling local producers and industry that USDA was imposing a national ID system but not telling them how to tag and track animals under the system, especially in the West.
- This participant believed that the present system wasted too much time and resources.
- He said that if USDA told producers, especially in the West, what they had to do and how to do it, USDA would get a lot more cooperation on ID.
- A State public health participant noted that Minnesota achieved greater ID compliance when it told producers that providing ID could help the State to quickly provide assistance in disease outbreaks.
- Clarify standards for the national animal ID program.
- Tagging heifers with brucellosis tags is commonplace and all producers do it and expect it. These tags help tremendously with TB traces. If brucellosis tags go away, the TB program will have a much harder time doing traces.
- Brands and brand inspections are very useful for doing TB traces also. Brands do not allow individual animal tracing, but do allow officials to follow the flow of animals to and from herds.
- A mandatory ID program is required in order for the TB program to be successful.
- The collective cattle industry must buy into the concept of an ID system (does not have to be RFID) that consistently allows officials to trace cattle.
- Premise and animal ID must be enforced!
- Animal identification enabling timely traceback is important in the long term.
- Producers are starting to see value in radio frequency identification (RFID).
- Neighbor-to-neighbor is the best way to spread support.

- Comments on ID included a mandatory program, the need for 48-hour traceback (for all diseases, not just TB), and encouraging RFID.

Comments from Public and Written Comments

- Animal identification, tracing, and data management and sharing: improvements are needed for disease control to operate responsibly in expenditure of resources.

Suggestions from Focus Groups

- One participant thought ID should be left to the States, with States being regulated according to their willingness and/or ability to impose ID requirements, track animals, and trace disease.
- This participant recommended cooperation between State and industry officials in drafting language to get authority to implement animal ID and make changes as needed.
- Just as important as drawing the circle is doing the traces. Following up on the movement is key to containing the spread of TB once it's identified in a herd.
- Bring all producers to the table to discuss ID.

Wildlife

APHIS Summary/Interpretation of Comments and Suggestions:

Wildlife is contributing to the disease problem, but the severity of its impact and how to deal with the problem are still debated. An across-the-board policy would be counterproductive, as different environments lead to different problems. It is seen as “virtually impossible” to keep wildlife away from livestock, and as long as TB remains within the wildlife population, the USDA will never be able to eradicate it from domestic livestock. Some suggestions include conducting an assessment regarding the risk wildlife presents and, if it merits action, reducing deer-cattle contact by conditioning the deer to go elsewhere to eat; and engaging in a more aggressive culling of deer.

Comments from Focus Groups

- While the participants recognized that wildlife contributed to the disease problem, they disagreed regarding the extent of the potential problem presented by the wildlife reservoir and how to monitor it.
- Most participants agreed that the different States in the area (and different parts of Minnesota, depending on proximity to Canada) would be affected differently depending on the range of local deer and elk.
- Participating wildlife officials expressed concern that there had been no known TB eradication in a free-ranging wildlife population.
- One participant raised the issue of wildlife eating hay and alfalfa meant for feed and contaminating it before it goes to other States.
- While no one brought up control methods (participants apparently assumed that contaminated feed would be destroyed), participants did mention that USDA should compensate these producers for their losses, especially if they were bovine/cervid producers using empty fields to raise feed as an alternate source of income.
- Wildlife movement tracking also played into ID concerns, since deer and elk have differing movement habits in different areas. Participants stressed the need to use up-to-date animal movement data.
- One participant said that State Departments of Natural Resources and universities have a lot of unpublished data on wildlife movement and that USDA just needs to ask for it.
- While the participants all agreed that USDA should have a national bovine TB eradication program, they admitted that as long as the possibility of a wildlife disease reservoir exists, USDA and its State partners may only be able to control the disease and conduct surveillance in the short term.
- The participants disagreed slightly on the level of tolerance for control.
- Assist States with diagnosis and control of the disease in wildlife.

- Concern was expressed regarding why VS' National Surveillance Unit (NSU) is not looking at surveillance for TB instead of more obscure things like hog cholera in feral pigs.
- Minnesota gave (stated dollar amount is unclear) for wildlife eradication; is the USDA going to play a part in funding for wildlife?
- Minnesota is working on stored feed issues.
- Keeping livestock and wildlife apart would require extreme and expensive measures that producers can't afford.
- One producer stated that keeping deer away from cattle is "virtually impossible"; small deer can slip through small holes in fences.
- Most of the group praised the State of Minnesota for its response to TB detections, though one participant felt that exposed cattle and deer should have been managed more aggressively in 2005.
- A producer-funded program in Minnesota (a check-off on Minnesota-origin beef) supports TB elimination efforts.
- We should invest in more research into wildlife and develop appropriate strategies
- A State participant recommended a progressively more aggressive response to TB in deer.

Comments from Public and Written Comments

- Pockets of infection in wildlife may be due to the allowance of high-risk animals that have been allowed to move freely throughout the United States.
- Very stringent movement controls can be placed on domestic animals, but how can that be justified in the presence of what seems to have become endemic disease in some wildlife populations?
- According to O'Reilly and Daborn, where TB occurs in free-ranging wildlife populations, it has not been possible to eliminate the infection from domestic herds.
- Wildlife surveillance tends to only focus on animals with gross lesions, which ignores the fact that the disease may very likely be incubating in cervids and possibly other wildlife species and is going undetected, as Europe has recently pointed out.
- The effort to eradicate the disease cannot be halfhearted in the wildlife population. We need to be very aware of and remind ourselves of the sacrifices that livestock producers have made for over 80 years. Are we really ready to throw all of their efforts and all of the resources that have been invested away for the sake of short-term economic convenience?
- Clearer definitions of wildlife reservoirs and wildlife vectors are needed to accurately reflect the biology, epidemiology, and wildlife population dynamics associated with the disease
- All must recognize that population management in wildlife is necessary just as it is for domestic animals and humans. USDA and State animal health agencies must seek and obtain legislative authority to regulate the health of all animals except humans. Tools available must then be applied to protect wildlife from infection and to eliminate disease when wildlife become infected.

The most readily available and effective tool to date is population management.

Suggestions from Public and Written Comments

- When deer are affected, area movement requirements should be established.

Suggestions from Focus Groups

- A risk assessment should be done to determine if wildlife present a significant TB risk and therefore merit surveillance. There are situations where cattle and wildlife come in contact.
- Because feral swine have TB, we should collectively consider testing them.
- One participant suggested reducing deer-cattle contact by “training” (conditioning) wild deer; deer seem to readily learn where food is and return to the same spot, so if you can stop young deer from coming close to barnyards they won’t come back.
- A statewide ban on deer feeding may need to be considered.
- A participant suggested more aggressive culling of deer, but noted that the hunting industry would probably not support that suggestion (and hunting is economically important in much of the State).

Miscellaneous

Comments from Focus Groups

- Within the dairy industry there is a movement to go to grazing.
- USDA should re-evaluate management structure in response to TB.
- Put a focus on rodeo cattle (very mobile).
- Address the risk from imported event cattle.

Comments from Public and Written Comments

- Minnesota has been struggling with this disease for three and half years now, maybe it's 3 years, 6 months, 5 days, 6 hours, something like that. It has been a real struggle.
- Our domestic animal and human populations are more exposed to tuberculosis than they were several years ago.
- Today, many States are doing TB investigations which are unfortunately continually leading to the identification of more infected or potentially infected herds that have to be monitored or severely movement restricted.
- Many Federal and State animal health officials that recognized the risk factors in past years have tried to work through proper channels to bring attention to those risks. They expected to have full support in swiftly mitigating the known risks.
- Resolutions presented at the United States Animal Health Association TB Committee clearly spelled out detailed actions that need to be taken, but the directives from a body of animal health scientists have been ignored. Why is what disillusioned producers and veterinarians are now asking as new cases continue to be identified.
- It seems like epidemiology is a forgotten word. Short-term economic gains to one segment of the cattle industry cannot be considered over the long-term animal, human and economic health and ultimately the stability of the entire livestock industry in our country.
- Is there really a problem with the past TB program or is it that some have failed to seriously heed the advice given to them by scientists, who have consistently said that we need to close some loopholes?
- Without addressing risk areas, we are allowing for amplification of the disease through exposure to high-risk animals immediately.
- We also need to carefully consider how we deal with TB in the future and how our country's TB status will impact our animals' ability to move intrastate, interstate, and internationally.
- If funds are limited, and we are going to have some sort of program, wouldn't our first action be to figure out how to prevent further introduction of the number one source of TB and immediately restrict movements in meaningful ways?

- If tuberculosis experts and the scientific committees are not being listened to, it seems a waste of time and effort to go on further.
- We have a major problem on our hands right now, and it needs to be dealt with, hands-on, immediately. Please start by addressing our highest risk of the introduction of TB into the United States.
- A new approach to eliminating TB is needed.
- Develop model language States could use to quickly gain necessary authority to control and eradicate the disease through State legislation.
- Streamline process and eliminate paperwork and unnecessary oversight.
- Obtain, retain, and reward experts in certain disease programs.
- Streamline TB epidemiology through one office, or one USDA expert knowledgeable about the disease.
- Retain this expertise to ensure consistency in regulations, procedure, and information.
- USDA response teams should be structured based on the incident and qualified to perform the jobs needed.
- In South Dakota we have concern that unless TB is totally eradicated from the U.S., we will continue to see generations of producers with practically no knowledge of TB or the risks and consequences of the disease.
- Other reservoirs, vectors, sources of disease: Epidemiologists, wildlife officials, and public health personnel must be tasked with determining potential and actual risks for reintroducing TB via sources other than cattle, including other domestic animals, wildlife, and people.
- Evaluate potential additional steps that could be taken to prevent importing TB-infected cattle from foreign countries.

Roles and Responsibilities

- At least one participant wanted the program to involve industry as well as State and Federal officials.
- The participants saw the following roles for USDA, States and the private sector:
 - USDA: Fund testing research, modify veterinary accreditation to ensure that veterinarians can properly administer tests and communicate accurate accreditation information to producers, speed up appraisal and indemnification payment, clarify standards and procedures for the national ID system, and increase the flexibility of State status regulations.
 - States: Encourage and maintain greater participation in conducting testing, setting up and administering zones, and conducting depopulation appraisal.
 - Industry: Provide input on changes for appraisal and indemnity.
- Wildlife with TB and brucellosis must be controlled, for we cannot just let these animals that live near cattle populations harbor the disease. USDA needs to be more assertive in this regard and put the Federal foot down.
- State personnel felt they spent a lot of time providing a variety of different reports to USDA. For example, it took an employee 3 months to develop the split-State status report which is unworkable. Many of the reports contain the same basic information, packaged in a slightly different way. The number of these reports needs to be streamlined, thus reducing the work burden on State offices.
- There should be a single office that oversees the TB program, unlike the way it is presently structured with personnel in Riverdale, Raleigh, Ft. Collins, etc. The customer needs one-stop shopping from USDA in getting information about the TB program. Also, there is too much turnover among staff program managers, making it hard to ever find a true program expert. Toward this end, retention strategies need to be developed and protégés need to be developed to fill in behind.
- The Federal government needs to oversee national standards, but the driving force for the TB program needs to be State animal health officials and strong industry involvement.
- USDA's APHIS and Food Safety and Inspection Service, and the Department of the Interior, etc., need to do a better job collectively in communicating about the program and coordinating policy and regulations. Presently, the right hand does not always know what the left hand is doing. Many diseases that have almost been eradicated span the jurisdiction of multiple Federal departments.

Federal

- Funding and research. (Industry)
- More funding. (Industry)
- Must be a decision-making body. (State)

- Most participants agreed that the Federal government should provide oversight and allow the States to run the day-to-day program. One participant described the Federal role as being limited to managing imports/exports and providing direction, then allowing States to be responsible for the disease program. Several participants suggested that USDA review and consider adopting the “single point of contact” role that the State of Minnesota has exercised during the recent TB outbreaks. This role would include coordinating the involvement of multiple agencies and providing an Incident Command System (ICS)-type of framework for the various entities responding.
- Another clear Federal role is that of providing expertise, especially when States are conducting testing or epidemiological investigations. However, regulatory expertise can be hard to find; it is especially frustrating when USDA staff won’t commit to an answer or when questions are circulated before answers are found.
- The Federal government should also assist in education. One example given was a simplified fact sheet on each animal disease.
- In communicating with producers, both State and Federal officials should use fewer acronyms.

State

- Compliance and risk management. (State)
- Education. (State)
- Movement Restriction. (State)
- State should be responsible for movement restriction. (State)
- The State should run the program, which means that the Federal framework has to be flexible enough to allow States to deal with the issues that affect them. Examples that could be handled under State laws include wildlife (problem in some States and not others) and practices such as consumption of unpasteurized milk. The State should also take the lead on communication and education.
- Harmonization of State rules (for all diseases) would encourage compliance and facilitate producer education.
- Most agreed that Minnesota has done a good job in handling bovine TB and its program could be used as a model for other States and other diseases. Its communication staff has been particularly effective.

Industry/Producers

- Risk management. (State)
- Lobbying Congress for funding. (Industry)
- Industry should be responsible for education. (State)
- Industry should be responsible for funding. (Industry)
- Industry has the most power if they can unite.
- If industry will become responsible they will have to pass the “cost” onto someone....the consumer. This is a problem. (Industry)

- Have husbandry/biosecurity protocol developed by the industry. (Industry)
- Industry organizations should focus on education directed at specific segments.
- Producers should take steps to reduce risk and participate in education/outreach.

These summaries and points reflect the observations, opinions, and knowledge of listening session participants and other commenters. They are not fact-checked, nor do not they reflect the views of USDA.