

Texas Veterinary Medical Diagnostic Laboratory
Compact with The Texas A&M University System
FY 2008 – 2009



MISSION

The central focus of the mission of the laboratories in the TVMDL System is to serve the citizens of Texas by reducing the costs and suffering associated with animal diseases. It is critical that we are centered in objectives which will produce freedom from animal diseases, increased efficiency of production animal agriculture, contribute to an animal disease surveillance system that monitors for emerging animal diseases and diseases of “high consequence,” provide support and guidance to public health programs aimed at the control of zoonotic disease, and contribute to the benefits of healthy human/animal interaction.

VISION

We envision TVMDL continuing as one of the premier Veterinary Diagnostic laboratories in the US. The goals that guide us in that pursuit are based in service to the citizens of Texas. Helping veterinarians and animal owners obtain accurate, fast, and reasonably priced diagnostic results can only be possible if we develop and encourage a talented, dedicated, well-trained professional and technical staff. We must then provide them with “cutting edge” technology and the physical resources that will allow them to achieve excellence.

CEO STATEMENT

For TVMDL to be recognized as a premier Veterinary Diagnostic Laboratory we must exploit advances laboratory technology, renew our commitment to infrastructure improvements, and encourage professional development of our staff. The professional staff of the TVMDL System has shown a sustained commitment to provide diagnostic services to Texas. The staff consists of 20 veterinarians, most with advanced degrees (MS or PhD) and/or board certification in specialty areas. In addition, 13 PhD’s with expertise in various specialties round out our professional organization to give us a combined total of over 300 years of veterinary laboratory experience to share with our clientele. The staff of the TVMDL System will provide testing results on approximately 192,400 cases in the 2007 calendar year, which will involve approximately 1.9 million individual tests. The number of cases submitted to TVMDL has essentially doubled in the last 10 years. That increase in testing demand has been met through increased efficiency and by exploiting automation where possible. However, successfully accomplishing a work load of that magnitude is certainly a testament to the hard work and dedication of the TVMDL professional, technical and administrative staff, whose numbers have remained constant for the last 10 years. For the next five years and beyond, the professional development of our staff will be based in the utilization of new technology to accomplish old task and in the pursuit of new educational opportunities.

The personnel and testing resources referenced above combined with a focused mission make TVMDL a unique resource that is not entirely replicated elsewhere in the country. By design, TVMDL is solely dedicated to diagnostic veterinary medicine. Language in the enabling legislation, which brought TVMDL into existence, directed the Agency to be solely responsible for diagnostic veterinary medicine for the citizens of Texas and not to participate in other areas, which are traditionally associated with higher education. The wisdom of that decision has provided an Agency that produces accurate, timely, and affordable testing results in a manner that is not generally available elsewhere in the county and has made TVMDL a unique resource for the State of Texas.

The administrative direction for the next five years and beyond must focus on three core goals of providing maximum accuracy, efficiency and cost effectiveness in the testing and reporting process. Achieving those goals will contribute to an expanding client base with an increasing number of case submissions. Those submissions and the tests results derived from them will provide the essential “eyes and ears” in a statewide animal and zoonotic disease surveillance system. We will meet these goals through a two-year plan to improve infrastructure, while continuing to obtain and implement new testing technology, and developing a coordinated plan to train for an emergency response capability in the event of a “high consequence disease” outbreak.

Priority #1: Upgrade the physical resources within the TVMDL System directly involved in support of the Texas poultry industry and avian disease diagnosis in Texas.

Link to Strategic Plan: Under development

1st Objective of Priority #1: Improve the physical facilities in the TVMDL Gonzales Poultry Laboratory.

Strategies:

1. By the 4th Quarter in 2007, develop a plan and identify the resources required to upgrade the physical plant of the Gonzales Poultry Laboratory.
2. By the 2nd Quarter in 2008, acquire land for construction of a new laboratory in Gonzales.
3. By the 4th Quarter in 2008, develop a construction plan using existing resources.
4. The Resident Director will develop a "Milestone Chart" in conjunction with the TVMDL Construction Manager, Dr. John Reagor, which identifies planning and construction steps.
5. Each step in the "Milestone Chart" will be approved by the Resident Director, the TVMDL Construction Manager, and the Executive Director.

Performance Measures:

1. Complete construction and occupy the new laboratory by the end of 2009.

Budget Impact and/or Resources Required:

1. Budgetary requirements are available within TVMDL reserve funds.
2. Costs for construction is estimated at \$900,000.
3. The fiscal resources necessary to replace the Gonzales Poultry Laboratory have been acquired from fee funded testing and are held in reserve.

Challenges to Success:

1. Land acquisition is not dependent on private or county governmental officials agreeing to donate land but we are working toward that goal.
2. Escalating construction costs for construction, most noted in laboratory construction.

Collaboration/Support Needed (Internal and External to A&M System)

1. Texas A&M System Real Estate Office – land acquisition.
2. Local city and county officials – possible land acquisition.
3. Texas Facilities Commission – Coordinate construction project.

2nd Objective of Priority #1: Develop and implement a plan to upgrade the testing equipment, and diagnostic testing capacity of the Gonzales and Center Poultry Laboratories.

Strategies:

1. By the end of 2008, acquire Molecular Diagnostics testing equipment and other instrumentation as needed to support polymerase chain reaction (PCR) testing in the Poultry Laboratories.
2. By the end of 2009, train personnel in the Poultry Laboratories on PCR testing protocols and acquire certification from the National Veterinary Services Laboratory (NVSL) for foreign animal diseases (FAD) or diseases of “high consequence.”

Performance Measures:

1. Based on implementation of Strategy 1 above, have PCR testing on line in the Center and Gonzales Laboratories for reportable diseases by the end of 2009.
2. Based on training from Strategy 2 above, obtain NVSL certification for a primary and secondary technician or manager for each laboratory by the end of 2009.

Budget Impact and/or Resources Required:

1. Fiscal resources will be drawn from the current TVMDL budget reserves.
2. Estimated costs will be \$120,000 at each laboratory.

Challenges to Success:

1. The technology involved is rapidly evolving and the equipment is costly.
2. NVSL retains the authority to select the protocols used in validation of tests methods.
3. NVSL is currently unable to validate tests based on the most recent technology.
4. The delay in validation of tests procedures can necessitate the purchase of equipment, which is less likely to meet “high through put” requirements, but would be mandated to be used by the Governor in an emergency situation.

Collaboration/Support Needed (Internal and External to A&M System):

1. Coordination within TVMDL to insure compatibility with current testing equipment.
2. Obtain input and guidance from NVSL on the future of validation procedures for FAD testing.
3. Commitment from vendors for equipment, service, and reagent availability in an “outbreak” situation.

Priority #2: Upgrade the physical resources in the Amarillo Laboratory.

Link to Strategic Plan: Under development.

1st Objective of Priority #2: Over the next two year's develop and implement a plan to modify the current TVMDL Amarillo building structure to incorporate a Biohazard Level 3 (BL-3) laboratory.

Strategies:

1. By the 4th quarter in 2007, identify space within the current Laboratory that may be converted into a Biohazard Level 3 (BL-3) containment area.
2. By the 1st quarter in 2008, develop a construction plan in coordination with TVMDL College Station personnel previously involved in BL-3 construction.
3. During the construction project, the Resident Director will develop a "Milestone Chart" in conjunction with the TVMDL Construction Manager, Dr. John Reagor, which identifies planning and construction steps.
4. Each step in the "Milestone Chart" will be approved by the Resident Director, the TVMDL Construction Manager, and the Executive Director.
5. By the 1st quarter in 2008, complete a cost analysis of construction and equipment needed.
6. Initiate construction project by the 3rd quarter in 2008.

Performance Measures:

1. Take possession of a BL-3 containment room at Amarillo TVMDL by the end of 2009.

Budget Impact and/or Resources Required:

1. Funding provided as appropriated funds through the 80th Legislative Session.
2. The estimated cost is \$600,000.

Challenges to Success:

1. Coordination and information exchange must occur between College Station and Amarillo in development of the project to provide for System wide SOPs and equipment utilization and NVSL certification.
2. Escalating construction cost for BL-3 facilities.

Collaboration/Support Needed (Internal and External to A&M System)

1. Texas Facilities Commission – Coordinate construction project.

2nd Objective of Priority #2: Over the next 2 years plan and complete a construction project to improve the Specimen Receiving and Specimen Processing facilities at the TVMDL Amarillo Laboratory.

Strategies:

1. By the 1th quarter in 2008, develop a construction plan to provide for a designated Specimen Receiving area with emphasis on biosecurity, specimen accountability, and client convenience.
2. By the 1st quarter in 2008, determine American Disabilities Act (ADA) compliance requirements for construction.
3. By the 1st quarter in 2008, determine physical security requirements for the Laboratory.
4. By the 3rd quarter in 2008, develop a construction plan with emphasis on client physical access, lighting and personnel security for afterhours specimen drop off.
5. By the end of 2009, complete construction.
6. The Resident Director will develop a "Milestone Chart" in conjunction with the TVMDL Construction Manager, Dr. John Reagor, which identifies planning and construction steps.
7. Each step in the "Milestone Chart" will be approved by the Resident Director, the TVMDL Construction Manager, and the Executive Director.

Performance Measures:

1. Successful completion of Amarillo construction project by the end of 2009.

Budget Impact and/or Resources Required:

1. Funding provided as appropriated funds through the 80th Legislative Session.
2. Cost is estimated at \$100,000.

Challenges to Success:

1. Modification of existing walkways and ramps will be needed to provide for compliance with new ADA requirements.
2. Construction must provide after hours accessibility to portions of the Laboratory while maintaining security requirements.

Collaboration/Support Needed (Internal and External to A&M System)

1. Texas Facilities Commission – coordination of all aspects of the construction project.

Priority #3: Expand and improve the current high consequence disease diagnostic response plan to provide diagnostic testing results, which would be required in a Foreign Animal Disease (FAD) outbreak.

Link to Strategic Plan: Under development.

1st Objective of Priority #3: Over the next two years we will collaborate with Local, State, and Federal officials to define TVMDL's role and responsibilities in the event of a Foreign Animal Disease outbreak.

Strategies:

1. By the end of the 2nd quarter in 2008, coordinate with Texas Animal Health Commission and United States Department of Agriculture in a review of current FAD response capacity.
2. By the end of the 3rd quarter in 2008, coordinate with State/Federal officials to produce a Memorandum of Understanding on a standardized specimen submission form or process that would be applicable in an emergency response.
3. Integration of State/Federal forms into FAD specimen processing at TVMDL by the end of 2009.
4. By the end of 2009, coordinate with the Governor's Office of Emergency Management to define TVMDL's role in a FAD outbreak and mechanisms of specimen transport.

Performance Measures:

1. Test TVMDL response capacity in a high consequence disease outbreak in a "table top" mock exercise by the end of 2009.

Budget Impact and/or Resources Required:

1. Fiscal resources will be drawn from the current TVMDL budget.

Challenges to Success:

1. Interagency coordination can be problematic due to a divergence of agency objectives and the difficulty of effective communication down to the level of field personnel.
2. Response to an outbreak situation may involve re-direction of resources that can have budgetary impact requiring emergency funding.

Collaboration/Support Needed (Internal and External to A&M System):

1. Texas Animal Health Commission – coordination on specimen submission and reporting process.
2. USDA – coordination on specimen submission and reporting process.
3. Governor's Office of Emergency Management – logistical support coordination.

2nd Objective of Priority #3: Over the next two years, we will evaluate the National Veterinary Services Laboratory (NVSL) testing protocols currently validated for use in an FAD outbreak.

Strategies:

1. By the end of 2008, obtain copies of all NVSL validated testing protocols for FAD testing.
2. By the end of 2008, insure there is compliance in TVMDL testing protocols with validated NVSL testing protocols.
3. Evaluate emerging “high through put” testing technology as an ongoing process.
4. By the end of 2009, acquire equipment as necessary and develop testing protocols.
5. By the end of 2009, provide substantial testing data on those new protocols or equipment to support or reject the use of that technology.
6. By the end of 2009, obtain tests results from 250 to 500 specimens derived from wild life species, which can provide validation data to support NVSL acceptance of these testing procedures for routine testing or in an emergency response.

Performance Measures:

1. By the end of 2009, implementation of testing protocols and equipment utilization that will allow for testing and reporting 3000 molecular diagnostics and serology tests daily in support of a statewide response to an FAD outbreak.
2. By the end of 2009, participate in tabletop exercises to test our response capability.

Budget Impact and/or Resources Required:

1. Fiscal resources will be drawn from the current TVMDL fee funded budget.
2. Estimated cost is \$100,000.

Challenges to Success:

1. Technology is rapidly evolving which may make identification of the best testing process a “moving target.”
2. Cutting edge technology and equipment is frequently in limited production, which can drive costs above an acceptable level.
3. Validation of new protocols will require a substantial number of tests on specimen collected for the specific purpose of validation.

Collaboration/Support Needed (Internal and External to A&M System)

1. National Veterinary Services Laboratory – personnel certification.
2. Private industry producing molecular diagnostics and serologic testing equipment – provide reagents and equipment.
3. Texas Wildlife Services – provide testing specimens.

3rd Objective of Priority #3: Over the next two years, we will identify and train personnel within TVMDL to serve in backup and leadership positions in the event of an FAD outbreak.

Strategies:

1. By the end of 2008, identify current NVSL validated testing protocols for FAD response.
2. By the end of 2008, certify Molecular Diagnostics and Serology personnel in those procedures.
3. By the end of 2009, certify all TVMDL personnel trained in NVSL testing protocols as soon as allowed by NVSL certification testing.
4. By the end of 2008, identify Team Leaders within TVMDL personnel to provide supervision of TVMDL personnel and external personnel recruited in an emergency.

Performance Measures:

1. Certification of Molecular Diagnostics and Serology personnel by the end of FY 09.
2. Certification of other TVMDL personnel by the end of FY 09.
3. Identification of other personnel resources that may be recruited for an emergency response by the end of FY 09.

Budget Impact and/or Resources Required:

1. Fiscal resources will be drawn from the current TVMDL budget.

Challenges to Success:

1. Validated NVSL testing protocols have historically been 2-4 years behind the release of newer testing protocols and equipment.
2. NVSL releases a limited number of certification tests annually for State Veterinary Diagnostic laboratories.
3. Technology in testing is rapidly evolving.
4. Identification of an adequate number of "Reserve Force" personnel may be difficult.
5. Substantial personnel support from other agencies has been difficult to support and fund.

Collaboration/Support Needed (Internal and External to A&M System)

1. The National Veterinary Services Laboratory – personnel certification.
2. Other agencies, teaching institutions, and research facilities who employ personnel trained in molecular diagnostics and serologic testing – roster of PCR trained technicians.

Compact Review and Approval

Date: November 14, 2007

TAMUS Member: Texas Veterinary Medical Diagnostic Laboratory

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