Recently, a rescue dog imported from Turkey was submitted for necropsy to the University of Georgia Athens Veterinary Diagnostic Laboratory with an antemortem diagnosis of chronic hepatitis. PCR of necropsy lesions was positive for mycobacteria, which were subsequently genetically identified as *Mycobacterium bovis*.

Tuberculosis is uncommon in our region. Mycobacterial infections in dogs and cats can be from *Mycobacterium tuberculosis*, which usually infects humans, while *Mycobacterium bovis*, which originates in cattle, infects dogs though cats appear to be resistant. Infections can spread via inhalation or ingestion of bacteria, and clinical signs generally correspond to the route of infection. In dogs, pulmonary infection is more typical while in cats the gastrointestinal presentation is more common. Dogs can present with fever, weight loss, anorexia, and harsh, non-productive coughing, while diarrhea, vomiting, inappetence and weight loss are more typical in cats. Cutaneous lesions may be found in either species. The preferred diagnostic test is PCR of affected tissue, though histopathology can also be suggestive of this disease.

Tuberculosis is one of a number of animal diseases that must be reported to the Georgia State Veterinarian. It is zoonotic, but transmission from people to animals is much more common than the reverse. A list of reportable diseases and contact information for the office of the Georgia State Veterinarian can be found at [http://tinyurl.com/he7xxxl](http://tinyurl.com/he7xxxl).

With today’s global movement of people and animals, we would like to encourage our clients to inquire about the country of origin and travel history of all new patients. Diseases that are absent or rare in North America, such as tuberculosis, may be prevalent elsewhere and pose a potential health risk for the public, your other patients, and your staff. Please ask your clients and provide travel history to your laboratory when submitting samples from animals that have been outside North America.

The only legal requirement for importation of dogs into the United States is rabies vaccination or origin from a rabies-free country. The USDA has information on dog importation at [http://tinyurl.com/jqwvdq8](http://tinyurl.com/jqwvdq8).

There are no specific health requirements for the importation of cats, rabbits, sugar gliders, foxes, guinea pigs, hamsters, gerbils, mice, rats, chinchillas, ferrets, or other rodents.

The following reportable diseases are of primary concern:


Brucellosis: [http://www.cdc.gov/brucellosis/](http://www.cdc.gov/brucellosis/)

Acid-fast stain confirms mycobacterial organisms on liver histology.

Cytology: Macrophages containing many cytoplasmic non-staining mycobacterial rods, and scattered rods also present in the background on a lymph node aspirate.
Anthrax: https://www.cdc.gov/anthrax/index.html
Rift Valley fever: http://www.cdc.gov/vhf/rvf/
Tularemia: http://www.cdc.gov/tularemia/
Q fever: http://www.cdc.gov/qfever/
Leptospirosis: http://www.cdc.gov/leptospirosis/
Leishmaniasis: http://tinyurl.com/ano47nk
Coccidiodomycosis: http://tinyurl.com/lmcbbba
Sporothrix: http://tinyurl.com/hzq6fer
Screwworm: http://tinyurl.com/2vu5jz and http://tinyurl.com/z8tql6f

Bovine next generation sequencing panel

The bovine next generation sequencing panel is able to detect common pathogens associated with bovine respiratory and enteric disease, as well as abortions/infertility, and mastitis. A list of pathogens is provided below. The panel can detect all of these pathogens in one test but submitting the correct specimen is important for detection. If you are interested in detecting respiratory disease, please submit deep nasal swabs, as well as BAL fluid from live animals for a thorough evaluation. If from a dead animal, please submit lung, bronchial LN, and trachea. For reproductive disorders, please submit vaginal/uterine swabs (if abortion- include fetus, specifically stomach contents and portions of major organs as well as lymphoid tissue, and placenta). For enteric cases, you can submit feces (or parts of colon and small intestine if necropsy case). Milk samples (5 mL) or a sample from the bulk tank (30 mL) can be submitted for mastitis cases. Swabs should be dacron (or other synthetic material), not cotton and should have a plastic shaft. Store swabs in a sterile container (ie red top tube). If using a culturette swab, do not place in gel slab, instead, place swab into a sterile container. All samples should be sent to the lab on ice packs by overnight shipping. Discount shipping is available through UPS. Please contact the lab for information. If samples will not be immediately sent to the lab, freeze the samples (except milk) and ship ASAP as described above. Milk samples should only be refrigerated and must be sent to the lab within 3 days of collection.

Looking for additional information on zoonotic or foreign animal diseases? Suggested resources are listed below.

Centers for Disease Control (CDC): http://www.cdc.gov/DiseasesConditions/
The World Organization for Animal Health: http://tinyurl.com/zomybhu
United States Animal Health Association: http://www.usaha.org/Portals/6/Publications/FAD.pdf
USDA Animal & Plant Health Inspection Service (APHIS): http://tinyurl.com/hqoku6x

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**Respiratory Pathogens**

- BVDV (with typing)
- other pestiviruses
- IBR (vs vaccine strain)
- Bovine Coronavirus
- Mycoplasma species
- Influenza D
- PI3
- BRSV
- Adenovirus 3
- Histophilus somni
- Pasteurella multocida
- Mannheimia haemolytica
- Trueperella pyogenes
- Bibersteinia trehalosi

**Enteric Pathogens**

- E. coli toxins (F41, F5, sta, stx 1,2, eae, cnf 1/2, alpha hly)
- Salmonella
- Rotavirus (A,B,C)
- Johnes’ Clostridium
- perfringens toxin typing (alpha, beta, beta2, epsilon, iota, cpe)
- Giardia
- Cryptosporidium
- Coronavirus

**Repro Pathogens**

- Neospora
- Leptospirosis species
- Toxoplasma
- Chlamydia species
- Campylobacter fetus fetus and venerealis
- BHV-4
- IBR
- BVDV
- Brucella abortus
- T. foetus
- Bluetongue/EHD
- Anaplasma marginale
- Listeria monocytogenes
- Ureaplasma

**Mastitis**

- Staphylococcus aureus
- E. coli toxins
- Streptococcus agalactiae
- Mycoplasma bovis
- Prototheca
- Streptococcus uberis
- Streptococcus dysgalactiae
- Coag negative Staphylococcus
- Pseudomonas
- Klebsiella
- Zygomycetes
- Aspergillus
- Nocardia