Questions and Answers: Guidelines for the Control of TB in Elephants

Q. What does this notice do?
A. On Dec. 28, 2012, USDA's Animal and Plant Health Inspection Service (APHIS) advised the public that it intends to use the 2010 “Guidelines for the Control of Tuberculosis in Elephants” issued by the United States Animal Health Association (USAHA) to assess whether or not USDA licensees are adhering to the Animal Welfare Act regulations and providing their elephants with adequate veterinary care with respect to TB, TB testing and elephant movement.

Q. Why is this action necessary?
A. Under the Animal Welfare Act (AWA), research facilities, dealers, and exhibitors are required to provide “adequate veterinary care” to the animals in their custody. However, the AWA does not prescribe specific measures to be undertaken in order to be in compliance. APHIS promulgates regulations and adopts and issues appropriate guidance documents to provide specificity. For example, in 1998, to address the emerging issue of tuberculosis in elephants and to provide licensees and registrants with concrete ways to meet the standards, APHIS first adopted USAHA's “Guidelines for the Control of Tuberculosis in Elephants,” which were developed by USAHA's National Tuberculosis Working Group for Zoo and Wildlife Species.

Since then, USAHA has worked with State and Federal regulatory veterinary leaders, as well as the animal exhibitor industry, to update the guidelines based on feedback, new scientific information about TB, and advances in diagnostics. As a result, since 1998, USAHA's guidelines have been widely used by the veterinary community and have assisted APHIS and the Agency's veterinary partners in detecting current elephant TB cases, preventing TB's spread by infected elephants, and protecting elephants that aren't currently infected from contracting the disease.

Q. What is TB?
A. Tuberculosis (TB) is a devastating chronic bacterial disease that attacks the respiratory system – most commonly the lungs and lymph nodes – and it can spread to other areas of the body. TB is a contagious disease of both animals and humans and can infect cattle, bison, cervids, as well as pigs, primates, and elephants, among others. If not treated, TB can be fatal to elephants and humans.

Q. Why did APHIS choose the USAHA guidelines?
A. The USAHA guidelines are the only standard for veterinary care regarding TB in elephants. APHIS uses USAHAs guidelines to ensure licensees with elephants are following the most current veterinary science in testing, treating and handling elephants – especially elephants that are known to be infected or are exposed to infected elephants. These guidelines also help APHIS better protect people who work with and around elephants and protect the health of domestic livestock and wildlife, as those animals are susceptible to TB as well.

Q. Why is APHIS adopting the 2010 guidelines?
A. Transitioning from USAHA's 2008 guidelines, which APHIS is currently using, to the 2010 guidelines, there are differences regarding elephant testing. The 2010 guidelines not only continue the use of the Stat-Pak and MAPIA testing as part of the annual testing requirement for TB in elephants, but also provide for travel restrictions based on MAPIA results. Under the 2008 guidelines, the only travel restrictions are based on elephant trunk wash culture results.

Since the 2010 USAHA guidelines constitute an interlocking series of provisions that, taken together, provide the best approach for detecting and preventing the spread of TB in elephants, APHIS does not believe that it is appropriate to make changes to the guidelines.

The reason APHIS is proposing to implement USAHAs 2010 guidelines for the control of tuberculosis in elephants, rather than its 2012 guidelines, is because the 2012 guidelines have not yet been finalized by USAHA. Also, because we understand that the 2012 guidelines are not likely to
be substantively different than the 2010 guidelines, we do not believe that we should delay any longer in adopting the 2010 standards.

Q. What tests are required under the guidelines?
A. The Stat-Pak and MAPIA are part of the annual testing requirement for TB in elephants. These are both serologic (blood) tests that determine if the elephant has been exposed to the TB organism. The Stat-Pak is a sensitive screening test that is not as specific for the type of bacteria it detects compared to the MAPIA test. The MAPIA test is confirmatory for specific antibodies to TB. It has shown value in detecting infection before positive cultures are obtained and is also useful in monitoring treatment for positive cases of TB as the antibody level will decline with effective treatment.

Trunk wash samples are used to detect the actual organism (which is helpful in determining where the elephant got the infection and if the organism can be treated effectively with available drugs). The trunk wash sample must be cultured. The trunk wash is considered the definitive test for TB in elephants as it is a direct test. A positive culture is the most reliable test to show that an elephant has TB. Also, with a positive culture, we can determine the antibiotic sensitivity and determine the genotype, which can help with epidemiological studies. However, a negative culture obtained from a trunk wash sample does not mean that the elephant has not been exposed to TB, or has the disease.

Q. What is USAHA?
A. The U.S. Animal Health Association, or USAHA, has been the nation's animal health forum for more than 100 years. It is a science-based, non-profit organization whose mission is to protect animal and public health. Its 1,100 members include: state and federal animal health officials; national allied organizations; regional representatives; and individual members. USAHA represents all 50 states and four foreign countries.

Q. Will public comments be accepted?
A. Yes, APHIS is seeking comments on this matter. APHIS will consider all comments submitted before the deadline, which is 60 days after this notice is published in the Federal Register.

Q. What is the AWA?
A. USDA enforces the Animal Welfare Act. The Act seeks to ensure the humane care and treatment of: warm-blooded animals used in biomedical research; warm-blooded animals exhibited to the public; exotic animals bred for commercial sale; and dogs and cats bred commercially. The Act does not apply to agricultural animals used for food or fiber.

USDA licensees and registrants must provide their animals with adequate housing, sanitation, nutrition, water and veterinary care, and they must protect the animals from extreme weather and temperatures.