

Reportable Diseases

A Veterinarian's Legal Responsibilities

By Brenda Weber, ISVMA, with support from Mark J. Ernst, DVM, State Veterinarian / Bureau Chief, Bureau of Animal Health and Welfare, Illinois Department of Agriculture; J. A. Herrmann, DVM, MPH, Diplomate, American College of Theriogenologists; Director, DVM/MPH Program; Section Head, Community Health & Preventive Medicine Department of Veterinary Clinical Medicine, University of Illinois College of Veterinary Medicine; and Stacy L. Kostiuk, DVM, MPH student, School of Public Health, University of Illinois College of Veterinary Medicine

Reportable diseases are regulated in Illinois by state and federal law. The statutes and their regulations are specific, with two separate agencies in Illinois held responsible for the adherence of these laws. The Department of Public Health is responsible for cases involving human exposure while reportable animal diseases are handled through the Department of Agriculture. It is important not only to know how to recognize the symptoms and diagnose the diseases, but it is essential to know where and how to report them.

Illinois Diseased Animals Act

The "Illinois Diseased Animals Act" was passed, and the Regulations Relating to Diseased Animals were filed, in 1972 (510 ILCS 50/1). This statute created the laws pertaining to cases or alleged cases of contamination or contagious and infectious diseases among animals within the State. It clearly indicates what must be done to suppress, prevent and extirpate infectious and contagious diseases. The statute also indicates that the Department of Agriculture may make and adopt reasonable rules and regulations to administer and enforce the provision of the laws as defined in the Act.

In very brief overview, but not completely inclusive of all sections, the Act pertains to many realms of animals: domestic, poultry and wild animals in captivity. The Department of Agriculture is given the authority to quarantine infected animals, or those animals suspected of being infected, to reduce the spread of contamination. Quarantines are removed only when epidemiological evidence indicates that the disease or contamination threat to humans or other animals no longer exists. It is also within the Department's authority to order the condemnation of diseased, contaminated or exposed animals, with accommodations to pay indemnity to the animal owner for their loss. It prohibits diseased or infected animals from entry into Illinois and addresses what is required to disinfect an infected area. Rights to enforce the Act are extended beyond the Illinois Department of Agriculture to include the inspectors of the Animal Health Division of the United States Department of Agriculture. Transporters who bring into IL any animal who has been found to be infectious or contagious, and upon conviction thereof, can be fined up to \$10,000, for each offense.

In Section 22 of the Act, the duty of the veterinarian is clearly stated.

(510 ILCS 50/22) (from Ch. 8, par. 189)

Sec. 22. Any veterinarian having information of the existence of any contamination or reportable disease among animals in this State, who fails to promptly report such knowledge to the Department, shall be guilty of a business offense and shall be fined in any sum not exceeding \$1,000 for each offense.

(Source: P.A. 95-179, eff. 8-14-07; 95-554, eff. 8-30-07.)

The Act stipulates that all rules, and all amendments or revocations of existing rules, are required to be printed in pamphlet form and furnished, upon request, to the public free of cost. This pamphlet can be obtained by calling the IL Department of Agriculture at 217/782-4944. Or, visit the ISVMA webpage at www.isvma.org to download a list of reportable communicable disease from the ISVMA Member's Center.

Reportable Diseases

Rules and Regulations Pertaining to carrying out the Illinois Diseased Animals Act

On the State of Illinois' Division of Food Safety and Animal Protection Bureau of Animal Health page, a list of Animal Health Laws and Regulations is posted. The Rules and Regulations that pertain to the administration and enforcement of the laws defined in the Diseased Animals Act can be found under TITLE 8: AGRICULTURE AND ANIMALS , CHAPTER I: DEPARTMENT OF AGRICULTURE , SUBCHAPTER b: ANIMALS AND ANIMAL PRODUCTS (EXCEPT MEAT AND POULTRY INSPECTION ACT REGULATIONS) , PART 85 DISEASED ANIMALS.

www.agr.state.il.us/Laws/index.html

Section 85.10 pertains specifically to communicable disease and provides a list of those diseases that are required to be reported **immediately** to the Illinois Department of Agriculture. Additionally this section stipulates that any veterinarian or other person having knowledge of the disease, failing to report a suspect case of any of the listed diseases immediately after discovery, or who is responsible for the spread of the disease, shall be subject to penalty as provided by law. It also gives a phone number to call – (217) 782-4944 - to report any of the diseases.

Reportable Communicable Diseases

Suspected cases of the following diseases shall be reported immediately to the Department:

anthrax
avian influenza
bluetongue
brucellosis – bovine, canine, swine, equine and caprine
chronic wasting disease (CWD) - cervids
contagious equine metritis
equine infectious anemia
equine viral encephalitis
fowl typhoid
hog cholera
infectious encephalomyelitis – avian
infectious laryngotracheitis
monkeypox
Mycoplasma gallisepticum – turkeys
Mycoplasma synoviae – turkeys
Newcastle disease
paramyxovirus infection

paratuberculosis – (Johne's disease)
piroplasmiasis
plague
pseudorabies – (Aujeszky's disease)
psittacosis – (ornithosis)
pullorum disease
Q fever
rabies
salmonella enteritidis – poultry
salmonella typhimurium – poultry
scabies – cattle and sheep
scrapie
transmissible spongiform encephalopathy (TSE)
trichinellosis
tuberculosis – bovine
tularemia
vesicular conditions of any type
West Nile Virus
any contagious or infectious disease presently considered as "exotic", i.e., not known to exist in the United States

After it's reported, what next?

Besides stating that veterinarians must report the existence – or suspected existence - of a reportable disease, the regulations are very specific on the course of action required for contaminated and contagious animals. Sections headings include: Goats (Section 85.5), Scrapie in Sheep and Goats (Section 85.55), Bluetongue (Section 85.6), Sheep Foot Rot (Repealed) (Section 85.65), Cattle Scabies (Section 85.7), Cattle Scabies -- Additional Requirements on Cattle from Certain Designated Areas (Section 85.75), Sheep and Goats (Section 85.8), Diseased Animals (Section 85.85), Copy of Health Certificate Shall be Furnished (Section 85.9), Requests for Permits (Section 85.95), Consignments to Stockyards, Auction Markets or Recognized Slaughtering Centers (Section 85.1), Obligation of Transportation Company and Truck Operators (Section 85.105), Additional Requirements on Cattle From Designated States (Section 85.11), Salmonella enteritidis serotype enteritidis (Section 85.115), Cervidae (Section 85.12), Ratites (Section 85.125), Vesicular Stomatitis (Section 85.13), Requirements for Establishing and Maintaining a Herd Under the Voluntary Paratuberculosis (Johne's Disease) Certification Program (Section 85.135), Requirements for Establishing and Maintaining a Herd Under the Voluntary Paratuberculosis (Johne's Disease) Risk Management Program (Section 85.14), Johne's Disease Positive Animals (Section 85.145), Importation of Animals; Permit Required (Section 85.15).

Reportable Diseases

What is required in order to transport livestock into Illinois, to verify the animal is healthy?

To import an animal into Illinois for the purpose of livestock production or exhibition, it must be accompanied by a *permit* from the Department and an *official certificate of veterinary inspection* or VS Form 9-2 or 9-3 in the case of poultry. (Section 85.150) The permit is issued through the Illinois Department of Agriculture. The official certificate of veterinary inspection must be issued by an accredited veterinarian of the state of origin, by a veterinarian in the employ of the United States Department of Agriculture, or by a licensed veterinarian of the country of origin (Source: Amended at 28 Ill. Reg. 13405, effective October 1, 2004) An "accredited veterinarian" is a veterinarian who is licensed by the state in which he/she practices, is approved by the animal health authority of that state, and is accredited by the United States Department of Agriculture (9 CFR 160, 161 and 162; 2003). Additional requirements set forth in this Act can be found in Section 85.30, Section 85.90, Section 85.110, and Section 85.150.

It must be noted that laws exist in addition to the Diseased Animals Act that regulate the importation of animals. These include requirements for tuberculosis and brucellosis. The additional requirements can be found in the Illinois Bovine Brucellosis Eradication Act [510 ILCS 30/6] Swine Brucellosis Eradication Act (510 ILCS 95/3) and the Illinois Bovidae and Cervidae Tuberculosis Eradication Act [510 ILCS 35/13].

Are all contagious or infectious diseases reportable?

The regulations note that the Department of Agriculture has the power to designate a disease as contagious or infectious when it is determined that the disease is a threat to the animal industry. A disease will be considered a threat to the animal industry for any of the following reasons:

- 1) is of unknown cause or previously not a recognized disease;
- 2) can cause interstate or international trade restrictions;
- 3) is highly communicable to other animals or species;
- 4) has the potential to produce uncontrollable death loss; or
- 5) is not endemic in the animal industry.

The following contagious or infectious diseases are specifically listed in Section 85.12. While they are not listed specifically by name in Section 85.10, they are included as "Reportable Communicable Diseases" due to the fact that they fall into the category of "any contagious or infectious disease presently considered as "exotic", i.e., not known to exist in the United States." As such, these are all a threat to the animal industry and must be reported immediately to the Department of Agriculture if diagnosed or suspected.

African horse sickness
African swine fever
akabane
Borna disease
bovine petechial fever
contagious bovine pleuropneumonia
dourine
ephemeral fever
epizootic lymphangitis
foot and mouth disease
glanders
heartwater
hemorrhagic septicemia
horse pox
Japanese B encephalitis

Jembrana disease
louping-ill
lumpy skin disease
Nairobi sheep disease
peste des petits -- ruminants
Rift Valley fever
rinderpest
sheep and goat pox
swine vesicular disease
vesicular exanthema of swine
Wesselsbron disease

Reportable Diseases

What about Blastomycosis?

Blastomycosis is a commonly occurring, potentially fatal fungal disease of both humans and dogs. The severity of the disease can range from a self-limiting or asymptomatic infection to severe clinical disease with pulmonary, cutaneous, and/or ocular involvement. Endemic areas of blastomycosis exist, such as the Vilas County area in northeast Wisconsin. Anecdotal evidence has suggested similar endemic areas in Illinois, however, environmental testing for blastomycosis to better delineate these areas is unrewarding as the organism is rarely recovered. What is currently accepted, however, is that *Blastomyces dermatitidis* tends to inhabit sandy, acidic soil with a high organic content and a proximity to waterways. While blastomycosis is neither a zoonotic nor contagious disease, its behavior in canines can provide valuable information for human cases.

Several studies, including one conducted by Drs. Stacy Kostiuik and Jack Herrmann from the College of Veterinary Medicine at the University of Illinois have shown that dogs are apparently at a much higher risk of developing blastomycosis when compared to humans. Looking at human and canine data in Illinois from 2001-2007, they determined that the prevalence of blastomycosis in dogs is 13 times higher than in humans. It is thought that since dogs have a more intimate contact with the environment compared to their owners, they could serve as a sentinel species for human cases.

The study from the University of Illinois also discovered that both canine and human cases of blastomycosis have been on the rise in Illinois from 2001-2007. Canine blastomycosis case counts rose from 0.24 cases/100 thousand dogs in 2001 to 10.8 cases/100 thousand dogs in 2007 whereas human blastomycosis case counts rose from 3.84 cases/1 million people in 2001 to 10.74 cases/1 million people in 2007. A surprising finding from this study was that black people were over-represented in the case population. The reason for this finding is unknown, however, it appears to be a recurring trend as a study done in the 1990's on human blastomycosis in Winnebago County, Illinois came to the same conclusion. Statewide distribution of human blastomycosis cases was not uniform. The northwest region of Illinois has a higher prevalence of human blastomycosis compared to the overall state prevalence whereas the western region has a lower prevalence. Regional differences also were exhibited with the canine cases.

The environmental factors that are causing regional differences in blastomycosis prevalence are currently being studied. Variables such as weather patterns, soil characteristics and proximity to waterways are being entered into GIS software to extrapolate their significance to human and canine blastomycosis cases. Anecdotally, the researchers from the University of Illinois have noticed associations between exposure of dogs to disturbed dirt (i.e. construction sites) and flooding followed by dry Spring and Summer seasons and an increase in cases of blastomycosis.

Currently the results of the GIS mapping of blastomycosis cases show some geographical discordance between the human and canine cases. At this point it can only be hypothesized as to why there is this discrepancy. Is there under reporting of human blastomycosis cases in some areas and under reporting of canine cases in others? What can be known is that blastomycosis occurs commonly enough in canines that practitioners should have it high on their list of differentials with any dog that presents with respiratory signs, draining tracts, and/or eye problems.

The diagnosis of blastomycosis has become more convenient recently with the development of a urine antigen detection test. However, fine needle aspirates or impression smears demonstrating the organism provide a rapid and inexpensive means of diagnosis. If a diagnosis of blastomycosis is confirmed or suspected, a thorough history including exposure to waterways, disturbed dirt, and/or travel history is warranted. The owners should also be informed of the possibility that they could have also been exposed to the organism and if he/she becomes ill, to mention that exposure to their physician. The researchers at the College of Veterinary Medicine plan to continue their study of blastomycosis and should have environmental risk factor associations analyzed within the next few months. They would appreciate any information practitioners may have regarding past cases or general trends that they have observed.

Blastomycosis research continues at the College of Veterinary Medicine. If a diagnosis of blastomycosis is, or has been, confirmed or suspected, information regarding these cases or general trends observed would be appreciated. Forward comments or questions to blastosurvey@gmail.com.