

Center for Veterinary Public Health Newsletter



Department of Health & Mental Hygiene
Community Health Administration
Epidemiology and Disease Control

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West Nile Virus Update

On May 1, 2001 following US Centers for Disease Control and Prevention guidelines, Maryland launched a comprehensive surveillance plan for the detection of West Nile virus (WNV). This response was initiated following the first appearance of West Nile virus in the Western Hemisphere in 1999 and the predicted geographic spread of the disease.

To reduce the threat of West Nile virus infection in human and equine populations, the *Maryland Arbovirus Surveillance and Management Plan, 2001* highlighted four critical areas of surveillance that included the detection of virus in mosquito, bird, horse, and human populations. By conducting surveillance activities such as mosquito trapping and testing for West Nile virus, and by examining any horse suspected of dying from encephalitis or meningitis, state officials were able to determine when West Nile virus moved into

a geographic area and issue appropriate prevention guidelines.

In the fight against WNV in equine populations, area veterinarians are encouraged to discuss with their clients the recently approved equine vaccine available since August 1, 2001 from Fort Dodge Laboratories. Additional information on this conditional vaccine can be found at www.aphis.usda.gov/oa/wnv/index.html.

In 1999, Maryland's only West Nile virus-positive finding was a single dead crow found in downtown Baltimore; in 2000, 50 positive birds were found throughout the state. As of 12/31/01 the Maryland Department of Health and Mental Hygiene (DHMH), Laboratories Administration, confirmed 454 dead birds, 18 mosquito pools, 7 horses and

6 humans that have tested positive for WNV. Three fatalities occurred, 2 humans and 1 equine case. Due to cooling temperatures and subsequent decreased mosquito populations, active avian WNV surveillance ceased on November 1, 2001 but equine and small animal surveillance continues.

The upcoming WNV season will begin on May 1, 2002. Details will be provided soon.

To access final WNV surveillance reports for 2000 and 2001 or to obtain additional information, please visit the DHMH website at www.edcp.org/html/west_nile.html.



Inside this issue:

WNV Update	1
Foot and Mouth Disease	1
Recommendations to Veterinarians	2
2000 Rabies Update	2
COMAR Regulations	3
Spongiform Information	3
For Small Ruminant Practitioners	3
Fact Sheet Information	4

Foot & Mouth Disease

Foot and Mouth Disease (FMD) is a highly contagious viral disease of cattle and swine, as well as sheep, goats, deer, and other cloven-hoofed ruminants. The US has been free of FMD since 1929. Although rarely transmissible to humans, FMD is devastating to livestock and has critical economic consequences with potentially severe losses in the production and marketing of meat and milk.

Information on FMD is available on the Internet by visiting the Animal and Plant Health Inspection Service website at www.aphis.usda.gov/oa/fmd/index.html. This

site details the causes, signs, effects, prevention, and control of FMD. This site also contains current information regarding foot-and-mouth disease and traveler questions.

Immediately report signs of a possible foreign animal disease to the USDA Area Veterinarian in Charge (AVIC), Dr. David Vogt at 410-349-9708 during the hours of 8 AM to 5 PM, or 410-279-3037 (cell). The Maryland State Veterinarian, Dr. Roger Olson, Maryland Department of Agriculture, 410-841-5810,

has developed a response plan should FMD be introduced in the State.

The United States remains free of any cases of Bovine Spongiform Encephalopathy and Foot and Mouth Disease.

Report signs of any suspicious cases to the USDA Area Veterinarian in Charge at 410-349-9708.

Special points of interest:

*National Pet Week is
May 5 to 11, 2002:*

www.avma.org

*National Animal Bite Prevention
Week is May 19 to 25*

*Contact your local State
Farm agent for details*

Recommendations to Veterinarians

It has come to the attention of the Center for Veterinary Public Health (CVPH) that many practitioners are administering a 3-year rabies vaccine to either a dog or cat and stating that it is protective for only 1 year because the animal is a few months overdue in receiving its booster dose. The first (primary) rabies vaccine administered to a dog or cat is protective for only 1 year. Although it is recommended that the **first** rabies vaccination be administered to the animal at 4 months of age, if the animal is older (at the time of its primary rabies vaccination), the immunization is still protective for **only one year**.

If a triennial vaccine is used for the subsequent doses (following the primary dose) then each vaccination is protective for 3 years regardless of whether a time gap occurred between when the rabies booster dose was due and when it was actually administered! [Of course, if you are administering a 1-year vaccine then the duration of protection is only 1 year for every vaccination.]

The CVPH follows the recommendations of the National Association of State Public Health Veterinarians (NASPHV) that state "if a previously vaccinated animal (dog or cat) is overdue for a booster, it should be revaccinated with a single dose of vaccine. Immediately following the booster, the animal is considered currently vaccinated and should be placed on an annual or triennial schedule depending on the type of vaccine used."

Please be aware that this practice is **only**

recognized for those overdue dogs and cats requiring a routine booster dose of rabies vaccine. It is **not applicable** to overdue animals facing a quarantine or isolation procedure following an exposure to a potentially rabid animal. If you have any questions, please call our office. If you would like a copy of the 2001 NASPHV Compendium to Control Rabies, please contact our office or visit the American Veterinary Medical Association (AVMA) website at www.avma.org/pubhlth/rabcont.asp. The 2002 Compendium will be available later this year.

An important safety tip for small animal as well as large animal practitioners:

Please consider using standard precautions (latex gloves at a minimum) for yourself and especially your staff when examining a stray, feral, or unfamiliar patient, or a patient exhibiting neurological signs to prevent non-bite exposures to potentially rabid animals. Many rabies post-exposure prophylaxis (PEP) treatments have been administered to veterinarians and veterinary staff members because of direct skin contact with rabies virus-laden saliva. Although gloves will probably not protect one against a bite exposure to a rabid animal, many more PEP treatments are administered for non-bite exposures than true bite exposures. Try to be **proactive** instead of reactive regarding you and your staff's personal safety to minimize your risk of rabies

2000 Human Rabies Update

In the United States in 2000, 5 human fatalities due to rabies occurred in California, Georgia, Minnesota, New York and Wisconsin. Four cases were due to bat-strain variants (Mexican free-tailed, Silver-haired or Eastern pipistrelle) and 1 case was an African-canine variant. The canine-variant case was imported when an individual, bitten on the leg and thumb by his unvaccinated puppy in Ghana, Africa in May, traveled to NY in September and succumbed to rabies in early October. Additionally, a 9-year-old boy from Quebec, Canada died due to bat variant rabies virus. In 2001, 1 human fatality was reported.

During the past decade, most (24 of 32) of the human rabies fatalities have been due to bat-strain variants. Frequently a bat bite is not reported or is so small that the need for medical care seems unnecessary. It is very important to instruct individuals who may have had a bite or non-bite exposure to a bat to have a complete and thorough risk assessment performed to determine their need for rabies post-exposure prophylaxis (PEP). Please help us get the word out; **individuals should contact their local health department for a proper risk assessment following any bat exposure.**

2000 Animal Rabies

exposures.

In 2000, 413 of the 4,881 animals from Maryland submitted for rabies testing were laboratory-confirmed as rabid. This total is a slight increase in the number of rabid cases from 1999 (394 positive out of 4,874 tested). Raccoons continue to be the majority of laboratory-confirmed rabid animals (313, 76%) followed by foxes (28, 7%), skunks (24, 6%), bats (17, 4%), cats (18, 4%), groundhogs (9, 2%), cattle (2, <1%), an opossum (1, <1%), and a dog (1 laboratory animal from Kenya, <1%).

All 24 Maryland jurisdictions reported rabid animals with Baltimore (51 cases), Frederick (42 cases), Montgomery (42), and Anne Arundel (41) counties reporting the largest numbers of laboratory-confirmed rabid animals.

During the past decade in Maryland, cats have been the fourth most prevalent species positive for rabies following raccoons, skunks, and foxes. But cats are the most prevalent **domestic** species with confirmed rabies. Please ensure that **all** cats are properly immunized against rabies according to Maryland regulations.

2001 rabid animal data will be available

For a copy of a detailed report on laboratory-confirmed rabid animals in Maryland in 2000, please contact our office at 410-767-6703 or access it on the web at www.edcp.org/html/vet_med.html.

For the complete text articles about the human rabies fatalities, please contact our office or see the following Morbidity and Mortality Weekly Report websites:

www.cdc.gov/mmwr/preview/mmwrhtml/mm4949a3.htm (US cases) or

www.cdc.gov/mmwr/preview/mmwrhtml/mm4949a4.htm (Canada case).

For a brochure that addresses bats and rabies:

www.cdc.gov/ncidod/dvrd/rabies/bats_&_rabies/bats_and_rabies.pdf.

COMAR Regulations

Code of Maryland Regulations (COMAR):

- Recently, the CVPH has noticed that some bite and non-bite exposures (to potentially rabid animals involving humans and animals) have not been reported to the appropriate local health department. As per COMAR 10.06.02.04, an "individual who knows of an animal that has rabies or is suspected of having rabies or of an animal that has had a bite from or non-bite contact with an animal known to have or suspected of having rabies **shall report the facts immediately** . . ." to the local animal control authority for a proper risk assessment. Please refer to the attachment for the name and phone number of your county rabies coordinator.
- According to the COMAR 10.06.02.10, the Public Health Veterinarian may delay the rabies vaccination requirement for certain dogs, cats, and ferrets that should not receive this vaccination for either medical reasons, a prior history of a significant adverse event (AE), or research purposes. Please contact our office for a copy of the 'rabies vaccine exempt form;' you can request either a temporary or permanent exemption. Once the form has been completed and submitted to our office, it will be reviewed (including the medical his-

mailed to both the veterinarian and the client informing them of the State Public Health Veterinarian's decision. Please be aware that an exemption should be requested **only** for those animals that may be medically harmed by the administration of a rabies vaccine and should **not** be used to encourage violation of the State Rabies Regulations. If this exemption request is due to an AE post rabies immunization, please report that event to the:

- US Pharmacopeia (USP), Veterinary Practitioners' Reporting Program at 800-4-USP PRN (800-487-7776) or www.usp.org/prn/vprp.htm or
- Food and Drug Administration, Center for Veterinary Medicine (FDA, CVM) at 1-888-FDA-VETS or www.fda.gov/cvm/index/ade/adetoc.htm.

If you would like a copy of the latest Rabies Regulations that were published in January 1999, please contact our office for supplies.

CVPH recently mailed a packet of information detailing the State's bioterrorism plan regarding animal surveillance. If you did not receive this material or would like additional copies, please contact our office at 410-767-6703.

Small Ruminant Practitioners

A new federal disease control program designed to accelerate the eradication of the fatal brain disease, scrapie, from the nation's sheep flocks and goat herds began on November 19, 2001. The program requires that ear tags are to be placed in **all** sheep over 18 months of age and some types of goats by their owners before they are sold or transported to a sale, show, or exhibition. Flocks enrolled in the Scrapie Flock Certification Program will **not** need to make any changes. For additional information and to obtain the required USDA tags, please contact your local USDA, APHIS office at 1-866-873-2824 (1-866-USDA-TAG).

FOR YOU !!

Enclosed are 2 copies of our recently published brochure, "Take a Bite Out Of Rabies." For additional copies, please call our office at 410-767-5649.

Dr. Jack Casper of MDA is coordinating a syndromic surveillance program to detect unusual disease occurrences within animal populations in MD. If you would like your clinic (large or small animal), kennel, zoo or research facility to be included in this important endeavor please contact Jack at:

jarucasper@comcast.net or
443-394-1449

Bovine Spongiform Encephalopathy

Bovine spongiform encephalopathy (BSE, or "mad cow disease") and a disease in humans called variant Creutzfeldt-Jakob disease (vCJD) have a causal relationship. Both disorders are invariably fatal brain diseases with unusually long incubation periods (measured in years), and are caused by an unconventional transmissible agent. Current scientific research indicates that prions are the transmissible pathogenic agents responsible for diseases such as BSE, vCJD, and scrapie. There have been **no** documented human cases of vCJD nor of BSE in cattle in the US. Variant CJD is **not** the same disease as conventional CJD. CJD has a worldwide distribution (including the US) and an

overall incidence rate of 1 human case per 1 million people annually.

Public health control measures to prevent BSE-infected tissues from entering animal and human food supplies include BSE surveillance, sick animal culls, or the ban of specified risk materials. Cow's milk and milk products are not believed to pose any risk for transmitting the BSE agent.

Although BSE has not been detected in cattle in the United States, according to the Animal and Plant Health Inspection Service of the US Department of Agriculture (USDA, APHIS), active BSE surveillance is ongoing. To maintain our BSE-free status the USDA is testing

cattle ≥ 2 years of age that have neurological signs regardless of the animal's diagnosis.

Further information about BSE is available at www.aphis.usda.gov/oa/bse, www.cdc.gov, and www.mda.state.md.us.

If you think that any of your patients (small or large animal) are infected with a foreign animal disease, please report your suspicions **immediately** to the USDA Area Veterinarian in Charge (AVIC), Dr. David Vogt at 410-349-9708 during the hours of 8 AM to 5 PM. During off-hours and weekends please call his cell phone at 410-279-3037.

**Department of Health & Mental Hygiene
Community Health Administration
Epidemiology and Disease Control**

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**We're on the Web:
[edcp.org/html/
vet_med.html](http://edcp.org/html/vet_med.html)**

CVPH Staff Directory

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 - 410-767-5441

Center for Veterinary Public Health

The Department of Health and Mental Hygiene (DHMH), Community Health Administration (CHA), Epidemiology and Disease Control Program (EDCP) includes the State Public Health Veterinarian and the Center for Veterinary Public Health (CVPH). The mission of the CVPH is the prevention and control of zoonotic and vector-borne diseases in Maryland, including rabies and Lyme disease, through surveillance, consultations, investigations, and the education of human and animal health care providers and the public. A major role of the CVPH is to provide consultations for local health departments that do not have veterinary staff. In the event of a bioterrorist act, an emerging infectious disease, or a rabies case with many questionable areas, the CVPH staff works with the local health department staff to resolve problems and find solutions. Additionally, CVPH represents the State at legislative hearings on various bills, writes regulations and fact sheets, attends meetings at the Centers for Disease Control and Prevention (CDC), writes grants, provides health education for the media, schools and the public, and coordinates with local, state, and federal agencies and medical professions. The two divisions of the CVPH (Rabies and Vector-borne Diseases and Zoonotic Diseases) coordinate with each other to produce various health-related documents, provide lectures and talks, and develop conferences and health education materials for local health departments.

Fact Sheet Information

Fact Sheets

The Department of Health and Mental Hygiene has a variety of Communicable Disease Fact Sheets available for distribution to your clients. Covering a variety of topics, these fact sheets include information about rabies, vector-borne, and other zoonotic diseases. The fact sheets may be accessed on the Internet at www.edcp.org/html/cdindex.html. You are encouraged to print out copies and freely distribute the fact sheets as needed. Included in this newsletter are the following:

- Arbovirus encephalitis
- Giardia
- Eastern equine encephalitis
- Psittacosis
- Anthrax
- Leptospirosis
- Rabies



CVPH Phone:
(410) 767-5649

CVPH Fax:
(410) 728-4825

The Food and Drug Administration (FDA) has a website of one-page information fact sheets that include topics such as protecting the US from 'mad cow disease' and safeguarding animal health:

[www.fda.gov/opacom/factsheets/
justthefacts/default.htm](http://www.fda.gov/opacom/factsheets/justthefacts/default.htm)

Please contact our office with any comments regarding this newsletter or with any topics that you would like to see in the next one.