

EPI Update for Friday April 29, 2005

Center For Acute Disease Epidemiology

Iowa Department of Public Health

Items for this week's EPI Update include:

- **Muskrat Goes to College**
- **Negative for Chronic Wasting Disease in Cervid Animals**
- **Hepatitis A Virus Testing**
- **Environmental Public Health and Emergency Response and Preparedness**
- **USDA Food Guide Pyramid Updated**
- **Meeting Announcement and Training Opportunities**

Muskrat Goes to College

Several weeks ago we received calls from a northwest Iowa physician and veterinarian requesting guidance on what to do about a campus muskrat who bit a college student. Apparently the student was handling the muskrat when the bite occurred. Normally a rodent would be considered a low risk animal for rabies, and recent state rabies data backs that up. Twenty-four muskrats have been tested from 1998 to 2004 and none were positive for rabies. However, unlike other rodents, the muskrat is large enough to survive a bite from another rabid animal, such as a fox, and could subsequently transmit it to a human. The muskrat was sent for testing and found to be negative for rabies. There are two take home messages - muskrats should stay off campus and humans shouldn't handle wild animals.

Negative for Chronic Wasting Disease in Cervid Animals

Chronic wasting disease (CWD) has recently been identified in captive deer in New York (<http://www.health.state.ny.us/nysdoh/zoonoses/cwd.htm>) with details announced in NY press releases (<http://www.agmkt.state.ny.us/AI/cwd.html>). However Iowa cervid animals (this includes various species of deer, elk, and reindeer) continue to be negative for CWD. Because the threat of CWD is a serious concern to Iowa and the cervid animal industry, the Iowa Department of Agriculture and Land Stewardship, and the Iowa Department of Natural Resources implemented surveillance and testing programs, with all practical steps to minimize the risk of CWD being introduced or spreading to Iowa in the year 2000.

The Iowa Department of Agriculture & Land Stewardship conducts a voluntary CWD Surveillance Inventory Program, which includes CWD surveillance, reporting, and testing of farmed deer 16 months of age and older that dies from any cause. Currently there are 149 premises enrolled in Iowa's CWD Program, which includes 80 whitetail deer herds, 55 elk herds, and 14 house mixed deer or deer/elk species. These herds total

approximately 5,400 animals and include 2,950 elk, 2,400 whitetail deer, and 50 fallow deer, mule deer, sika, and reindeer. Since 2000, the farmed cervid animal producers have submitted over 1,300 brain samples for CWD testing and all have been negative. If CWD is ever diagnosed in a farmed cervid animal, the farm would be quarantined and the disease eradicated using recommended disease control strategies. For more information on the CWD surveillance program conducted by IDALS visit:

<http://www.agriculture.state.ia.us/animalIndustry.htm>

In addition, Iowa DNR conducts testing for hunter-harvested deer. Testing of white-tailed deer for CWD was initiated in 2000, and surveillance was increased in 2002 when CWD was discovered in nearby counties in Wisconsin and Illinois. Since then, the Iowa DNR has tested more than 12,300 deer and all have been negative for CWD. During the 2004-2005 season, 4,579 whitetail deer were tested under this program and all were negative. Samples were collected from all 99 counties in Iowa, with the majority of the samples (approximately 3,500) taken in the seven Mississippi River border counties stretching from Allamakee County south to Scott County. Emphasis was placed on testing deer from this area because of the prevalence and proximity of CWD in Wisconsin and Illinois. Samples were collected voluntarily from hunter-harvested deer at check stations and meat lockers. The DNR intends to check a similar number of deer during the 2005-2006 season. The Iowa DNR has a CWD management plan in place should any hunter-harvested deer in Iowa test positive for CWD. For more information visit the Iowa DNR's website on CWD at:

<http://www.iowadnr.com/wildlife/files/CWDindex.html>

Hepatitis A Virus Testing

Testing for Hepatitis A virus (HAV) involves detection of antibody to the virus, which is found in the patient's serum. When someone is infected with HAV, the body first responds by producing IgM antibody. Within a week of the onset of symptoms, the IgM antibody test will be positive as well as the test that detects both IgG and IgM, but cannot differentiate between the two. The amount of IgM antibody produced peaks around 3 months, and is usually gone after 6 months. HAV IgG antibody is indicative of a past infection.

Some tests detect "total antibody", which is the sum of both IgG (late) and IgM (early) antibody. When a patient was previously infected with HAV, this type of test will remain positive for many years because IgG antibody persists. Since many cases of HAV are sub clinical, the test that detect IgG and IgM cannot determine if the infection occurred now or sometime in the past. For that reason, the test that will only detect IgM antibody is the best method to determine if the HAV infection is recent. **University Hygienic Laboratory (UHL) offers hepatitis A specific IgM antibody testing for detecting infection.**

Environmental Public Health and Emergency Response and Preparedness

The field of environmental health has expanded over the last 50 years to cover many new responsibilities. Environmental health practitioners help ensure that the vulnerable areas of our environment are protected from accidental or intentional contamination. The

emergence of many new issues and threats; such as food and water security, exposures to hazardous chemicals, building environments, radiation, vectors, biologic and infectious wastes, and terrorism threats establishes the need for an educated and well-prepared environmental health workforce. Practitioners must be able to anticipate, recognize, and respond to many issues. They must also stay current on all of the latest information and technology available.” This information was taken from the CDC and the National Center for Environmental Health. Their new website can be accessed via the following link: <http://www.cdc.gov/nceh/ehs/ETP/default.htm> <<https://email.idph.state.ia.us/exchweb/bin/redirect.asp?URL=http://www.cdc.gov/nceh/ehs/ETP/default.htm>>.

The information provided on this newly launched website, provides a wealth of knowledge that local environmental health practitioners within the State of Iowa can use to plan, prepare, and possibly mitigate an intentional or unintentional emergency within their local jurisdiction, along with their other local response partners. The IDPH is also working hard to provide support to local agencies in the event that local environmental health resources are overwhelmed, by the development of the EHRT (Environmental Health Response Team), in conjunction with the DMAT, as another component of the State of Iowa public health response effort. Please contact Cory Frank at the IDPH, at (515) 281-8561, for more information regarding the EHRT (team) and other information regarding environmental health’s role involving emergency response and disaster preparedness.

USDA Food Guide Pyramid Updated

On April 13, 2005 federal officials revealed a new Food Guide Pyramid. This is the first time the USDA’s Food Guide Pyramid has been updated in 13 years. The new pyramid is based on new dietary recommendations that were released earlier this year. The new pyramid still emphasizes consumption of grains, fruits and vegetables, with limited intake of meat, oils and fat.

The main thrust of the pyramid is moderation and exercise and is meant to help people maintain an ideal weight. The pyramid places emphasis on their new website “My Pyramid” at <<http://www.mypyramid.gov/>>, which is designed to help individuals tailor their intake based on their age, gender, and level of daily exercise. The website will give individual recommendations on the amounts of specific foods to eat and has an interactive area that allows you to assess your food intake and physical activity. It will also allow you to track your weight, daily activity level and food intake.

Meeting Announcement and Training Opportunities

- **29th Annual Iowa Infection Control Seminar**
May 3-4, 2005
Iowa City, IA 52344
Quality Inn Highlander

Contact: Dawn Folkmann 319-356-1742 or sherry-david@uiowa.edu

<http://www.uihc.uiowa.edu/corm/FolderHospitalEpiTraining.htm>

<<https://email.idph.state.ia.us/exchweb/bin/redirect.asp?URL=http://www.uihc.uiowa.edu/corm/FolderHospitalEpiTraining.htm>>