The WISCONSIN EPI EXPRESS provides a regular update on communicable disease issues of importance in our state and is intended primarily for participants in the public health surveillance system. Please let us know if the topics covered are on target or if there are others that we should be addressing. Thank you. Akan Ukoeninn MPH

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1. WISCONSIN TUBERCULOSIS CASES UP IN 2004
After four consecutive years of declining tuberculosis rates, the Tuberculosis Program reported an increase in TB cases in Wisconsin. The 95 cases of active tuberculosis disease reported in the state, is the highest number reported in the past five years. This represents a 44% increase compared to the 66 TB cases reported in 2003.

Several factors may contribute to an increase in TB, but the rise seen in Wisconsin is largely due to delayed diagnosis of the disease. Many TB patients in Wisconsin may have had symptoms during 2003, but were not diagnosed with active TB disease until 2004. Individuals may not recognize the symptoms of active TB, and therefore do not immediately seek medical care, believing that they have a bad cold or influenza.

The previous decline in the annual numbers of new TB cases in Wisconsin has resulted in fewer clinicians in the state that are experienced in diagnosis and treatment of the disease. Delayed diagnosis of tuberculosis substantially increases the risks of the disease spreading from one person to another—especially if they are unaware that they have TB.

To improve access to TB screening and treatment, the Department of Health and Family Services expects to spend over $300,000 for TB prevention and treatment services during this fiscal year. This money will be used to fund local health departments throughout Wisconsin to provide outreach to populations at risk, including:

- people with recent contact with a person who has infectious TB,
- users of illicit drugs,
- people born in countries that have a high rate of TB,
- people with a history of homelessness, and
- residents and employees of group settings such as nursing homes or jails.
For more information about tuberculosis, visit: http://dhfs.wisconsin.gov/tb or you may contact the TB program at (608) 266-9692.

2. TB GENOTYPING EXCLUDES TRANSMISSION IN CLINIC WAITING ROOM
In June 2004, an HIV-positive man was diagnosed with smear and culture positive tuberculosis. He had sought care in an outpatient clinic prior to his TB diagnosis. Concerned about the possibility of TB transmission to vulnerable patients, the clinic prepared lists of those likely to have been in the waiting room at the same time as the TB patient. Patients were sent letters recommending they receive TB testing. Of those receiving TB skin tests, all were negative.

In November 2004, a case of TB was diagnosed in a patient that had been identified as being in the waiting room with the index case. The second patient had an initial skin test that was negative, but did not return for a follow-up skin test. The patient was a transplant recipient, receiving immunosuppressive anti-rejection medication. The second patient’s physician was convinced that his patient had acquired TB through waiting room contact with the index case.

Through Wisconsin’s universal genotyping program, TB isolates from both patients were submitted to the regional laboratory in Michigan for genotyping. Both isolates had unique genotypes, indicating transmission between the two patients had NOT occurred.

When a diagnosis of TB is delayed and a health care agency realizes staff and patients were potentially exposed to an infectious patient, the agency often errs on the side of caution in deciding who should receive tuberculin skin tests. Public health departments insist that close, prolonged contact is necessary to transmit TB and casual contacts in a waiting room would not require testing. This scenario confirmed that transmission did NOT occur in this casual setting. Large-scale contact investigations are not necessary in a casual setting unless the concentric circle analysis of closer contacts indicates a very high rate of transmission.

Contact the Tuberculosis Program at (608) 266-9692 if you need more information about determining transmission rates in close contacts.

3. ZOONOTIC DISEASE RESOURCES
The arrival of warmer weather brings more opportunities for human-animal contact. School-sponsored farm field trips, petting zoos, county fairs, and similar venues provide enjoyment and learning opportunities, but also have the potential for the spread of zoonotic diseases. Public health professionals should know about the availability of several resources that provide guidance in the area of human-animal interaction.

- “The Compendium of Measures to Prevent Disease Associated with Animals in Public Settings, 2005” (NEW): This report provides standardized recommendations for public health officials, veterinarians, animal venue operators, animal exhibitors, concessionaires, visitors to animal venues and exhibits, and others concerned with disease-control and with minimizing risks associated with animals in public settings. http://www.cdc.gov/mmwr/PDF/rr/rr5404.pdf

- “Compendium of Animal Rabies Prevention and Control, 2005” (NEW): The recommendations in this compendium serve as the basis for animal rabies prevention and control programs throughout the United States and facilitate standardization of procedures
among jurisdictions, thereby contributing to an effective national rabies control program. [http://www.cdc.gov/mmwr/PDF/rr/rr5403.pdf](http://www.cdc.gov/mmwr/PDF/rr/rr5403.pdf)

- **“Recommendations for Animal Swap Meets”**: These recommendations were developed jointly by the Division of Public Health, the Division of Animal Health, and the Department of Natural Resources to provide guidance regarding what animal species are appropriate to have at animal swap meets. This document was developed last year in response to multiple local health department inquiries following the swap meet purchase of a prairie dog infected with monkeypox virus. The document can be found under the “Communicable” topic on the HAN website.

- **“Wisconsin Rabies Prevention Flowchart”**: This electronic algorithm should be able to provide guidance for the management of the more common and straightforward animal bite situations that local public health department staff must address. This algorithm is on a portion of the HAN that is accessible to all, without the need to log onto the HAN. This permits its use by providers who are not registered HAN users. [http://hanplus.wisc.edu/DISEASES/rabies/introduction.htm](http://hanplus.wisc.edu/DISEASES/rabies/introduction.htm)

Questions regarding these resources or about zoonotic diseases in general can be addressed to Dr. Jim Kazmierczak, the State Public Health Veterinarian for Wisconsin, at (608) 266-2154 or kazmijj@dhfs.state.wi.us.

### 4. TICK SURVEYS – WISCONSIN, 2004

The Division of Public Health has recently learned that a research group conducted surveys for the presence of *Ixodes scapularis* ticks (AKA deer ticks) in several Wisconsin State Parks during 2004. As you may know, *I. scapularis* is the vector of *Borrelia burgdorferi*, the causative agent of Lyme disease. The four parks surveyed were Hartman Creek State Park (Waupaca Co.), Hoffman Hills State Recreation Area (Dunn Co.), Mirror Lake State Park (Sauk Co.), and Kohler-Andrae State Park (Sheboygan Co.).

Deer ticks were found in all four parks in numbers that indicate the presence of viable populations at each site. Additionally, *B. burgdorferi*-infected ticks were found at all sites. This was not surprising news for the parks in Waupaca, Dunn, and Sauk Counties. However, the finding of *I. scapularis* in Sheboygan County was unexpected. This is the first time that a population of deer ticks has been found in the eastern counties that border Lake Michigan. Health care providers and the public should be aware of the risk of Lyme disease at Kohler-Andrae State Park. Whether there are additional foci of the tick in that region is currently unknown.

Questions regarding these surveys can be addressed to Dr. Jim Kazmierczak, the State Public Health Veterinarian for Wisconsin, at (608) 266-2154 or kazmijj@dhfs.state.wi.us.

### 5. HEPATITIS C VIRUS INFECTION IN WISCONSIN: RESULTS OF AN ENHANCED HCV SURVEILLANCE PROJECT

*Marjorie Hurie, RN, MS, Wisconsin Hepatitis C Coordinator, Pam Rogers, AIDS/HIV Quality Assurance Coordinator, Neil Hoxie, MS, AIDS/HIV Epidemiologist*

Local health department (LHD) nurses interviewed a sample of 253 persons reported with confirmed hepatitis C virus (HCV) infection during June and July 2004 to assess patient risk
factors, access to health care and receipt of hepatitis services. Ninety-seven interviewees (35%) had used injection drugs, 202 (80%) had health insurance and 201 (78%) had received at least one hepatitis-related service before the study interview. The most frequently received service was a liver function test (N=171, 68%) and the least frequently received service was hepatitis A vaccine (N=53, 21%). In addition to a liver function test, more than half had received information on preventing the spread and complications of HCV infection. Less than 30% had received hepatitis B vaccine, a liver biopsy, or treatment for HCV infection. Even among persons who had health insurance, or who had been aware of their infections for 6 months or more, less than half had received any dose of hepatitis A or B vaccine. Because persons with HCV infection may experience serious complications when co-infected with hepatitis A or B, clinicians should offer hepatitis A and B vaccines to susceptible persons with HCV infection. Public health nurses should anticipate a need for hepatitis A and B vaccines, even among clients who have health insurance or were diagnosed in the past. Wisconsin LHDs may order hepatitis A and hepatitis B vaccines from the Wisconsin Immunization Program for administration to persons with HCV infection who are un- or under-insured for vaccines.

The authors gratefully acknowledge the public health nurses whom follow-up persons with HCV infection and whose skill and persistence made this study possible. A full report of this project will be published in the summer 2005 issue of the AIDS/HIV update.

If you have questions, please feel free to contact Margie Hurie at (608) 266-5819 or huriemb@dhfs.state.wi.us.

6. FACT SHEETS AVAILABLE ON MANAGING THE SIDE EFFECTS OF HEPATITIS C TREATMENT
A series of fact sheets on how to manage the side effects of hepatitis C treatment is available from the HCV Advocate web site at http://www.hcvadvocate.org/hepatitis/factsheets.asp (scroll down to HCV Treatment – Side Effect Management). Fact sheet topics include anxiety, mania and depression, dental hygiene, depression, depression for family and friends, diarrhea, hair loss, headaches, hemolytic anemia, injection site reactions, maintaining a positive attitude, mouth sores, nausea, neutropenia, rashes, water and weight loss. These fact sheets are written by experts in the field of liver disease and are designed to help people understand and manage hepatitis.

If you have questions, please feel free to contact Margie Hurie at (608) 266-5819 or huriemb@dhfs.state.wi.us.

Telephone Reporting of Unusual Disease Occurrences

Occurrences of diseases that are uncommon or atypical in Wisconsin, and outbreaks or clusters of disease which are identified, should be reported by phone as soon as possible, to (608) 258-0099. Reports may be made to this number on a 24/7 basis, but please do not use it for normal and routine disease reporting

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