

# WISCONSIN EPI EXPRESS

January 27, 2005

[Wisconsin Department of Health & Family Services](#)

Division of Public Health  
Bureau of Communicable Diseases and  
Preparedness

“Surveillance provides information for action.” World Health Organization

*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. Jim Vergeront, MD.*

## In This Issue:

1. Food and Drug Administration Approval of HIV Rapid Tests.
2. The Respiratory Virus Season
3. Free Web Course on Cross-Cultural Communication
4. Why It Is Important to Confirm *Cryptosporidium* Antigen Rapid Assay Tests
5. Funds Restored for 2005 TB Incentive Program
6. Infectious Disease Journal Reports on Wisconsin TB Outbreak
7. Communicable Diseases Seminars – Hold the Dates

## 1. FOOD AND DRUG ADMINISTRATION APPROVAL OF HIV RAPID TESTS

### OraQuick Rapid Test with Oral Fluid Samples

In March 2004, the FDA approved the OraQuick Rapid HIV Antibody Test for the detection of both HIV-1 and HIV-2 in blood and oral fluid specimens. The newly licensed version of OraQuick is being marketed under the name OraQuick Advance.

The test is performed on an oral fluid sample by using a device that has an exposed absorbent pad. In as little as 20 minutes, the test device indicates if HIV antibodies are present. The results of rapid screenings will be reported onsite. If the OraQuick test gives a reactive result, it must be confirmed with an additional more specific test result, as required for all screening tests.

The newly approved test is classified under the Clinical Laboratory Improvement Amendments (CLIA) as “waived” and therefore can be used in many more health care settings than tests categorized as higher complexity. OraQuick Advance has not been approved to screen blood donors.

### Uni-Gold HIV Rapid Test

In December 2003, the FDA approved the Uni-Gold Recombigen HIV rapid test, a single use rapid test for the detection of antibodies to HIV-1. Uni-Gold Recombigen is the first device to be FDA-approved for use with plasma, serum and whole blood samples obtained through venipuncture.

The Uni-Gold test is also classified as waived under CLIA when used with whole blood specimens. The test is not approved to screen donors of blood, plasma, cells or tissues, or for home use. Uni-Gold provides results in 10 minutes and positive test results require additional testing to confirm results.

For further information regarding HIV rapid testing, contact Kathleen Krchnavek at 608-267-3583 or [krchnka@dhfs.state.wi.us](mailto:krchnka@dhfs.state.wi.us) .

## **2. THE RESPIRATORY VIRUS SEASON**

The winter months are often referred to as “influenza season”, however many other viruses that cause respiratory illness are also circulating in the state. Since late December, an increase in influenza and respiratory syncytial virus (RSV) activity and the incidence of adenovirus infections has increased. The following offers a brief review of some epidemiologic features of these viruses.

### **Influenza**

The sharp increase in influenza activity identified statewide during the week ending January 1, 2005 corresponds with an increase in positive influenza tests, identified from virus laboratories throughout the state. This increase signals the countdown to peak influenza activity that usually occurs 4-5 weeks later. Based on this theory, influenza-like illness activity will likely peak in late January or early February. However, as we all know, influenza activity can take a sudden unexpected turn. The Bureau of Communicable Diseases and Preparedness will continue to update clinicians and, infection control professionals and public health officials of the current status of influenza-like illness activity. So far this year, approximately 87% of the confirmed cases of influenza are type A. All Wisconsin isolates that have been tested at the CDC were of the A/Fujian strain, the H3 component included in the 2004-05 trivalent influenza vaccine.

### **RSV**

RSV is the most common cause of bronchiolitis and pneumonia among infants and children under 1 year of which 0.5% to 2% require hospitalization. Illness begins most frequently with fever, runny nose, cough, and sometimes wheezing. Most children recover from illness in 8 to 15 days. RSV also causes repeated infections throughout life, usually associated with moderate-to-severe cold-like symptoms; however, severe lower respiratory tract disease may occur at any age, especially among the elderly or among those with compromised cardiac, pulmonary, or immune systems.

RSV is spread from respiratory secretions through close contact with infected persons or contact with contaminated surfaces or objects. Infection can occur when infectious material contacts mucous membranes of the eyes, mouth, or nose, and possibly through the inhalation of droplets generated by a sneeze or cough.

In Wisconsin, RSV infections occur during annual outbreaks that can last for months. In most years, peak RSV activity follows peak influenza-like illness activity by 4-6 weeks. Many pediatricians use RSV-IGIV during the RSV outbreak season to prevent serious complications of infection in some infants and children at high risk for serious RSV disease (e.g., those with chronic lung disease and prematurely born infants with or without chronic lung disease).

### **Adenovirus**

Adenoviruses most commonly cause respiratory illness; however, depending on the infecting serotype, they may also cause various other illnesses, such as gastroenteritis, conjunctivitis, cystitis, and rash illness. Symptoms of respiratory illness caused by adenovirus infection range from the common cold syndrome (sneezing, stuffy nose without fever) to a febrile illness with a sore throat to pneumonia, croup, and bronchitis. Most infections are mild and require no

therapy or only symptomatic treatment. However, patients with compromised immune systems are especially susceptible to severe complications of adenovirus infection. Because there is no virus-specific therapy, serious adenovirus illness can be managed only by treating symptoms and complications of the infection.

Outbreaks of adenovirus-associated respiratory disease have been more common in the late winter, spring, and early summer; however, adenovirus infections can occur throughout the year. Although epidemiologic characteristics of the adenoviruses vary by type, all are transmitted by direct contact with respiratory secretions from an infected person, fecal-oral transmission, and occasionally waterborne transmission

For more information, contact Tom Haupt: 608-266-5326 or [hauptte@dhfs.state.wi.us](mailto:hauptte@dhfs.state.wi.us) .

### **3. WHY IT IS IMPORTANT TO CONFIRM *CRYPTOSPORIDIUM* ANTIGEN RAPID ASSAY TESTS**

Since 2001, the Bureau of Communicable Diseases and Preparedness (BCDP), Communicable Disease Epidemiology Section (CDES) has identified high percentage of false-positive *Cryptosporidium* test results associated with the use of commercial, rapid membrane EIA kits [1]. In 2004, CDES and the Wisconsin State Laboratory of Hygiene (WSLH) conducted a study to evaluate the screening kits [2]. Fifty-nine fecal specimens collected from patients with positive *Cryptosporidium* test results identified through the use of commercial screening kits such as Immunocard®, ColorPac®, and Prospect® EIA, were sent to WSLH for confirmation testing using direct fluorescent antibody (DFA) and hot safranin modified acid-fast stains. During this period, 58% (34 of the 59) of the confirmation tests were negative for *Cryptosporidium* which suggested that the positive EIA test results of these 34 specimens were false positive results. The proportion of false-positive EIA test results was high throughout the study and increased from 39% (13/33) in June - September 2003, to 69% (9/13) in October - December 2003, and 92% (12/13) during January-March 2004. During periods of low disease prevalence (November 2003 – March 2004), the reliability of these tests is reduced due to the low positive predictive value (PPV). However, the highest proportion of false-positive results usually occurs between January through March [2].

False-positive test results interfere with disease surveillance and may lead to misdiagnosis and inappropriate management of patients. The CDES recommends all positive *Cryptosporidium* test results using commercial rapid membrane or microwell EIA kits be confirmed by DFA assay and/or hot safranin modified acid-fast stain. Since *Cryptosporidium* infection is reportable, it is important for local health departments to monitor EIA screening results and follow up with a confirmatory test. In some cases, it may be necessary to call the initial submitting agency to request that the stool samples be sent to WSLH for further testing. This should be done as soon as possible because some laboratories do not keep samples for more than a couple days. The WSLH provides for free shipping of specimens and confirmatory testing in circumstances involving all positive results with commercial rapid screening assays. Confirmatory tests will include Merifluor® DFA for *Cryptosporidium* and hot safranin modified acid-fast stains.

If you have any questions regarding *Cryptosporidium* surveillance, please contact Diep (Zip) Hoang Johnson, DPH, at (608) 267-7422. Questions about laboratory testing or specimen submission may be directed to Dr. Dave Warshauer, WSLH, at (608) 265-9115 or Tim Monson at (608) 263-3421.

## References:

1. Centers for Disease Control and Prevention. Public health dispatch: Manufacturer's recall of rapid assay kits based on false positive *Cryptosporidium* antigen tests--Wisconsin, 2002. MMWR, 2002; 51: 189.
2. Wisconsin Division of Public Health. Falsely positive rapid assay tests for *Cryptosporidium* antigen, Wisconsin, 2003-2004. The Wisconsin Epidemiology Express (WEE) posted May 17, 2004. Available on the Health Alert Network (HAN): [https://www.han.wisc.edu/mod\\_phom/index.jsp](https://www.han.wisc.edu/mod_phom/index.jsp)

## 4. FUNDS RESTORED FOR 2005 TB INCENTIVE PROGRAM

Despite a shortfall in funding of the TB incentive program in 2004, funding has been secured for calendar year 2005. The American Lung Association of Wisconsin will continue to seek additional funding to bridge any potential gaps.

Please be aware of the following information as we move forward with the program this year:

- The Lung Association will be contacting health departments to update their database. This is part of an effort to enhance communication.
- Updated program guidelines and forms will be sent to health departments. Please read the guidelines carefully and share a copy with other TB nurses in your health department.
- Regarding reimbursement for incentives, please remember:
- The program operates on a calendar year and expenses from previous years cannot be reimbursed. The guidelines state that all reimbursement requests must be submitted by December 15 each year.
- Program funds are intended for small incentive items. Do not expense any funds for housing, rent, utility assistance or other "big ticket" items without prior approval of the Lung Association and completing a special assistance request form. We cannot guarantee reimbursement without prior discussion.

Please contact Janet McMahon at the Lung Association with any questions you might have at 262-703-4840 or [janetmcm@lungwisconsin.org](mailto:janetmcm@lungwisconsin.org).

## 5. INFECTIOUS DISEASE JOURNAL REPORTS ON WISCONSIN TB OUTBREAK

The February 1 issue of the journal *Clinical Infectious Diseases*, includes an article "Unsuspected Recent Transmission of Tuberculosis among High-Risk Groups: Implications of Universal Tuberculosis Genotyping in Its Detection" that describes a Wisconsin case involving 3 clusters of 19 patients with tuberculosis with no apparent epidemiological links, which were linked through the use of universal genotyping. The article notes the value of universal genotyping as an epidemiologic tool to reveal previously unsuspected transmission of TB in high-risk groups. The article may be read on the Web at <http://www.journals.uchicago.edu/CID/journal/issues/v40n3/34331/34331.web.pdf>.

For more information, contact Tanya Oemigt at 608-263-3169 or [oemigt@dhfs.state.wi.us](mailto:oemigt@dhfs.state.wi.us).

## 6. COMMUNICABLE DISEASES SEMINARS – HOLD THE DATES

Dates and locations for the upcoming annual Communicable Diseases Seminars sponsored by the Bureau of Communicable Diseases and Preparedness have been set. The one day seminars will run from 8:30-3:30, and will be held at the following sites:

- April 13, 2005 – Minoqua
- April 14, 2005 – Eau Claire
- April 20, 2005 – Green Bay
- April 22, 2005 – Oconomowoc
- April 28, 2005 – Madison

The registration form and brochure will be available on the Web and through the DPH Regional Offices after February 23. For more information, please contact Cindy Paulson at 608-266-9376 or [paulscl@dhfs.state.wi.us](mailto:paulscl@dhfs.state.wi.us).

## **7. FREE WEB COURSE ON CROSS-CULTURAL COMMUNICATION**

School of Public Health-Office of Public Health Practice, in collaboration with the New York New Jersey-Public Health Training Center, invites you to participate in a free web-based interactive learning experience:

### **Communicate to Make a Difference: Exploring Cross-Cultural Communication**

This course, in three modules, introduces many facets of culture and communication in a real-world public health scenario. Learners must make decisions while discovering communication strategies they can employ in their daily work. The course is designed for public health professionals and may be completed at one's own pace within a 30-day period. Completion requires approximately six hours.

For more information go to the Web site: <http://www.nynj-phtc.org/cc/> or call Robyn Shumer at the School of Public Health-Office of Public Health Practice at 732-235-9451 or [shummerb@umdnj.edu](mailto:shummerb@umdnj.edu).

### **Learning Objectives:**

- Increase the participant's awareness of his/her own cultural framework, including core assumptions in public health.
- Give examples of discriminating and non-discriminating practices in providing public health services.
- Recognize and choose effective methods/strategies/techniques for unbiased communication.
- Identify specific factors that influence an individual's or group's acceptance of public health information and services.
- Develop increased awareness of diversity.
- Understand how and why stereotypes/generalizations are created.

### **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*

### **To be added to or removed from the distribution list contact:**

Cindy Paulson: [paulscl@dhfs.state.wi.us](mailto:paulscl@dhfs.state.wi.us) (608) 267-9003

**To comment on topics in this issue:** Michael Pfrang: [pfranmm@dhfs.state.wi.us](mailto:pfranmm@dhfs.state.wi.us) (608) 266-7550