WSLH Wisconsin State Laboratory of Hygiene

Results

News from Wisconsin's Public Health and Environmental Laboratory

Issue No. 32 Summer 2002

Chronic Wasting Disease Reaches WI

By Katie Dix, WSLH Public Affairs

While deer hunting season is just around the corner, a recent discovery is making many hunters uneasy about heading out to the woods and bagging that trophy buck.

The detection of Chronic Wasting Disease (CWD) in three Wisconsin white-tailed deer after the 2001 gun season has caused alarm to many Wisconsinites.

However, the Wisconsin Department of Natural Resources says it is monitoring the situation closely so the hunt can go on. Since 1999 it has tested over 1,000 deer for CWD and is planning to sample another 15,000.

According to the DNR, CWD is a brain disease that affects elk, mule and white-tailed deer. It causes the animals to suffer poor body condition, tremors, stumbling and excessive thirst or urination.

Dr. Bob Garrison, a veterinarian who works in the WSLH Communicable Disease Division, says that based on the available scientific evidence, the risk to human health appears to be extraordinarily low.

"There is good evidence that the transmission of CWD from deer to cattle is extremely limited," Garrison explains. "There is also limited 'test tube' evidence suggesting transmission from deer to people is very unlikely."

This white-tailed deer shows signs of Chronic Wasting Disease, which the DNR detected in Wisconsin after the 2001 gun hunting season.

Picture courtesy of the Wisconsin DNR.

Garrison also points out that Wisconsin is not the first state to deal with the disease. CWD has been a fact of life for people in Colorado and Wyoming for nearly 20 years. Other states have also reported their first CWD cases recently.

Nevertheless, many Wisconsin hunters are looking for a "quick fix" to the problem by asking the DNR to use a rapid test to detect the presence of CWD in their deer when it is registered. However, Garrison says that request is not likely to be fulfilled.

"Currently, no rapid CWD test is approved for use in the United

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Bioterrorism:
Wisconsin's Laboratory Response

Ronald H. Laessig, Ph.D., became WSLH director in 1980 after 10 years as assistant director. He earned his bachelor's degree in chemistry from UW-Stevens Point and his doctorate from UW-Madison. He completed post-doctoral work at Princeton University and the CDC. A UW Medical School professor of population health sciences, he is an active researcher and speaker on laboratory aspects of public and environmental health.

In June 2002, the state of Wisconsin was awarded more than $19,268,000 in Centers for Disease Control and Prevention and Health Resources and Services Administration funding to address terrorism issues. The comprehensive plan, including more than $1.6 million in the category "Laboratory Capacity-Biologic Agents" is being administered by the Wisconsin Division of Health and subcontracted to the Wisconsin State Laboratory of Hygiene.

What does this mean to the State Lab and our statewide partners?

Less than 12 months ago the events of September 11 changed forever the State Laboratory of Hygiene's mission. Simultaneously more than 200 Wisconsin laboratories, local public health agencies, and others, under the leadership of the Department of Health and Family Services, found ourselves engaged in a war on terrorism. Within two months we were all challenged to deal with a very real anthrax threat. Public Health in Wisconsin responded, and we all responded well!

The laboratory portion of the grant proposal was developed by a team headed by Dr. Pete Shult, the WSLH's Director of the Communicable Disease Division. Consistent with the entire proposal, it focuses on two broad objectives: (1) preparation for response to a bioterrorism threat and (2) rebuilding and strengthening our public health, including statewide laboratory infrastructure.

The response capability and infrastructure will enable our public health system to detect, respond to, manage and resolve any threat of public health importance--the so called "dual use" philosophy. In these times of extremely tight funding, the DHFS/DOH leadership has come up with a truly remarkable statewide response in this proposal.

The laboratory funding will focus on three priorities: (1) strengthening level A hospital and local public health laboratories' capabilities to respond to a bioterrorism threat, (2) educating all partners, including first responders, regarding sample collection, transport and testing capabilities and (3) strengthening laboratory capabilities to respond to the whole spectrum of infectious agents that pose a threat to public health. Some of the funds will offset costs to expand BSL-3 laboratories.

Wisconsin chose to develop its response for utilization of the available terrorism preparedness funding by recognizing the need for communication, cooperation and collaboration among all laboratories in Wisconsin, including the important role local public health laboratories will play in any outbreak from terrorist or natural sources. The public, as in "public health," is counting on us.

DNA Fingerprinting Assists in Cow-Leasing Program Investigation

By Katie Dix, WSLH Public Affairs

Current Wisconsin State law forbids the sale of unpasteurized milk for health reasons. However, a group of Sawyer County residents recently found a way around the law and in turn many also found themselves sick.

In December of 2001, over 75 people contracted a Campylobacter jejuni infection that public health officials linked to unpasteurized milk from a cow-leasing program. As part of the program participants paid an initial fee to lease a part of a cow, allowing them to legally purchase the milk and other dairy products.

After the Sawyer County Department of Health and Human Services noted the possible source of the C. jejuni outbreak, several patient and milk samples were sent to the Wisconsin State Laboratory of Hygiene for further testing. With the aid of pulsed-field gel electrophoresis (PFGE), microbiologists from the WSLH were able to pin point whether all of the samples were contaminated with the same strain of bacteria.

WSLH Chief Bacteriologist Dr. David Warshauer said the lab used PFGE to determine a DNA fingerprint for each sample of C. jejuni. "We isolated the DNA from the cells and then cut the DNA with two enzymes," he explains. "We then used a computer program to analyze the DNA band patterns of the different isolates submitted. In this case, the DNA samples of Campylobacter jejuni were indistinguishable."

WSLH Advanced Microbiologist Terry Kurzynski prepares a gel using pulsed-field gel electrophoresis. The instrument shown above separates the DNA in the sample, and then microbiologists use a computer program to analyze the DNA bands.

Warshauer said the lab frequently uses PFGE to test outbreaks of C. jejuni, Salmonella and many other foodborne bacteria. However, he says it is uncommon to see such a large outbreak of the same strain of C. jejuni, and until recently he was unaware of any cow-leasing programs in the state.

The Wisconsin Division of Public Health used the PFGE results to confirm their suspicion that all of the sick residents acquired their illness from the cows that were part of the cow-leasing program. The health department then ordered the farm to ship all of its milk to a pasteurization plant, and advised consumers not to drink the unpasteurized milk. State officials are now enforcing regulations that prohibit cow-leasing programs.

Send in Your Isolates for PFGE Testing

The WSLH requests that all clinical laboratories submit their Campylobacter, Salmonella and E. coli 0157:H7 isolates for PFGE analysis. This will enhance the capability of the WSLH to detect outbreaks that may have gone undetected by the local health departments or the state epidemiologists. This testing is performed at no charge to the submitter. Contact Terry Kurzynski at (608) 262-3302 for further information.

WSLH Staff Members Honored for Outstanding Public Service

Communicable Disease Director Dr. Peter Shult is presented the "WPHA Distinguished Service to Public Health Award" by WSLH Board Member Bob Bagley at the July 2002 WSLH Board Meeting.

Americans across the country were called to a higher level of public service in the wake of the September 11 terrorist attacks. Now many are being honored for their hard work and dedication to public safety during that difficult time, and many Wisconsin State Laboratory of Hygiene staff members are among those recognized.

One employee who was recently honored for his leadership skills during the fall anthrax scares was WSLH Communicable Disease Director Dr. Peter Shult. Dr. Shult was presented the Wisconsin Public Health Association's "Distinguished Service to Public Health Award."

During the fall of 2001, Dr. Shult led the WSLH's efforts to provide law enforcement and public health agencies with transport and testing of suspected anthrax samples along with bioterrorism training. Prior to the fall, Dr. Shult helped establish the Wisconsin Laboratory Response Network for bioterrorism with the WSLH, City of Milwaukee Health Department Laboratory, Zablocki Veterans Hospital Laboratory-Milwaukee and Marshfield Clinic Laboratories. He also formed relationships and provided training to HazMat teams and clinical laboratories across the state.

In his acceptance speech, Dr. Shult said he was proud to accept the award on behalf of all the WSLH, Wisconsin Division of Public Health and local health and safety professionals who worked together to keep all Wisconsinites safe and healthy throughout the year.

Earlier in the summer all of the microbiologists in the Communicable Disease Division received the Wisconsin Federation of Teachers' "Members of the Year" Award. The group was honored for their outstanding efforts in expediently analyzing suspected anthrax samples during the fall of 2001.

Since mid-October, CDD microbiologists have examined nearly 680 suspected anthrax specimens and have maintained their 24/7 on-call status.

CWD...

from page 1

States," Garrison explains. "And the logistics of performing any test on large numbers of deer under field conditions would be daunting. It isn't likely to become a part of the DNR's plan any time soon."

Currently, the Wisconsin Veterinary Diagnostic Lab is preparing to take on the testing for the deer specimens, and the Wisconsin State Lab of Hygiene has not played a role. However, Garrison says it is possible for the WSLH to become involved, but the likelihood is very remote.

"We have pledged to help the WVDL if a situation would arise that overwhelmed it," he says. "But it would have to be an extraordinary set of circumstances for us to become involved."

WSLH Communicable Disease Division Director Dr. Peter Shult added that the lab would immediately become involved in providing expertise with the testing if new developments surfaced.

"It goes without saying that if the Division of Public Health determines this situation was presenting a direct threat to human health, we would work with the WVDL and the DNR," Shult says.

The Switch to NAAT for Chlamydia Infections

By Bobbie McDonald, CDD STD Program Coordinator

Nucleic acid amplification technology is revolutionizing science and medicine in many areas, and diagnostic microbiology is on the forefront of these developments. One of the first infectious diseases to benefit greatly from the "amplification revolution" was Chlamydia testing. Currently, there are at least four commercially-available nucleic acid amplification tests (NAAT) for diagnosing Chlamydia infections.

Chlamydia trachomatis is a common sexually transmitted bacterium, with over 700,000 cases reported in the United States in 2001. The CDC estimates that there are approximately 4 million new infections each year in the United States. Chlamydia infections are frequently asymptomatic, but may lead to major complications such as acute pelvic inflammatory disease, ectopic pregnancy and tubal infertility in untreated women. The majority of cases are found in women ages 15-24. Most screening efforts focus on females, and rates of infection among males are underreported.

Conventional screening methods, such as enzyme immunoassay (EIA) and non-amplified nucleic acid probe, made large-scale screening possible and are still widely used. However, the advantages of NAAT, including improved sensitivity, ability to test urine from males and females and the available option to perform gonorrhea testing from the same specimen-often simultaneously, make them the tests of choice in many programs--despite their relatively higher costs.

The Wisconsin State Laboratory of Hygiene began using NAAT for limited Chlamydia testing in the mid 1990s. However, a full transition did not take place until 2000.

To examine the effects of this transition, the WSLH compared the positivity rate observed during the first six months of using NAAT with the EIA positivity rate during the corresponding period in 2000. Data from January-June of 2000 and January-June of 2002, from 64 Wisconsin family planning clinics totaling nearly 14,000 women per interval were included in the study. Overall, the 14 percent increase in positivity rate from 6.3 percent to 7.2 percent was consistent with expectations. However, when results were stratified by factors, such as age, clinic prevalence and presence or absence of symptoms, some trends emerged. (See table.)

Significant increases in positivity rate were seen in low-prevalence clinics and in asymptomatic individuals, while their higher-risk counterparts saw only minor to modest increases in positivity rates using NAAT. However, this trend did not hold true for age, as the highest risk, younger age groups saw larger increases in positivity rates using NAAT, while almost no increase was observed in lower-risk older women. While many factors may have contributed to these differences, it is plausible that asymptomatic infections may contain relatively few organisms and thus be more difficult for less-sensitive tests to detect. These data illustrate the importance of assay performance when selecting a screening test for Chlamydia.

Other effects of the transition from EIA to NAAT at the WSLH include an increase in requests for concomitant gonorrhea testing (16.3 percent) and a small increase in the number of female urine specimens submitted.

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Comparison of EIA and NAAT Positivity

	2000 (EIA)	2001 (NAAT)	Percent Change
Overall Positivity	6.3%	7.2%	↑ 14.3%
High Prevalence Clinics (>5.0%)	8.9%	9.0%	↑ 1.1%
Low Prevalence Clinics (<5.0%)	3.4%	5.7%	↑ 67.6%
Symptoms or Contact	12.0%	12.8%	↑ 6.7%
Asymptomatic/ Non-Contact	5.6%	6.5%	↑ 16.1%
Age <20	8.2%	9.9%	↑ 20.7%
Age 20-24	5.8%	7.2%	↑ 24.1%
Age >24	3.1%	3.1%	-0-

2001 Rabies Round-Up: Positives Increase

In calendar year 2001, the Wisconsin State Laboratory of Hygiene's Rabies Unit received 1,739 specimens for diagnosis, yielding 20 positive animals from Wisconsin. Three additional positive animals from California were submitted through the National Wildlife Health Center (United States Fish and Wildlife Service) in Madison.

Of the Wisconsin cases, 13 were in wild animals while seven cases could be attributed to domestic animals. Bats accounted for 12 of the wild animal cases--nine Big Brown Bats, one Little Brown Bat, one Northern Long-eared Bat and one Silver Haired Bat. Although the number of positive bats doubled from calendar year 2000, the positivity rate increased only slightly to 3.4 percent, remaining within the range observed for the past 20 years.

For the second year in a row, a single case of rabies was diagnosed in a striped skunk, the primary terrestrial rabies vector in Wisconsin.

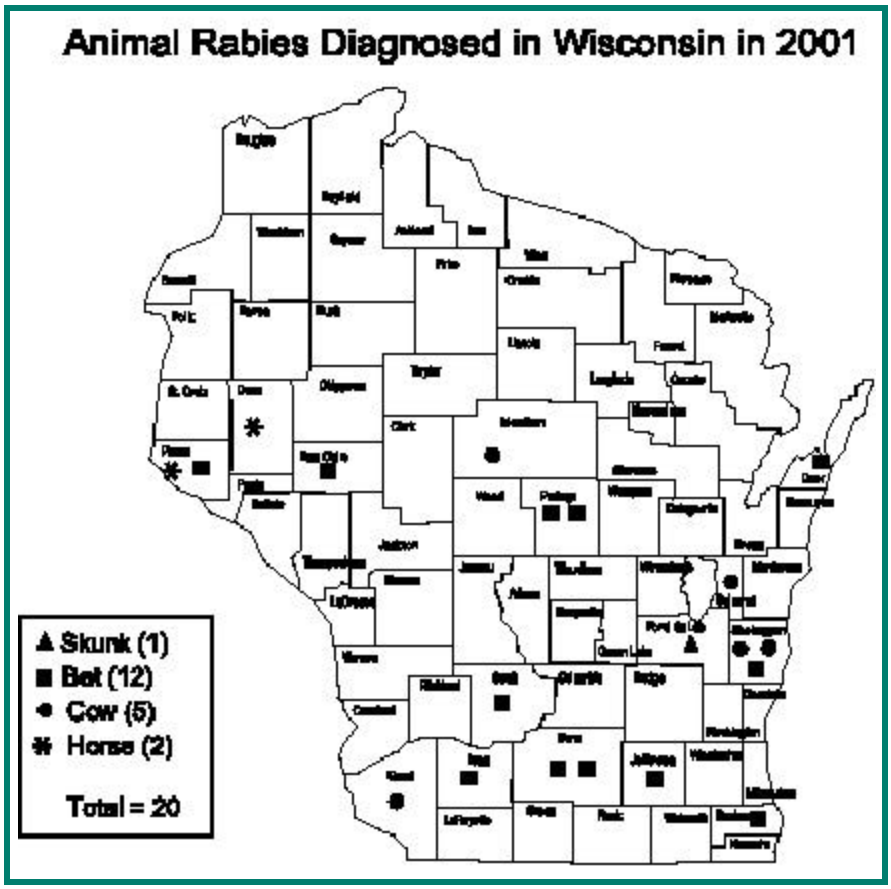
All seven of the rabies positive domestic animals were livestock; five cows and two horses. A single horse (September) and single cow (October) represented the last domestic animal cases of 2001 and of note, were infected with the same bat variant of the rabies virus.

Although bat to terrestrial animal transmission occurs infrequently in Wisconsin, antigenic typing at the WSLH indicated that the horse and cow were infected with a migratory bat variant, with subsequent genetic typing at the Centers for Disease Control and Prevention identifying the Silver Haired/ Eastern Pipistrelle bat variant of rabies virus.

The rabies positive horse was the primary carriage animal of an Amish family. This case points out that while it may not be practical to vaccinate all domestic livestock, it may be worthwhile to vaccinate more valuable animals against rabies.

Antigenic typing at the WSLH indicated that the remaining five positive domestic animals (four cows and one horse) were infected with the north central skunk variant of the rabies virus which is indigenous to Wisconsin.

Jim Powell is the senior microbiologist in the WSLH Rabies Laboratory. He graduated with a master's degree in bacteriology from the University of Wisconsin. He serves on a U.S. Public Health Service steering committee, developing a national plan for rabies control in the United States and is the technical consultant for the national rabies proficiency testing program.



Revised Sampling Requirement for Rabies Diagnosis

Due to recent changes in published national recommendations for the performance of rabies diagnosis and to enhance the sensitivity of testing, please note the change in policy for submission of brain tissue for rabies diagnostic testing.

Because of the sometimes uneven distribution of viral antigen in brain tissue and the outright scarcity of antigen in some large animal specimens, a complete rabies test will now require:

• **A full cross section of brainstem (preferably medulla or pons) from all animals. For large animals (bovine, equine and similar sized animals), a full cross section of the brainstem at two levels, preferably medulla and pons.**

• **A full cross section of cerebellum that transects both anterior and posterior lobes.**

· **Both hippocampi may be substituted for cerebellum when the latter is not available.**

If these tissue combinations (brainstem and cerebellum or brainstem and both hippocampi) are not received, testing still will be attempted; however, only a positive or equivocal result will be rendered, a negative result will not. This may lead to unnecessary anti-rabies prophylaxis being administered to exposed humans and quarantine of exposed animals.

If rabies is in the differential diagnosis, the Rabies Unit recommends submitting the head or the entire brain (fresh, not formalin fixed) of the animal and, as always, we will pass brain tissue on to the appropriate laboratory for additional testing if the brain is rabies negative. Please contact the WSLH Rabies Laboratory at (608) 262-7323 if you have any questions.

NAAT...

Interpretation of these data come with several important caveats. It is not possible to determine the actual sensitivity or specificity of either assay from this data. While it is true that a loss of specificity would have more effect in low-prevalence settings, it seems unlikely to be a major factor here, given that all low-prevalence groups did not see an increase in positives. Possible procedural changes and demographic shifts within individual clinics could not be thoroughly evaluated, although the data were adjusted for changes in the numbers of tests performed during the two time periods. Prevalence estimates from low-volume clinics had wide confidence intervals, which may have resulted in their misclassification as high- or low-prevalence. And, most importantly, NAAT is new in these clinics and should be re-evaluated after a longer period of use.

Even with these limitations, it is apparent from the data that many Chlamydia infections are being missed by non-amplified tests. But simple positivity rate increases do not tell the whole story. Most missed infections appear to be in low-risk, and asymptomatic individuals, making them less likely to be detected or treated in the face of a negative test result. The improved sensitivity of NAAT, as well as convenience, are making them to become the tests of choice.

Rabies Serology Testing

The WSLH Rabies Laboratory has redesigned the test for Rabies Antibody Immune Status.

As a result of the change, the price of the test will be reduced from $29.20 to $22.00. You may continue to fill out test request forms as you have in the past by checking "Rabies Immune Status," and the new test code will automatically be entered at the WSLH. However, for your information the new test code is #2900.

Although the new method is also a virus neutralization test, the patient titer will be reported in International Units/milliliter (I.U.), with titers of 0.5 I.U./mL or greater being considered indicative of satisfactory response to vaccine by the World Health Organization. Titers below 0.5 I.U./mL may require the patient to receive rabies booster vaccination. An interpretive comment explaining this will accompany each test result.

Please contact the laboratory if there are any questions regarding these changes in standard operating procedure.

The WSLH Rabies Laboratory can be reached at (608) 262-7323.

As a service to our public health partners, the WSLH is reprinting this report from the Wisconsin Antibiotic Resistance Network (WARN)

2001 Wisconsin Antibiotic Resistance Report: Invasive *Streptococcus pneumoniae*

Data provided by WARN: Wisconsin Antibiotic Resistance Network (www.wisconsinmedicalsociety.org/WARN).

WARN Partners: Marshfield Medical Research Foundation, State Medical Society of Wisconsin, Wisconsin Division of Public Health.

Funding Source: U.S. Centers for Disease Control and Prevention.

The Wisconsin Division of Public Health conducts surveillance for invasive bacterial infections in Wisconsin residents. Invasive pneumococcal isolates are obtained from blood or another normally sterile body site. For more information, contact Susann Ahrabi-Fard at (608) 261-6955 or by e-mail at ahrabs@dhfs.state.wi.us.

TABLE 1. Penicillin susceptibility of invasive *S. pneumoniae* by patient characteristics

	# Isolates Tested	# Interm. (Pen-I)	# Resist. (Pen-R)	Total Nonsusceptible 2001	2000	1999
Male	139	18	16	25%	25%	24%
Female	116	14	12	22%	28%	24%
Age						
0-4 yrs.	36	9	7	44%	31%	28%
5-19 yrs.	18	1	2	17%	6%	10%
20-59 yrs.	78	5	8	17%	29%	31%
60+ yrs.	123	14	14	23%	24%	19%
TOTAL	255	32	28	24%	26%	24%

Intermediate resistant (Pen-I) includes isolates with MIC 0.1 to 1.0 mcg/mL. Resistant (Pen-R) includes all isolates with MIC ≥ 2 mcg/mL. Isolates with MIC < .1 are susceptible (Pen-S).

TABLE 2. Antibiotic susceptibility for invasive pneumococcal isolates

	# Interm.	# Resist.	Total Nonsusceptible 2001	2000	1999
TMP/Sulfa	7	71	31%	19%	28%
Cefotaxime	15	15	12%	13%	11%
Erythromycin	6	34	18%	11%	14%
Meropenem	12	6	10%	10%	5%
Ceftriaxone	10	4	9%	8%	6%
Chloramphenicol	6	3	7%	2%	2%
Levofloxacin	0	1	<1%	<1%	0%
Telavancin	0	10	4%	–	—

FIGURE 1. Cumulative Penicillin resistance (Pen-R) by public health region for the years 1999-2001.

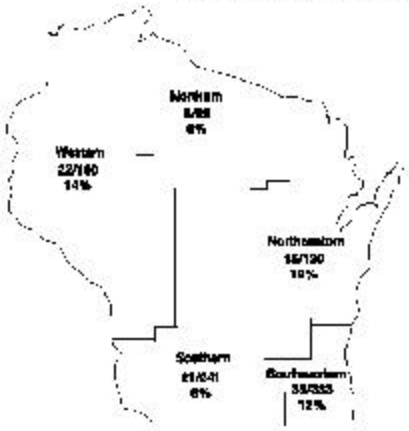


FIGURE 2. Temporal trends in penicillin resistance (Pen-R) among invasive isolates in Wisconsin and the U.S.

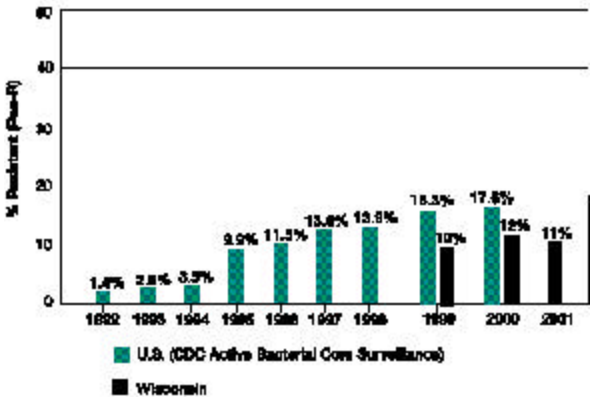


TABLE 3. Proportion of pneumococcal isolates with multi-drug resistance (nonsusceptible to penicillin and > 2 non-beta-lactam antibiotics).

Year	MDR	Percent
1999	47/410	11.5%
2000	39/289	13.5%
2001	33/255	12.9%

New Administrative Rule for TB Reference Laboratory Selection

By Tanya Oemig, Wisconsin Tuberculosis Program Director

Six laboratories in Wisconsin provide identification of M. tuberculosis complex (M.tbc) and other mycobacteria. The remaining laboratories across the state submit their mycobacterial specimens or cultures to reference laboratories. New administrative rules in effect April 1, 2002 will effect the selection of reference laboratories.

Administrative rule HFS 145.09 requires any laboratory receiving a specimen for tuberculosis testing to report positive results and submit an isolate from a patient with a positive M.tbc culture to the state M.tbc isolate repository--in Wisconsin the Wisconsin State Laboratory of Hygiene.

Tuberculosis is a reportable condition, requiring immediate reporting to the local health department. This law applies to all laboratories in the state, regardless of where the actual testing procedures take place.

In 1999, Wisconsin laboratories performing mycobacterial testing formed the Wisconsin Mycobacteriology Laboratory Network (MLN) and agreed to comply with these requirements. Submitting specimens to an in-state reference laboratory ensures compliance with the law. The MLN provides a forum for laboratories to share information and technical expertise in order to maintain proficiency, improve test result turnaround times, and access new technology.

Submitting specimens to an in-state reference laboratory ensures quality testing using the latest procedures and ensures prompt reporting of results to public health officials. In selecting a reference lab, applicable state laws and laboratory performance should receive major consideration.

For more information about reference laboratory expectations, contact Tanya Oemig, Wisconsin Tuberculosis Program Director, at (608) 261-6319.

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Between-Season Doldrums Are Sure to Pick Up

By Carol Kirk, Virology Program Coordinator

Wisconsin virology laboratories are currently experiencing the "between-season doldrums." The major peak in viral activity occurs during the winter respiratory season, when both influenza and respiratory syncytial viruses increase in activity. A secondary peak in activity usually occurs in late summer-early autumn, when enterovirus activity increases.

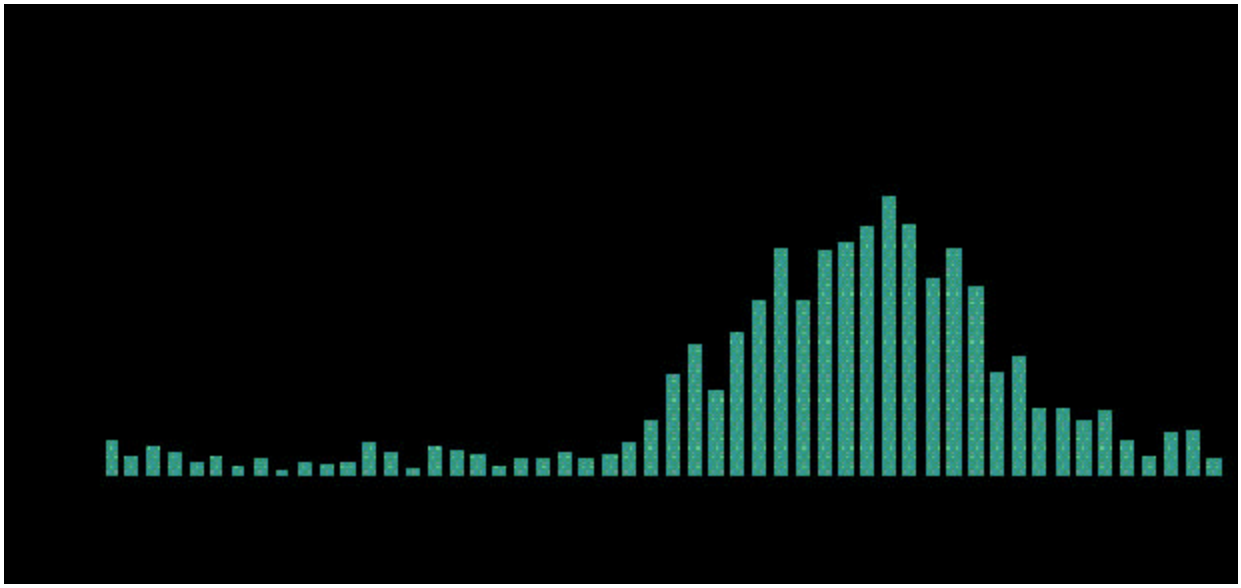
A composite of the laboratory detections of enteroviruses in Wisconsin for the last five years demonstrates a relatively steady increase in detections beginning in early July. The composite peak detections occurred around week 37, which would be mid-September, with detections decreasing through the rest of the year. (See graph below.)

The enterovirus group is composed of 60-plus viruses, classified as polioviruses, echoviruses, coxsackie A viruses, coxsackie B viruses, and newer types designated by number only. Of note, echoviruses 22 and 23 have recently been moved from the enterovirus group to a new group and designated parechovirus 1 and 2.

While the complexity of the group can be bewildering, the spectrum of clinical illness associated with these viruses is just as confusing. Enteroviruses routinely replicate in the enteric tract, but gastrointestinal symptoms (e.g., vomiting and diarrhea) are not usually predominant in enterovirus infections. As a matter of fact, most enterovirus infections cause no symptoms or only mild nondescript febrile illnesses. When symptoms do develop, they usually range from rash illnesses to aseptic meningitis. Enterovirus infections are usually self-limiting, but can be severe or even life threatening.

Although there is considerable overlap among the enteroviruses and the syndromes they cause, certain of the enterovirus types are more commonly associated with CNS illnesses, myocarditis and pericarditis, or severe disease of newborns.

Several enterovirus types usually circulate in any given year, but a few usually predominate. However, there is no means of predicting which will circulate or predominate. During the 2001 season, the Milwaukee Health Department Laboratory and the Wisconsin State Laboratory of Hygiene serotyped 125 of approximately 180 enterovirus isolates. Echoviruses 13 and 18 accounted for approximately 75% of the fourteen serotypes detected. So far in 2002, eight serotypes have been detected, but none has shown clear predominance yet.



Dead Birds Test Positive for West Nile Virus

West Nile Virus Prevention Tips

- Wear protective clothing such as long pants, long-sleeved shirts and socks.
- Use an insect repellent containing DEET (use according to manufacturer's directions).
- Make sure doors and windows have tightly fitting screens and repair holes.
- Remove standing water that collects on your property.
- Report dead birds to your Local Health Department or the West Nile Virus Hotline at 1-800-433-1610.

So far this summer 16 Wisconsin counties have collected birds that tested positive for West Nile Virus (WNV), with the greatest number of positives originating from Dane and Milwaukee counties. Since May 1, 2002, over 70 birds have reported the presence of WNV. In 2001, 58 birds tested positive in Wisconsin, with all but four reported in Milwaukee County.

WNV is transmitted to birds and mammals through the bite of an infected mosquito. Although very few mosquitoes become infected and even fewer people contract the virus after being bitten, severe cases can occur in some segments of the population, such as the elderly. Mild cases can include headache, fever, muscle aches or swollen lymph nodes. In rare instances, WNV can cause high fever, encephalitis and even death.

The Wisconsin State Lab of Hygiene has played an important role in tracking the progression of the disease this summer by testing over 215 birds for the virus.

"The Department of Public Health is very happy to have the in-state testing capacity at the State Lab of Hygiene because it increases the number of birds we can test and provide faster turnaround time for better public health decision making," said Dr. Linda Glaser, Wisconsin's WNV coordinator.

Wisconsin Virology Network Holds Annual Meeting

Clinical and public health virologists from across Wisconsin held their 12th annual meeting in Madison on June 26, 2002.

The meeting, which is hosted by the Wisconsin State Laboratory of Hygiene, provides an opportunity for Wisconsin's virologists to share information on current laboratory issues and receive updates on viral topics. The meeting also includes an annual review of the Wisconsin Virology Laboratory Information Network, which provides year-round data on laboratory detection of viruses circulating in Wisconsin.

Presentations at this year's meeting included a presentation on "Mosquito-Borne Viruses in Wisconsin" by Linda Glaser, D.V.M., Wisconsin Division of Public Health, Bureau of Communicable Diseases, and a "Smallpox Preparedness Update" by Pete Shult, Ph.D. of the WSLH.

Wisconsin Virology Laboratory Information Network Members

The Wisconsin State Laboratory of Hygiene would like to acknowledge virology laboratories at the following institutions for their voluntary participation in the Wisconsin Virology Laboratory Information Network.

Bellin Memorial Hospital, Green Bay

St. Vincent Hospital, Green Bay

Gunderson Lutheran Medical Center, LaCrosse

Marshfield Laboratories, Marshfield

St. Marys Hospital Medical Center, Madison

Childrens Hospital of Wisconsin, Milwaukee

Medical Science Laboratories, Wauwatosa

Milwaukee Health Department, Milwaukee

United Dynacare, Milwaukee

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