



Dickinson-Iron District Health Department
www.didhd.org

818 Pyle Drive, Kingsford, MI 49802
(906) 774-1868
LINDA PIPER, RN, BSN, MPH
Health Officer

601 Washington Avenue, Iron River, MI 49935
(906) 265-9913
RANDALL M. JOHNSON, MD, MPH
Medical Director

PHYSICIAN NEWSLETTER

May/June 2007

INDEX

<u>Topic</u>	<u>Page Number</u>
<i>Non-Occupational Use of Facemasks During Influenza Pandemic</i>	1
<i>Record Number of Flu Vaccine Doses Predicted</i>	1
<i>Changes In West Nile Virus Testing at MDCH in 2007</i>	2
<i>Fluoroquinolones No Longer Recommended for Treatment of Gonococcal Infections</i>	3
<i>Expansion of Vaccines for Children (VFC) Program</i>	3
<i>Upper Peninsula Reportable Communicable Diseases For the Period March-April 2007 and YTD</i>	4

NON-OCCUPATIONAL USE OF FACEMASKS

The Department of Health and Human Services (DHHS) recommends the use of surgical masks and N 95 respirators for use by healthcare workers during an influenza pandemic, but there is not a consensus about their use in community, non-occupational settings. In the November 2005 HHS *Pandemic Influenza Plan*, the use of facemasks by well persons in public settings is not recommended, given a lack of evidence that they confer a public health benefit. Instead, DHHS recommended avoiding close contact with ill individuals. In 2006, the World Health Organization (WHO) stated that while masks are not expected to have an appreciable effect on reduction of transmission of pandemic influenza, their use by the general public should be permitted, but not required, as use is likely to occur spontaneously. In response to requests for more guidance on this issue, the Centers for Disease Control and Prevention (CDC) has now issued new *Interim Public Health Guidance for the Use of Facemasks and Respirators in Non-Occupational Community Settings* during an influenza pandemic.

RECORD NUMBER OF FLU VACCINE DOSES PREDICTED

Flu vaccine manufacturers expect to have a record 132 million doses ready for the 2007-2008 flu season, and even more could be available if a fifth company joins their ranks. Government health officials have been expanding their flu shot recommendations to cover more age groups, and they now say that more than 200 million Americans should get vaccinated each year. But setbacks in recent years, including vaccine delays and shortages, have left doctors and patients soured and

confused. Influenza kills an estimated 36,000 Americans each year, and hospitalizes another 200,000, according to the CDC. There are currently four companies that provide flu vaccines: Sanofi Pasteur Inc., which projects 50 million doses; Novartis Vaccines, which expects to make up to 40 million doses; and GlaxoSmithKline, which is planning 30 million to 35 million doses. In addition, MedImmune Vaccines Inc. plans to manufacture about 7 million doses of FluMist; a nasal mist recommended only for healthy people between ages 5 and 49. Federal guidelines call for 218 million Americans to get vaccinated, so the supply for shots still falls far short. The companies said they are ramping up production.

CHANGES IN WEST NILE VIRUS TESTING AT MDCH IN 2007

Since West Nile virus (WNV) was first detected in Michigan, it has become endemic with cases occurring every year during a predictable season. Wider availability of testing for WNV, evolving arbovirus surveillance strategies and resource limitations have prompted the Michigan Department of Community Health Bureau of Laboratories (BOL) to revise WNV test menu and availability. For 2007 arbovirus testing resources will be directed toward detecting the most severe cases of neuro-invasive disease. Routine serum IgG testing of non-hospitalized patients with suspect WNV will not be available.

Cerebral spinal fluid samples will be tested for IgM antibodies to the four arboviruses most likely to be found in Michigan: WNV, St. Louis encephalitis virus (SLE), Eastern Equine encephalitis virus (EEE), and California Group virus (CGV) which includes LaCrosse virus. CSF IgM testing will be performed twice per week. Confirmatory Plaque Reduction Neutralization Test (PRNT) will also be performed on IgM positive CSF specimens to distinguish between flavivirus with cross-reacting antigens. Testing frequency may be adjusted depending on the availability of reagents and controls provided solely by the Center for Disease Control and Prevention.

Since many commercial and clinical reference laboratories now offer serum IgM and IgG WNV and other arbovirus testing with acceptable performance, limited public health resources must be directed to other public health priority testing. Therefore, IgG and IgM of **serum** specimens from non-hospitalized patients will not be available at MDCH. Serum testing for PRNT for hospitalized patients will be available only with prior approval of an MDCH epidemiologist. To request serum PRNT, phone the MDCH Bureau of Epidemiology at 517-335-8165.

The BOL appreciates the collaboration with clinicians that allowed public health to respond to WNV as it emerged as a threat in Michigan. Robust reporting by clinical laboratories provided essential surveillance data to the state Bureau of Epidemiology and CDC. The elimination of arbovirus IgG testing at MDCH will mean a greater dependence upon reporting of positive serum antibody tests by clinical laboratories and physicians. More than ever, your assistance in reporting positive test results is needed for arboviral surveillance. Please continue to report all positive arbovirus IgG and IgM results to your local health department.

The BOL received a total of 765 cerebrospinal fluid and serum specimens for arbovirus testing in 2006 (compared to 922 for 2005). Testing identified 52 positive WNV specimens and 2 positive LaCrosse virus specimens. Blood collection donor screening identified 4 blood donors with WNV at the time of donation, resulting in a total of 55 laboratory reported cases of WNV illness in Michigan in 2006 including seven fatalities.

For questions regarding testing, please contact Dr. Anthony Muyombwe at 517-335-8099 or MuyombweA@Michigan.gov.

FLUOROQUINOLONES NO LONGER RECOMMENDED FOR TREATMENT OF GONOCOCCAL INFECTIONS

On April 13, the Centers for Disease Control and Prevention announced that the resistance of *Neisseria gonorrhoeae* (GC) to fluoroquinolones has reached sufficient levels across the United States that this class of antibiotics should no longer be used to treat infection with this agent. (<http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5614a3.htm>). This development leaves clinicians with limited options for treatment of GC and concern among public health officials that the increased cost of reliably effective treatments could seriously consume already limited sexually transmitted disease program budgets.

Quinolone-resistant *Neisseria gonorrhoeae* (QRNG) appears to have emerged in Michigan in 2003, when isolates were recovered in culture from 11 patients with no history of out-of state travel. A surveillance network was established including six hospital laboratories and five local health departments, which routinely performed genital culture that yielded an isolate for susceptibility testing. This sampling of isolates in Michigan has shown a continual increase in resistance, from 0.5% in 2002 to 4.8% in 2006.

However, monitoring for GC resistance to fluoroquinolone or other antimicrobial agents is challenging because most of the testing for GC is now routinely performed using nucleic acid amplification tests (NAATs) which does not yield a viable isolate. The MDCH Bureau of Laboratories (BOL) worked with the surveillance network and other partners to develop and evaluate an assay to detect resistant GC genotypes in residual NAAT specimens. Application of this assay to a random sample of GC-positive, NAAT specimens from public health labs across the state started in January 2007. Preliminary data suggests that resistance rates are between 4 and 5%. These findings indicate that resistance is clearly established in Michigan and support the CDC recommendation to use alternatives to the quinolones in treating *N. gonorrhoeae*.

The April announcement from CDC encourages susceptibility testing of isolates from patients who fail treatment with therapeutic alternatives to quinolones. MDCH is adapting its susceptibility testing protocol to reflect the CDC recommendations and will no longer report results for ciprofloxacin. While the minimum inhibitory concentration (MIC) values for *N. gonorrhoeae* against cephalosporins appear to be increasing, no resistant strains have yet been isolated. This limits the capability to develop a molecular assay to detect such resistance. The medical community will have to rely upon traditional susceptibility tests.

The Michigan Department of Community Health (MDCH) Bureau of Laboratories (BOL) urges clinical colleagues to share the MMWR with the medical staff in their communities. Under the new recommendations, culture, rather than molecular-based testing, should be used when patients appear to have treatment failure. Please contact Dr. James Rudrik, Microbiology Section Manager at 517-335-9641 or rudrikj@michigan.gov with any questions or concerns.

EXPANSION OF VACCINES FOR CHILDREN (VFC) PROGRAM

Michigan's VFC Program has some very exciting news! Due to some changes in MDCH's funding for this fiscal year and the slow uptake of several vaccines, they are able to expand VFC coverage to offer the following:

1. MCV4 (Menactra) vaccine can now be administered to all VFC-eligible clients 11 through 18 years of age INCLUDING the underinsured seen in private provider offices. Private

providers will no longer need to refer children to an FQHC, RHC or the health department for MCV4 vaccine and providers will no longer have to follow the priority groups. All VFC-eligible clients, 11 through 18 years of age, who wish to be vaccinated against this disease, may receive the vaccine.

2. HPV4 vaccine can now be administered to all VFC-eligible females 9 through 18 years of age INCLUDING the underinsured seen in private provider offices. Private providers will no longer need to refer underinsured clients to an FQHC, RHC or the health department for HPV4 vaccine.
3. Hepatitis A vaccine will now be available for all children over 1 year of age who are VFC-eligible clients, (including the underinsured children) seen in ALL provider offices. This will eliminate the previous policies of administering vaccine only to those born after 01/01/2004, screening for high risk criteria, and the need to refer clients to an FQHC, RHC, Migrant Health Center or the health department.

MDCH has indicated they will make every effort to maintain and support the funding to continue to offer these vaccines to these expanded populations. These changes are effective June 1, 2007. The 2007 edition of the VFC Resource Book will be updated to reflect these changes.

We are very pleased to have the opportunity to remove barriers to allow even more of Michigan's children to be vaccinated in their medical home!

UPPER PENINSULA REPORTABLE COMMUNICABLE DISEASES FOR THE PERIOD MARCH-APRIL 2007 AND YTD

Disease	Chippewa		Delta Menominee		Dickinson Iron		LMAS		Marquette		Western UP		UP Total	
	Period	YTD	Period	YTD	Period	YTD	Period	YTD	Period	YTD	Period	YTD	Period	YTD
Campylobacter	0	0	0	2	0	1	2	3	2	2	1	1	5	9
Cryptosporidiosis	2	3	4	4	0	0	0	0	0	0	0	0	6	7
Giardiasis	1	1	2	5	0	1	0	1	1	1	1	3	5	12
Salmonellosis	5	6	0	0	2	2	1	1	2	4	0	0	10	13
Meningitis - Aseptic	0	0	0	1	0	0	0	0	0	1	0	0	0	2
Streptococcus pneumoniae, Inv	1	2	1	1	0	0	0	0	0	0	0	0	2	3
Blastomycosis	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Coccidioidomycosis	0	0	0	0	0	0	0	0	0	0	1	1	1	1
Creutzfeldt-Jakob Disease	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Flu Like Disease	131	263	483	957	721	2123	173	467	39	86	502	1040	2049	4936
Histoplasmosis	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Influenza	1	7	1	1	0	0	0	6	1	1	4	8	7	23
Kawasaki	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Staphylococcus Aureus Infect.	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Chlamydia (Genital)	8	19	13	21	9	13	5	8	24	44	10	22	69	127
Gonorrhea	1	1	0	0	1	1	1	1	4	5	0	0	7	8
Tuberculosis	1	1	0	0	0	0	0	0	0	0	0	0	1	1
Chickenpox (Varicella)	0	0	3	5	6	9	4	5	12	13	5	5	30	37
Mumps	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Pertussis	0	0	0	0	0	0	0	1	1	1	0	0	1	2
Lyme Disease	0	0	2	2	0	0	0	0	0	0	0	0	2	2
Hepatitis A	0	0	0	1	0	0	1	1	0	0	0	0	1	2
Hepatitis B, Chronic	1	1	0	0	0	0	0	0	0	0	1	1	2	2
Hepatitis C, Acute	1	3	0	0	0	0	0	0	1	2	1	3	3	8
Hepatitis C, Chronic	16	29	4	10	1	5	1	3	6	11	12	15	40	73
Hepatitis C, Unknown	0	0	1	1	2	2	0	0	0	0	2	4	5	7