Michigan Department of Community Health
MDCH
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EPI Insight
Bureau of Epidemiology
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Norovirus Activity in Michigan

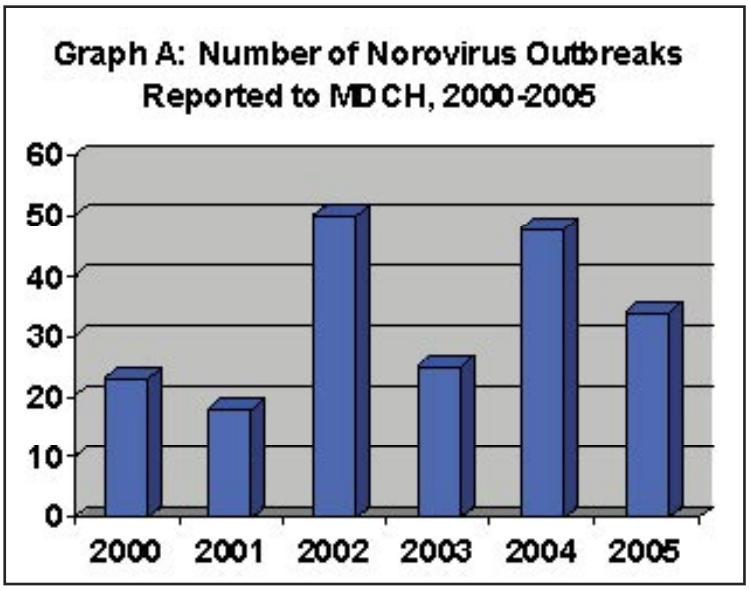
By: Brenda M. Brennan, M.S.P.H. and Susan Bohm, M.S.

Norovirus, incorrectly referred to as the "stomach flu," is actually viral gastroenteritis. Norovirus is characterized by a quick onset of vomiting and/or diarrhea often accompanied by nausea, stomach cramps, low-grade fever, chills, and body aches. The duration of illness lasts between 12 and 60 hours. There is no treatment or vaccine for norovirus, only intravenous fluids are available to prevent dehydration. Norovirus can be transmitted by fecally contaminated food, water or surfaces and fomites contacted by an infected individual. There is also evidence to support transmission via aerosols when a vomiting incident occurs. During an outbreak, primary cases are usually due to contact with a contaminated vehicle (food, water, surface, or fomite), whereas secondary cases tend to be a result of person-to-person transmission.

In a typical year, the Michigan Department of Community Health (MDCH) receives between 30 and 50 reports of suspected or confirmed norovirus outbreaks. The number of outbreaks that are actually reported to MDCH and local health departments are presumably a small portion of true norovirus activity throughout the state. Graph A illustrates the number of norovirus outbreaks per year from 2000 to 2005.

In 2005, there were 34 norovirus outbreaks investigated in Michigan. Graph B depicts the locations of where the suspected/confirmed outbreaks occurred. The majority of outbreaks in 2005 occurred in schools (elementary schools, high schools and universities), and camps (either privately run or university affiliated).

As of March 1, 2006, MDCH has received twelve reports of outbreak activity affecting over 909 individuals. These outbreaks occurred at food service establishments (n=5), healthcare facilities (n=5), and schools (n=2).



Last year, MDCH and the Michigan Department of Agriculture (MDA) collaborated with local health department representatives from Communicable Diseases and Environmental Health to draft *"Local Health Department Guidelines for the Environmental Cleaning and Disinfection of Norovirus."* The document was distributed to both local health department Communicable Disease and Environmental Health staff. The guidelines have also been featured at numerous conferences and are available on line at http://www.michigan.gov/documents/Guidelines_for_Environmental_Cleaning_126234_7.pdf

The guidance addresses norovirus disinfection, specific bleach concentrations for multiple surfaces, contact times, other effective and ineffective disinfectants, specific clean-up procedures for large spills of vomit or stool, and how to clean and disinfect carpet, furniture, clothing and more. The document also addresses concerns

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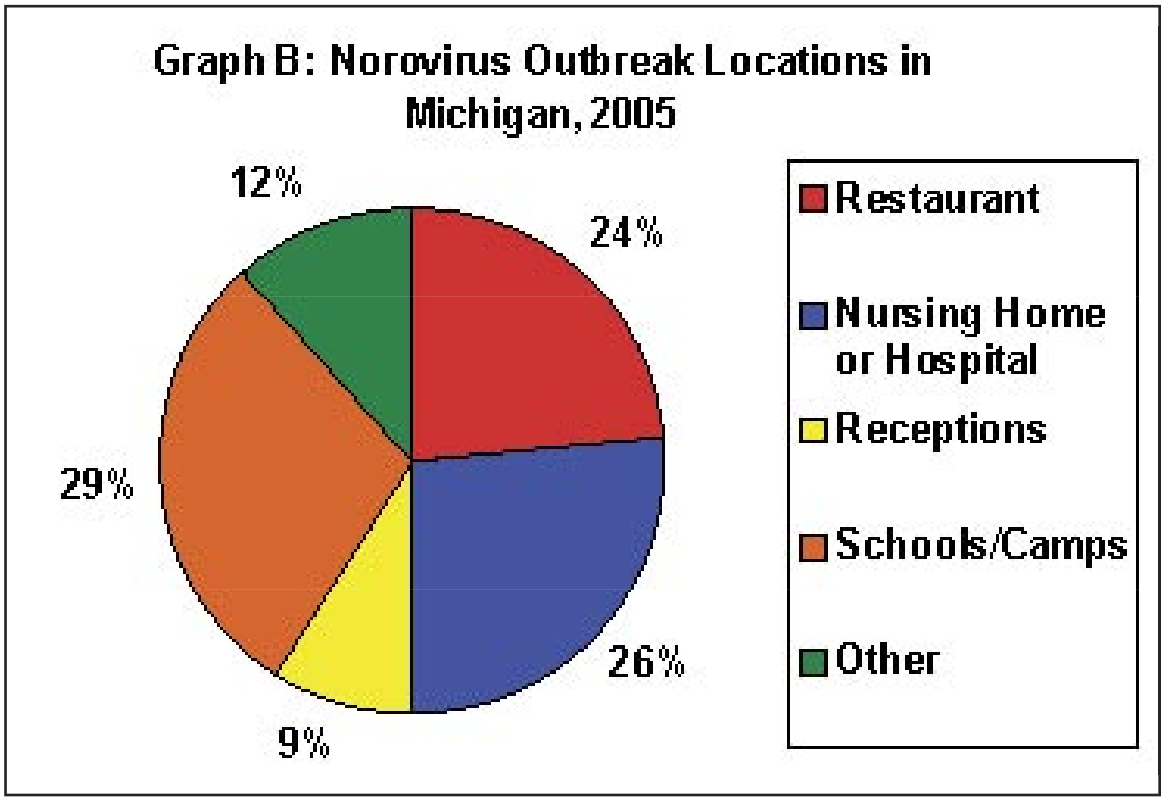

specific to food service establishments, healthcare facilities and schools/daycares.

These guidelines were valuable during a recent norovirus outbreak that occurred among diners at a mid-Michigan restaurant. A restaurant employee allegedly had a vomiting incident in the kitchen, which resulted in the exposure of over 1300 patrons. A total of 495 people reported to the local health department that they had become ill as a consequence of eating and/or working at the restaurant, having contact with an ill patron or employee, or from eating leftovers from the restaurant. In line with the known events that took place at the restaurant, it seems plausible that gross contamination of the premises occurred. Transmission most likely occurred via airborne droplets of vomitus and contact with contaminated surfaces (e.g., plates, cutlery, take-out containers).

As sporadic illness continued among patrons and employees for several days, it was suspected that the environment was still contaminated. When health department sanitarians reviewed specific clean-up procedures with the restaurant, they were told the facility staff had washed down the premises with a quaternary compound, which is ineffective against norovirus. The health department forwarded the *Local Health Department Guidelines for the Environmental Cleaning and Disinfection of Norovirus* and instructed them to use a bleach solution. Since then, no further cases of diarrhea or vomiting illness have been reported.

If you suspect a norovirus outbreak is occurring in your jurisdiction, please contact Brenda Brennan in the Bureau of Epidemiology/Communicable Disease Division at (517) 335-8165 for detailed instructions and approval to send samples for testing.

ACIP Publishes New Childhood & Adolescent Immunization Schedule

The *2006 Recommended Childhood and Adolescent Immunization Schedule* was published in the January 6, 2006, Morbidity and Mortality Weekly Report (MMWR). The recommendations for January - December 2006 were approved by the Advisory Committee on Immunization Practices (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP).

Hepatitis B

The 2006 Childhood and Adolescent Immunization Schedule recommends that all newborns receive hepatitis B vaccine (HepB) soon after birth and before hospital discharge. Administering four doses of HepB is permissible (e.g., when combination vaccines are administered after the birth dose); however, if monovalent HepB is used, a dose at age 4 months is not needed. For infants born to hepatitis B surface antigen (HBsAg)-positive mothers, testing for HBsAg and hepatitis B surface antibody (anti-HBs) after completion of the vaccine series should be conducted at age 9-18 months (generally at the next well-child visit after completion of the vaccine series).

Other Key Changes

Several new vaccines were licensed during 2005, and these have now been incorporated into the 2006 immunization schedule.

- A new tetanus toxoid, reduced diphtheria toxoid and acellular pertussis vaccine (Tdap) is recommended at age 11-12 years for those who have completed the diphtheria and tetanus toxoids and pertussis/diphtheria and tetanus toxoids and acellular pertusis (DTP/DtaP) series and have not received a

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Michigan Department of Community Health Key Contributor to National Report on Occupational Health

By: Tom Largo, MPH

Occupational health indicators are measures of work-related health outcomes or workplace exposures. These indicators, such as fatal injuries, musculoskeletal disorders, amputations, elevated blood lead levels and lung diseases, provide a snapshot of the health of workers that can be used to portray occupational health in a state. This information ultimately assists in the development of injury and illness prevention measures.

In October 2005, the Council of State and Territorial Epidemiologists (CSTE) released the report *Putting Data to Work: Occupational Health Indicators from Thirteen States for 2000.* Michigan was one of thirteen states to provide data to CSTE for nineteen indicators (see table) and to co-author the report. The report can be found on the CSTE website: www.cste.org/pdffiles/newpdffiles/CSTE_OHI.pdf

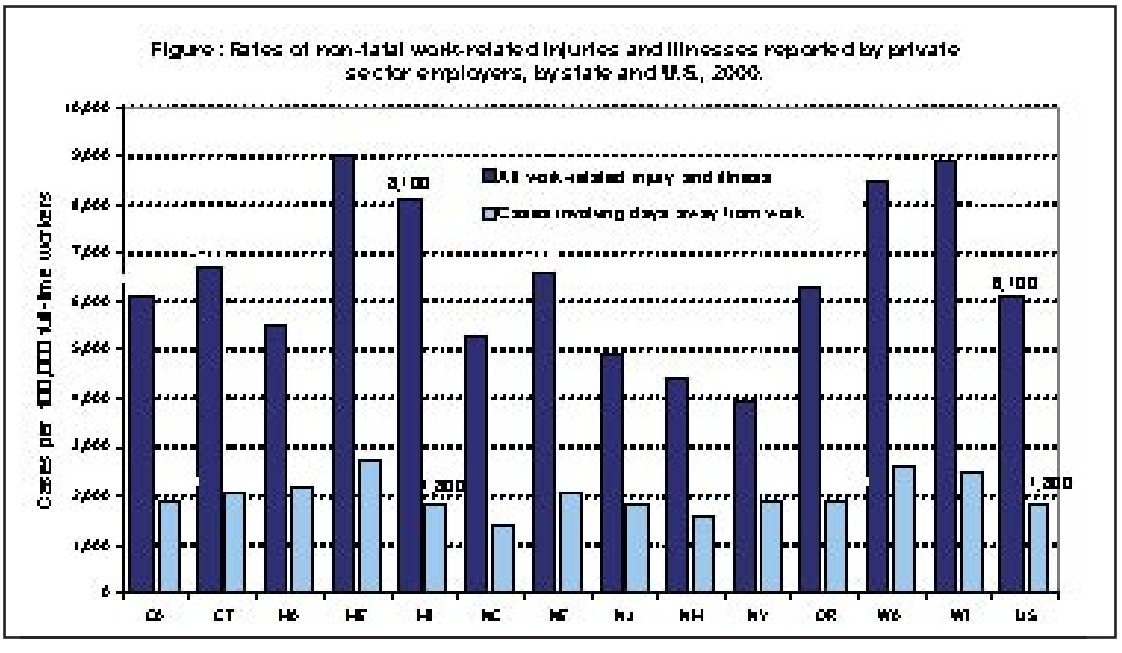
The report illustrates that in 2000, Michigan exceeded national rates for work-related injuries and illnesses reported by employers (see figure), and for malignant mesothelioma. The state had a relatively high percentage of workers in industries with high risk of occupational morbidity. However, for most indicators, Michigan's rates were lower than national rates.

The Division of Environmental and Occupational Epidemiology is in the final stages of publishing a Michigan-specific indicator report (scheduled for release Spring of 2006). In this report, state and national trend data were obtained to allow for a more comprehensive evaluation of the status of occupational health in Michigan.

For additional information about occupational health indicators or to provide feedback on the CSTE indicators report, contact Tom Largo (largot@michigan.gov) or Martha Stanbury (stanburym@michigan.gov) at the Michigan Department of Community Health.

Table: National Occupational Health Indicators

1. Non-fatal injuries & illnesses reported by employers
2. Work-related hospitalizations
3. Fatal work-related injuries
4. Amputations reported by employers
5. Amputations identified in state workers' compensation systems
6. Hospitalizations for work-related burns
7. Musculoskeletal disorders reported by employers
8. Carpal Tunnel Syndrome cases identified in state workers' compensation systems
9. Pneumoconiosis hospitalizations
10. Pneumoconiosis mortality
11. Acute work-related pesticide poisonings reported to poison control centers
12. Incidence of malignant mesothelioma
13. Elevated blood lead levels
14. Workers employed in industries with high risk for occupational morbidity
15. Workers employed in occupations with high risk for occupational morbidity
16. Workers employed in industries & occupations with high risk for occupational mortality
17. Occupation safety & health professionals
18. Occupational Safety and Health Administration Enforcement Activities
19. Workers' compensation awards



Preconceptional Health—An Essential Birth Defects Prevention Strategy

By: Jane Simmermon, RN, MPH

Congenital anomalies affect one in every 33 births in the United States annually, including approximately 10,000 Michigan newborns. Birth defects remain a leading cause of infant death and contribute to an increased risk of mortality beyond a child's first year of life. Data from the Michigan Birth Defects Registry (MBDR) demonstrate an infant death rate for children born in 2003 with a reportable condition to be ***45.3 deaths*** per 1,000 MBDR cases. This compares to an infant death rate of ***8.6 deaths*** per 1,000 for all resident infants born in Michigan during the same year. In addition, factors such as specialized medical care, support services, special education, lost wages, and lost productivity merely scratch the surface of the emotional and financial implications of birth defects and disabilities. Birth defects impact not only affected individuals and their families, but ultimately, public health.

What causes birth defects?

Both genetic and environmental factors contribute to the etiology of birth defects. Although the causes of most birth defects remain unknown, achieving optimal preconceptional maternal health is one strategy that can help reduce the risk of birth defects. The role of preconceptional health in lowering the impact of birth defects was the focus of the national Birth Defects Prevention Month in January. Supporting preconceptional health by providing educational outreach to professionals and women of childbearing age remains an important prevention strategy for the Michigan Department of Community Health (MDCH) Birth Defects Program.

Why focus on preconceptional health?

The importance of achieving optimal health for women of childbearing age prior to conception, and the role preconceptional health plays in the prevention of birth defects, cannot be overemphasized. Since approximately 50 percent of pregnancies are unplanned, there is an urgent need for health care providers to incorporate prevention messages that foster healthy preconceptional behaviors into *every* aspect of health care for women in their reproductive years.

What should women do?

Achieving good preconceptional health includes:

- Consuming 400 micrograms of folic acid daily
- Knowing one's family medical history
- Having a check-up from a health care provider prior to conception
- Seeking reproductive genetic counseling, if appropriate
- Managing chronic maternal illnesses such as diabetes, hypertension, lupus, phenylketonuria (PKU), and seizure disorders
- Making healthy lifestyle choices with regard to diet and exercise
- Ensuring that immunizations are up-to-date
- Ensuring that prescription medication and herbal supplements are safe at the time of conception and during early pregnancy
- Ensuring protection against domestic violence
- Avoiding exposure to alcohol, nicotine and recreational drugs
- Avoiding exposure to infection
- Avoiding harmful occupational and environmental exposures

Of all the strategies mentioned above, perhaps the simplest and most effective is daily consumption of a multivitamin containing 400 micrograms (400 mcg or 0.4 mg) of folic acid in addition to consuming a healthy, varied diet. Up to 70% of neural tube defects such as spina bifida and anencephaly can be prevented by daily folic acid intake of 400 micrograms prior to conception and throughout the first trimester of pregnancy. Research on folic acid continues to expand our knowledge about the benefits of this important cofactor. Folic acid consumption may reduce the risk of other birth defects including cleft lip/palate, limb-reduction defects, and certain congenital heart defects. Furthermore, folic acid intake is beneficial for both women and men throughout the lifespan. It may reduce the risk of cardiovascular disease/stroke; cervical, colon and lung cancer; and Alzheimer's disease.

Can these strategies make a difference?

The good news is that prevention efforts do offer hope for reducing the number of families affected by birth defects. The essential public health message is that achieving preconceptional health matters—both for women of childbearing age and their future offspring.

The MDCH Birth Defects Program is grateful to have received cooperative agreement funding from the Centers for Disease Control and Prevention (CDC) since 1999 to support birth defects surveillance, prevention and intervention efforts. Current CDC funding will supplement program activities through February 2010.

Where can more information be found?

For more information about birth defects prevention, including a free pamphlet, *"Preventing Birth Defects—Important Information for Michigan Families,"* please contact the Birth Defects Program at (866) 852-1247, e-mail BDRFollowup@michigan.gov or visit www.migeneticsconnection.org and click on "Birth Defects & Folic Acid". To receive the 2006 Birth Defects Prevention Month packet, please contact Val Ewald at ewaldv@michigan.gov. For additional information on folic acid or to request a folic acid in-service contact Nelda Mercer, MS, RD, folic acid community outreach coordinator, at mercern5@michigan.gov. For more information on Michigan birth defects data, please visit the MDCH Health Statistics and Reports website at: www.mdch.state.mi.us/pha/osr/index.asp.

Cross Border Collaboration Continues: MDCH's Border Health Program Prepares for Third Annual Conference

By: Carol Somers

Newly emerging diseases, including severe acute respiratory syndrome (SARS) and avian influenza, have underscored the need to ensure that geopolitical and jurisdictional boundaries do not impede infectious disease control and surveillance efforts. Diseases do not respect borders, making effective global collaboration critical in an age of escalating world travel and trade.

Differences in healthcare systems, government structures, cultural nuances and public health priorities all impact the coordination of streamlined international crisis response. And, while many informal communication pathways exist at the local level, official mechanisms are needed for effective state to province partnership in both routine and emergency situations.

Enter the Great Lakes Border Health Initiative (GLBHI). Originally undertaken as the Michigan-Ontario Border Health Initiative in early 2004, the program expanded in the fall of 2004 to include Minnesota, New York and Wisconsin. Funded by the Centers for Disease Control and Prevention's (CDC) Early Warning Infectious Disease Surveillance (EWIDS) project, the GLBHI aims to formalize relationships between U.S. and Canadian public health and emergency preparedness agencies responsible for communicable disease tracking, control and response.

As Michigan's Border Health program enters its third year, it continues to build essential cross-border relationships and perfect several draft documents aimed at formalizing data sharing and communication protocols.

Professionals in the fields of epidemiology, public health laboratories, emergency preparedness, public health law and infection control teleconference regularly via subcommittee, with representation from local, regional, state/provincial and federal public health levels. Tribal and First Nation stakeholders on both sides of the border have also been invited to the partnership.

Chief among the initiative's current projects:

- The implementation of an international test of the Michigan Health Alert Network
- The completion and test of the GLBHI Infectious Disease Emergency Communications Guideline
- Continued development of a Memorandum of Agreement (MOA) between Ontario and Michigan
- Formalizing protocols for moving laboratory samples across the border
- Developing a plan for credentialing for cross-border surge capacity

The initiative's momentum is building with the development of a program brochure that details GLBHI efforts and provides contact information for stakeholders and the public. A CDC-hosted EWIDS website will provide another opportunity for information sharing and promotion, and the Border Health program will soon find a home on the Michigan Department of Community Health's (MDCH) website.

The third face-to-face meeting of GLBHI stakeholders will take place August 23-25, 2006, when the program's annual conference is held in Dearborn. This year's event is being expanded to include a wider scope of participants, with a focus on developing relationships with border patrol, local response units, emergency managers and first responders.

The conference planning group is currently pursuing several dynamic speakers who will address breaking news topics related to international public health collaboration. The event will also highlight subcommittee progress and goals, provide a pandemic disease tabletop exercise and identify future work for the GLBHI. Previous conference webcasts have been archived at www.wmsu.org for those unable to attend.

Border Health Program Coordinator Kathy Allen-Bridson and EWIDS International Liaison Carol Somers, working under the Surveillance Section of MDCH's Communicable Disease Division, staff the Michigan arm of the Great Lakes Border Health Initiative.

Questions about the Great Lakes Border Health Initiative or the 2006 Annual Conference may be directed to Kathy Allen-Bridson at (517) 335-8199 or allen-bridsonk@michigan.gov.

New Publications

Norma J. Allred, John M. Stevenson, Maureen Kolasa, Diana L. Bartlett, Richard Schieber, **Kyle S. Enger,** Abigail Shefer. Using Registry Data to Evaluate the 2004 Pneumococcal Conjugate Vaccine Shortage. American Journal of Preventive Medicine 2006;30(4):347-350.

Violanda Grigorescu, Michael Paustian, Glenn Copeland, Darline ElReda, George Baker. Contribution of preterm births to the population of Michigan's Children with Special Health Care Services program. J Registry Management 2005;32:132-136.

Lee, J.S, S.S. Lee, S.A. Damon, R. Geller, **Erik R. Janus,** C. Ottoson, and M.J. Scott. "Risk Communication Needs in a Chemical Event." Accepted for publication in the Journal of Emergency Management.

Employee Spotlight – Christina Bush

Christina Bush is a toxicologist with the Site Assessment Program in the Toxicology and Response Section of the Division of Environmental and Occupational Epidemiology. She has been with the Michigan Department of Community Health (MDCH) since 2001. Though originally from New York, Bush has lived in Michigan since she was a young girl. Interested in animal health, Bush received her Bachelor of Science in Animal Science from Michigan State University (MSU). While at MSU, she held animal research and care positions on the university's poultry farm, working with the mink, which were used for environmental toxicology studies. It was during this time that Bush became intrigued with toxicology. She continued her education at MSU (go Spartans!), earning a dual Master of Science degree in Animal Science and Environmental Toxicology. Bush eventually left the university and worked as an assistant toxicologist at the Department of Environmental Quality (DEQ) for about a year, prior to coming to MDCH.

Functioning through a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR), the MDCH Toxicology and Response Section is consulted by local, state and/or federal agencies in reaction to environmental contamination. In her role at MDCH, Bush is responsible for evaluating public health threats at these contaminated sites. The investigations take on a multi-agency approach, and Bush regularly collaborates with colleagues not only from MDCH, but several other agencies, such as the DEQ, Environmental Protection Agency (EPA), and the U.S. Fish and Wildlife Service. She states that one of the major contributions of the toxicology 'team' at MDCH is educating the public about the effects of environmental contaminants on health, and how to prevent exposures. "We aim to empower citizens to make informed decisions in regards to environmental contamination in their communities" she says. Working with such diverse environmental agencies and communities is both challenging and rewarding for Bush, and she is not embarrassed to say, "I love what I do."

On a personal note, Bush is an avid 'outdoorsy' person. One of her favorite activities is backpacking in scenic Michigan. She is usually accompanied by her husband and dog, or else travels with a group of colleagues who call themselves BABES (Beautiful Adventurous Backpacking Employees of the State). In the past two years, she has participated in the Michigan 60-mile 3-Day Breast Cancer walk for the Susan G. Komen Breast Cancer Foundation. Her experience as a two-time breast cancer survivor inspires her to promote public cancer awareness. Other outdoor activities Bush enjoys in her free time include gardening, keeping bees, and raising chickens. She also likes to cook and make maple syrup. Bush is very involved with her church, plays the piano, and has even been known to sing (very well!) at work functions.

New Michigan Behavioral Risk Factor Survey Website

The Michigan Behavioral Risk Factor Survey (BRFS) website has moved to a new location and can be directly accessed at www.michigan.gov/brfs. If you have previously saved the old Michigan BRFS website as a favorite and/or homepage, the new one will not come up.

Please feel free to explore the new website and if you have any questions or suggestions, please contact Michelle Cook by phone, 517-335-8144 or by e-mail, cookm1@michigan.gov.

"ACIP Publishes New Childhood & Adolecent Immunization Schedule"

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tetanus and diphtheria toxoids (Td) booster. Adolescents 13-18 years who missed the 11-12 year Td/Tdap booster dose should receive a single dose of Tdap vaccine if they have completed the recommended DTP/DTaP series. Tdap vaccine may be given with other vaccines.

- Meningococcal conjugate vaccine (MCV4) was approved by FDA in early 2005. This vaccine should be given to all children at the 11-12 year old visit as well as to unvaccinated adolescents at high school entry and other adolescents who wish to decrease their risk of disease. College freshman living in a dormitory should also be vaccinated preferably with MCV4, although meningococcal polysaccharide vaccine (MPSV4) is an acceptable alternative. MCV4 may be given with other vaccines.

- Hepatitis A vaccine is now recommended for all children at age 1 year (12-23 months). The 2 doses in the series should be administered at least 6 months apart.

To access a ready to print (PDF) version of the 2006 Childhood and Adolescent Immunization Schedule and a ready-to-print (PDF) version of the MMWR Quick Guide go to the CDC website at: http://www.cdc.gov/mmwr/pdf/wk/mm5451-Immunization.pdf.

ACIP statements for each recommended childhood vaccine are available at the CDC website at http://www.cdc.gov/nip/publication/acip-list.htm.

Source: Centers for Disease Control and Prevention. Recommended childhood and adolescent immunization schedule–United States, 2006. MMWR 2005;54 (Nos. 51&52):Q1--Q4.

HIV Incidence and Drug Resistance Surveillance

By: Marianne O'Connor, MPH, MT and Mary-Grace Brandt, MPH, PhD

Two HIV surveillance initiatives funded by the Centers for Disease Control and Prevention are currently being implemented in Michigan: Variant, Atypical and Resistant HIV Surveillance **(VARHS)**; and Serologic Testing Algorithm for Recent HIV Seroconversion **(STARHS)**. Both protocols involve additional testing on sera from newly diagnosed HIV-infected individuals. VARHS provides HIV genotyping to detect antiretroviral resistance and HIV-1 subtype information, while STARHS provides incidence information on these newly diagnosed cases.

VARHS incorporates HIV drug-resistant genotype testing (specifically sequencing the reverse transcriptase [RT] and protease regions of the pol gene of HIV) into routine diagnostic HIV testing protocols. As a result, all individuals over twelve years of age who have their first HIV diagnosis identified through the Michigan Department of Community Health's (MDCH) two HIV regional laboratories (Detroit and Grand Rapids), and who are not known to have been exposed to antiretroviral therapy, are provided with a clinically useful genotype and assessment of drug resistance and HIV subtype. Testing sites (public and private) that do not routinely utilize the MDCH HIV regional laboratories are encouraged to provide a second serum specimen to MDCH for HIV testing in addition to their normal lab protocols so that all newly diagnosed individuals in Michigan may benefit from this expanded protocol and so that MDCH can accurately and comprehensively monitor trends in HIV drug resistance and subtype statewide. As part of the routine testing protocol, VARHS does not require consent beyond HIV testing guidelines and requires an insignificant increase in blood draw volume. No additional patient information outside of routine surveillance is collected. Clinical results are provided free of charge to any health care provider designated by the participant at post-test counseling within one month (and can be designated up to five years after the test is conducted).

The public health implications of baseline (at diagnosis) resistance testing are significant. Previous studies indicate a rise of resistant strains among infected persons and that perhaps as many as 15% of newly diagnosed individuals are infected with a resistant strain of HIV. Baseline testing is important from a clinical perspective because as infection progresses in an individual, the ability to detect mutant strains becomes increasingly difficult (wild-type virus takes over, obscuring less-fit mutant strains from detection). However, when an individual enters into an initial treatment regimen these drug-resistant mutants will surface and can cause treatment failure. Baseline resistance testing is routine in many Canadian provinces and European nations where the prevalence of HIV drug-resistant strains exceeds 10%. Further, both the U.S. Department of Health and Human Services and the U.S. panel of the International AIDS Society recommend resistance testing for newly infected and chronically infected drug-naive individuals.

For more information on VARHS and HIV drug resistance and subtype testing, please contact Mary-Grace Brandt PhD, MPH at (313) 876-4115 or brandtmg@michigan.gov.

STARHS adds an additional enzyme immunoassay to the routine testing protocol. The assay can detect recent HIV infection reliably in groups of testers. The test is for surveillance purposes only and results are not returned to patient or physician. Results are reported as either "recent" (infection likely within the previous six months), or "long standing" (infection likely to have occurred more than six months ago).

In order to calculate incidence rates that can be inferred to the general population, testing history information needs to be collected from the patient. A few simple questions are asked regarding reasons for testing, any previous HIV test dates and results, and antiretroviral medication use during the six months preceding the positive test.

Michigan is one of thirty-four sites across the nation in various stages of implementing STARHS. Presently, testing is conducted on eligible sera from three major laboratories, and testing history questionnaires are forwarded to providers for clients to complete at their next visit. The goal is to include testing and questionnaires on all newly reported HIV cases in Michigan.

For further information, please contact the HIV Incidence Surveillance Coordinator, Marianne O'Connor at (313) 876-0854 or oconnormf@michigan.gov.

Position Changes

Janice Bach has been appointed manager of the Public Health Genomics Unit in the Bureau of Epidemiology. Bach has 26 years of experience at the Michigan Department of Community Health in clinical and public health applications of human genetics and genomics across the life cycle. She will continue to provide leadership, guidance, direction and management to the genomics program.

Brad Carlson has been appointed the Surveillance System Coordinator for the Surveillance Section. He is responsible for the coordination of the Michigan Disease Surveillance System. Carlson received his Master of Public Health from the University of Michigan. He has been with MDCH since 1998 when he started as an epidemiologist in HIV/AIDS surveillance prior to moving to the bioterrorism preparedness program in January 2000. Carlson was part of the starting crew in the Surveillance Systems Section and has been there since.

Following the retirement of Doug Paterson in January, **Gary M. Kirk,** formerly the acting director of the Division of Immunization, was named acting director of the Bureau of Family, Maternal and Child Health. Subsequently, **Bob Swanson** was named acting director of the Division of Immunization.

Recent Presentations

The following Bureau of Epidemiology employees presented at the National Birth Defects Prevention Network 9th Annual Meeting on January 30-February 1, 2006, in Washington, D.C.

Rupali Patel, Glenn Copeland, Yasmina Bouraoui, **Joan Ehrhardt,** and Erin Estrada presented the poster *Collaboration between Birth Defects Registry and Early Hearing Detection and Intervention program: Better case identification, reporting and referral services, Michigan 1997-2003 Data.*

Rupali Patel, Violanda Grigorescu, and **Glenn Copeland** presented the poster *Multiple births and the risk for birth defects in Michigan 1998-2002, Michigan Birth Defects Registry.*

Nelda Mercer, **Jane Simmermon, Janice Bach,** and Srimathi Kannan (received special recognition) presented the poster *Survey of Dietetic and Nursing Professionals in Michigan Reveals a Need for Continuing Education on the Role of Folic Acid in Preventing Neural Tube Defects.*

Won Silva, Glenn Copeland, Phil Chvojka, and Cheryl Lauber presented the poster *Birth Defects Among Children Born to Women Admitted to Substance Abuse Treatment Program for Alcohol Abuse in Detroit and Wayne County.*

The following Bureau of Epidemiology employees presented at the 11th Annual Maternal and Child Health Epidemiology Conference on December 7-9, 2005, in Miami, FL.

Violanda Grigorescu presented *Neonatal Intensive Care Unit (NICU) utilization and costs associated with preterm births in Michigan.*

Cassandre Larrieux presented *Postneonatal infant mortality among Medicaid WIC and Non-WIC participants in Michigan.* She also presented *Effect of WIC participation on LBW infants among Medicaid participants in Michigan* (this talk was also presented at the MDCH Epidemiology Seminar Series on March 16).

Rupali Patel presented *Binge drinking and pregnancy intention: 2001-2002 Michigan Pregnancy Risk Assessment Monitoring System (PRAMS).*

Rupali Patel, Violanda Grigorescu, and **Glenn Copeland** presented a poster titled *Multiple births and the risk for birth defects in Michigan 1998-2002, Michigan Birth Defects Registry.*

Michael Paustian presented *Early Medicaid dental utilization in a Michigan birth cohort* and also presented *Geographic distribution of CSHCS and their providers.*

The following Bureau of Epidemiology employees presented to genetic counseling students of the University of Michigan Department of Human Genetics Genetic Counseling Program for a professional development seminar on March 17, 2006, in Ann Arbor:

Deb Duquette presented on Genomics in Public Health.

Joan Ehrhardt gave an overview of the MDCH Birth Defects Program, from the Michigan Birth Defects Registry to Surveillance, Prevention and Follow-up. This topic was also presented to genetic counseling students at Wayne State University on March 7, 2006.

The following Bureau of Epidemiology employees presented at the MDCH Epidemiology Seminar Series on February 16, 2006:

Mary-Grace Brandt presented *VARHS: Variant Atypical Resistant HIV Surveillance in Michigan.*

Marianne O'Connor presented *STARHS: HIV Incidence Surveillance in Michigan.*

Additional presentations by Bureau of Epidemiology employees included:

Mark Caulder, Christy Avery, Sarah Raup, Stephen Cohle, Patricia Peyser, and Michael Lehmann presented a poster titled *Sudden Coronary Death in the Young: Kent County, Michigan, 1990-2002* at the 46th Annual Conference on Cardiovascular Disease Epidemiology and Prevention (American Heart Association), in Phoenix, AZ, on March 2-5, 2006.

Mark Caulder gave a presentation *Introduction to Genomics: Public Health Perspective* on January 31, 2006, for the Molecular Epidemiology Seminar Series of the Michigan State University Department of Epidemiology.

Michelle L. Cook gave two oral presentations at the 2006 Annual BRFSS Conference in Cathedral City, CA, on March 21, 2006: 1) *Demographic Characteristics of the Respondents Who Skipped the 2005 Intimate Partner and Sexual Violence Modules in Michigan* and 2) *Michigan Asthma Call-Back Survey.* Cook also presented two posters at this conference: 1) *Binge Drinking in Michigan* and 2) *Family Health History Questions in the Michigan BRFS.*

Erik Janus presented a lecture *The World of Chemical Weapons: History and Basic Awareness* on January 7, 2006, as part of pre-deployment training for the University of Michigan School of Public Health "Public Health Action Support Team." This team is headed to the Gulf Region to assist in recovery efforts.

Erik Janus presented a lecture *Chemical Events in Michigan: Planning and Response at the Michigan Department of Community Health* on January 25, 2006, at the 16th Annual Northern Michigan Waterways Hazardous Material Spill (NOSPILL) Conference in Traverse City.

Carla Marten presented *Pandemic Influenza: Epidemiology, History, Preparedness and WHO Stages* at the St. Clair County Influenza Symposium in November 2005,

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New Employees

Michelle Bruneau was recently hired through the Michigan Public Health Institute, as a Program Assistant for the Chemical Terrorism and Bioterrorism groups within the Environmental and Occupational Epidemiology Division and for the Surveillance Systems Section within the Communicable Disease division. Bruneau has a bachelor of arts degree with a language arts major and a German minor from Hope College. She previously worked at Smalley Investments in Lansing, MI and as a Publicity Assistant and Tour Publicist at Warner Bros. Records in New York City.

Kristine Brunst recently joined the newborn screening follow-up program. Brunst most recently worked at the Michigan Department of Transportation, Office of Commission Audits. She has also worked for the Departments of Career Development, Agriculture and Corrections. Brunst attained her Associates Degree in radiology in 1994 and has experience in taking x-rays, transcribing dictation into reports for radiologists, and performing electrocardiograms.

Andrea Howard is a contract employee with Southeastern Michigan Health Association recently joining the Lead Hazard Remediation Program as a certification assistant. She has worked in various facets throughout the Department of Community Health, including the Surgeon General's office, as well as the Deputy Public Health Director's office and most recently, the Newborn Screening Program. Howard studied nutrition with a minor in music while attending the University of Central Oklahoma.

Paula Jager recently joined the Communicable Disease Division as the division secretary. Jager was previously employed at the VA Medical System in Colorado, and prior to that, she was an executive secretary with the Michigan Department of Labor and Economic Growth.

Renee McCoy, PhD, has accepted the HIV Behavioral Surveillance Coordinator position. She is a native Detroiter and comes to the HIV/STD and Bloodborne Infections Surveillance Section with over 20 years of experience in HIV/AIDS. McCoy has worked for the Section in the past as a consultant on previous behavioral surveillance projects. The dissertation topic for her medical anthropology PhD was "African American Men who have sex with men: meanings, identity and risk".

Carol Somers recently joined the Surveillance Section as the new Early Warning Infectious Disease Surveillance International Liaison. Previously, Somers was employed at the Tri-County Citizen, a weekly newspaper serving the Chesaning area where she served as the news editor as well as staff writer. Somers has also worked at Clinton Memorial Hospital as a communications assistant and newsletter coordinator.

Steve Weldert is the new toxicologist in the Toxicology and Response Section. Weldert has a bachelor's degree in agricultural science from the University of Illinois and a Master of Science in environmental toxicology from the University of Cincinnati. Weldert has an extensive background in human health risk assessment and indoor air quality. He will be splitting his time between the methamphetamine program and health consultations.

Courtney La Roue Wisinski was recently hired by the Lead and Healthy Homes Section as the project manager of the Healthy Homes University. Wisinski is coordinating a grant to reduce asthma, allergy triggers and injury hazards within homes. She worked as an environmental consultant for nearly eight years prior to joining the Michigan Department of Community Health. Wisinski earned a degree in environmental science from Michigan State University.

"Recent Presentations"

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and at the Oakland County Health Division Influenza Symposia in March 2006.

Mary Teachout gave two talks about public health genomics, concentrating on the evolution of newborn screening and genetic testing for chronic disease, for Advanced Placement biology students at Portage Northern High School and Vicksburg High School on March 20, 2006.

Mary Teachout has presented the talk *Make Your Family Health History a Tradition* to several Michigan genealogy groups over the past several months. This presentation involves incorporating health histories into genealogy, and will be continuing throughout the summer.

Dawn Sievert presented *Enhanced Influenza Surveillance Through Syndromic Systems* at the Michigan Premier Public Health Conference in October 2005, the St. Clair County Influenza Symposium in November 2005, and the Oakland County Health Division Influenza Symposia in March 2006.

Dawn Sievert presented *Fifth Case of Vancomycin-Resistant Staphylococcus aureus in United States and Third for Michigan* at the 16th Annual Scientific Meeting of the Society for Healthcare Epidemiology of America (SHEA) in March 2006.

Dawn Sievert presented *Antimicrobial Resistance in Michigan: Identify, Define, Respond* at the 15th Annual Information Integration Conference in March 2006.

Melinda Wilkins and **Jim Collins** presented at the National Preparedness Summit on February 22nd – 24th, 2006.

Bureau of Epidemiology Highlighted in Detroit News Article

On February 27, 2006, an article about the State's flu response was featured in the Detroit News.

The article reviewed the collaboration between the Michigan Departments of Community Health, Agriculture, Natural Resources and the Federal Centers for Disease Control and Prevention. Topics included how these agencies were working to increase surveillance and communication to detect avian flu virus in birds. Also discussed were these agencies preparations for possible spread of bird cases to humans.

Specifically quoted were Jim Collins, Surveillance Systems Section Manager and Dr. Eden Wells, who coordinates the pandemic flu response at the Department of Community Health.

Please read the complete article at http://www.detnews.com/apps/pbcs.dll/article?AID=/20030227/LIFESTYLE03602270354&SearchID=73237149309676.

Burden of Oral Disease in Michigan, 2005

By: Michael Paustian, M.S.

In June 2005, the Michigan Department of Community Health released its first summary of the burden of oral disease in Michigan. The goal of this report was to summarize the current status of oral health in Michigan, identify disparities in disease and access to oral healthcare, and to compare oral health indicators between Michigan and the rest of the nation. The document is intended to provide a valuable resource for the public, clinicians, researchers, public health professionals, and policy makers to increase awareness, guide prevention and treatment efforts, and enhance the health quality of Michigan residents.

The report integrates information from several data sources, including Michigan's oral health surveillance system. The report addresses oral diseases spanning all age groups, from early childhood caries to oral cancers. In addition, the document details Michigan's capacity to prevent and treat oral disease. This includes information on the utilization of dental services (such as Healthy Kids Dental [see figure]), access to fluoridated water, and the distribution of dental providers.

Additional improvements in oral health surveillance will help to further expand the scope of this document and increase knowledge and awareness of oral diseases in Michigan.

The Burden of Oral Disease in Michigan, 2005, is publicly available at: http://www.michigan.gov/documents/OHBurdenDraft_135603_7.pdf.

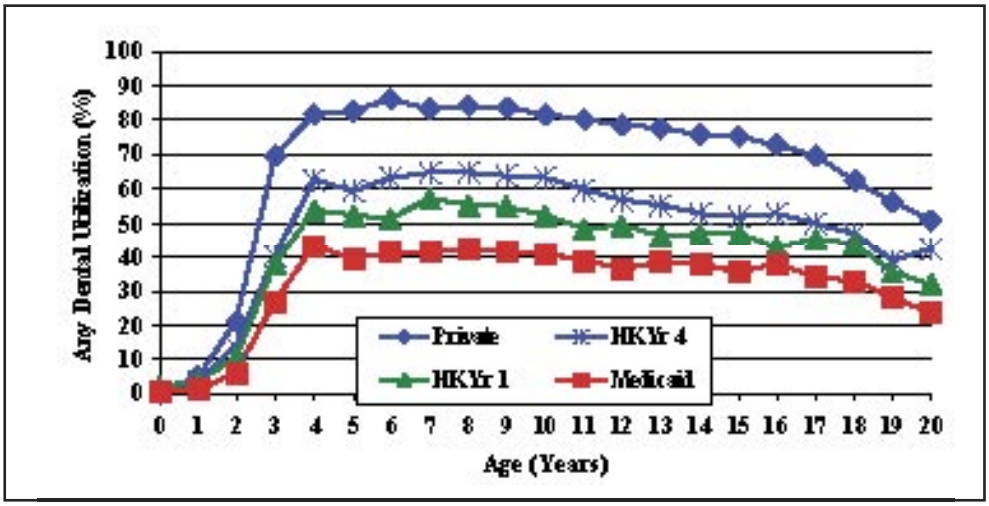

Figure: Healthy Kids Dental annual utilization by age, 12 month enrollment beginning Oct 2003 to Sept 2004

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