

# Communicable Disease Newsletter

## In this edition:



**MRSA**



**Protected?**



**Getting Attention...**

FALL 2007

VOLUME 7  
Issue 3



## MRSA—Methicillin-Resistant Staphylococcus



MRSA is a type of bacteria that causes infections, ranging from minor skin infections such as bumps or boils to serious infections like pneumonia. However, MRSA infections can not be treated with antibiotics commonly used to treat non-resistant infections.

MRSA usually spreads from person to person through hands or close, skin-to-skin contact. Drainage from an infected wound can spread MRSA to other parts of the body or to other persons. We are all at risk for getting a MRSA infection, because MRSA can live on the skin and survive on some surfaces for prolonged periods of time. MRSA is diagnosed by a healthcare provider by taking a culture of the infected site.

MRSA is not always treated with antibiotics. Sometimes, a health care provider only needs to open and drain the wound. The wound should be cleaned often and kept covered to prevent spreading the infection. Remember that antibiotics are “antibacterial,” they do not work on viral infections, like colds or flu. It is very important to take antibiotics exactly as prescribed. Don’t save them or share them with other people.

In order to prevent getting or spreading MRSA there are several steps you can take.

- ◆ Wash hands often with soap and water or use an alcohol-based hand sanitizer, especially after touching wounds or bandages.
- ◆ Do not share personal items, like towels, bar soap, wash cloths, razors, or clothing, even among family members
- ◆ Seek medical care immediately at the first signs of infection, including: redness, swelling, pain, warmth, and draining pus.
- ◆ Keep wounds clean and covered with a dry bandage.
- ◆ Wash your clothes, towels and sheets in water with laundry detergent at the hottest suitable temperature, and dry in a dryer at the hottest suitable temperature.
- ◆ Clean and disinfect high-touch or soiled surfaces such as door knobs, and phones frequently.

For more information about MRSA or other communicable disease please contact the Saginaw County Department of Public Health at 989-758-3885.

## Saginaw County Head Lice Submitted For International Research Project

During the month of August, 2007 the Saginaw County Department of Public Health participated in an international study related to human head lice. Samples of live head lice were requested from Dr. John Clark, a professor in the Animal Biotechnology and Biomedical Sciences program at the University of Massachusetts at Amherst. The DNA of the lice is being studied to determine if there is actually resistance occurring with use of head lice shampoo treatments. The samples sent from SCDPH were from children who had previously treated with a pediculocidal product with subsequent findings of live lice. This has been a common finding, with many people applying multiple treatments before coming in to the health department for assistance. We had been seeing a great increase in treatment failures and families who had been using lice treatments repeatedly and not really getting to the source of the problem.

In December, 2006 the health department stopped distributing head lice shampoo to those affected by head lice. We continue to offer free screening, education, and lice combs. Hopefully, the University of Massachusetts research will bring new insight into treatment protocols.

### There are three things that typically lead to a reinfestation of head lice:

**The infested person’s own head-** You MUST remove all lice and nits, “dead or alive” to prevent reinfestation. No pediculocidal product on the market today is 100% effective against head lice and nits. If even a few viable nits are left on the hair, a new crop of lice can hatch and reinfestation can occur.

**Contact with an undetected source-** This is usually another family member or playmate. Remember that live lice are spread from head-to-head contact or through infected object-to-head contact. They die within two days if off a human head.

**Return to source of infestation-** A nit on a hair can survive and hatch within 10-14 days. Environmental cleaning (washing linens in hot water, cleaning combs and brushes, vacuuming carpet, furniture, and car seats) is important for wherever the infected person has been living or visiting. This includes recent visits to friends, relatives, school, work, and any other place the infected person has been. You must inform others about the head lice; keeping it a secret often hurts everyone.

For more information on head lice, please visit our agency website at [www.saginawpublichealth.org](http://www.saginawpublichealth.org) or contact the Community Resource Nurse at (989)758-3675.

# Immunizations-

## Protecting the Healthcare Worker



“Hepatitis B (HBV) is perhaps the most hazardous infection for HCW’s. The risk of acquiring (HBV) is largely dependent on the frequency of exposure to blood or body fluids containing blood.”

Maintaining immunity is vitally important for the prevention of disease and infection of the health-care worker (HCW). Because of contact with patients and potentially infectious materials, it is prudent to decrease the risk of exposure to and possible transmission of vaccine-preventable diseases. HCW’s encompass a variety of staff, including physicians, nurses, laboratory technicians, medical and nursing students, medical emergency personnel, volunteers, and administrative staff. HCW’s are found in many areas, including hospitals, offices, nursing homes, schools, laboratories, and often first at the site of an accident. HCW’s are considered to be at significant risk for acquiring or transmitting such diseases as hepatitis B, influenza, measles, mumps, rubella, and varicella all of which are vaccine-preventable.

Hepatitis B (HBV) is perhaps the most hazardous infection for HCW’s. The risk of acquiring (HBV) is largely dependent on the frequency of exposure to blood or body fluids containing blood. In 1987, the Departments of Labor and Health and Human Services issued a joint Advisory Note which prompted the Federal Standard issued in 1991 under the Occupational Safety and Health Act. This standard mandates that “hepatitis B vaccine be made available at the employer’s expense to all HCW’s who are occupationally exposed to blood or potentially infectious materials”. It is also recommended that HCW’s have postvaccination testing for antibody response to hepatitis B surface antigen (anti-HBs), generally done within 1-2 months of completing the series of 3 doses. Anti-HBs testing is not recommended routinely for previously vaccinated HCW’s who were not tested 1-2 months following their original vaccine series.

Influenza vaccination should be given to all health care personnel annually. Because the influenza virus can change from year to year, it is necessary to receive influenza vaccination on an annual basis. The influenza vaccine protects against the three influenza viruses thought to be most prominent in any given season. A person infected with influenza can pass the virus along to others up to 2 days before experiencing the symptoms themselves. Studies have shown that it is often a HCW who brings the influenza virus into an institution, infecting patients as well as co-workers. The influenza vaccine is available as a single injection, or as a nasal mist (with age and health restrictions).

All HCW’s should be immune to measles, mumps, and rubella. Those HCW’s born in 1957 or later should have documentation of a physician-diagnosed measles or mumps disease; or laboratory evidence of measles, mumps, and rubella immunity (“titer”); or documentation of two doses of age-appropriate measles, mumps, and rubella vaccinations (administered on or after the first birthday, and at least 28 days later). For those HCW’s born before 1957, healthcare facilities should consider recommending a dose of MMR vaccine if there is no history of physician-diagnosed disease or laboratory evidence of immunity.

Evidence of immunity to chickenpox (Varicella) includes documentation of 2 doses of Varicella vaccine given at least 28 days apart, history of varicella or herpes zoster based on physician diagnosis, laboratory evidence of immunity, or laboratory confirmation of disease. It is highly recommended that all HCW’s be immune to chickenpox.

All adults (not just HCW’s) who have completed the primary series of a tetanus/diphtheria containing vaccine (DPT, DTaP, DT, or Td) should receive Td boosters every 10 years. HCW’s under the age of 65 should receive one dose of Tdap (Tetanus, diphtheria, and pertussis) vaccine. Pertussis (whooping cough) was once thought of as a childhood disease but is affecting many adults. Tdap is a vaccine highly recommended to all adults who have contact with infants under the age of 12 months.

The meningitis vaccine is recommended for microbiologists working closely with the bacteria *N. meningitidis*. Routine exposure to this germ increases the risk of infection.

Many HCW’s voice concern regarding exposure to disease via contact with fecal material. The risk of a HCW acquiring a vaccine-preventable disease from exposure to stool is theoretically small, therefore the Centers of Disease Control and Prevention (CDC) does not routinely recommend Hepatitis A, typhoid, or polio vaccination of HCW’s who may have on-the-job exposure to fecal material.

Health Care Providers are known to put the health and welfare of others before themselves. Immunization is one way to not only protect your patients and co-workers, but also protect you and your family!

#### References:

1. [www.immunize.org](http://www.immunize.org)
2. “Updated U.S. Public Health Service Guidelines for the Management of Occupational Exposures to HBV, HCV, and HIV and Recommendations for Postexposure Prophylaxis”, MMWR, June 29, 2001, Vol. 50, RR-11.
2. [www.cdc.gov/nip/publications](http://www.cdc.gov/nip/publications)

This newsletter is provided to all Saginaw County healthcare providers, hospitals, schools, local colleges, universities, urgent care facilities, and local media.

If you would like to get this newsletter by e-mail please submit your e-mail address to: [sborsenik@saginawcounty.com](mailto:sborsenik@saginawcounty.com)

Articles for this newsletter are written and researched by the following members of the Personal and Preventive Health Services Division: Kimberly Newman, R.N., B.S.N., Susan Gottlieb, R.N., Jayne Heringhausen, R.N., B.S.N., Tawnya Simon, R.N., B.S.N., M.S.A., and John Winden, R.N., B.S.N.

Please visit our website at [www.saginawpublichealth.org](http://www.saginawpublichealth.org) where our communicable disease pamphlets are available.

**COMMUNICABLE DISEASE  
REPORTED FOR SAGINAW COUNTY  
4/1/2007 – 6/30/2007**

Disease	No. Reported
ANIMAL BITE	7
CAMPYLOBACTER	2
CHLAMYDIA (Genital)	239
FLU-LIKE DISEASE	3482
GIARDIASIS	2
GONORRHEA	88
HIV	5
HEPATITIS B CHRONIC	6
HEPATITIS C CHRONIC	52
HISTOPLASMOSIS	1
INFLUENZA	1
LEGIONELLOSIS	1
MENINGITIS ASEPTIC	8
SALMONELLOSIS	4

**COMMUNICABLE DISEASE YTD  
REPORTED FOR SAGINAW COUNTY  
1/1/2007 – 6/30/2007**

Disease	No. Reported
ANIMAL BITE	8
CAMPYLOBACTER	2
CHICKENPOX (Varicella)	2
CHLAMYDIA (Genital)	484
CRYPTOCOCCOSIS	1
FLU-LIKE DISEASE	13727
GIARDIASIS	5
GONORRHEA	177
HIV	6
HEPATITIS B CHRONIC	10
HEPATITIS C CHRONIC	97
HISTOPLASMOSIS	1
INFLUENZA	1
LEGIONELLOSIS	1
MENINGITIS ASEPTIC	13
SALMONELLOSIS	4

Saginaw County Department of Public Health  
1600 N. Michigan Ave.  
Saginaw, MI 48602