Communicable Disease Newsletter

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HEAD LICE….A COMMUNITY PROBLEM

Head lice, also known as pediculosis capitis, may affect people of any age, but most frequently those between 3 and 12 years of age are affected in the United States. Traditional thought leads one to believe that head lice are associated with low socioeconomic status, poor hygiene, long hair, and/or the frequency with which one washes or brushes the hair. Proven science completely rejects these notions, and supports the thought that head lice infestations are not dependent on these variables at all, but have the ability to potentially affect all population groups equally. In Saginaw County alone, 428 cases of head lice were reported last year. The head louse transmits no disease but can be socially stigmatizing and does place great burden upon the patient, the parent, and on society in general as the annual direct and indirect costs associated with head lice infestations in the United States are estimated to be in the hundreds of millions of dollars.

Head lice are commonly viewed as being 1-2 mm long, white-to-gray in color, and have an average life-span of about 30 days. The louse utilizes its mouthparts to feed on the blood of the human host every 4-6 hours. When the louse feeds, it injects saliva into the host which leads to an inflammatory reaction and causes itching. The female head louse lays eggs at night and may produce as many as 10 eggs per day. Most times the eggs are deposited at the base of the hair shaft within 1-2 mm of the scalp. The egg is called a nit and is attached to the hair shaft with an insoluble cement. The nit will hatch within an average time frame of 8-10 days.

Transmission of head lice occurs most frequently by way of head-to-head contact, but head lice may also be transmitted more indirectly by way of shared items such as brushes, combs, hair accessories, bedding, helmets, and headgear. Treatment for head lice is recommended for individuals diagnosed with a head lice infestation. All close contacts should be examined and those with evidence of infection should also be treated. Treatment should be completed concurrently so to minimize potential re-infestation. Many different types of treatments are available for head lice. Some treatments are over-the-counter and some are given by way of prescription. Whatever method is used, it is important that the instructions for use are followed closely. Other non-medicated treatments such as mayonnaise or olive oil may be used as these treatments work by suffocating the louse. In conjunction with either a medicated treatment or a non-medicated treatment should be some type of mechanical removal. A metal nit comb is used to remove nits from the hair, and combing should be done on a daily basis and continued for a 3 week period. Along with treating the infected person, care must be taken to ensure that all lice are removed from any potential transmission source. Washable clothing and linens should be laundered with a minimum water temperature of 50 degrees Celsius and/or dried on a hot cycle for at least 40 minutes. Items that cannot be washed such as stuffed animals should be thoroughly vacuumed.

References: Martinez-Diaz, G., & Mancini, A. (2010). CNE series. Head Lice: Diagnosis and Therapy.

Dermatology Nursing, 22(4), 2-8.

PNEUMONIA

Pneumonia is an infection of the lungs that is caused by bacteria, viruses, and rarely fungi. In the US, the most common bacterial cause of pneumonia is *Streptococcus pneumoniae*, also known as pneumococcus. The most common viral causes are influenza and respiratory syncytial viruses. Pneumonia can cause mild to severe illness in people of all ages - adults 65 years of age and older, children younger than 5 years of age, smokers and people with asthma are more susceptible to the condition. Globally, pneumonia causes more deaths than any other infectious disease.

Signs/Symptoms of Illness

Illness may be manifested by coughing, fever, fatigue, nausea, vomiting, rapid breathing and shortness of breath, chills or chest pain. In addition, infection with pneumococcus can cause other conditions such as meningitis, otitis media (middle ear infection) and blood stream infections (bacteremia), any of which may be characterized by a combination of the signs and symptoms listed above.

Transmission

The bacteria that cause pneumonia are normally found in the nose, throat, mouth, sinuses and environment. The disease-causing bacteria and viruses are spread by coughing, sneezing, or contact with respiratory secretions. Disease can be contracted from people who are infected, regardless of whether they display signs/symptoms of illness. When the bacteria and viruses spread to the lungs for unknown reasons, pneumonia can develop.

Prevention

Pneumonia can be prevented by good hygiene habits such as handwashing and coughing or sneezing into your elbow, sleeve, or a tissue and discarding it immediately. In addition, two vaccines are licensed for protection against pneumococcal disease - pneumococcal conjugate vaccine (Prevnar 13) and pneumococcal polysaccharide vaccine (Pneumovax). The vaccines have shown promise in preventing severe pneumococcal disease, hospitalization and even death.

For more information on which vaccine may be appropriate for children and adults, consult your primary care provider or the Saginaw County Department of Public Health at (989) 758-3840 or visit www.saginawpublichealth.org

References

Centers for Disease Control and Prevention. *Epidemiology and Prevention of Vaccine-Preventable Diseases*. Atkinson, W., Wolfe, S., Hamborsky J., eds. 12th ed. Washington DC: Public Health Foundation, 2011.

Centers for Disease Control (CDC). http://www.cdc.gov/Features/Pneumonia

INFLUENZA

***Influenza* (flu)** is a contagious respiratory illness caused by various influenza viruses. Most often, the "flu" is spread by direct contact with droplets transferred from one person to another through coughing, sneezing and talking. Flu viruses can also be spread by touching surfaces or objects with flu virus on them and then touching one's own mouth, eyes, or nose. The flu can cause mild to severe illness, and even death. Each year in the United States, up to 20% of the population is infected with influenza accounting for greater than 200,000 hospitalizations and 3,000 – 49,000 related deaths.

Signs & Symptoms

It is possible for a sick individual to infect others before showing signs and symptoms of illness. Healthy adults may be able to infect others beginning 2 days **before** symptoms develop and up to 5-7 days **after** becoming ill. Adults and children with weakened immune systems may be able to infect others for an even longer period of time. Signs and symptoms of flu infection include:

- fever (not everyone with flu will have a fever)
- chills
- dry cough
- sore throat
- runny or stuffy nose
- muscle or body aches
- headaches
- fatigue (very tired)
- vomiting and diarrhea (this is more common in children than adults)

Cold vs. Flu

It is important not to confuse a common cold with the flu, although differentiating between the two may be difficult. In general, common colds are usually milder than the flu. Flu symptoms such as fever, body aches, extreme tiredness, and dry cough are usually more common and intense. Common colds generally do not result in hospitalization or cause serious health problems such as pneumonia or bacterial infections. Due to the fact that colds and flu share many symptoms, it can be difficult (or even impossible) to tell the difference based on symptoms alone. It is very important to contact your healthcare provider at the onset of illness.

Prevention

One of the best ways to prevent the flu is to receive a flu vaccination. During the 2009-2010 flu season, the 2009 H1N1 virus spread worldwide causing the first flu pandemic in more than 40 years. Just as in prior years, the 2012-2013 flu vaccine will offer protection against 3 different flu viruses, including 2009 H1N1. The remaining 2 flu strains contained in this year's vaccine are different from those used in the previous 2 flu seasons. Due to the varying composition of the vaccine each year, and declining immunity throughout the season, annual vaccination using the current vaccine is required.

There are 2 different types of flu vaccine available:

The "flu shot" is an inactivated (dead) vaccine and is approved for use in people 6 months of age and older, including healthy people, people with chronic medical conditions and pregnant women

The "nasal spray" is a live, weakened vaccine and is approved for use in people 2-49 years of age in the absence of pregnancy and chronic medical conditions

Full antibody protection develops against influenza virus infections about two weeks after vaccination. It is important to remember that flu vaccination will not cause flu infection or stop any infectious process already in progress.

Yearly flu vaccination should begin in September, or as soon as vaccine is available, and continue throughout the flu season. The flu season can begin early as October with seasonal flu activity peaking in January or later. You should contact your healthcare provider to receive the flu vaccine as soon as it becomes available. Flu vaccine is also available at the Saginaw County Department of Public Health for individuals 6 months of age and older. For more information call (989) 758-3840 or visit www.saginawpublichealth.org.

COMMUNICABLE DISEASE
REPORTED FOR SAGINAW COUNTY
FOR THE QUARTER
07/1/2012 – 09/30/2012

Disease	No. Reported
ANIMAL BITE	15
CAMPYLOBACTER	2
CHLAMYDIA (Genital)	278
CRYPTOSPORIDIOSIS	3
FLU-LIKE DISEASE	**639**
GASTROINTESTINAL ILLNESS	257
GIARDIASIS	3
GONORRHEA	52
HEAD LICE	**62**
HEPATITIS A (ACUTE)	1
HEPATITIS B CHRONIC	5
HEPATITIS C ACUTE	2
HEPATITIS C CHRONIC	25
INFLUENZA	**1**
LEGIONELLOSIS	1
MENINGITIS-ASEPTIC	2
MENINGITIS-BACTERIAL	1
MYCOBACTERIUM-OTHER	4
SALMONELLOSIS	8
STREP THROAT	147
SHIGA TOXIN-PRODUCING ESCHERICHIA COLI	3
SYPHILIS	1
VZ INFECTION, UNSPECIFIED	1

COMMUNICABLE DISEASE YTD
REPORTED FOR SAGINAW COUNTY
1/1/2012– 09/30/12

Disease	No. Reported
ANIMAL BITE	49
CAMPYLOBACTER	6
CHLAMYDIA (Genital)	914
CRYPTOSPORIDIOSIS	9
FLU LIKE DISEASE	**8229**
GASTROINTESTINAL ILLNESS	3768
GIARDIASIS	8
GONORRHEA	172
GUILLAIN-BARRE SYNDROME	1
HEAD LICE	**340**
HEMOLYTIC UREMIC SYNDROME	1
HEPATITIS A	3
HEPATITIS B ACUTE	4
HEPATITIS B CHRONIC	10
HEPATITIS C ACUTE	14
HEPATITIS C CHRONIC	71
HISTOPLASMOSIS	1
INFLUENZA	**124**
LEGIONELLOSIS	5
MENINGITIS-ASEPTIC	3
MENINGITIS-BACTERIAL	3
MYCOBACTERIUM-OTHER	5
SALMONELLOSIS	16
SHIGA TOXIN-PRODUCING ESCHERICHIA COLI	3
STREP THROAT	1128
STREPTOCOCCAL DIS. INV. GROUP A	1
STREPTOCOCCAL TOXIC SHOCK	1
SYPHILIS	3
VZ INFECTION, UNSPECIFIED	7

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Please visit our website at www.saginawpublichealth.org where our communicable disease pamphlets are available.

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