

Communicable Diseases

May-June 2010

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Briefs

- ◆ About one out of 10 children with measles also gets an ear infection.
- ◆ Up to one out of 20 gets pneumonia.
- ◆ About one out of 1,000 gets encephalitis.
- ◆ One or 2 out of 1,000 die.
- ◆ While measles is almost gone from the U. S, it still kills nearly 200,000 people each year around the world.
- ◆ Measles can also make a pregnant woman have a miscarriage or give birth prematurely.

Source: Centers for Disease Control and Prevention (CDC)

Monthly Newsletter For Joplin City and Jasper County

Measles Disease

Measles is a viral respiratory disease, also called rubeola. Measles virus normally grows in the cells that line the back of the throat and lungs.



Skin of a patient after 3 days of measles infection: CDC

Signs and symptoms

Symptoms generally begin about 7 to 14 days after a person is infected, and include:

- ◆ Blotchy rash
- ◆ Fever
- ◆ Cough
- ◆ Runny nose
- ◆ Red, watery eyes (conjunctivitis)
- ◆ Feeling run down, achy (malaise)
- ◆ Tiny white spots with bluish-white centers found inside the mouth.

A typical case of measles begins with mild to moderate fever, cough, runny nose, red eyes, and sore throat.

Two or 3 days after symptoms begin, tiny white spots may appear inside the mouth. Persons with measles are considered contagious from 1 to 2 days prior to onset of symptoms (about 4 days before rash onset) to 4 days after the appearance of the rash. Three to 5 days after



Eyes of a child with measles, Source: CDC

the reddish-brown rash appears and usually begins on a person's face at the hairline and spreads downward to the neck, trunk, arms, legs, and feet. When the rash appears, a person's fever may spike to more than 104 degrees Fahrenheit. The fever subsides and the rash fades after a few days.

Complications

About one out of 10 children with measles also gets an ear infection, and up to one out of 20 gets pneumonia. About one out of 1,000 gets encephalitis, and one or 2 out of 1,000 die. While measles is almost gone from the U. S, it still kills nearly 200,000 people each year around the world. Measles can also make a pregnant woman have a miscarriage or give birth prematurely.

Transmission

The disease spreads through the air by breathing, coughing or sneezing. It is so contagious that any child exposed to it and is not immune will probably get the disease.

Measles Incidence

Measles is very rare in countries and regions of the world that have high vaccination coverage. In North and South America, Finland, and some other areas, endemic measles transmission is considered to have been interrupted through vaccination. There are still sporadic cases of measles in the U.S. because visitors from other countries or U.S. citizens traveling abroad can become infected before or during travel and spread the infection to unvaccinated persons. Worldwide, there are estimated to be 10 million cases and 197,000 deaths each year.

Source: CDC

Measles in Southwest Missouri

On May 10, 2010, the Missouri Department of Health and Senior Services reported 2 laboratory-confirmed cases of measles among residents of southwestern Missouri. The 2 cases had recently travelled abroad. One had not received a measles vaccine, and the other's vaccination status had not been confirmed.

Patients presenting with signs/symptoms suggestive of measles, should immediately be isolated and appropriately evaluated by a health care professional. Health care providers should not rule out the possibility of measles based on a history of measles immunization. Any individual suspected of having measles should immediately be reported to the local health agency or to DHSS at 800/392-0272.

To prevent measles, children (and some adults) should be vaccinated with the measles, mumps, and rubella (MMR) vaccine. Two doses are needed for complete protection. The "Recommended Immunization Schedules" can be obtained from the CDC web site at: <http://www.cdc.gov/vaccines/recs/schedules/default.htm>.

Source: Missouri DHSS

Healthy Swimming: Protection Against Recreational Water Illnesses (RWIs)

What are RWIs?

Recreational water illnesses (RWIs) are caused by germs



Source: CDC

spread by swallowing, breathing in the mists or aerosols of, or having contact with the contaminated water from swimming pools, water parks, hot tubs, interactive fountains, water play areas,

lakes, rivers, springs, ponds, or oceans. Diarrhea is the most common RWI, and it is often caused by germs like *Crypto* (short for *Cryptosporidium*), *Giardia*, norovirus, *Shigella*, and *E. coli* O157:H7. Other common RWIs include skin, ear, eye, respiratory, neurologic, and wound infections. Children, pregnant women, as well as people with weakened immune systems are most at risk for RWIs.

Healthy Swimming behaviors will help protect you and your kids from recreational water illnesses (RWIs) and help stop germs from getting in the pool in the first place.

Three Steps for All Swimmers

Keep germs from causing recreational water illnesses (RWIs):

- ◆ Don't swim if you have diarrhea. You can spread germs in the water and make other people sick.
- ◆ Don't swallow the pool water. Avoid getting water in your mouth.
- ◆ Practice good hygiene. Shower with soap before swimming and wash your hands after using the toilet or changing diapers. Germs on

your body end up in the water.

Three Steps for Parents of Young Kids

Keep germs out of the pool:

- ◆ Take your kids on bathroom breaks or check diapers often. Waiting to hear "I have to go" may mean that it's too late.
- ◆ Change diapers in a bathroom or a diaper-changing area and not at poolside. Germs can spread in and around pools.
- ◆ Wash your child thoroughly (especially the rear end) with soap and water before swimming. Invisible amounts of fecal matter can end up in the pool.

Source: CDC and Missouri DHSS



Source: Missouri DHSS

Tick-Borne Illnesses Season

In the U.S., ticks are responsible for more human diseases than any other insect. Tick-borne disease is an infectious disease that can be transmitted between animals and humans. Ticks become infected with a disease-causing agent by feeding on infected mammals or birds. At least six different human tick-borne diseases have been reported in Missouri: Rocky Mountain spotted fever, ehrlichiosis, tularemia, Q-fever, Lyme or a lyme-like disease, and the southern tick-associated rash illness.

Prevention

- ◆ Walk in the center of trails to avoid overhanging brush and tall grass where ticks will wait until a suitable host brushes against the vegetation. Ticks do not jump, fall, or fly and are generally found within three feet of the ground.
- ◆ Using an insect repellent that contains DEET on your skin protects you because it interferes with ticks' ability to locate you. Another repellent called permethrin, which is used on clothing, actually kills ticks (as well as mosquitoes and chiggers).
- ◆ Once on a host, the tick will most frequently attach on or around the head, neck, underarms, and groin. Light-colored clothing helps you spot ticks more easily and tucking or even taping your pant legs into your socks helps slow them down in their quest for your skin.

Continued in page 3

Communicable Diseases Monthly Report—May 2010

Cumulative Case from January Through the End of April in Joplin and Jasper County (2009 & 2010) (Includes confirmed, probable and suspect cases)

Table 1

CONDITION / YEAR BY LPHA	JOPLIN		JASPER	
	2009	2010	2009	2010
ANIMAL BITES	80	29	58	27
CAMPYLOBACTERIOSIS	3	4	10	79
CRYPTOSPORIDIOSIS	0	1	0	0
E. COLI SHIGA TOXIN	0	1	2	0
GIARDIASIS	0	0	2	4
HAEMOPHILUS INFLUENZAE	0	0	1	0
HEPATITIS B PREGNANCY	2	1	1	0
HEPATITIS B ACUTE	5	3	1	3
HEPATITIS B CHRONIC	1	2	3	1
HEPATITIS C ACUTE	1	0	0	1
HEPATITIS C, CHRONIC	28	15	32	15
MYCOBACTERIUM OTHER THAN TB	1	1	4	0
PERTUSSIS	0	1	12	2
Q FEVER (CHRONIC)	0	0	0	0
ROCKY MOUNTAIN SPOTTED FEVER	1	2	1	0
SALMONELLOSIS	6	0	1	0
SHIGELLOSIS	0	3	0	0
TB DISEASE	1	0	0	0
TB INFECTION	10	2	17	6
VARICELLA (CHICKENPOX)	0	0	11	1

Source: Crystal Reports, MDHSS

January Through May

(See data in table 1)

Campylobacter infection in Jasper County continued to increase as of the end of May.

On the other hand, animal bites, chronic Hepatitis C, salmonella infection and tuberculosis infection in 2010, continue to be lower than those cases reported in 2009 year-to-date.

There were 11 chicken pox infections in Jasper County in 2009 while only one has been reported in 2010 year-to-date.

Tick-Borne Illnesses Season (*continued from page 2*)

Continued from page 2...

- ♦ Prompt, careful inspection and removal of ticks is an important method of preventing disease. The longer a tick is attached the greater the risk of infection. Correctly using tweezers or commercial tick removal tools is preferred. The key to using tweezers correctly is to position the tips of tweezers around the area where the tick's mouthparts enter the skin. Then use a slow, steady motion when pulling the tick a way from the skin. After removing the tick, disinfect the skin with soap and water, or other available disinfectants.

Signs and Symptoms of Tick-borne Disease

The signs and symptoms of tick-borne disease vary among individuals and differ according to the infecting agent. In general, a person should consider consulting a health care provider whenever he or she experiences a sudden high fever, severe headache, muscle or joint aches, or nausea, vomiting, or diarrhea.

Reporting Tick-borne Disease

Most tick-borne diseases, such as Rocky Mountain spotted fever, ehrlichiosis, tularemia, Q- fever, and Lyme or a lyme-like disease are reportable in Missouri. Reporting helps DHSS monitor disease trends, track unusual occurrences or clusters of diseases, and identify possible risk factors associated with diseases. If you want to know more about reporting diseases and conditions in Missouri, contact your local health agency or the Missouri Department of Health and Senior Services (DHSS).

Contacts

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UPCOMING TRAININGS AND EVENTS

- ♦ **Finding the Pulse on HIV/AIDS/STDS and Human Sexuality Education Conference – June 9 – 11, 2010**

This annual conference is designed for teachers, school nurses, prevention and care providers, administrators, health professionals, community health planners, physicians, counselors, persons from community-based organizations, members of the faith community, social workers, parents, and public health individuals. Sponsors include Region VII U.S. Department of Health and Human Services, state departments of education and health, including the Missouri DHSS, and other partners. Early-bird registration deadline is June 1. All registrations MUST be completed on-line at <http://events.ksde.org/Default.aspx?tabid=465>. To access the conference program, visit <http://www.dhss.mo.gov/AdolescentHealth/Conferences.html>. For more information, contact Jennifer Farmer at 573-751-6212 or jennifer.farmer@dhss.mo.gov.

- ♦ **National HIV Testing Day—June 27, 2010**

- ♦ **Summer 2010 MICA Training**

DHSS' Bureau of Health Informatics is offering an "Introduction to Profiles/MICA" training, as well as a newly-developed course, "Health Data Analysis". The locations for these trainings include: Jefferson City, St. Louis, Springfield, Cape Girardeau, and Liberty. These courses are hands-on and are designed to assist local public health agencies with health status monitoring and data analysis needs. You are encouraged to register as early as possible to secure your preferred location. If you have questions or need additional information regarding these courses, please contact Andrew Hunter at 573-526-0444 or at Andrew.Hunter@dhss.mo.gov

- ♦ **Registered Environmental Health Specialist (REHS) Opportunity Available**

Anyone who has met the prerequisite training and educational requirements that wants to take the REHS certification exam may have an opportunity to take it. A special site has been set up for the REHS exam at the St. Charles County Health Department for a test date on August 17 at 8:00 a.m. "If ten or more persons are recruited for the exam, the "special test site fee" will be waived by NEHA. Regular application fees and exam fees will still apply." To learn more about this opportunity contact [Ryan Tilley](mailto:Ryan.Tilley@stcharlescounty.org) at the St. Charles County Health Department, 1650 Boone's Lick Rd., St. Charles MO 63301 or telephone at 636-949-7900 ext. 4257 or Carol Newlin with NEHA at 303-756-9090 ext. 337 or cnewlin@neha.org or Heidi Shaw ext. 339. The application must be completed and sent to NEHA at least 4 to 6 weeks prior to testing.

"Those who say that something cannot be done should not interrupt those doing it"
Chinese Proverb