

Communicable Diseases

June 2011

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Monthly Newsletter

For Joplin City and Jasper County

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About Salmonellosis

Salmonellosis is more common in the summer than winter.

In the U.S., about 40,000 salmonellosis cases are reported every year.

Approximately 400 persons die each year with acute salmonellosis.

(Learn more on page 3)

Fungal Infection After the Joplin Tornado

CDC is assisting the Missouri Department of Health and Senior Services with an investigation into a number of reports of fungal skin infection in people who were injured by the tornado in Joplin.

People who had trauma resulting in an open wound that is not healing, or are experiencing continued symptoms such as worsening redness, tenderness, pain, heat in the area of the wound, or fever, should see a health care provider for evaluation.

As of June 15, 2011, none of the cases in Joplin was in people who helped with clean-up, so the risk of infection among these individuals is likely very low. It is recommended that those handling debris should wear protective clothing e.g. long sleeves, pants, gloves etc and to seek medical care from a health care provider if there is concern about any cuts, scrapes, or other skin injuries.



The fungal infection have only been associated with deep wound injuries so far in Joplin.

Source: CDC *(Learn more on page 2)*

<http://www.cdc.gov/mucormycosis/>

U.S. Measles Cases in 2011

From January 1 to June 17 this year, 156 confirmed cases of measles have been reported to CDC. This is the highest reported number of cases since 1996.

Most of these cases were among or linked to travelers returning from or visiting from other countries, including countries in Europe and Southeast Asia.

Those traveling abroad with an infant or young children should talk with their child's doctor about measles vaccination.

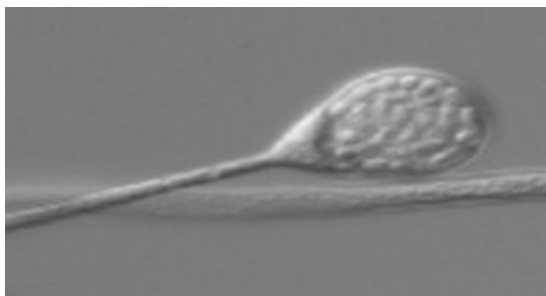
Joplin City and Jasper County

No measles cases have been reported in Joplin City or Jasper County as of June 30, 2011.

Source: CDC

<http://emergency.cdc.gov/HAN/han00323.asp>

Mucormycosis: A Deep Wound Fungal Infection



Microscopy of Apophysomyces, a causative agents of mucormycosis.

Mucormycosis (also called zygomycosis) is a fungal infection caused by organisms that are typically found in the soil and in association with decaying organic matter, such as leaves, compost piles or rotten wood.

Who gets mucormycosis?

Though rare, the infection is more common among people with weakened immune systems, but it can occur (rarely) in people who are otherwise healthy. Risk factors include:

- ◆ Uncontrolled diabetes
- ◆ Cancer
- ◆ Organ transplant
- ◆ Neutropenia (low white blood cells)
- ◆ Skin trauma (cuts, scrapes, punctures, etc.)

Getting the Infection

There are two main types of infection that people can get, depending on exposure.

- ◆ **Cutaneous form:** The fungus can enter the skin through cuts, scrapes, puncture wounds, or other forms of trauma to the skin. It is not contagious and does not spread from person to person.

- ◆ **Pulmonary or sinus form:** Exposure occurs by inhaling fungal spores from the environment which can cause infection in the lungs, sinuses, eyes, and face. In rare cases, it can spread to the central nervous system.

Symptoms of mucormycosis?

Symptoms of mucormycosis depend on where the fungus is growing. Mucormycosis most commonly affects the sinuses or lungs. Symptoms of sinus infections include fever, headache, and sinus pain. Lung infections with the fungus can cause fever and cough symptoms.

Skin infections can develop after the fungus enters through a break in the skin due to surgery, burns, or trauma. A skin infection can look like blisters or ulcers, and the infected tissue may turn black. Other symptoms of a skin infection include fever, and tenderness, pain, heat, excessive redness, or swelling around a wound.

If the infection is not treated quickly, the fungus can spread throughout the body.

How do I do if I have mucormycosis?

If you have symptoms of the infection, you should see your health care provider, who can diagnose it by taking a sample of infected tissue and sending it to a lab.

How is mucormycosis treated?

Mucormycosis needs to be treated with antifungal medication prescribed by a health care provider. These medications are given by mouth or through a vein. Skin infections with the fungus may require surgery to cut away the infected tissue.

Source: CDC

<http://www.cdc.gov/mucormycosis/>

STD Reports in Joplin City and Jasper County: 2011

Summary Report

- ◆ There were 272 STD cases (177 in Joplin and 95 in Jasper County) reported from January through May 2011.
- ◆ Females had higher reported STD cases than males in both jurisdictions. Of the 177 reports in Joplin City, 127 were females and 73 out of the 95 cases in Jasper County were females.
- ◆ In terms of age, most cases were reported among those between 15 to 24 years old in both jurisdictions i.e. 212 out of 272. Two cases were reported among individuals under 15 years.
- ◆ Of the 272 reports since January, there were 240 chlamydia, 31 gonorrhea and one syphilis report(s).

Communicable Diseases Monthly Report

Table 1

**Cumulative Communicable Conditions from January Through June:
Joplin City & Jasper County: 2010 & 2011.**
(Data includes confirmed, probable and suspect cases)

CONDITION / YEAR BY LPHA	JOPLIN		JASPER	
	2010	2011	2010	2011
CAMPYLOBACTERIOSIS	9	2	83	17
COCCIDIOIDOMYCOSIS	1	0	0	1
CRYPTOSPORIDIOSIS	3	0	3	0
E. COLI SHIGA TOXIN	1	0	1	6
EHRlichia CHAFFEENSIS	0	0	1	0
EHRlichia EWINGII	0	0	1	0
GIARDIASIS	1	3	4	2
HEPATITIS B PREGNANCY	1	1	0	0
HEPATITIS B ACUTE	2	6	3	4
HEPATITIS B CHRONIC	3	1	2	4
HEPATITIS C ACUTE	0	0	1	2
HEPATITIS C, CHRONIC INFECTION	41	18	28	8
LEGIONELLOSIS	0	1	0	1
MENINGOCOCCAL DISEASE	1	0	0	1
MYCOBACTERIA OTHER THAN TB	3	1	1	3
PERTUSSIS	1	0	2	0
RABIES POST EXPO PROPHYLAXIS	0	2	1	1
ROCKY MOUNTAIN SPOTTED FEVER	0	4	0	6
SALMONELLOSIS	3	5	7	7
SHIGELLOSIS	4	57	1	23
STREP DISEASE, GROUP A	1	0	0	1
TB DISEASE	1	1	0	0
TB INFECTION	5	5	19	17
TOXIC SHOCK (STAPH) SYNDROME	0	0	0	1
VARICELLA (CHICKENPOX)	0	1	7	8

Source: Crystal Reports, DHSS. Data is preliminary and may be subject to change

Communicable Disease/Conditions Overview

Compared with 2010, diseases that showed an increase in 2011 were;

- ◆ *Shigella* infection (in Joplin City and Jasper County)
- ◆ **Salmonella infection (Joplin City)**
- ◆ Rocky Mountain Spotted Fever (Joplin City and Jasper County)
- ◆ *Giardiasis* infection (Joplin City)
- ◆ Acute Hepatitis B (Joplin City)
- ◆ *E. Coli* Shiga Toxin Producing (Jasper County)

Salmonella Infection

Salmonella infection is an acute bacterial illness characterized by diarrhea, fever, abdominal cramps and sometimes vomiting.

How is it spread?

Consuming foods derived from infected animals or contaminated by feces of an infected animal or person.

Infection period

It usually takes 12 to 72 hours after infection to show symptoms. The illness usually lasts 4 to 7 days but can be longer.

While most persons recover without treatment, some may become severe and need to be hospitalized. In such severe cases, the infection may spread from the intestines to the blood stream and can cause death unless treated promptly with antibiotics.

The elderly, infants, and those with impaired immune systems are more likely to have a severe illness.

Are there long Term Effects?

A small number of persons develop pain in their joints, irritation of the eyes, and painful urination. This is called *Reiter's syndrome*. It can last for months or years, and can lead to chronic arthritis which is difficult to treat.

Prevention

- ◆ Cook meat & eggs thoroughly.
- ◆ Do not consume foods with raw eggs, or raw milk.
- ◆ Wash hands, surfaces, and utensils with soap and water after they get in contact with raw meat or after handling reptiles, birds, or baby chicks, and pet feces.

Source: CDC

<http://www.cdc.gov/salmonella/>

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TRAININGS AND EVENTS

HEALTH AGENCY TRAINING (HAT): INTRODUCTION TO BASIC EPIDEMIOLOGY - July 12 and 13 in Rolla, and July 20 and 21 in Springfield

This course is intended for those who are interested in learning more about applying the scientific methods of biostatistics and epidemiology to program development, program evaluation, and development of policy. The target audience for this course includes: local public health agency administrators, disease investigators, epidemiologists, environmental specialists, and hospital infection control practitioners. There is no registration fee. Participants will be responsible for hotel accommodations, meals, and travel expenses. If you are interested in attending, please complete the registration form. If you have questions, please call 573-751-6113.

This activity has been submitted to the Missouri Nurses Association for approval to award nursing contact hours. The Missouri Nurses Association is accredited as an approver of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation.

Reporting Diseases and other Health Conditions in Missouri

A reportable disease is any disease or condition for which an official report is required according to state law (**Rule 19 CSR 20-20.020 and 19 CSR 20-20.080**) (health care provider and laboratory respectively). These diseases/conditions shall be reported to the local health department or the Missouri Department of Health and Senior Services.

Why Report

The accurate identification and timely reporting of diseases and other health conditions is vital in disease control because it;

- ◆ Enables the health department to implement disease intervention without delay.
- ◆ Assists in identifying contacts who may be infected or individuals at risk of infection.
- ◆ Helps to determine occurrence of diseases in the communities.
- ◆ Enables provision of aggregate data on possible risk factors associated with diseases.

The data collected from disease reporting;

- ◆ Helps physicians evaluate their patients' illnesses.
- ◆ Assists the public to make better decisions regarding their own health and lifestyle.
- ◆ Enables public health agencies to target and implement prevention and control measures.
- ◆ Permits public health agencies to plan for resource allocation, implement initiatives and evaluate them.

Who Must Report

Healthcare providers or other institutions providing diagnostic testing, screening or care to any person with any disease or condition. Laboratories are also required to report any test that is positive for, or suggestive of, any reportable disease.

(Source: Missouri Department of Health and Senior Services)

“Life is like an onion: You peel it off one layer at a time, and sometimes you weep”