

Communicable Diseases

September 2010

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Monthly Newsletter

For Joplin City and Jasper County

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Rabies: A Viral Disease of Mammals

Rabies is a viral disease of mammals and is transmitted primarily through bites. It is found naturally in Missouri, primarily in bats and skunks, although found in other animals such as dogs, cats, horses, and cattle, etc. Although transmitted to humans almost entirely through bites, one can get exposed through open wounds or mucous membranes with saliva or nervous tissue from a rabid animal.



Rabies in humans is almost invariably fatal. Fortunately, the human deaths in U.S. have become relatively rare due to:

- Effective vaccinations for animals
- Public health practices like animal quarantine and testing are aggressively pursued
- Development of improved anti-rabies shots for those exposed to rabies.

Rabies in Animals

The incubation period (time from exposure to signs of illness) of rabies in domestic animals such as dogs and cats can vary between 3 to 6 weeks.



The first sign of rabies in animals is often a change in behavior. As illness progresses, the animal will attack and bite other animals, objects, or people. The animal then becomes paralyzed. Death is virtually certain within 10 days of onset of signs. A dog, cat, or ferret may have rabies virus in its saliva for several days before it even develops any outward signs of disease.

Vaccination of Animals

Effective rabies vaccines are available for dogs, cats, ferrets, sheep, cattle, and horses and must be given by a licensed veterinarian. No post-exposure treatment is available for animals.

Testing Animals for Rabies

Animals that bite or potentially expose a human or pet to rabies may be tested. This requires that it be euthanized, since sections of the brain must be examined for the presence of the rabies.

Rabies in Humans

The incubation period of rabies in people is also variable (depending upon factors like the site and severity of the bite), but averages 3 to 8 weeks. Following exposure to rabies, there is normally a window of opportunity (usually days) in which the patient can receive a series of shots to keep him/her from developing disease.

Once symptoms begin, the outcome is almost always death. Early symptoms of rabies often include numbness or tingling at the bite site, fever, headache, and a feeling of discomfort. The patient may then exhibit excitability, anxiety, abnormal aversion to air in motion, abnormal fear of water, mental confusion, paralysis, delirium, and convulsions. Without treatment, death usually occurs within 2 - 6 days.

Community Prevention

- Ensure your animals have up-to-date on rabies vaccinations.
- Keep pets under control; do not allow them to run loose.
- Avoid contact with stray pets and wild animals
- Report wild animals with unusual behavior or stray pets to animal control officials.
- Report the animal bites immediately.
- Consult with a physician for a rabies risk assessment and to determine if anti-rabies series of shots is warranted.

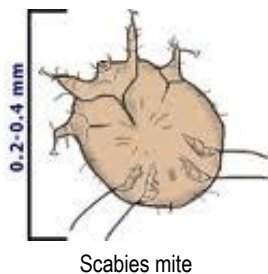
For more information, consult with a healthcare provider or your local health department

Source: CDC & DHSS

Scabies: A Highly Communicable Skin Disease

What is scabies?

Scabies is a highly communicable skin disease caused by tiny human mites that burrow under the skin to lay eggs. Scabies causes intense itching, and a red, generally raised skin rash. Itching is most intense at night. The rash can start anywhere on the body (generally the face is spared) and continues to spread over the body until appropriately treated.



Scabies mite

Who gets scabies?

Anyone can get scabies. Scabies affects all persons regardless of economic status, color of skin, age, or standard of personal hygiene.

How is scabies spread?

Scabies are most commonly passed from one infested person to another through direct skin to skin contact. Occasionally, scabies has been transferred from undergarments, bedclothes, bedding or other articles having skin contact with an infested person.

What are the symptoms?

Itching and scratching, especially at night. The rash can look like many other skin problems (eczema, dermatitis, poison ivy or oak, even chicken pox). Sometimes secondary bacterial infections occur as a result of the constant scratching that leads to bleeding and/or abraded skin that allows entry of disease producing organisms.

How soon do symptoms appear?

For persons getting scabies for the first time, itching and the rash can take up to 8 weeks to appear. Normal range is 2–6 weeks. For those who get re-infested with scabies, itching and rash will occur within one to 4 days.

How long can a person spread scabies?

The scabies mite can be transferred once an infested person has skin-to-skin contact with another person. Therefore, persons who are yet to show symptoms can transfer the mite prior to their knowledge of having scabies. This is why outbreaks of scabies can occur within institutions like long term care facilities.

How is scabies diagnosed?

Because the rash caused by scabies can look like many other types of rashes, diagnosis is important and easily achieved by performing skin scrapings. A nurse may perform this procedure.

What is the treatment for scabies?

A medicated lotion or cream, known as a “scabicide,” which must be prescribed by a physician, is required to effectively treat a person with scabies. This lotion or cream must cover the entire surface of the skin (generally from the tips of the earlobes to the ends of one’s toes). A second, and sometimes a third, application may be necessary to adequately treat a person. Environmental cleaning and laundering of bed linens, bed clothes, and clothes worn in the past three days also must occur with clean clothes donned following the post-treatment shower/bath.

Do I need to treat furniture, other household items?

Vacuuming of upholstered furniture and rugs is recommended. It is not necessary to clean walls or curtains. Laundering of bed linens and bedclothes is very important and must be done following treatment of the infested person and/or prior to reuse by anyone. For items that cannot be washed, either dry clean, place in a hot dryer for 20 minutes, or place in a plastic bag and seal for 10 days.

Following treatment will itching cease?

Itching may continue for two or more weeks following treatment. Scabicides are very drying to the skin plus the body must absorb eggs and fecal pellets left under the skin by the scabies mites. Application of skin lotions and bath oils aid in minimizing dry skin. What will be noted is improvement of the rash (drying up and going away) and absence of new rash.

Source: DHSS



Communicable Diseases Monthly Report—End of September 2010

Table 1

Cumulative Cases from January Through End of September in Joplin City and Jasper County; 2009 & 2010.
(Data includes confirmed, probable and suspect cases)

CONDITION / YEAR BY LPHA	JOPLIN		JASPER	
	2009	2010	2009	2010
ANAPLASMA PHYCOCYTOPHILUM	0	0	0	2
ANIMAL BITES	149	39	119	33
CAMPYLOBACTERIOSIS	7	14	18	94
COCCIDIOIDOMYCOSIS	1	1		
CRYPTOSPORIDIOSIS	1	3	4	6
E COLI SHIGA TOXIN POSITIVE	0	1	3	2
E. COLI O157 H7	0	1	3	1
EHRlichia CHAFFEENSIS	1	0	3	2
EHRlichia EWINGII			0	1
GIARDIASIS	0	2	4	4
HAEMOPHILUS INFLUENZAE			1	1
HEPATITIS A ACUTE	0	0	1	0
HEPATITIS B (PREGNANCY)	3	1	1	0
HEPATITIS B ACUTE	6	5	2	3
HEPATITIS B CHRONIC INFECTION	1	4	4	3
HEPATITIS C ACUTE	2	0	0	1
HEPATITIS C, CHRONIC INFECTION	59	37	59	29
LEGIONELLOSIS	1	0	0	0
MYCOBACTERIUM OTHER THAN TB (MOTT)	1	1	6	1
PERTUSSIS	3	1	15	3
RABIES POST EXPOSURE PROPHYLAXIS	2	0	0	1
ROCKY MOUNTAIN SPOTTED FEVER	3	11	2	5
SALMONELLOSIS	8	6	6	12
SHIGELLOSIS	2	11	0	4
STREP DISEASE, GROUP A	0	1	0	0
TB DISEASE	2	1	0	1
TB INFECTION	26	6	30	22
VARICELLA (CHICKENPOX)	1	0	32	10

Source: Crystal Reports, DHSS

Local Shigellosis Report

- ◆ A total of 15 *Shigella* illness cases have been reported in Joplin City (11) and Jasper County (4) since January.
- ◆ Seven of the 11 cases in Joplin were reported in August and September.
- ◆ The health departments investigated the cases and provided the necessary preventive and control measures. Surveillance efforts are still on-going.

What is Shigellosis?

It is a disease caused by the bacteria *Shigella*.

Symptoms

Diarrhea (often bloody), fever, and stomach cramps starting a day or two after exposure to the bacteria. *Shigellosis* usually resolves in 5 to 7 days. In severe cases, high fever may be associated with seizures in children less than 2 years old. Others may have no symptoms, but may still infect others.

Treatment

Some people usually recover without treatment. However, appropriate antibiotic treatment kills the bacteria, and may shorten the illness by a few days. Consult your health care provider for more information about appropriate antibiotics.

Effects

Persons with diarrhea usually recover completely, but it may take several months for their bowel habits to be fully normal. Some types of *Shigella* may later cause pains in their joints, irritation of the eyes, and painful urination and can lead to chronic arthritis. Once you have shigellosis, you may not get infected with that specific type again for at least several years.

Transmission

The bacteria pass from one infected person to the next. *Shigella* are present in the diarrheal stools of infected persons while they are sick and for up to a week or two afterwards. Toddlers who are not fully toilet-trained are particularly at risk.

- ◆ Eating contaminated food,
- ◆ Ingesting contaminated water
- ◆ Swimming in or playing in contaminated water

Prevention

Currently, there is no vaccine to prevent shigellosis. However, the spread can be stopped by frequent careful hand-washing.

More information

Discuss your concerns with your healthcare provider or your local health department about shigellosis.

Source: DHSS, CDC and Joplin/Jasper County Health Departments

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UPCOMING TRAININGS AND EVENTS

USING QUALITY IMPROVEMENT TOOLS TO ADVANCE PUBLIC HEALTH PREPAREDNESS – THE KANSAS H1N1 EXPERIENCE—October 7, 2010.

Heartland Center for Public Health Preparedness invites you to join them for the Using Quality Improvement Tools to Advance Public Health Preparedness - The Kansas H1N1 Experience webinar on Thursday, October 7, from 10:00 a.m. - 11:00 a.m. Space is limited so sign up today! To register or for more information, visit; <http://www.heartlandcenters.slu.edu/hcphp/hcphpwebinar.htm>.

Sexually Transmitted Diseases: Joplin City & Jasper County, August 2010

Table 2 shows the data collected in August 2010 for the local STD reports based on local jurisdiction, gender and age. The cases of STD reported in Joplin City (28) were higher than those reported in Jasper County (9) in August.

The data also showed that there were more women than men in both Joplin City and Jasper County with STDs in August. Similarly, those between the age of 15 and 24 acquired STDs more than those older than 25 years. The most reported STD was chlamydia, followed by gonorrhea. There was no syphilis reported in August.

A total of 414 cases of STD have been reported in Joplin City (275) and Jasper County (139) from January through August 2010.

Source: DHSS & Joplin City/Jasper County Health Department, 2010

Table 2

	Jasper County—August 2010				Joplin City—August 2010			
	Gender		Age		Gender		Age	
	Men	Women	15-24	>25	Men	Women	15-24	>25
Chlamydia	1	8	6	3	7	18	22	3
Gonorrhea	0	0	0	0	3	0	1	1
Syphilis	0	0	0	0	0	0	0	0

Source: DHSS ; Analyzed by Joplin City/ Jasper County Health Departments

Chlamydia

Chlamydia is one of the most common STDs, especially among young women.

CDC recommends that all sexually active women younger than 26 years of age get tested for Chlamydia once a year if they have a new or multiple sex partners. Getting tested and treated for Chlamydia can reduce new cases of pelvic inflammatory disease (PID).

Women with PID can experience pregnancy complications, infertility, chronic pain, and irreversible damage to their reproductive organs.

Source: CDC
<http://www.cdc.gov/features/stdawareness/>

**“Opportunities are usually disguised as hard work, so most people don't recognize them”.
-Ann Landers**