



Public Health  
Prevent. Promote. Protect

# COMMUNICABLE DISEASES

## MONTHLY NEWSLETTER

For Joplin City, Barton, Dade, Jasper, McDonald, Newton and Vernon Counties

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### Inside this issue

Communicable Diseases Report (January –April)	2
Recreational Water Illnesses (RWI)	3
Increase in Tularemia cases in Missouri	3
Upcoming Events/Trainings	4
Contacts	4
New rule on Reportable diseases/Conditions in Missouri	4

### Special Point of interest

Raw milk can carry bacteria capable of causing;

- Hemolytic Uremic Syndrome (HUS)
- Listeriosis
- Typhoid
- Tuberculosis
- Diphtheria
- Brucellosis

(Read 'The Danger of Raw milk' for more information)

## The Dangers of Raw Milk (DHSS News Release - 05/16/08)

The Missouri Department of Health and Senior Services (DHSS) and the Missouri State Milk Board together are warning Missourians that consuming raw milk, or products made from it, can lead to very serious illness and even death. Raw milk can be contaminated with E. coli O157:H7, thus causing a condition known as hemolytic Uremic Syndrome, HUS.

HUS is a serious as well as a life threatening complication that can cause severe, bloody diarrhea, injury to the kidneys and kidney failure. Half of the people having HUS-related diarrhea require dialysis, and 3 to 5 percent die. Overall, HUS occurs in about 10 percent of those infected with E. coli O157:H7 or other toxin-producing E. coli. It can be especially serious in young children, senior adults and people with weakened immune systems.

The bacteria are found in the feces of cows and goats and can contaminate milk during the milking process. The use of standard hygiene practices during milking, such as washing hands, keeping equipment clean, and also keeping the milking area separated from other areas, are important, but will not completely eliminate the risk for contamination. Therefore, consumers should not assume that the raw milk purchased at a farmers' market or grocery store is safe to drink. Raw milk and its products are those that have not gone through the process of pasteurization, which kills harmful organisms by heating the milk to a specific temperature for a set length of time.

Although many people are aware that raw milk can cause disease, some do believe that it has potential benefits over pasteurized milk, such as greater nutritional value, vitamins that are present naturally rather than added, and even protection against tooth decay. However, re-

search has not shown any benefit of raw milk over pasteurized milk. To assure that the milk product being purchased is safe to consume, look for a label that says the product is made from pasteurized milk.

Raw milk products that should be considered unsafe unless made from pasteurized milk include; soft cheeses such as the Brie and Camembert, Queso Fresco, Panela, Asadero and Queso Blanco, as well as cream, yogurt, pudding, ice cream and frozen yogurt.

Missouri statutes specifically allow a farmer to sell raw milk or cream, at the farm where it originated, or deliver it to the customer for the customer's own use. However, if a producer wishes to sell retail raw milk or cream at a farmers' market or any other retail venue, the producer must first obtain a permit with the Missouri State Milk Board. If granted a permit, the producer must comply with the regulations pertaining to the proper bottling, capping and labeling of raw milk products as specified in the state statutes.

Compliance with these regulations does not ensure raw milk is free of harmful bacteria. No producers currently have a retail permit to sell raw milk or cream in Missouri.

Raw milk products can also carry *Listeria* bacteria that put pregnant women as well as their unborn or newborn children at risk and also bacteria that cause typhoid fever, tuberculosis, diphtheria and brucellosis.



Source: Missouri Department of Health and Senior Services

Picture: CDC Website

# Communicable Disease Report

Table 1

Cumulative Cases From January Through End of May By Local Jurisdiction and Year (2007 & 2008) (Includes confirmed, probable and suspect cases)														
CONDITION / YEAR BY LPHA	JOPLIN		JASPER		BARTON		DADE		MCDONALD		VERNON		NEWTON	
	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008
ANIMAL BITES	87	45	40	39	4	1	3	2	8	1	2	1	9	13
BLASTOMYCOSIS	0	0	0	0	1	0	0	0	0	0	0	0	0	0
CAMPYLOBACTERIOSIS	1	1	7	8	1	1	0	1	0	1	3	3	0	3
CREUTZFELDT-JAKOB DIS	0	0	0	0	0	0	0	1	0	0	0	0	0	0
CRYPTOSPORIDIOSIS	0	0	1	1	0	1	0	0	0	1	4	3	3	0
E. COLI SHIGA TOXIN	0	0	0	8	0	0	0	0	0	0	0	0	0	0
E. COLI O157 H7	0	0	0	0	0	0	0	1	0	1	0	0	0	0
EHRlichiosis HGE	0	0	0	0	0	0	0	0	0	0	0	1	0	0
EHRlichiosis HME	0	0	0	1	0	1	0	0	0	2	0	0	2	1
GIARDIASIS	3	1	2	0	3	0	0	1	0	0	0	1	2	0
HEPATITIS B PREGNANCY	0	0	0	2	0	0	0	0	0	0	0	0	1	1
HEPATITIS B ACUTE	4	1	1	3	1	0	1	1	0	0	1	0	3	2
HEPATITIS B CHRONIC	3	4	1	1	0	1	0	0	1	0	0	2	1	2
HEPATITIS C ACUTE	2	0	0	0	0	0	0	0	0	0	0	1	0	0
HEPATITIS C, CHRONIC IN	54	39	26	23	4	2	4	1	11	17	15	10	19	24
LEGIONELLOSIS	0	1	1	0	0	0	0	0	0	0	0	0	0	0
LISTERIOSIS	0	0	0	3	0	0	0	0	0	0	0	0	0	0
LYME	0	0	2	0	2	0	0	0	0	0	1	0	0	0
MENINGOCOCCAL DISEASE	1	2	0	0	0	0	0	0	0	0	0	0	0	0
MUMPS	0	0	0	0	0	0	0	0	0	1	0	0	0	0
Q FEVER	0	0	2	0	0	0	0	0	1	0	0	0	0	0
RABIES POST EXPO PROPHY	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ROCKY MOUNTAIN SPOT	0	3	4	3	0	0	0	0	1	1	1	2	10	12
SALMONELLOSIS	3	7	1	4	1	1	1	0	1	2	2	3	3	3
SHIGA TOXIN + (NON E. C	0	1	0	0	0	0	0	0	0	0	0	0	0	0
SHIGELLOSIS	0	1	2	0	0	0	0	0	0	0	0	0	0	0
STREP DISEASE, GROUP	0	1	0	0	0	0	0	0	0	0	0	1	0	0
STREP PNEUMONIAE, <4	0	1	0	0	0	0	0	0	0	0	0	0	0	0
STREP PNEUMONIAE, DR	0	0	2	0	0	0	0	1	1	0	0	0	0	0
TULAREMIA	0	0	0	0	0	1	0	0	0	0	0	0	0	0
VARICELLA (CHICKENPOX)	6	0	10	8	0	0	0	0	0	0	0	0	1	3
<b>Total Cases Per Year To-Date</b>	164	108	102	104	17	9	9	9	24	27	29	28	54	65

Source: Missouri Department of Health and Senior Services, Crystal Reports

### Data period : January through end of May 2008

Rocky Mountain Spotted Fever continue to increase in 5 of the 7 counties with a significant spike in Newton County between April (zero cases) and May 2008 (12 cases).

While Tularemia is beginning to be a concern according to Missouri Department of Health and Senior services, there has been only one case in Barton county in 2008 to-date within this region (see page 3 for the MDHSS report on Tularemia).

Chronic Hepatitis C and Ehrlichiosis HME continue to increase in most of the counties in 2008. Additionally, animal bites continued to increase in most counties although 2007 cases to-date have exceeded those in 2008 except for Newton County, which had more cases in 2008 than 2007. Overall, more cases to-date have been reported in 2008 than 2007 in Jasper, McDonald and Newton Counties while Joplin City reflects a significant decrease from 2007.

Analysis: Joseph Njenga

## Recreational Water Illnesses (RWI)

**RWIs** are illnesses that are spread by swallowing, breathing, or having contact with contaminated water from swimming pools, spas, lakes, rivers, or oceans. These illnesses can cause a wide variety of symptoms, including gastrointestinal, skin, ear, respiratory, eye, neurologic and wound infections. The most commonly reported RWI is diarrhea.

### Diarrheal Illnesses

These are the most common illness spread through use of swimming pools. If swimmers are ill with diarrhea, they can easily contaminate the water if they have an "accident" in the pool because their stool can contain millions of germs.

In addition, lakes, rivers, and the ocean can be contaminated by sewage spills, animal waste, and water runoff following rainfall. It is important to avoid swallowing the water because natural recreational water is not disinfected. Avoid swimming after rainfalls or in areas identified as unsafe by health departments. Similarly, swallowing water from decorative or interactive fountains can cause diarrheal illnesses because not all such fountains are chlorinated or filtered. Contamination occurs when people, especially diaper-aged children with fecal matter on them play in the water.

Most of the diarrhea-causing pathogens do not have to be swallowed in large amounts to cause illness.

### Other Recreational Water Illnesses (RWIs)

Many other RWIs such as skin, ear, eye, respiratory, neurologic, wound, and other infections are caused by germs that live naturally in the environment. In the pool or hot tub, if disinfectant is not maintained at the appropriate levels, these germs can increase and cause some illnesses.

### Who is most likely to get ill from an RWI?

Everyone is at risk of getting ill from RWI. However, children, pregnant women, and people with weakened immune systems can suffer from more severe illness if infected with these germs. They should consult their health care provider before participating in those behaviors that place them at risk for illnesses.

### Healthy swimming behaviors

Healthy Swimming behaviors are needed to protect against RWIs and help stop germs from getting in the pool in the first place.

Six "PLEAs" that promote Healthy Swimming include:

- Don't swim when you have diarrhea. You can spread germs in the water and make other people sick.
- Avoid swallowing or getting pool water into your mouth.
- Practice good hygiene by taking a shower before swimming. Wash your hands after using toilet or changing diapers.
- 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 to surfaces and objects in and around the pool and cause illness.
- Wash your child thoroughly (especially the rear end) with soap and water before swimming. Everyone has invisible amounts of fecal matter on their bottoms that ends up in the pool.

National Center for Zoonotic, [Vector-borne, and Enteric Diseases](#) / CDC

## Increase in Tularemia cases in Missouri

Reports indicate that tularemia cases in Missouri are 33% above the five-year median through May 20, 2008. May and June are typically the peak months. Similarly, an increase in tick density this year has been detected in the fields as reported by two Missouri academic institutions' field technicians. Although increased physician awareness is likely contributing to increased testing and better recognition of tick-borne disease, the Bureau for Communicable Disease Control and Prevention (BCDCP) is concerned that the prolonged cool, damp weather this year may result in sustained tick activity through the early summer, possibly leading to increases in the abundance of infected ticks and the incidence of tick-borne disease.

In addition to the increase in tularemia reports, a review of historic tularemia cases reported through the month of May for the years 2003 - 2007 indicates that 2008 has already seen a three-fold increase in reports of suspected or confirmed cases.

LPHA investigations of these cases point to at least three *F. tularensis* infections occurring through tick-bites rather than exposure to infected animals.

In order to increase tick-borne disease awareness and prevention, a wide variety of information materials are available at your local public health agencies as well as free educational materials are available through the DHSS warehouse at [www.dhss.mo.gov/TicksCarryDisease/LiteratureList.html](http://www.dhss.mo.gov/TicksCarryDisease/LiteratureList.html).

*Report adapted from a report by Karen Yates, Vector-Borne Disease Program Coordinator Missouri Department of Health and Senior Services*



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**Questions/Comments?**

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## Upcoming Events / Trainings

**Risk Communication Media Seminar, CERC Advanced Training** in May and June. For more information, contact Laura Kliethermes at the DHSS at 573-526-4768 OR laura.kliethermes@dhss.mo.gov

**Laboratory Specimen Collection Training on June 25, 2008** at the State Public Health Laboratory in Jefferson City from 9:30-3:00pm. Contact the Region D Senior Epidemiology Specialist, John Bos (John.bos@dhss.mo.gov). Space for training is limited to about 100 participants.

**Principles of Epidemiology Course – July 15-16**

You can access the on-line portion of the course at <http://www.dhss.mo.gov/EPI/Instructions>. After which you will attend a two days of face-to-face exercises in Jefferson City on July 15 and 16. Class size is limited. For more information, call 573-751-6113.

**6th Annual HIV/AIDS/STDs and Human Sexuality Education Conference – June 11-13**

at the Kansas City. The 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. To access the conference brochure and on-line registration site, visit <http://www.dhss.mo.gov/AdolescentHealth/Conferences.html>

All registrations must be completed on-line. For more information, contact Patti Van Tuinen at 573-751-6188, or by e-mail at patti.vantuinen@dhss.mo.gov.

For local Pandemic Influenza and business continuity information, visit [www.JascoFlu.com](http://www.JascoFlu.com)

**Remember:**

Always be prepared before an emergency occurs.

IF YOUR INSTITUTION WOULD LIKE TO PARTICIPATE IN OUR COMMUNICABLE DISEASE SURVEILLANCE, PLEASE CONTACT YOUR LOCAL HEALTH

DISEASE SURVEILLANCE IS VERY ESSENTIAL IN THE CONTROL AND PREVENTION OF DISEASES IN OUR COMMUNITY.

## New Rule on Reportable Diseases and Conditions

The new Reporting Rule became effective on 5/30/08. The new reportable disease list can be found at: <http://www.dhss.mo.gov/CommunicableDisease/reportablediseaselist2.pdf>  
A summary at-a-glance of the changes are as follows:

**19 CSR 20-20.020: Reporting Communicable, Environmental and Occupational Diseases**

**ADDS:**

- Novel Influenza A virus infections
- Poliovirus infection, nonparalytic
- Vibriosis (non-cholera Vibrio species infections)
- Influenza-associated pediatric deaths

**DELETES**

- Blastomycosis

**19 CSR 20-20.080: Duties of Laboratories**

**ADDS :** • Listeriosis

**DELETES:** • Campylobacter species

**A reference (or note) is also made, as that, "Cancer is also a reportable disease"**

Source: Missouri Department of Health and Senior Services, Bureau of Communicable Disease

**"You gain strength, courage and confidence by every experience in which you really stop to look fear in the face". - Eleanor Roosevelt**