



Epi Watch

Disease of the Month: MULTI-DRUG RESISTANT ORGANISMS (MDROs)

Multidrug-resistant organisms (MDROs) are bacteria and other organisms that have developed resistance to certain antibiotics. These antibiotics include methicillin and other more common antibiotics such as penicillin and amoxicillin. Of the multidrug-resistant organisms, Methicillin-resistant *Staphylococcus aureus* (MRSA) is perhaps the most well known. MRSA, like other staph infections, occur most frequently among persons in hospitals and healthcare facilities (such as nursing homes) who have weakened immune systems. MRSA infections that occur in otherwise healthy people who have not been recently hospitalized or had a medical procedure are known as community-associated infections or CA-MRSA.

My doctor says I am colonized but not infected, what does this mean?

* Colonization means the

organism is in or on the body but does not cause illness.

* Infection means the organism is present and causing illness.
If you are infected, please seek medical attention for treatment.

How are MDROs spread?

These organisms are spread by:

- * Direct contact with an infected or colonized person,
- * Indirect contact with contaminated objects such as towels, linens, wound dressings, clothes, workout equipment, or other objects, and
- * Use of medical equipment contaminated by an infected or colonized person.

How do people get skin infections?

Many different types of bacteria are commonly found on the skin or in the nose of healthy people. These bacteria can cause



Cutaneous Abscess
Skin Infection

an infection when a break in the skin (scratch, insect bite) gives the bacteria a place to grow.

How should I treat skin infections?

Skin infections are usually mild and can be treated with basic wound care.

- * Keep the area cleaned and protected with a bandage,
- * Keep all wound drainage controlled.
- * Good hand hygiene after touching or caring for a wound can help stop further infections,
- * If infections keep occurring and basic treatment is not helping see a health care provider who can prescribe antibiotics, and
- * If antibiotics are prescribed, proper use of them is important. Incorrect use has caused some bacteria to become drug resistant.

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Special Points of Interest DID YOU KNOW?

The estimated number of people developing a serious MRSA infection (i.e., invasive) in 2005 was about 94,360 and about 85% of all invasive MRSA infections were associated with healthcare.

Source: [Journal of the American Medical Association 2007;298\(15\):1763-1771](http://www.jama.com/doi/10.1001/jama.298.15.1763-1771)

TIPS: Preventing MDRO Infections

Healthy people are at low risk of contracting these organisms, although it can happen. The best way to avoid getting these organisms is to prevent skin infections and be careful when providing care for those infected. Follow these steps to prevent skin infections. When you notice a break in your skin:

- * Wash it with soap and

- running water,
- * Put a clean, dry bandage over it, and
- * Change the bandage if it becomes wet, dirty, or loose. Caregivers should perform the following when caring for family members who are colonized or infected with multidrug-resistant organisms:
- * Wash their hands with soap

- and water after contact with the colonized or infected person and before leaving their home,
- * Dry their hands with disposable towels and discard or launder cloth towels after each use,
- * Wear disposable gloves if they come in contact with bodily fluids and wash their

- hands after removing the gloves,
- * Wash all clothes, towels, and linens of the infected or colonized person separate from other family members, and
- * Routinely clean the person's environment especially when the environment is soiled with bodily fluids.

CURRENT NEWS

The Tulsa Health Department experienced an active West Nile virus season this year. The first case was reported in July 2007 and epidemiologists continue to investigate new cases. Of the cases reported to date, 18 individuals were classified as having West Nile Fever, a milder illness than its counterpart West Nile Neuroinvasive disease, of which there 21 cases. Among the cases with West Nile Neuroinvasive disease, the average age was 60 years with a range from 43 to 87 years. Eight (38%) cases were female and 13 (62%) were male. There were 2 deaths.

As we approach what is traditionally the end of the West Nile virus season, it is still important to protect yourself by:

- * using repellent when outdoors, especially during dusk and dawn when mosquitoes are most active;
- * getting rid of mosquito breeding sites by emptying standing water from buckets, flower pots and other containers, and
- * by making sure you have good screens on your doors and windows to prevent mosquitoes from entering your homes.

The Tulsa Health Department collects Emergency Room chief complaint data to monitor the emergence of illnesses, such as influenza, in our community. For additional information on THD's county-wide surveillance system please [click here](#)

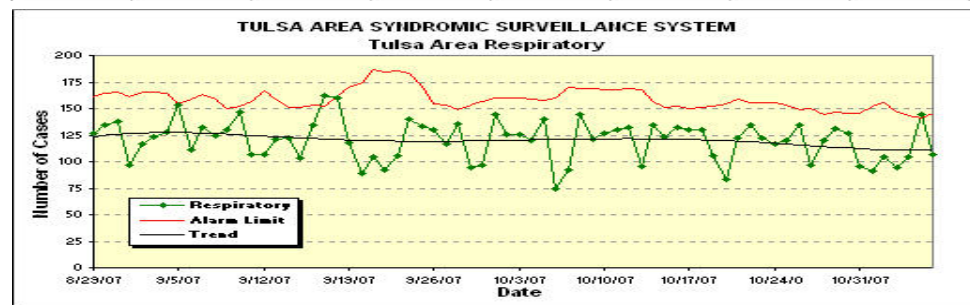
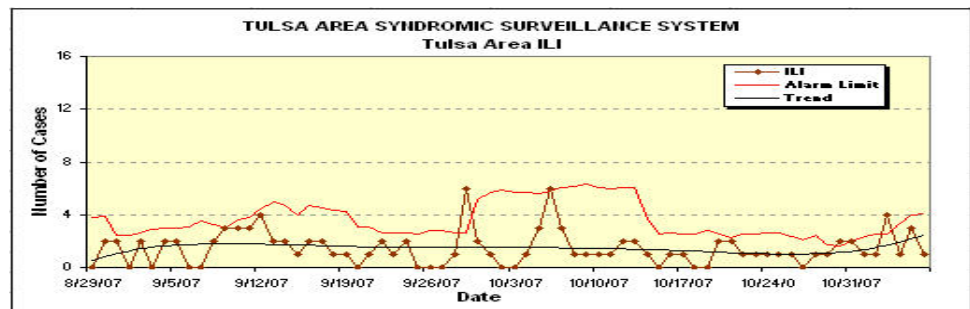
REPORTED CASES OF SELECTED DISEASES

Disease	Tulsa County		Oklahoma	
	Cases Reported Year-to-Date 2007	Cases Reported Year-to-Date 2006	Cases Reported Year-to-Date 2007	Cases Reported Year-to-Date 2006
<i>Campylobacter</i>	38	37	439	360
<i>E. coli</i> O157:H7	2	6	14	35
<i>Giardia</i>	15	22	117	146
Hepatitis A	3	4	11	10
Hepatitis B	44	43	186	105
Hepatitis C	268	312	1472	983
Rabies (Animal)	1	2	72	59
Salmonella	59	67	553	538
Shigella	48	14	111	177

Discrepancies between state and county numbers may result from cases being reported directly to the county. Also, Tulsa County totals for Hepatitis B includes perinatal cases.

Surveillance Report

The first influenza B case has been confirmed in the state of Oklahoma. Currently THD's surveillance is showing the following:



Flu vaccines are recommended to help lower the risk of getting the flu. The following are good habits to follow:

- * Cover your nose and mouth with a tissue when coughing or sneezing.
- * Wash your hands often with soap and water. Avoid contact with people who are sick as much as possible.
- * If you get the flu, stay home to avoid spreading it.
- * Avoid touching your eyes, nose, or mouth, as germs can enter your system this way.

It is not too late to receive your flu shot. For further information on flu vaccines contact the Tulsa Health Department's flu information hotline at (918) 595-4500 or visit the website at www.tulsa-health.org.