



# Communicable Disease Update

October, 2006



## Dane County E. coli O157:H7 Spinach Outbreak Summary

In September 2006, the U.S. experienced a nationwide E. coli O157:H7 outbreak that was linked to spinach grown in California. As of October 6, there were 199 cases reported in 26 states, including three deaths. Forty-nine cases were reported in Wisconsin, including one death. Nine Dane County residents were diagnosed with this outbreak strain of E. coli during September. Dane County case ages ranged from 1 - 59 years (median = 21); five cases were female. Onset dates ranged from August 27 through September 5. Three Dane County cases were hospitalized and one of these developed hemolytic uremic syndrome. Eight of the Dane County cases reported eating spinach during the week before illness and a spinach sample submitted by one of these cases tested positive for the outbreak strain. In addition, three household members of these cases reported symptoms compatible with E. coli O157:H7 infection during the same time period but did not have positive stool cultures. Two of these individuals were likely infected by eating the same spinach as their household members with confirmed E. coli O157:H7 and one was likely infected through household spread.

In addition to these nine outbreak cases, eight other shiga-toxin producing E. coli cases were reported in Dane County during September. Public Health - Madison and Dane County appreciates the increased awareness, extra testing, and prompt reporting by Dane County health care providers during this outbreak. Working together we were able to identify cases quickly and prevent further spread in high risk settings such as daycare centers and health care facilities.



## Acute and Communicable Disease Summary for July - September 2006

**DANE COUNTY DIVISION OF PUBLIC HEALTH & MADISON DEPARTMENT OF PUBLIC HEALTH**

Below is a preliminary listing of the acute and communicable diseases (ACD) reported to MDPH and DCDPH during July - September, 2006. Data are based on ACD reports received by both agencies. These numbers are not a complete picture of ACDs in Dane County; some reports are sent directly to Wisconsin DHFS and are not in our databases, some infections may not have been reported yet, and many are never reported.

### SEXUALLY TRANSMITTED INFECTIONS

DISEASE	NUMBER OF CASES					
	Madison		Dane Co. (Excluding Madison)		Dane County Total	
	2006	2005	2006	2005	2006	2005
Chlamydia	249	331	149	149	398	480
Gonorrhea	104	71	33	44	137	115
Herpes	33	35	29	20	62	55

### OTHER REPORTABLE COMMUNICABLE DISEASES

Amebiasis	0	0	0	0	0	0
Arbovirus	1	3	1	2	2	5
Babesiosis	0	0	0	1	0	1
Blastomycosis	0	0	0	0	0	0
Campylobacter	17	10	16	21	33	31
Cat scratch disease	0	1	0	0	0	1
Cryptosporidium	5	6	21	20	26	26
E. coli, enterohemorrhagic	1	3	8	2	9	5
E-coli O157:H7	5	3	9	6	14	9
Ehrlichiosis	0	0	1	2	1	2
Encephalitis, viral	0	1	0	1	0	2
Giardia	5	19	18	20	23	39
Haemophilus influenzae invasive disease	0	0	0	0	0	0
Hepatitis A	2	2	7	1	9	3
Hepatitis B	7	8	6	2	13	10
Hepatitis C	18	29	12	15	30	44
Hepatitis E	0	1	0	0	0	1
Kawasaki Disease	0	0	0	0	0	0
Legionella	2	1	2	1	2	2
Lyme Disease*	14	13	40	9	54	22
Malaria	0	2	0	0	0	2
Meningitis, bacterial	0	0	1	1	1	1
Meningitis, viral	6	6	7	10	13	16
Meningococcal Disease	2	0	0	0	2	0
Mumps	1	1	0	0	1	1
Pertussis (confirmed & probable)	1	15	1	12	2	27
Rheumatic fever	0	0	0	0	0	0
Rocky Mountain Spotted Fever	0	0	1	0	1	0
Salmonella	10	13	13	13	23	26
Shigella	7	0	3	1	10	1
Streptococcus Group A invasive disease	0	1	0	1	0	2
Streptococcus Group B invasive disease	4	2	3	5	7	7
Streptococcus pneumoniae invasive disease	2	1	0	1	2	2
Toxic Shock Syndrome	0	1	0	0	0	1
Toxoplasmosis	0	1	0	0	0	1
Tuberculosis	1	2	0	2	1	4
Yersiniosis	0	0	0	0	0	0

\*The increase in Lyme disease reports from 2005 to 2006 is due at least in part to a change in reporting practices by a local lab.

## Tuberculosis Guidelines Errata

The Centers for Disease Control and Prevention (CDC) published the document "Guideline for Preventing the Transmission of Mycobacterium tuberculosis in Health-Care Settings, 2005" on December 30, 2005. On September 25, 2006, the CDC published several significant errata for these guidelines. The guidelines and errata can all be found on the CDC Division of Tuberculosis Elimination website:

[www.cdc.gov/nchstp/tb/pubs/mmwrhtml/Maj\\_guide/infectioncontrol.htm](http://www.cdc.gov/nchstp/tb/pubs/mmwrhtml/Maj_guide/infectioncontrol.htm)

## Hepatitis A Follow-Up

Dane County has seen an increase in the number of hepatitis A cases reported in 2006 over previous years. Many of the cases resulted from transmission within households and to extended family members. Public health follow-up for some of these cases involved providing immune globulin to many people and hepatitis A testing for others. During the course of our follow-up, Public Health - Madison and Dane County (PHMDC) worked with many different local health care providers. Below are some of the questions that came up during our work on hepatitis A cases.

### Why do hepatitis A cases need to be reported upon suspicion?

Hepatitis A is preventable in people who have been exposed to the virus if they receive hepatitis A immune globulin (IG) within fourteen days of exposure. The sooner PHMDC learns about a potential case of hepatitis A, the sooner exposed individuals can be identified. Then, if the case is confirmed, it is more likely contacts will receive IG within the required time period. In addition, PHMDC can work with potential cases and their employers to exclude people from high risk settings while tests are pending.

### Why do suspect cases need a hepatitis A IgM result?

A positive hepatitis A IgM result indicates current or recent infection. A positive result combined with elevated liver enzymes and/or symptoms indicates current infection. A person who has a hepatitis A total antibody positive result but is IgM negative is immune to hepatitis A, either through past infection or immunization. It is important to test for hepatitis A IgM when hepatitis infection is suspected because of symptoms and when testing contacts for early or asymptomatic infections (see below).

### How long should hepatitis A cases be excluded from work or school?

People with hepatitis A who work in or attend high risk settings such as food handlers, healthcare workers, and daycare workers or attendees should generally be excluded from the high risk setting for ten days after jaundice onset (or first symptom if no jaundice) or for ten after a positive test if the individual has no symptoms. Consult with PHMDC to determine the length of exclusion. People with hepatitis A who do not work in a high risk setting do not need to be excluded from work or school as long as they do not have diarrhea, have received education on how to prevent transmission, and feel well enough to work.

### Why test asymptomatic children who have been exposed to hepatitis A?

Most young children have asymptomatic infections. Infected children, however, can still transmit hepatitis A virus. Transmission is most common within households but may also occur in daycare settings. When transmission occurs within daycare settings, children may carry the virus home to their family members who could develop symptoms and who may work in settings that are high-risk for spread, such as restaurants. When an individual is diagnosed with hepatitis A, PHMDC generally recommends all children in the household be tested to both rule them out as possible sources and to ensure they won't spread hepatitis A to others.

### Should asymptomatic adults who have been exposed to hepatitis A be tested?

If the exposed adult works in a high-risk setting, PHMDC recommends he/she receive hepatitis A and liver enzyme testing to rule out early or asymptomatic infection. He/she also receives education from a PHMDC sanitarian or public health nurse before returning to work. For people who do not work in high risk settings, PHMDC generally does not recommend testing because most adults who have been infected with hepatitis A will have symptoms. PHMDC advises adults who have been exposed to hepatitis A what symptoms to watch for and to not prepare food for people outside their households for seven weeks after exposure if possible.

### Why should household contacts to hepatitis A cases receive IG if they don't share food?

The hepatitis A virus can be spread by a person touching surfaces contaminated with fecal matter and then not washing his/her hands before eating. Examples of potentially contaminated surfaces include toilet handles and doorknobs. All household contacts of hepatitis A cases should receive IG as soon as possible after a case is confirmed.

#### Sources:

- Wisconsin Division of Public Health. [Hepatitis A: A Handbook for Public Health Personnel](#). 2006.
- Heymann, DL ed. [Control of Communicable Diseases Manual](#) 18th edition. American Public Health Association, 2004.
- Centers for Disease Control and Prevention, National Center for HIV, STD, & TB Prevention [www.cdc.gov/ncidod/diseases/hepatitis/a/faq.htm](http://www.cdc.gov/ncidod/diseases/hepatitis/a/faq.htm)

## Mumps - It's Still Here!

While the large mumps outbreak that occurred in the Midwest in the winter and spring of 2006 has ended, mumps hasn't completely disappeared. One probable case was reported in Dane County in October and two culture confirmed cases were reported in Rock County in September and October. Wheaton College in Illinois also reported a mumps outbreak in September.

Please keep mumps in mind when examining patients with swelling around the jaw. Report suspected mumps cases to the Intake Nurse at Public Health Madison and Dane County at 266-4821 (Madison residents) or 242-6520 (Dane County residents outside of Madison).

### PUBLIC HEALTH CONTACT INFORMATION

**Communicable Disease Epidemiologist for Madison and Dane County:**

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**Public Health Madison and Dane County:**

General ..... 266-4821

**To Report Communicable Diseases:**

City of Madison residents,  
 call the Downtown Office Intake Nurse..... 266-4821  
 Dane County residents outside Madison,  
 call the Northport Office Intake Nurse..... 242-6520

**After Hours Contact Number for Public Health Madison and Dane County: 911**