



DuPage County Health Department R E V I E W

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Contact Information

Communicable Disease
(630) 682-7979, ext. 7553

Environmental Health
(630) 682-7979, ext. 7046

Immunizations
(630) 682-7400

Sexually Transmitted Diseases
(630) 682-7979, ext. 7575

HIV/AIDS
(630) 682-7979, ext. 7310

Tuberculosis
(630) 682-7522

School Health
(630) 682-7979, ext. 7300

Travel Clinic
(630) 682-7979, ext. 7590

Animal Control
(630) 407-2800

Please contact Peggy Iverson, BS at (630) 682-7979, ext. 7534 or piverson@dupagehealth.org to send suggestions or to be added to the distribution list.

The purpose of this two-page surveillance update is to promote the control and prevention of **communicable disease (CD)** by providing clinically relevant information and resources to healthcare professionals in DuPage County.



Under the Microscope *Neisseria meningitidis*

For questions or to report a suspect or known case of meningococcal disease, please call the DuPage County Health Department at (630) 682-7979, ext. 7553.

Background: Meningococcal disease is an acute, potentially severe and life-threatening illness caused by the bacterium *Neisseria meningitidis*. Each year, an estimated 1,400-2,800 cases of meningococcal disease occur in the United States.¹ Meningococci are transmitted by direct contact with droplet aerosol or secretions from the nasopharynx of colonized persons.² Humans are the only natural reservoir of meningococcus; as many as 10% of adolescents and adults are asymptomatic transient carriers of *N. meningitidis*, most strains of which are not pathogenic.²

N. meningitidis is a leading cause of bacterial meningitis and sepsis in the United States. Despite the continued sensitivity of meningococcus to multiple widely available antibiotics, including penicillin, the **case-fatality ratio for meningococcal disease is 10%-14%**.¹ Meningococcal disease also causes substantial morbidity; **11%-19% of survivors have permanent sequelae** (e.g., limb loss, neurologic disability, and hearing loss).¹

During 1991-2002, the highest rate of meningococcal disease (9.2/100,000) occurred among infants aged <1 year; the rate for persons aged 11-19 years (1.2/100,000) also was higher than that for the general population.¹ Although rates of disease are highest among children aged <2 years, **62% of meningococcal disease in the United States occurs among persons aged ≥11 years**.¹

Control and Prevention: In addition to prompt initiation of appropriate antimicrobial therapy after obtaining necessary cultures, **all health-care workers should report any case of invasive meningococcal disease to the local health department** of the jurisdiction in which the patient resides.² Case investigation by health department staff may expedite identification of close contacts of infected persons, since **antimicrobial chemoprophylaxis should be administered as soon as possible, ideally less than 24 hours after identification of the index patient**.²

Risk of transmission of meningococcal infection can be reduced by practicing **good hygiene**, including frequent handwashing and covering one's nose and mouth when sneezing or coughing and discarding used tissues promptly.³ To avoid exposure, persons should not share cigarettes, straws, cups, glasses or eating utensils.³

Vaccination: Almost all invasive disease is caused by one of five serogroups: A, B, C, Y, and W-135. The relative importance of each serogroup depends on geographic location, as well as other factors, such as age.² Among infants aged <1 year, >50% of cases are caused by serogroup B, for which no vaccine is licensed or available in the United States. **Of all cases of meningococcal disease among persons aged ≥11 years, 75% are caused by serogroups (C, Y, or W-135) which are included in vaccines available in the United States**.¹

Meningococcal conjugate vaccine, or MCV (Menactra®, Sanofi Pasteur), is routinely recommended for all children at 11-12 years of age as well as to unvaccinated adolescents at high school entry (age 14-15 years).² Other adolescents who wish to decrease their risk for meningococcal disease may also be vaccinated. **All college freshmen who live in a dormitory should be vaccinated**.²

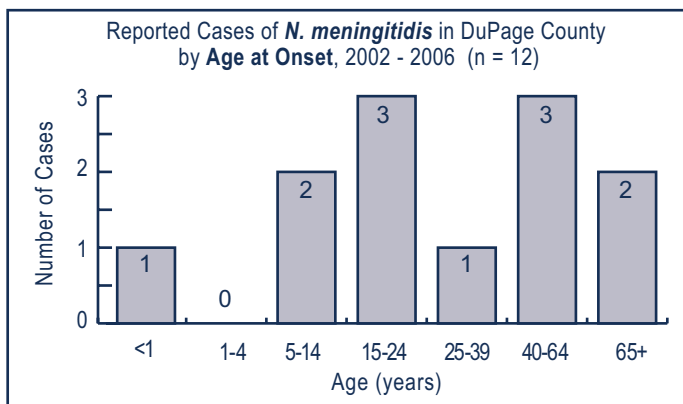
Meningococcal vaccination is **also recommended for persons at increased risk for meningococcal disease**, including persons who **travel** to countries in which *N. meningitidis* is hyperendemic or epidemic and persons with functional or anatomic **asplenia**.² Use of meningococcal polysaccharide vaccine, or MPSV (Menomune®, Sanofi Pasteur), should be limited to persons 2-10 years and older than 55 years of age, or when MCV is not available.²

References:

1. <http://www.cdc.gov/mmwr/preview/mmwrhtml/rr5407a1.htm>

2. <http://www.cdc.gov/nip/publications/pink/mening.pdf>

3. <http://www.idph.state.il.us/public/hb/hbmenin.htm>



The DuPage County Health Department is assisting the Illinois Department of Public Health in recruiting community providers to **enroll in the Vaccines for Children (VFC) Plus Program**. By becoming a VFC provider, you will be able to order and receive free vaccines to be used for VFC-eligible patients.

For more information, please contact Arlene Sharp, RN, BSN at 630-682-7979, ext. 6145.

DUPAGE COUNTY HEALTH DEPARTMENT

CASES¹ OF REPORTABLE DISEASES*

Required by the Illinois Department of Public Health (IDPH)

* Last updated July 2002

CD REVIEW

Volume 3, No. 5 May 2007

Vaccine Preventable Diseases	Report Within	2007		2006		2005		2004		2003		Median	
		April 2007	Jan-April	Jan-April	Total	Jan-April	Total	Jan-April	Total	Jan-April	Total	Jan-April	Total ('03-'06)
Chickenpox in those < 20 yrs old	7 days	12	75	116	244	123	225	190	273	238	342	123	259
Chickenpox in those ≥ 20 yrs old	24 hrs	1	4	6	8	5	7	7	13	7	10	6	9
Diphtheria	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> , invasive disease	24 hrs	0	1	4	7	5	10	2	6	3	4	3	7
Hepatitis A	24 hrs	2	7	2	9	1	9	11	27	5	20	5	15
Hepatitis B	7 days	0	3	0	5	1	6	6	8	5	12	3	7
Hepatitis B (carriers)	7 days	9	41	51	139	44	147	69	146	71	136	51	143
Measles	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Mumps	7 days	1	9	6	129	0	0	1	1	1	3	1	2
<i>Neisseria meningitidis</i>	24 hrs	0	0	2	2	2	4	1	1	0	1	1	2
Pertussis	24 hrs	0	6	12	25	9	29	8	127	5	12	8	27
Poliomyelitis	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	7 days	0	0	0	0	0	0	0	0	0	0	0	0
<i>Streptococcus pneumoniae</i> , invasive disease	7 days	5	27	29	67	29	64	28	62	42	97	29	66
Tetanus	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Other Communicable Diseases													
Amebiasis	7 days	0	1	1	2	0	0	2	3	2	2	1	2
Anthrax	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Blastomycosis	7 days	0	3	2	6	4	5	1	5	5	8	3	6
Botulism, foodborne	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Botulism, other	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Brucellosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Campylobacteriosis	7 days	9	31	23	105	43	151	47	143	41	136	41	140
Cholera	24 hrs	0	0	0	0	0	0	0	0	0	1	0	0
Cryptosporidiosis	7 days	0	0	0	9	0	3	2	2	2	4	0	4
Cyclosporiasis	7 days	0	0	0	0	1	2	23	23	0	0	0	1
Diarrhea of the newborn	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Ehrlichiosis	7 days	0	0	0	2	0	0	0	0	0	1	0	1
Encephalitis ²	7 days	0	2	5	14	3	7	0	0	0	1	2	4
Enteric <i>E. coli</i> infections ³	24 hrs	1	2	1	11	0	17	0	11	0	4	0	11
Giardiasis	7 days	4	20	10	43	21	47	20	64	37	88	20	56
Glomerulonephritis	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Hantavirus pulmonary syndrome	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Hemolytic uremic syndrome	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Hepatitis C (cases & carriers)	7 days	3	52	99	239	84	238	87	189	94	193	87	216
Hepatitis, viral, other ⁴	7 days	0	0	0	0	0	0	1	1	0	0	0	0
Histoplasmosis	7 days	0	0	0	1	0	0	2	6	1	2	0	2
Legionnaires' disease	7 days	0	0	1	8	3	4	1	5	1	8	1	7
Leprosy	7 days	0	0	0	1	0	0	0	0	0	0	0	0
Leptospirosis	7 days	0	0	0	0	1	1	0	0	0	0	0	0
Listeriosis	7 days	0	0	1	6	0	2	0	2	0	2	0	2
Lyme disease	7 days	1	1	0	11	2	12	2	9	0	8	1	10
Malaria	7 days	0	2	1	6	2	5	0	8	2	4	2	6
Meningitis, aseptic ²	7 days	6	21	21	102	27	123	21	116	21	174	21	120
Ophthalmia neonatorum	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Plague	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Psittacosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Q fever ⁵	3 hrs	0	0	0	0	0	0	0	1	0	0	0	0
Rabies, human case	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rabies, potential exposure	24 hrs	0	1	6	27	2	24	4	18	6	10	4	21
Reye syndrome	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Rheumatic fever	24 hrs	0	0	0	1	1	1	0	0	0	0	0	1
Rocky Mountain spotted fever	7 days	0	0	0	1	0	0	0	1	0	0	0	1
Salmonellosis	7 days	1	23	24	98	26	120	26	107	32	99	26	103
Shigellosis	7 days	0	2	5	26	8	35	0	15	24	44	5	31
Smallpox	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
<i>Staphylococcus aureus</i> (in those < 28 days old)	7 days	0	0	1	4	0	3	2	4	2	2	1	4
<i>Staphylococcus aureus</i> (vancomycin-resistant)	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Streptococcal infections, group A invasive	24 hrs	2	5	14	17	3	10	10	15	15	23	10	16
Streptococcal infections, group B invasive (in those < 3 mos old)	7 days	0	1	1	2	0	5	1	3	0	3	1	3
Toxic shock syndrome ⁶	24 hrs	0	0	0	1	0	3	2	6	3	4	0	4
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	7 days	3	10	16	44	0	29	16	46	12	62	12	47
Tularemia	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Typhoid fever	24 hrs	0	0	1	2	1	2	2	2	0	1	1	2
Typhus	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
West Nile disease	7 days	0	0	0	42	0	47	0	5	0	3	0	24
Yersiniosis	7 days	0	0	0	0	1	2	0	2	0	0	0	1
STDs, HIV and AIDS													
AIDS (Jan-Mar) ⁷	7 days	----	0	2	22	10	30	7	20	10	22	---	22
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia	7 days	125	409	409	1310	419	1215	296	948	312	939	409	1082
Gonorrhea	7 days	14	58	55	183	73	205	65	210	77	209	65	207
HIV infection (Jan-Mar) ⁷	7 days	---	3	5	22	6	38	9	29	8	31	---	30
Syphilis	7 days	0	4	5	24	1	15	1	9	5	18	4	17

DuPage County healthcare providers and hospitals **must report any suspected or confirmed case of these diseases** to the local health authorities within the number of hours or days indicated.

REPORTING NUMBERS:

Communicable Diseases
(630) 682-7979, ext. 7553
24 hours: (630) 682-7400

Tuberculosis
(630) 682-7522

STDs
(630) 682-7979, ext. 7575

HIV/AIDS:
(630) 682-7979, ext. 7310

¹ Provisional cases, based on date of onset

² Excludes West Nile disease

³ O157:H7, STEC, EHEC, ETEC, EPEC

⁴ Includes hepatitis D and E

⁵ Q fever case in 2004 not related to any suspected bioterrorism threat or event

⁶ Includes streptococcal (reportable within 24 hours) and presumed staphylococcal (reportable within 7 days)

⁷ HIV/AIDS data are provided quarterly by IDPH and are provisional, based on date of diagnosis

Websites

CDC:
www.cdc.gov

IDPH:
www.idph.state.il.us

DuPage:
www.dupagehealth.org

Archived issues of *CD Review* are available at:

www.dupagehealth.org/health_data/cd-review.html