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#### **General Information**

Communicable Disease and Epidemiology (630) 221-7553

**Environmental Health** (630) 682-7400

> **Immunizations** (630) 682-7400

Sexually **Transmitted Diseases** (630) 221-7553

> **HIV/AIDS** (630) 221-7553

> **Tuberculosis** (630) 221-7522

School Health (630) 221-7300

**Travel Clinic** (630) 682-7400

**Animal Care & Control** (630) 407-2800

Please contact **Communicable Disease** and Epidemiology at (630) 221-7553 or ebarajas@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.

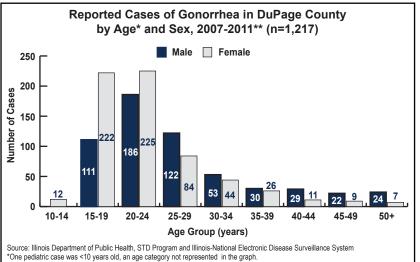
# **Under the Microscope** Neisseria gonorrhoeae

For questions or to report a suspect or known case of gonorrhea, please call the DuPage County Health Department at (630) 221-7553.

Gonorrhea is a sexually transmitted disease (STD) caused by Neisseria gonorrhoeae, a bacterium that can grow and multiply easily in the warm, moist areas of the reproductive tract, including the cervix, uterus, and fallopian tubes in women, and in the urethra in women and men. The bacterium can also grow in the mouth, throat, eyes, and anus. Gonorrhea is the second most frequently-reported notifiable disease in the U.S. (second

In the U.S., an estimated 700,000 new N. gonorrhoeae infections occur each year.<sup>3</sup> In 2010, gonorrhea rates were highest among adolescents and young adults. In 2010, the highest rates were observed among women aged 15-19 years and 20-24 years. Among men, the rate was highest among those aged 20-24 years. Rising rates of gonorrhea and chlamydia in men who have sex with men (MSM) are concerning because urethral, rectal, or pharyngeal infections may increase the risk for HIV infection (if HIV-uninfected), and may increase HIV transmission to others (if already HIV-infected).

In 2010, gonorrhea rates in the U.S. remained highest among blacks; the rate among blacks was 18.7 times the rate among whites. Gonorrhea rates among American Indians/Alaska Natives were 4.6 times those of whites, and rates among Hispanics were 2.2 times those of whites. Although an individual's sexual behavior can increase the risk of acquiring gonorrhea, social determinants of health, such as poverty, may contribute to the burden of gonorrhea in a community.2



\*One pediatric case was <10 years old, an age category not represented in the graph. \*\*2011 data are provisional

behaviors with patients. The U.S. Preventive Services Task Force (USPSTF) recommends that clinicians screen all sexually active women, including those who are pregnant, for gonorrhea infection if they are at increased risk.3 Women aged <25 years are at highest risk for gonorrhea infection, and are frequently asymptomatic. Other risk factors for gonorrhea include a previous gonorrhea infection, other STDs, new or multiple sex partners, inconsistent condom use, engaging in commercial sex work, and drug use. All patients tested for gonorrhea should be tested for other STDs,

<u>Dual Therapy for All Cases of Gonorrhea:</u> Due to increasing prevalence of antimicrobial-resistant N. gonorrhoeae, as of April 2007, quinolones are no longer recommended in the U.S. for the treatment of gonorrhea and associated conditions (e.g., PID). Consequently, only one class of antimicrobials, the cephalosporins, is recommended and available for the treatment of gonorrhea in the U.S.<sup>3</sup> Patients infected with *N. gonorrhoeae* frequently are coinfected with Chlamydia trachomatis; this finding has led to the recommendation that patients treated for gonococcal infection also be treated routinely with a regimen that is effective against uncomplicated genital C. trachomatis infection (further guidance is provided on pages 49-55 of the CDC's STD Treatment Guidelines, 2010 at <a href="https://www.cdc.gov/std/treatment/2010/STD-Treatment-2010-RR5912.pdf">www.cdc.gov/std/treatment/2010/STD-Treatment-2010-RR5912.pdf</a>).

Effective January 1, 2010, health care professionals in Illinois (licensed physicians, physician assistants and advanced practice nurses) have the option of providing antibiotic therapy (expedited partner therapy, or EPT) for the sex partners of individuals infected with chlamydia and gonorrhea, even if they have not been able to perform an exam on the infected patient's partner(s) (Public Act 96-613). EPT guidance materials are available at: http://www.idph.state.il.us/health/std/ept cq.htm.

Prevention: In addition to screening, timely diagnosis and treatment, with appropriate partner notification and management, the most reliable way to avoid transmission of STDs is to abstain from sex (i.e., oral, vaginal, or anal sex) or to be in a long-term, mutually monogamous relationship with an uninfected partner. Latex male condoms, when used consistently and correctly, can reduce the risk of transmission of gonorrhea and other STDs.

## References:

- 1. www.cdc.gov/std/Gonorrhea/
- 2. www.cdc.gov/std/stats10/gonorrhea.htm

including chlamydia, syphilis, and HIV.

- 3. www.cdc.gov/std/treatment/2010/STD-Treatment-2010-RR5912.pdf
- 4. www.medscape.com/viewarticle/754191

The majority of urethral infections caused by N. gonorrhoeae among men produce symptoms that cause them to seek curative treatment soon enough to prevent serious sequelae (e.g., epididymitis, infertility), but treatment might not be soon enough to prevent transmission to others. Among women, gonococcal infections might not produce recognizable symptoms until complications, e.g., pelvic inflammatory disease (PID), have occurred. PID can result in tubal scarring that can lead to infertility, ectopic pregnancy, and/or chronic pelvic pain.

Taking a sexual history is an important part of any clinic visit and provides a more complete picture of a patient's health and disease risk. A sexual history allows for identification of appropriate anatomical sites for examination and specimen collection. It also provides the opportunity to discuss sexual health and risk

# DUPAGE COUNTY HEALTH DEPARTMENT

CASES<sup>1</sup> OF REPORTABLE DISEASES\*

\* Last updated by the Illinois Department of Public Health in March 2008

	Report	2012	2	011		010	200			08		Median Total
Vaccine Preventable Diseases	Within	Jan	Jan	Total	Jan	Total	Jan	Total	Jan	Total	Jan	('08-'11)
Chickenpox (varicella)	24 hrs	10	6	82	9	95	9	146	7	236	9	120
Diphtheria	24 hrs	0	0	0	0	0	0	0	0	0	0	
Haemophilus influenzae, invasive	24 hrs	1	0	15	0	7	1	11	0	6	0	
Hepatitis A	24 hrs	0	1	9	0	3	1	6	0	11	0	7
Hepatitis B	7 days 7 days	6	7	111	7	4 108	9	8 127	13	3 128	7	<u>3</u>
Hepatitis B (carriers) Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	0	127	0	0	0	<u> </u>
Influenza, ICU admissions	24 hrs	0	4	24	0	3	NR	NR	NR	NR	0	13
Measles (rubeola)	24 hrs	0	0	0	0	0	0	1	0	14	0	0
Mumps	24 hrs	1	1	4	0	2	0	2	0	2	0	
Neisseria meningitidis , invasive	24 hrs	0	0	2	0	1	0	6	0	4	0	
Pertussis (whooping cough)	24 hrs	34	12	267	5	92	4	26	1	13	5	
Poliomyelitis	24 hrs	0	0	0	0	0	0	0	0		0	
Rubella	24 hrs	0	0	0	0	0	0	0	0	0	0	
Streptococcus pneumoniae, invasive	7 4			40								
disease, in those < 5 yrs old Tetanus	7 days 7 days	0	1 0	13	0	8	0	8	0	6	0	
Other Communicable Diseases	1 uays	U 0	U	U	U	U	U	U		U	U	
	T T								_			
Anaplasmosis <sup>2</sup>	7 days	0	0	3	0	0	0	0	0	0	0	
Anthrax Botulism, foodborne	3 hrs	0	0	0	0	0	0	0	0	0	0	
Botulism, foodborne Botulism, other	24 hrs	0	0	0	0	0	0	0	0	0	0	
Brucellosis	3 hrs	0	0	0	0	0	0	0	0	0	0	
California encephalitis <sup>3</sup>	7 days	0	0	0	0	0	0	0	0	0	0	
Cholera	24 hrs	0	0	0	0	0	0	0	0	1	0	
Creutzfeldt-Jakob disease	7 days	0	1	2	0	0	0	0	0	0	0	
Cryptosporidiosis	7 days	0	0	5	0	5	0	5	0	1	0	
Cyclosporiasis	7 days	0	0	0	0	0	0	1	0	0	0	
Dengue fever <sup>3</sup>	7 days	0	0	1	1	4	0	4	0	0	0	
Ehrlichiosis <sup>2</sup>	7 days	0	0	0	0	0	0	0	0	0	0	
Enteric E. coli infections4	24 hrs	2	3	21	2	18	1	12	0	21	2	19
Giardiasis	7 days	5	0	54	4	49	4	40	4	53	4	
Glomerulonephritis <sup>5</sup>	24 hrs	0	0	0	0	0	0	0	0	0	0	
Hantavirus pulmonary syndrome	24 hrs	0	0	0	0	0	0	0	0	0	0	
Hemolytic uremic syndrome	24 hrs	0	0	1	0	0	0	0	0	1	0	
Hepatitis C (cases & carriers)	7 days	11	14	196	18	187	18	213	25	246	18	20
Hepatitis D	7 days	0	0	1	0	0	0	0	0	0	0	
Histoplasmosis	7 days 3 hrs	0	0	0	0 5	2 11	1 0	2 181	0	6	0	
Influenza A, novel virus Legionellosis	7 days	0	0	15	1	11	0	13	0	5	0	
Leprosy	7 days	0	0	0	0	0	0	0	1	1	0	
Leptospirosis	7 days	0	0	0	0	0	0	0	0	0	0	
Listeriosis	7 days	0	1	3	0	6	0	3	0	1	0	
Lyme disease <sup>2</sup>	7 days	0	0	31	0	19	0	17	0	16	0	
Malaria	7 days	0	0	7	0	4	1	4	1	4	0	
Ophthalmia neonatorum	7 days	0	0	0	0	0	0	0	0	0	0	
Plague	3 hrs	0	0	0	0	0	0	0	0	0	0	
Psittacosis	7 days	0	0	0	0	0	0	0	0	0	0	
Q fever <sup>6</sup>	3 hrs	0	0	0	0	0	0	0	0	0	0	
Rabies, human case	24 hrs	0	0	0	0	0 54	0	0	0	0	0	
Rabies, potential exposure	24 hrs	0	0	31 0	0	0	0	15 0	0	45 0	0	
Reye syndrome	7 days							_			-	
Rheumatic fever <sup>5</sup> Rocky Mountain spotted fever <sup>2</sup>	24 hrs 7 days	0	0	0	0	0	0	0	0	0	0	
Salmonellosis	7 days	3	3	99	6	136	8	89	9		6	1
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	'
Shigellosis	7 days	0	4	22	0	277	4	12	5		4	
Smallpox	3 hrs	0	0	0	0	0	0	0	0	0	0	
Smallpox vaccination, complications	24 hrs	0	0	0	0	0	0	0	0	0	0	
St. Louis encephalitis <sup>3</sup>	7 days	0	0	0	0	0	0	0	0	0	0	
Staphylococcus aureus, methicillin												
resistant (MRSA), in those								-				
< 61 days old	24 hrs	0	1	3	0	6	2	6	0	3	0	
0												
Staphylococcus aureus , methicillin		I .I										
resistant (MRSA), community cluster <sup>7</sup>	24 hrs	0	0	0	0	1	0	1	0	4	0	
Staphylococcus aureus	04 5				ا ا	ار						
(vancomycin-resistant) Streptococcal infections, group A	24 hrs	0	0	1	1	1	0	0	0	0	0	-
nvasive disease <sup>8</sup>	24 hrs	3	3	30	4	20	1	4.4	1	16		
Toxic shock syndrome <sup>9</sup>		0	1		0		0	14		_	1	
Frichinosis	7 days 7 days	0	0	1	0	0	0	0	0		0	
Tuberculosis	7 days	1	3	18	1	26	1	29	2		1	2
ruberculosis Fularemia	3 hrs	0	0	0	0	0	0	0	0		0	
Typhoid fever	24 hrs	1	1	3	2	3	1	5	0		1	
Typhus	24 hrs	0	0	0	0	0	0	0	0	0	0	
/ibriosis (non-cholera)	7 days	0	0	3	0	1	0	2	0	0	0	
West Nile disease <sup>3</sup>	7 days	0	0	2	0	17	0	0	0		0	
Yersiniosis	7 days	2	0	3	0	0	1	5	0	1	0	
STDs, HIV and AIDS	,-					- 1						
AIDS <sup>10</sup> (January - March)	7 days	I I	5	16	10	26	2	19	6	22	- 1	2
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	
Chlamydia	7 days	87	129	1485	129	1542	155	1555	133		129	154
Gonorrhea	7 days	18	13	243	22	223	20	225	34	268	20	2
HIV infection <sup>10</sup> (January - March)	7 days		5	24	13	27	11	40	6	-		2
Synhilis	7 days	1	1	24	1	25	4	33	3		1	2

Syphilis

7 days

24

25

33

3 18

#### **CD REVIEW**

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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) 221-7553

24 hours: (630) 682-7400

# **Tuberculosis** (630) 221-7522

### STDs

(630) 221-7553

#### HIV/AIDS:

(630) 221-7553

- <sup>1</sup> Provisional cases, based on date of onset
- <sup>2</sup> Listed in CD Rules and Regulations under "Tickborne Disease"
- <sup>3</sup> Listed in CD Rules and Regulations under "Arboviral Infections"
- <sup>4</sup> O157:H7, STEC, EIEC, ETEC, EPEC
- <sup>5</sup> Listed in CD Rules and Regulations under "Streptococcal infections, group A invasive disease sequelae"
- <sup>6</sup> Q fever case in 2004 not related to any suspected bioterrorism threat or event
- <sup>7</sup> Two or more laboratory-confirmed cases of community onset MRSA infection during a 14 day period
- $^{\rm 8}$  Includes streptococcal toxic shock syndrome and necrotizing fasciitis
- <sup>9</sup> Due to Staphylococcus aureus
- <sup>10</sup> HIV/AIDS data are provided quarterly by IDPH and are provisional, based on date of diagnosis

NR = Not reported

\*\* = Count of 5 cases or less

#### <u>Websites</u>

CDC:

www.cdc.gov

DPH:

www.idph.state.il.us

#### DuPage:

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www.dupagehealth.org

Archived issues of *CD Review* are available at: www.dupagehealth.org/publications