



DuPage County Health Department R E V I E W

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General Information

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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

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Communicable Disease
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(630) 221-7553 or
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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.

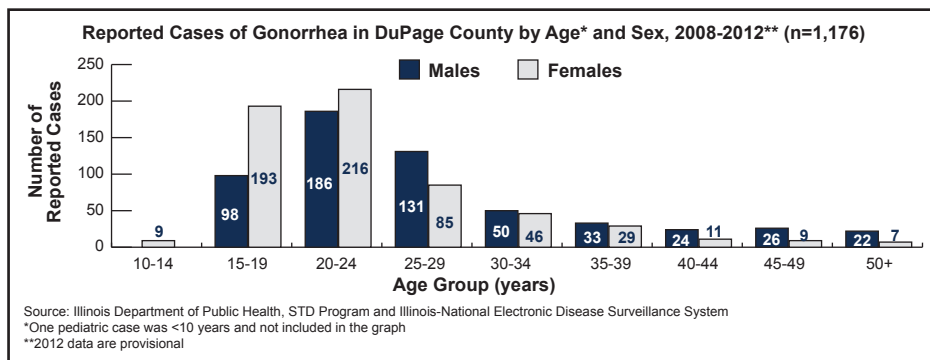
April is STD Awareness Month, an annual event calling attention to the impact of sexually transmitted diseases (STDs) in the U.S. This month-long observance provides individuals, physicians, and community-based organizations an opportunity to address ways to prevent some of nearly 20 million new cases of STDs that occur in the U.S. each year, costing the U.S. health-care system nearly \$16 billion in direct medical costs, and placing a substantial human and economic burden on the nation.¹

Gonorrhea is a 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 infect the mucous membranes of the mouth, throat, eyes, and anus.² **Gonorrhea is the second most frequently-reported notifiable disease in the U.S. (after chlamydia).**³

Often asymptomatic, infections due to *N. gonorrhoeae*, like those resulting from *Chlamydia trachomatis*, are a **major cause of pelvic inflammatory disease (PID)** in the U.S. PID can lead to serious outcomes in women, such as tubal infertility, ectopic pregnancy, and chronic pelvic pain. In addition, epidemiologic and biologic studies provide strong evidence that **gonococcal infections facilitate the transmission of HIV infection.**³ Gonorrhea rates among **women** have been higher than those among men since 2002. In 2011, gonorrhea rates were highest among **adolescents and young adults**, and by race/ethnicity, rates remained highest among **blacks.**³

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, including chlamydia, syphilis, and HIV.**⁴

Neisseria gonorrhoeae has progressively developed resistance to each of the antibiotics used for treatment of gonorrhea. In the last decade, the development of **fluoroquinolone resistance** has resulted in the availability of only a single class of antibiotics that meet CDC's efficacy standards—the cephalosporins. Most recently, **declining susceptibility to cefixime** resulted in a change in the CDC treatment guidelines, so that **dual therapy with ceftriaxone and either azithromycin or doxycycline is now the only CDC-recommended treatment regimen for gonorrhea.**³ Because tetracycline resistance is common, **azithromycin is preferred over doxycycline** for gonorrhea treatment.⁵



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_cg.htm.

For all patients with gonorrhea, every effort should be made to ensure that the patients' sex partner(s) from the preceding 60 days are evaluated and treated for *N. gonorrhoeae* with a recommended regimen. **If a heterosexual partner of a patient cannot be linked to evaluation and treatment in a timely fashion, then expedited partner therapy should be considered**, using oral combination antimicrobial therapy for gonorrhea (cefixime 400 mg and azithromycin 1 g) delivered to the partner by the patient.⁶

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.⁴

References:

1. www.cdc.gov/mmwr/preview/mmwrhtml/mm6213a5.htm?s_cid=mm6213a5_w
2. www.cdc.gov/std/Gonorrhea/
3. www.cdc.gov/std/stats11/Surv2011.pdf
4. www.cdc.gov/std/treatment/2010/default.htm
5. <http://jama.jamanetwork.com/article.aspx?articleid=1556135>
6. www.cdc.gov/mmwr/preview/mmwrhtml/mm6131a3.htm?s_cid=mm6131a3_w

DUPAGE COUNTY HEALTH DEPARTMENT
CASES¹ OF REPORTABLE DISEASES*

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

CD REVIEW
Volume 9, No. 4 April 2013

	Report Within	2013		2012		2011		2010		2009		Median	
		Mar	Jan-Mar	Jan-Mar	Total	Jan-Mar	Total	Jan-Mar	Total	Jan-Mar	Total	Jan-Mar	Total ('09-'12)
Vaccine Preventable Diseases													
Chickenpox (varicella)	24 hrs	4	18	32	93	16	82	25	95	34	146	25	94
Diphtheria	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> , invasive	24 hrs	1	1	4	11	3	15	3	7	1	11	3	11
Hepatitis A	24 hrs	0	1	0	8	2	8	2	3	2	6	2	7
Hepatitis B	7 days	0	1	1	5	0	0	0	4	4	8	1	4.5
Hepatitis B (carriers)	7 days	11	22	28	97	20	113	26	108	36	127	26	110.5
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	0	0	0	1	1	0	0
Influenza, ICU admissions	24 hrs	4	50	4	59	23	24	0	3	NR	NR	13.5	24
Measles (rubeola)	24 hrs	0	0	0	0	0	0	0	0	1	1	0	0
Mumps	24 hrs	0	0	1	1	1	3	0	2	0	2	0	2
<i>Neisseria meningitidis</i> , invasive	24 hrs	0	0	0	0	1	2	0	1	2	6	0	1.5
Pertussis (whooping cough)	24 hrs	2	9	77	195	34	268	8	92	4	26	9	143.5
Polioyielitis	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rubella	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
<i>Streptococcus pneumoniae</i> , invasive disease, in those < 5 yrs old	7 days	1	1	1	5	5	13	4	8	3	8	3	8
Tetanus	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Other Communicable Diseases													
Anaplasmosis ²	7 days	0	0	0	2	0	3	0	0	0	0	0	1
Anthrax	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
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	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
California encephalitis ³	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Cholera	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Creutzfeldt-Jakob disease	7 days	0	0	0	1	1	3	1	1	0	0	0	1
Cryptosporidiosis	7 days	0	0	1	2	0	5	0	5	1	5	0	5
Cyclosporiasis	7 days	0	1	0	0	0	0	0	0	0	1	0	0
Dengue fever ³	7 days	0	0	0	1	1	1	1	4	0	4	0	2.5
Ehrlichiosis ²	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Enteric <i>E. coli</i> infections ⁴	24 hrs	3	5	4	18	5	22	2	18	2	12	4	18
Giardiasis	7 days	1	3	12	34	2	44	18	49	10	40	10	42
Glomerulonephritis ⁵	24 hrs	0	0	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	0	0
Hemolytic uremic syndrome	24 hrs	0	0	0	1	0	1	0	0	0	0	0	0.5
Hepatitis C (cases & carriers)	7 days	16	47	54	171	38	189	47	187	57	213	47	188
Hepatitis D	7 days	0	0	0	0	0	1	0	0	0	0	0	0
Histoplasmosis	7 days	0	0	0	2	0	1	1	2	1	2	0	2
Influenza A, novel virus	3 hrs	0	0	0	0	0	0	11	11	0	181	0	5.5
Legionellosis	7 days	0	4	4	25	0	14	2	11	1	13	2	13.5
Leprosy	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Leptospirosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Listeriosis	7 days	0	0	0	2	1	2	1	6	1	3	1	2.5
Lyme disease ²	7 days	0	0	0	27	0	32	0	19	0	17	0	23
Malaria	7 days	1	1	1	2	0	7	0	4	1	4	1	4
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 ⁶	3 hrs	0	0	0	0	0	0	0	0	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	3	4	1	43	3	30	7	54	0	15	3	36.5
Reye syndrome	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Rheumatic fever ⁵	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Mountain spotted fever ⁷	7 days	0	0	0	1	0	0	0	0	0	0	0	0
Salmonellosis	7 days	5	16	16	123	11	95	24	136	18	89	16	109
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	7 days	1	1	6	20	5	22	255	277	4	12	5	21
Smallpox	3 hrs	0	0	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	0	0
St. Louis encephalitis ³	7 days	0	0	0	0	0	0	0	0	0	0	0	0
<i>Staphylococcus aureus</i> , methicillin resistant (MRSA), in those < 61 days old	24 hrs	0	0	1	7	1	3	1	6	2	6	1	6
<i>Staphylococcus aureus</i> , methicillin resistant (MRSA), community cluster ⁷	24 hrs	0	0	1	1	0	0	1	1	0	1	0	1
<i>Staphylococcus aureus</i> (vancomycin-resistant)	24 hrs	0	0	0	0	0	1	1	1	0	0	0	0.5
Streptococcal infections, group A invasive disease ⁸	24 hrs	3	6	9	20	12	30	3	20	6	14	6	20
Toxic shock syndrome ⁹	7 days	0	2	0	0	1	1	0	0	0	0	0	0
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	7 days	2	10	4	26	7	18	6	26	9	29	7	26
Tularemia	3 hrs	0	0	0	1	0	0	0	0	0	0	0	0
Typhoid fever	24 hrs	0	0	1	2	2	3	2	3	2	5	2	3
Typhus	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Vibriosis (non-cholera)	7 days	0	0	0	4	0	3	0	1	0	2	0	2.5
West Nile disease ³	7 days	0	0	0	56	0	2	0	17	0	0	0	9.5
Yersiniosis	7 days	0	0	2	3	1	3	0	0	2	5	1	3
STDs, HIV and AIDS													
AIDS ¹⁰ (January - March)	7 days	6	6	**	17	**	16	10	26	**	19	**	18
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia	7 days	111	381	427	1650	350	1599	396	1542	421	1555	396	1577
Gonorrhea	7 days	16	54	58	196	46	241	51	223	61	225	54	224
HIV infection ¹⁰ (January - March)	7 days	6	6	6	20	**	24	13	27	11	40	8.5	25.5
Syphilis	7 days	2	3	2	12	11	24	3	25	11	33	3	24.5

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

¹ Provisional cases, based on date of onset
² Listed in CD Rules and Regulations under "Tickborne Disease"
³ Listed in CD Rules and Regulations under "Arboviral Infections"
⁴ O157:H7, STEC, EIEC, ETEC, EPEC
⁵ Listed in CD Rules and Regulations under "Streptococcal infections, group A invasive disease sequelae"
⁶ Q fever case in 2004 not related to any suspected bioterrorism threat or event
⁷ Two or more laboratory-confirmed cases of community onset MRSA infection during a 14 day period
⁸ Includes streptococcal toxic shock syndrome and necrotizing fasciitis
⁹ Due to *Staphylococcus aureus*
¹⁰ 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

Websites

CDC:
www.cdc.gov

IDPH:
www.idph.state.il.us

DuPage:
www.dupagehealth.org

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www.dupagehealth.org/publications