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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 Services  
(630) 407-2800

Please contact  
Communicable Disease  
and Epidemiology at  
(630) 221-7553  
with suggestions  
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 Sexually Transmitted Diseases Awareness Month.<sup>1</sup> Gonorrhea is a sexually transmitted disease (STD) caused by infection with the *Neisseria gonorrhoeae* bacterium. *N. gonorrhoeae* infects the mucous membranes of the reproductive tract, including the cervix, uterus, and fallopian tubes in women, and the urethra in women and men. *N. gonorrhoeae* can also infect the mucous membranes of the mouth, throat, eyes, and rectum.<sup>2</sup>

**Gonorrhea is the second most frequently-reported notifiable disease in the U.S.** (second only to chlamydia).<sup>3</sup> Of concern, there has been a **121% increase in the number of reported gonorrhea cases in DuPage County from 2000 (204 cases) to 2017 (451 cases)**. While improved STD screening and reporting may contribute to rate increases, timely treatment and prevention should result in a reduction of disease burden.

Often asymptomatic, persons with 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**.<sup>3</sup> Together, sexual behavior and community prevalence can increase the risk of acquiring gonorrhea. **Social determinants of health, such as socioeconomic status, discrimination, and access to quality health care, may contribute to the burden of gonorrhea in a community.**<sup>3</sup>

Clinicians should take a thorough sexual history.<sup>4</sup> **Annual screening for *N. gonorrhoeae* infection is recommended for all sexually active women aged <25 years and for older women at increased risk for infection** (e.g., those who have a new sex partner, more than one sex partner, a sex partner with concurrent partners, or a sex partner who has a STD). **Additional risk factors for gonorrhea include inconsistent condom use among persons who are not in mutually monogamous relationships, previous or coexisting sexually transmitted infections, and exchanging sex for money or drugs. Subgroups of men who have sex with men (MSM) are at high risk for gonorrhea infection and should be screened at least annually at all sites of exposure (e.g., genital and extragenital [rectal and pharyngeal] anatomic sites).**<sup>5,6</sup>

A recent travel history with sexual contacts outside of the U.S. should be part of any gonorrhea evaluation. **Prenatal screening and treatment of pregnant women is the best method for preventing gonococcal infection among neonates. All patients tested for gonorrhea should also be tested for other STDs, including chlamydia, syphilis, and HIV.**<sup>5</sup>

Gonorrhea has progressively developed **resistance** to the antibiotic drugs prescribed to treat it. Following the spread of gonococcal fluoroquinolone resistance, the cephalosporin antibiotics (including the injectable antibiotic ceftriaxone and the oral antibiotic cefixime) have been the foundation of recommended treatment for gonorrhea. CDC currently recommends only one regimen of **dual therapy for the treatment of gonorrhea—the injectable cephalosporin ceftriaxone, plus oral azithromycin**—which should be administered together on the **same day, preferably simultaneously and under direct observation**.<sup>7</sup>

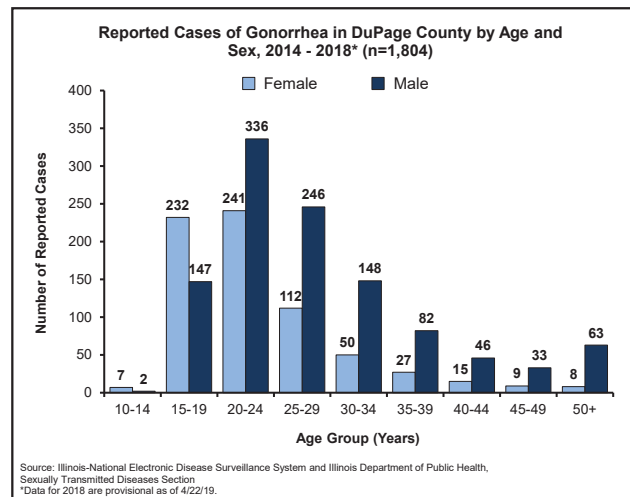
**Recent sex partners** (i.e., persons having sexual contact with the infected patient **within the 60 days preceding onset of symptoms or gonorrhea diagnosis**) should be referred for **evaluation, testing, and presumptive dual treatment**. If the patient's last potential sexual exposure was >60 days before onset of symptoms or diagnosis, the **most recent sex partner** should be treated. To avoid reinfection, sex partners should be instructed to **abstain from unprotected sexual intercourse for 7 days** after they and their sexual partner(s) have completed treatment and after resolution of symptoms, if present.<sup>5</sup>

Since 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 heterosexual partners of individuals infected with chlamydia or gonorrhea, even if they have not been able to perform an exam on the infected patient's partner(s). EPT has been proven to **reduce re-infection rates and possible health complications** due to untreated STDs. EPT guidance materials are available at: [www.dph.illinois.gov/topics-services/diseases-and-conditions/stds/ept](http://www.dph.illinois.gov/topics-services/diseases-and-conditions/stds/ept). If a clinician considers it unlikely that a heterosexual partner of a gonorrhea patient will access timely evaluation and treatment, EPT with **cefixime 400 mg and azithromycin 1 g** should still be considered, as not treating partners is significantly more harmful than is the use of EPT for gonorrhea.<sup>5</sup>

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 oral, vaginal, and anal sex or to be in a long-term, mutually monogamous relationship with a partner known to be uninfected**. Latex male condoms and dental dams (for oral sex), when used consistently and correctly, can reduce the risk of transmission of gonorrhea and other STDs.<sup>5,8,9</sup> **Prevention counseling is most effective if provided in a nonjudgmental and empathetic manner** appropriate to the patient's culture, language, gender, sexual orientation, age, and developmental level.<sup>5</sup>

### References:

1. [www.cdc.gov/features/stdawareness/index.html](http://www.cdc.gov/features/stdawareness/index.html)
2. [www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm](http://www.cdc.gov/std/gonorrhea/stdfact-gonorrhea-detailed.htm)
3. [www.cdc.gov/std/stats17/gonorrhea.htm](http://www.cdc.gov/std/stats17/gonorrhea.htm)
4. <https://nationalcoalitionforsexualhealth.org/tools-for-health-care-providers/sexual-health-and-your-patients-a-providers-guide>
5. [www.cdc.gov/std/tg2015/gonorrhea.htm](http://www.cdc.gov/std/tg2015/gonorrhea.htm)
6. [www.cdc.gov/mmwr/volumes/68/wr/mm6814a1.htm?s\\_cid=mm6814a1\\_w](http://www.cdc.gov/mmwr/volumes/68/wr/mm6814a1.htm?s_cid=mm6814a1_w)
7. [www.cdc.gov/std/gonorrhea/arg/default.htm](http://www.cdc.gov/std/gonorrhea/arg/default.htm)
8. [www.cdc.gov/std/healthcomm/stdfact-stdriskandalsex.htm](http://www.cdc.gov/std/healthcomm/stdfact-stdriskandalsex.htm)
9. [www.cdc.gov/condomeffectiveness/Dental-dam-use.html](http://www.cdc.gov/condomeffectiveness/Dental-dam-use.html)



DUPAGE COUNTY HEALTH DEPARTMENT

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

\* Last updated by the Illinois Department of Public Health, effective January 1, 2019.

CD REVIEW

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	Report Within	2019		2018		2017		2016		2015		Median	
		Mar	Jan-Mar	Jan-Mar	Total	Jan-Mar	Total	Jan-Mar	Total	Jan-Mar	Total	Jan-Mar	Total ('15-'18)
<b>Vaccine Preventable Diseases</b>													
Chickenpox (varicella)	24 hrs	4	15	11	42	6	35	16	56	11	36	11	39
Diphtheria	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> , invasive	24 hrs	1	3	5	16	3	9	2	13	3	15	3	14
Hepatitis A	24 hrs	1	2	1	6	2	3	0	2	1	5	1	4
Hepatitis B (acute, chronic, perinatal)	7 days	6	32	30	92	28	100	29	124	42	139	29	112
Influenza, deaths in < 18 yrs old	7 days	1	1	0	0	0	0	0	0	0	0	0	0
Influenza, ICU admissions	24 hrs	37	67	108	126	55	121	54	69	28	43	54	95
Measles (rubeola)	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Mumps	24 hrs	1	1	4	12	4	8	4	11	1	8	4	9.5
<i>Neisseria meningitidis</i> , invasive	24 hrs	0	0	0	0	0	0	0	1	0	1	0	0.5
Pertussis (whooping cough)	24 hrs	0	6	6	34	4	36	17	105	8	49	6	42.5
Polioyielitis	3 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	2	6	0	1	0	2	0	0	0	1.5
Tetanus	7 days	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other Communicable Diseases</b>													
Anaplasmosis	7 days	0	0	0	0	0	1	0	1	0	3	0	1
Anthrax	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Arboviral Disease (other and unspecified) <sup>2</sup>	7 days	0	0	0	0	0	2	1	1	0	0	0	0.5
Babesiosis	7 days	0	0	0	1	0	0	0	1	0	0	0	0.5
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
Campylobacteriosis	7 days	10	37	23	160	32	161	29	173	NR	NR	26	161
Chikungunya virus disease	7 days	0	0	0	2	0	0	0	4	0	2	0	2
Cholera	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Cryptosporidiosis	7 days	0	4	10	31	1	18	2	18	2	5	2	18
Cyclosporiasis	7 days	0	0	0	141	0	7	0	5	0	1	0	6
Dengue virus infection	7 days	0	0	0	2	0	1	0	3	0	3	0	2.5
Ehrlichiosis	7 days	0	0	0	0	0	0	0	2	0	1	0	0.5
Enteric <i>E. coli</i> infections <sup>3</sup>	24 hrs	2	6	7	39	3	23	5	24	3	14	3	23.5
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	0	0	0	0	0	0	0	0	0
Hepatitis C (acute, chronic, perinatal)	7 days	23	56	54	186	61	294	77	255	63	237	61	246
Hepatitis D	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Histoplasmosis	7 days	1	3	1	6	3	9	3	8	0	3	1	7
Influenza A, novel virus	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Legionellosis	7 days	0	2	0	37	3	28	2	34	1	18	1	31
Leptospirosis	7 days	0	0	0	0	0	1	0	0	0	0	0	0
Listeriosis	7 days	0	0	0	0	0	4	0	0	0	2	0	1
Lyme disease	7 days	0	1	2	27	2	36	2	34	1	30	2	32
Malaria	7 days	1	1	1	4	0	3	5	10	0	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	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rabies, animal case	24 hrs	0	0	0	8	0	12	0	10	0	16	0	11
Rabies, human case	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rabies, potential exposure	24 hrs	1	5	17	167	1	84	3	59	3	73	3	78.5
Spotted fever rickettsiosis	7 days	0	0	0	2	0	1	0	3	0	0	0	1.5
Salmonellosis	7 days	4	19	19	118	16	104	14	118	17	131	16	118
<i>Salmonella</i> Paratyphi infection <sup>4</sup>	24 hrs	0	1	2	2	0	1	0	1	1	2	0	1.5
<i>Salmonella</i> Typhi infection	24 hrs	0	0	2	4	2	4	0	0	1	3	1	3.5
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	7 days	2	4	2	10	4	14	8	21	3	27	3	17.5
Smallpox	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Smallpox vaccination, complications	24 hrs	0	0	0	1	0	0	0	0	0	0	0	0
<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 disease <sup>5</sup>	24 hrs	3	8	15	33	8	24	7	18	8	22	8	23
Toxic shock syndrome <sup>6</sup>	7 days	0	0	1	1	0	0	0	0	0	0	0	0
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	7 days	1	6	6	50	5	42	9	42	2	39	5	42
Tularemia	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Typhus	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Vibriosis (non-cholera)	7 days	0	1	2	14	2	6	1	6	0	4	1	6
West Nile virus disease	7 days	0	0	0	18	0	6	0	10	0	9	0	9.5
Zika virus disease	7 days	0	0	1	1	0	1	1	11	NR	NR	0.5	1
<b>STDs, HIV and AIDS</b>													
AIDS <sup>7</sup> (January - March)	7 days	3	3	1	15	4	12	8	12	4	13	4	12.5
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia	7 days	126	471	607	2396	583	2495	622	2417	541	2382	583	2406.5
Gonorrhea	7 days	21	74	82	414	94	451	97	390	77	307	82	402
HIV infection <sup>7,8</sup> (January - March)	7 days	11	11	5	24	12	39	12	43	14	56	12	41
Syphilis <sup>9</sup>	7 days	6	18	16	62	21	55	14	59	7	42	14	57
<b>Outbreaks<sup>10</sup></b>													
Foodborne	24 hrs	0	0	0	6	0	2	1	3	2	3	0	3
Waterborne	24 hrs	0	0	0	0	0	0	0	1	0	0	0	0
Person to Person	24 hrs	12	33	51	80	38	66	27	47	29	53	29	59.5
Other and Unspecified	24 hrs	0	0	0	1	0	0	0	0	0	0	0	0

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> Including, but not limited to, California serogroup virus diseases, Eastern equine encephalitis virus disease, Powassan virus disease, St. Louis encephalitis virus disease, Western equine encephalitis virus disease, and yellow fever. Chikungunya virus disease, dengue virus infection, West Nile virus disease, and Zika virus disease are listed individually.

<sup>3</sup> O157:H7, STEC

<sup>4</sup> *Salmonella enterica* serotypes Paratyphi A, B [tartrate negative], and C

<sup>5</sup> Includes streptococcal toxic shock syndrome and necrotizing fasciitis

<sup>6</sup> Due to *Staphylococcus aureus*

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

<sup>8</sup> HIV counts reflect all newly diagnosed HIV cases regardless of stage of disease at diagnosis.

<sup>9</sup> Cases are provisional, based on test date per local health department investigation.

<sup>10</sup> Listed based on report submission date

NR = Not reported

Websites

CDC:

[www.cdc.gov](http://www.cdc.gov)

IDPH:

[www.dph.illinois.gov](http://www.dph.illinois.gov)

DuPage:

[www.dupagehealth.org](http://www.dupagehealth.org)

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