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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
with 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 Syphilis

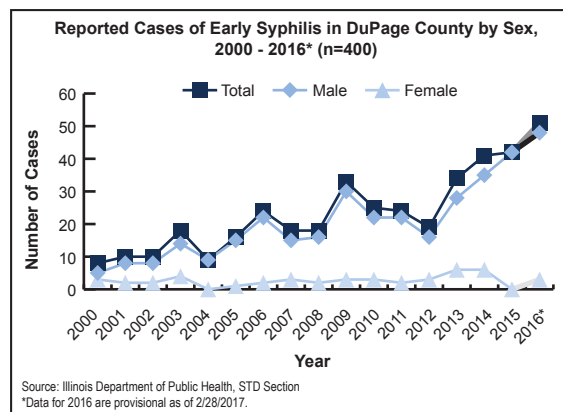
For questions or to report a suspect or known case of syphilis, please call the DuPage County Health Department at (630) 221-7553. Patients may be referred for STD screening, diagnosis, treatment, and counseling to the DCHD STD Clinic (for an appointment, please call 630-682-7400).

Syphilis, a genital ulcerative disease caused by the bacterium *Treponema pallidum*, is associated with **significant complications if left untreated** and can **facilitate the transmission and acquisition of HIV infection**. As observed locally and nationally, **men account for the most cases of syphilis, with the vast majority of those cases occurring among men who have sex with men (MSM)**. Additionally, historical data demonstrate that untreated early syphilis in pregnant women, if acquired during the 4 years before delivery, can lead to infection of the fetus in up to 80% of cases and **may result in stillbirth or death of the infant in up to 40% of cases**.¹

After being on the verge of elimination in 2000 in the United States, syphilis cases have rebounded, as reported by CDC.² Rates of early syphilis have continued to rise overall in recent years, nationally and locally. **DuPage County has been experiencing a sustained increase in reported syphilis cases since 2013.**

Epidemiology: The DuPage County 2016 provisional case count of **early syphilis (includes primary, secondary, and early latent syphilis; less than one year's duration of infection)** is 51, compared to 42 cases reported in 2015. The number of reported cases of primary, secondary, and early latent syphilis was **over six times higher in 2016 than in 2000**. DuPage County previously experienced an increase in 2009 with a total of 33 cases.

Among provisional DuPage County early syphilis cases reported in 2016, non-Hispanic white persons accounted for 51%, and **41% of reported cases were 40 years or older (unlike the younger age distribution of chlamydia and gonorrhea cases)**. Consistent with previous years, 2016 cases have occurred primarily in men, with a reported risk of being MSM (men who have sex with men; includes MSM only or bisexual). Nearly half (45%) of cases have co-infection with HIV.



Recommendations: The DuPage County Health Department (DCHD) is requesting the assistance of physicians, practitioners, and laboratory staff to counteract this ongoing increase in early syphilis cases. **To assist in rapid identification and prompt intervention:**

- Be alert to possible cases of syphilis and **test sexually active clients who have been diagnosed with another sexually-transmitted disease(STD)and/or HIV and those who have an infected sex partner.**
- A presumptive diagnosis of syphilis is possible with the use of **two types of serologic tests:** nontreponemal tests (e.g., VDRL and RPR) and treponemal tests (e.g., FTA-ABS tests, TP-PA assay). **The use of only one type of serologic test is insufficient for diagnosis**, because each type of test has limitations, including the possibility of false-positive test results in persons without syphilis.
- The following **STD screening tests should be performed at least annually for sexually active MSM (men who have sex with men): syphilis, HIV, chlamydia (urethral and rectal), and gonorrhea (urethral, pharyngeal, and rectal)**. All MSM should also be tested for HBsAg to detect hepatitis B virus (HBV) infection; in addition, screening among past or current drug users should include hepatitis C virus and HBV testing. **More frequent screening (i.e., at 3-6 month intervals)** is recommended for MSM who have multiple or anonymous sex partners. Vaccination against hepatitis A and B is recommended for all MSM in whom previous infection or vaccination cannot be documented.
- Also perform a serologic test for syphilis on **patients with signs/symptoms of early syphilis** (e.g., single or multiple genital or oral lesions, palmar/plantar or body rash, enlarged lymph nodes and patchy hair loss).
- Test **all pregnant women**, as is required by Illinois statute, for syphilis at the **first prenatal visit** and **again during the third trimester**. **Effective prevention and detection of congenital syphilis depends on the identification of syphilis in pregnant women.**
- Persons who were **exposed within the 90 days preceding the diagnosis of primary, secondary, or early latent syphilis in a sex partner** might be infected even if seronegative; therefore, such persons **should be treated presumptively**.
- **Report all reactive syphilis serology results (RPR, FTA-ABS, EIA, VDRL, TP-PA, etc.) or presumptive diagnoses by calling the DCHD Communicable Disease and Epidemiology Program at 630-221-7553.**
- **All patients who have syphilis should be tested for HIV infection.**
- Patients with syphilis and **ocular complaints** should receive a lumbar puncture with cerebrospinal fluid (CSF) examination and an immediate ophthalmologic evaluation. Ocular syphilis should be managed according to treatment recommendations for **neurosyphilis**, in collaboration with an ophthalmologist.

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 syphilis and other STDs.³

References:

1. www.cdc.gov/std/syphilis/stats.htm
2. www.cdc.gov/mmwr/preview/mmwrhtml/mm6318a4.htm
3. www.cdc.gov/std/tg2015/syphilis.htm

DUPAGE COUNTY HEALTH DEPARTMENT

CASES¹ OF REPORTABLE DISEASES*

* Last updated by the Illinois Department of Public Health in April 2016

CD REVIEW

Volume 13, No. 2 February 2017

Vaccine Preventable Diseases	Report Within	2017		2016		2015		2014		2013		Median	
		Jan	Jan	Jan	Total	Jan	Total	Jan	Total	Jan	Total	Jan	Total ('13-'16)
Chickenpox (varicella)	24 hrs	1	5	56	8	36	4	76	2	78	4	66	
Diphtheria	3 hrs	0	0	0	0	0	0	0	0	0	0	0	
Haemophilus influenzae, invasive	24 hrs	1	1	13	1	15	1	5	0	10	1	11.5	
Hepatitis A	24 hrs	0	0	2	0	5	0	8	1	4	0	4.5	
Hepatitis B	7 days	0	0	2	0	2	1	5	1	3	0	2.5	
Hepatitis B (carriers)	7 days	12	10	121	11	137	6	112	9	110	10	116.5	
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	0	0	0	1	0	0	
Influenza, ICU admissions	24 hrs	11	4	69	14	43	26	152	39	78	14	73.5	
Measles (rubeola)	24 hrs	0	0	0	0	0	0	0	0	0	0	0	
Mumps	24 hrs	0	2	11	1	8	1	2	0	0	1	5	
Neisseria meningitidis, invasive	24 hrs	0	0	1	0	1	0	0	0	0	0	0.5	
Pertussis (whooping cough)	24 hrs	2	7	107	5	49	2	22	2	43	2	46	
Poliomyelitis	3 hrs	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	
Streptococcus pneumoniae, invasive disease, in those < 5 yrs old	7 days	0	0	2	0	0	0	3	0	4	0	2.5	
Tetanus	7 days	0	0	0	0	0	0	0	0	0	0	0	
Other Communicable Diseases													
Anaplasmosis ²	7 days	0	0	1	0	3	0	3	0	0	0	2	
Anthrax	3 hrs	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	
Botulism, other	24 hrs	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	
California encephalitis ³	7 days	0	0	0	0	0	0	0	0	0	0	0	
Campylobacteriosis	7 days	12	12	173	NR	NR	NR	NR	NR	NR	NR	NR	
Chikungunya virus disease ³	7 days	0	0	4	0	2	0	0	NR	NR	0	2	
Cholera	24 hrs	0	0	0	0	0	0	0	0	0	0	0	
Creutzfeldt-Jakob disease	7 days	0	0	3	0	1	0	2	0	0	0	1.5	
Cryptosporidiosis	7 days	1	0	18	0	5	0	2	0	7	0	6	
Cyclosporiasis	7 days	0	0	5	0	1	0	1	1	4	0	2.5	
Dengue fever ³	7 days	0	0	3	0	3	1	1	0	3	0	3	
Ehrlichiosis ²	7 days	0	0	2	0	1	0	0	0	0	0	0.5	
Enteric E. coli infections ⁴	24 hrs	0	2	23	2	14	0	18	2	54	2	20.5	
Glomerulonephritis ⁵	24 hrs	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	
Hemolytic uremic syndrome	24 hrs	0	0	0	0	0	0	2	0	0	0	0	
Hepatitis C (cases & carriers)	7 days	23	24	254	22	237	29	242	17	181	23	239.5	
Hepatitis D	7 days	0	0	0	0	0	0	0	0	0	0	0	
Histoplasmosis	7 days	0	1	7	0	3	0	7	0	1	0	5	
Influenza A, novel virus	3 hrs	0	0	0	0	0	0	0	0	0	0	0	
Legionellosis	7 days	2	0	34	0	18	1	26	1	39	1	30	
Leprosy	7 days	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	
Listeriosis	7 days	0	0	0	0	2	0	2	0	2	0	2	
Lyme disease ²	7 days	0	0	34	0	30	0	22	0	39	0	32	
Malaria	7 days	0	2	10	0	4	0	2	0	7	0	5.5	
Ophthalmia neonatorum	7 days	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	
Psittacosis	7 days	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	
Rabies, animal case	24 hrs	0	0	10	0	16	0	6	NR	NR	0	10	
Rabies, human case	24 hrs	0	0	0	0	0	0	0	0	0	0	0	
Rabies, potential exposure	24 hrs	0	1	59	2	73	1	51	1	44	1	55	
Reye syndrome	7 days	0	0	0	0	0	0	0	0	0	0	0	
Rheumatic fever ⁶	24 hrs	0	0	0	0	0	0	0	0	0	0	0	
Rocky Mountain spotted fever ²	7 days	0	0	3	0	0	0	0	0	0	0	0	
Salmonellosis	7 days	4	4	119	12	133	5	115	5	128	5	123.5	
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	0	
Shigellosis	7 days	1	5	21	2	27	0	18	0	18	1	19.5	
Smallpox	3 hrs	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	
St. Louis encephalitis ³	7 days	0	0	0	0	0	0	0	0	0	0	0	
Staphylococcus aureus, methicillin resistant (MRSA), in those < 61 days old	24 hrs	0	0	11	0	10	1	9	0	3	0	9.5	
Staphylococcus aureus, methicillin resistant (MRSA), community cluster ⁶	24 hrs	0	0	1	0	0	0	0	0	0	0	0	
Staphylococcus aureus (vancomycin-resistant)	24 hrs	0	0	0	0	0	0	0	0	0	0	0	
Streptococcal infections, group A invasive disease ⁷	24 hrs	3	3	18	2	22	9	29	4	21	3	21.5	
Toxic shock syndrome ⁸	7 days	0	0	0	0	0	0	0	0	1	0	0	
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	
Tuberculosis	7 days	3	2	42	1	39	0	34	2	35	2	37	
Tularemia	3 hrs	0	0	0	0	0	0	0	0	0	0	0	
Typhoid fever	24 hrs	1	0	0	0	3	0	5	0	2	0	2.5	
Typhus	24 hrs	0	0	0	0	0	0	0	0	0	0	0	
Vibriosis (non-cholera)	7 days	0	0	6	0	4	0	3	0	2	0	3.5	
West Nile virus disease ³	7 days	0	0	10	0	9	0	5	0	6	0	7.5	
Yersiniosis	7 days	0	0	4	0	1	1	3	0	2	0	2.5	
Zika virus disease ³	7 days	0	0	10	NR	NR	NR	NR	NR	NR	NR	NR	
STDs, HIV and AIDS													
AIDS ⁹ (January - March)	7 days	--	--	8	**	11	**	15	6	26	6	13	
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	
Chlamydia	7 days	125	205	2299	172	2382	181	2056	180	1883	180	2177.5	
Gonorrhea	7 days	24	33	378	27	307	15	242	23	258	24	282.5	
HIV infection ^{9,10} (January - March)	7 days	--	--	30	13	38	10	37	13	47	13	37.5	
Syphilis ¹¹	7 days	4	6	51	2	42	2	41	3	34	3	41.5	

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 Two or more laboratory-confirmed cases of community onset MRSA infection during a 14 day period
 - ⁷ Includes streptococcal toxic shock syndrome and necrotizing fasciitis
 - ⁸ Due to *Staphylococcus aureus*
 - ⁹ HIV/AIDS data are provided quarterly by IDPH and are provisional, based on date of diagnosis.
 - ¹⁰ HIV counts reflect all newly diagnosed HIV cases regardless of stage of disease at diagnosis.
 - ¹¹ Cases are provisional, based on test date per local health department investigation.
- NR = Not reported
** = Count of 5 cases or less

Websites

CDC:
www.cdc.gov

IDPH:
www.dph.illinois.gov

DuPage:
www.dupagehealth.org

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