



DuPage County Health Department R E V I E W

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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 *Mycobacterium tuberculosis*

For questions or to report a suspect or known case of TB, please call the TB Clinic at (630) 221-7522.

World TB Day is recognized each year on March 24, which commemorates the date in 1882 when Dr. Robert Koch announced his discovery of *Mycobacterium tuberculosis*, the bacillus that causes tuberculosis (TB). World TB Day is an opportunity to raise awareness about TB and support local and worldwide TB prevention and control efforts. The U.S. theme for World TB Day, "Unite to End TB," highlights how much more needs to be done to eliminate TB in the U.S.¹

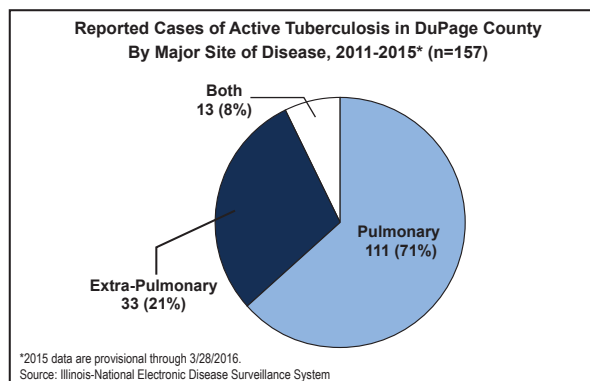
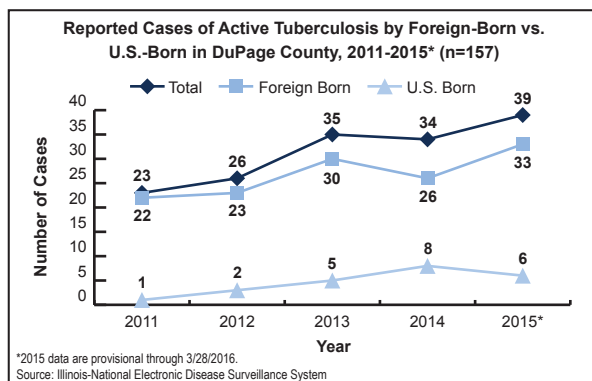
After two decades of annual declines, TB incidence in the U.S. has leveled at **approximately 3.0 new cases per 100,000 persons**. The determinants of this leveling in TB incidence are not yet clear; further evaluation of available data is required to understand the causes of this trend.¹

Statistics: Preliminary data reported to the National Tuberculosis Surveillance System indicate that in 2015, **TB incidence among foreign-born persons in the U.S. (15.1 cases per 100,000) has remained approximately 13 times the incidence among U.S.-born persons (1.2 cases per 100,000).**¹

In DuPage County, 39 active TB cases were reported in 2015, with an incidence of 4.21 cases per 100,000 population. Statewide, 344 active TB cases were reported in Illinois in 2015, with an incidence of 2.67 cases per 100,000 population (source: Illinois Department of Public Health).

Racial/ethnic minorities continue to be disproportionately affected by TB within the U.S. In 2015, among foreign-born persons with reported TB in the U.S., Asians had both the highest case count (3,007 cases) and highest incidence (28.2 cases per 100,000 persons). The top five countries of origin for foreign-born persons with TB were Mexico (19.7%), the Philippines (12.9%), India (9.1%), Vietnam (8.1%), and China (6.7%). Together, these countries represent 45.2% of the foreign-born population in the U.S., but accounted for 56.6% of all TB cases among foreign-born persons.¹

Two thirds of all U.S. TB cases occur among foreign-born persons, often years after arrival, which is consistent with disease progression following years of untreated latent TB infection. Epidemiologic modeling indicates that eliminating the threat of TB in the U.S. will require additional strategies to reduce TB in the countries of origin and expand treatment of latent TB infection among foreign-born persons.¹



TB Testing: TB testing should be performed in persons with **active TB symptoms** and **contacts of persons with active TB disease**. In addition, TB testing should also occur in persons at **higher risk for having latent TB infection**, such as those who 1) are **homeless**, 2) have **lived in a country with a high prevalence of TB**, 3) have **injected illegal drugs**, 4) spent time personally or professionally in a **setting associated with higher rates of TB transmission** (e.g., prison or health care institutions), or 5) have **HIV infection** or another **condition that weakens the immune system** and puts them at high risk for active TB disease (e.g., prolonged use **immunosuppressive drug therapy**).²

Dispelling the Myth: Testing for TB in BCG-Vaccinated Persons

Many foreign-born persons have been BCG-vaccinated. BCG vaccination may cause a false-positive reaction to the tuberculin skin test (TST), which may complicate decisions about prescribing treatment. **Despite this potential for BCG to interfere with test results, the TST and TB blood tests (interferon-gamma release assays or IGRA) are not contraindicated for persons who have been vaccinated with BCG.**^{2,3} In addition, TB blood tests, unlike the TB skin tests, are **not affected by prior BCG vaccination** and are not expected to give a false-positive result in persons who have received prior BCG vaccination.²

Treatment and Prevention: TB is preventable and curable, and its elimination would have widespread health, economic, and social benefits. Necessary comprehensive public health approaches, both globally and domestically, include **increasing case detection and cure rates globally**, **reducing TB transmission in institutional settings** such as health care settings and correctional facilities, and **increasing detection and treatment of preexisting latent TB infection** among the U.S. populations most affected by TB. Finally, more emphasis should be placed on **interrupting the relatively limited, but persistent, ongoing TB transmission (e.g., among persons experiencing homelessness) in the U.S.**, as well as continuing research on better means to diagnose, treat, and prevent TB infection and disease.¹

References:

1. www.cdc.gov/mmwr/volumes/65/wr/pdfs/mm6511.pdf
2. www.cdc.gov/tb/topic/testing/default.htm
3. www.cdc.gov/tb/publications/factsheets/testing/IGRA.htm

DUPAGE COUNTY HEALTH DEPARTMENT

CASES¹ OF REPORTABLE DISEASES*

* Last updated by the Illinois Department of Public Health in February 2014

CD REVIEW

Volume 12, No. 3 March 2016

Vaccine Preventable Diseases	Report Within	2016		2015		2014		2013		2012		Median		
		Feb	Jan-Feb	Jan-Feb	Total	Jan-Feb	Total	Jan-Feb	Total	Jan-Feb	Total	Jan-Feb	Total	('12-'15)
Chickenpox (varicella)	24 hrs	6	11	8	36	11	76	13	78	15	93	11	77	
Diphtheria	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0	
<i>Haemophilus influenzae</i> , invasive	24 hrs	1	2	2	15	1	5	0	10	3	11	2	10.5	
Hepatitis A	24 hrs	0	0	0	5	0	8	1	4	0	8	0	6.5	
Hepatitis B	7 days	0	0	0	1	1	5	1	3	1	5	1	4	
Hepatitis B (carriers)	7 days	8	18	26	139	14	112	11	110	15	101	15	111	
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	0	0	1	0	0	0	0	
Influenza, ICU admissions	24 hrs	21	25	19	43	33	152	45	78	1	64	25	71	
Measles (rubeola)	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0	
Mumps	24 hrs	1	3	2	9	0	2	0	0	1	1	1	1.5	
<i>Neisseria meningitidis</i> , invasive	24 hrs	0	0	0	1	0	0	0	0	0	0	0	0	
Pertussis (whooping cough)	24 hrs	2	9	5	48	6	22	7	43	61	195	7	45.5	
Poliomyelitis	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	0	0	0	0	0	3	0	4	1	5	0	3.5	
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	2	0	2	
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	
Chikungunya fever ³	7 days	0	0	0	2	0	0	NR	NR	NR	NR	0	1	
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	2	0	0	0	1	0	1	
Cryptosporidiosis	7 days	2	2	1	5	0	2	0	7	0	2	0	3.5	
Cyclosporiasis	7 days	0	0	0	1	0	1	1	4	0	0	0	1	
Dengue fever ³	7 days	0	0	0	3	1	1	0	3	0	1	0	2	
Ehrlichiosis ²	7 days	0	0	0	1	0	0	0	0	0	0	0	0	
Enteric <i>E. coli</i> infections ⁴	24 hrs	2	3	2	14	0	18	2	54	2	19	2	18.5	
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	0	0	2	0	0	0	1	0	0.5	
Hepatitis C (cases & carriers)	7 days	24	47	43	237	37	242	31	182	34	171	34	209.5	
Hepatitis D	7 days	0	0	0	0	0	0	0	0	0	0	0	0	
Histoplasmosis	7 days	1	2	0	3	1	7	0	1	0	2	0	2.5	
Influenza A, novel virus	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0	
Legionellosis	7 days	1	1	0	18	2	26	4	39	3	25	2	25.5	
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	0	2	0	2	0	2	0	2	
Lyme disease ²	7 days	2	2	1	29	0	22	0	39	0	27	0	28	
Malaria	7 days	2	4	0	4	0	2	0	7	1	2	1	3	
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	16	0	6	NR	NR	NR	NR	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	2	2	73	5	51	1	44	0	43	1	47.5	
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 ²	7 days	0	0	0	0	0	0	0	0	0	1	0	0	
Salmonellosis	7 days	6	9	16	133	8	115	11	128	8	123	8	125.5	
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0	
Shigellosis	7 days	0	5	3	27	0	18	0	18	2	20	0	19	
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	10	2	9	0	3	0	7	0	8	
<i>Staphylococcus aureus</i> , methicillin resistant (MRSA), community cluster ⁶	24 hrs	0	0	0	0	0	0	0	0	0	1	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 ⁷	24 hrs	2	5	6	22	11	29	5	21	8	20	5	21.5	
Toxic shock syndrome ⁸	7 days	0	0	0	0	0	0	0	1	0	0	0	0	
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0	
Tuberculosis	7 days	3	5	2	39	1	34	8	35	1	26	1	34.5	
Tularemia	3 hrs	0	0	0	0	0	0	0	0	0	1	0	0	
Typhoid fever	24 hrs	0	0	1	3	1	5	0	2	1	2	0	2.5	
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	2	0	4	0	3.5	
West Nile virus disease ³	7 days	0	0	0	9	0	5	0	6	0	56	0	7.5	
Yersiniosis	7 days	0	0	0	1	1	3	0	2	2	3	0	2.5	
Zika virus disease ³	7 days	0	1	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR	
STDs, HIV and AIDS														
AIDS ⁹ (January - March)	7 days	--	--	**	10	**	15	7	25	**	17	7	16	
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0	
Chlamydia	7 days	107	289	328	2226	353	2056	319	1883	267	1861	319	1969.5	
Gonorrhea	7 days	8	31	53	291	35	242	45	258	45	239	45	250	
HIV infection ⁹ (January - March)	7 days	--	--	9	30	8	29	8	28	6	20	8	28.5	
Syphilis ¹⁰	7 days	1	7	4	35	5	41	4	34	2	19	4	34.5	

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 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.idph.state.il.us

DuPage:

www.dupagehealth.org

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