



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.



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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
palak.panchal@
dupagehealth.org
to send suggestions
or to be added to the
distribution list.



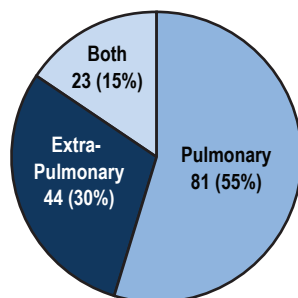
Under the Microscope *Mycobacterium tuberculosis*

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

March 24 is World TB Day, which commemorates the date in 1882 when Dr. Robert Koch announced his discovery of *Mycobacterium tuberculosis*, the bacillus that causes tuberculosis (TB), a leading cause of death from infectious disease worldwide. World TB Day provides an opportunity to raise awareness about TB-related problems and solutions and to support worldwide TB control efforts. For the second year, the U.S. slogan for the 2013 observance is "Stop TB in My Lifetime."¹

Statistics: Illinois ranks sixth in the nation for the highest number of TB cases; in 2012, 347 cases of active tuberculosis were reported in Illinois, a decrease from 359 cases reported in 2011.² In 2012, a total of 9,951 new TB cases were reported in the U.S., for a rate of 3.2 cases per 100,000. This is the first time the number of TB cases has dropped below 10,000 since standardized national reporting began in 1953. Despite this milestone, a number of challenges remain that slow progress toward the goal of TB elimination in the U.S.¹

Cases of Tuberculosis in DuPage County
By Major Site of Disease, 2008-2012* (n=148)



Source: Illinois-National Electronic Disease Surveillance System
* 2012 data are provisional

TB still persists in specific populations; foreign-born persons, racial/ethnic minorities, persons infected with HIV, homeless persons, and those who are incarcerated continue to be affected disproportionately.¹ The TB rate among foreign-born persons in the U.S. in 2012 was 11.5 times higher than among U.S.-born persons. The TB rates among Asians, Hispanics, and blacks were 25.0, 6.6, and 7.3 times as high as whites, respectively. Among U.S.-born persons, the greatest disparity in TB rates was between blacks and whites; the rate among blacks was 5.8 times as high as that of whites.

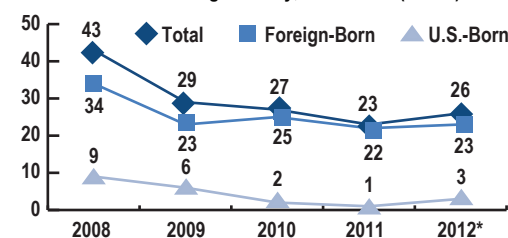
Homeless persons also are a population at high risk for TB. Persons who are homeless might have factors that favor TB transmission, such as excessive alcohol use, substance abuse, malnutrition, and crowded living situations, as reported in recent outbreaks in the U.S., including neighboring Kane County.^{1,3} **Vigilance for TB among homeless persons will be crucial for maintaining progress toward TB elimination among the U.S.-born population.**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 of **immunosuppressive drug therapy**).⁴

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 IGRAs) are not contraindicated for persons who have been vaccinated with BCG.**^{4,5} In addition, TB blood tests (interferon-gamma release assays or IGRAs), 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.⁴

Treatment and Prevention: The record low number of cases in recent years can largely be attributed to **Directly Observed Therapy (DOT)**, a program to make sure those with TB complete their full medication regimen. Therapy often involves health department staff meeting regularly with patients who have TB to watch them take their medications.² Fewer cases of TB are also due to identification of contacts of persons with infectious TB disease and testing (and treating, as indicated) them for **Latent Tuberculosis Infection (LTBI)**.²

Reported Cases of Active Tuberculosis by Foreign-Born vs. U.S.-Born in DuPage County, 2008-2012* (n=148)



Source: Illinois-National Electronic Disease Surveillance System
* 2012 data are provisional

References:

1. www.cdc.gov/mmwr/pdf/wk/mm6211.pdf
2. www.idph.state.il.us/public/press13/3.21.13_Low_Tuberculosis_Cases_in_IL.htm
3. www.cdc.gov/mmwr/preview/mmwrhtml/mm6111a3.htm
4. www.cdc.gov/tb/topic/testing/default.htm
5. 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 March 2008

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Vaccine Preventable Diseases	Report Within	2013		2012		2011		2010		2009		Median	
		Feb.	Jan-Feb	Jan-Feb	Total	Jan-Feb	Total	Jan-Feb	Total	Jan-Feb	Total	Jan-Feb	Total ('09-'12)
Chickenpox (varicella)	24 hrs	12	14	15	93	8	82	15	95	24	146	15	94
Diphtheria	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> , invasive	24 hrs	0	0	3	11	2	15	2	7	1	11	2	11
Hepatitis A	24 hrs	0	1	0	8	2	8	1	3	1	6	1	7
Hepatitis B	7 days	0	1	1	5	0	0	0	4	3	8	1	4.5
Hepatitis B (carriers)	7 days	2	11	15	97	11	113	15	108	26	127	15	110.5
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	0	0	0	0	1	0	0
Influenza, ICU admissions	24 hrs	6	46	1	59	18	24	0	3	NR	NR	9.5	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	0	2	0	1	2	6	0	1.5
Pertussis (whooping cough)	24 hrs	4	6	61	195	21	268	5	92	4	26	6	143.5
Polio	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	0	0	1	5	4	13	2	8	2	8	2	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	0	3	1	1	0	0	0	1
Cryptosporidiosis	7 days	0	0	0	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	0	2	2	18	4	22	2	18	2	12	2	18
Giardiasis	7 days	1	1	9	34	2	44	11	49	7	40	7	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	14	31	34	171	27	189	35	187	35	213	34	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	0	2	1	2	0	2
Influenza A, novel virus	3 hrs	0	0	0	0	0	0	8	11	0	181	0	5.5
Legionellosis	7 days	3	4	3	25	0	14	2	11	0	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	0	6	1	3	0	2.5
Lyme disease ²	7 days	0	0	0	27	0	32	0	19	0	17	0	23
Malaria	7 days	0	0	1	2	0	7	0	4	1	4	0	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 ⁸	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	1	2	0	43	0	30	0	54	0	15	0	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	1	0	0	0	0	0	0	0	0
Rocky Mountain spotted fever ⁶	7 days	0	0	0	1	0	0	0	0	0	0	0	0
Salmonellosis	7 days	6	11	8	123	7	95	15	136	12	89	11	109
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	7 days	0	0	2	20	4	22	204	277	4	12	4	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	0	7	1	3	0	6	2	6	0	6
<i>Staphylococcus aureus</i> , methicillin resistant (MRSA), community cluster ⁷	24 hrs	0	0	0	1	0	0	0	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 ⁹	24 hrs	1	3	8	20	6	30	3	20	5	14	5	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	6	8	1	26	5	18	2	26	5	29	5	26
Tularemia	3 hrs	0	0	0	1	0	0	0	0	0	0	0	0
Typhoid fever	24 hrs	0	0	1	2	1	3	2	3	1	5	1	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	0	3	0	0	2	5	0	3
STDs, HIV and AIDS													
AIDS ¹⁰ (January - March)	7 days	--	--	**	17	**	16	10	26	**	19	**	18
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia	7 days	97	236	268	1650	230	1599	253	1542	285	1555	253	1577
Gonorrhea	7 days	13	36	41	196	30	241	35	223	33	225	35	224
HIV infection ¹⁰ (January - March)	7 days	--	--	6	20	**	24	13	27	11	40	8.5	25.5
Syphilis	7 days	0	0	2	12	6	24	1	25	6	33	2	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

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