



DuPage County Health Department R E V I E W

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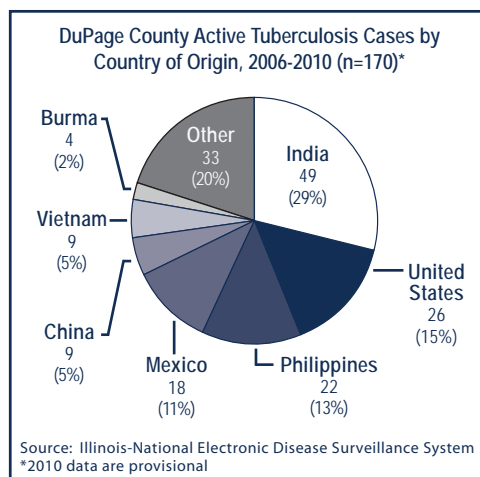
The purpose of this two-page surveillance update is to promote the control and prevention of communicable disease (CD) by providing clinically relevant information and resources to healthcare professionals in DuPage County.



Under the Microscope *Mycobacterium tuberculosis*

For questions or to report a suspect or known case of TB, please call the TB Clinic at (630) 682-7979, ext. 7522. All services for active TB cases and their contacts, including medication, are free of charge.

World TB Day is observed each year on March 24 to commemorate the date in 1882 when Robert Koch announced the discovery of *Mycobacterium tuberculosis*, the bacterium that causes tuberculosis (TB).¹ Worldwide, TB remains one of the leading causes of death from infectious disease: **one-third of the world's population is infected with TB.** Each year, over 9 million people around the world become sick with TB, and each year, there are almost 2 million deaths worldwide.² World TB Day provides an opportunity for TB programs, nongovernmental organizations, and others partners to describe problems and solutions related to the TB pandemic and to support worldwide TB control efforts. The U.S. theme for 2011's observance is **TB Elimination: Together We Can!**¹



Despite a continued decline in U.S. TB rates, the national goal of TB elimination by 2010 was not met. TB case rates decreased among both foreign-born and U.S.-born persons, but **the incidence of TB in the United States is disproportionately greater among foreign-born persons and racial/ethnic minorities.**¹

In 2010, 372 cases of active tuberculosis were reported in Illinois, a decrease from 418 cases reported in 2009. The record low number of cases in Illinois can largely be attributed to making sure those with TB take all their medication, **Directly Observed Therapy (DOT)**, and identifying contacts of persons with infectious TB disease and testing them (and treating, as indicated) for **Latent Tuberculosis Infection (LTBI)**.³ Following the national trend, the majority of TB cases in Illinois are among individuals who were born in foreign countries where TB is common, such as Mexico, India and the Philippines. In 2010, 61 percent of tuberculosis cases in Illinois were among people born in foreign countries.³



TB Testing: Clinicians, laboratorians, and public health departments must remain vigilant to guard against the resurgence of TB. 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 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} The presence or size of a TST reaction in these persons does not predict whether BCG will provide any protection against TB disease. Furthermore, **the size of a TST reaction in a BCG-vaccinated person is not a factor** in determining whether the reaction is caused by latent TB infection (LTBI) or the prior BCG vaccination. Evaluation of TST reactions in persons vaccinated with BCG should be interpreted using the same criteria for those not BCG-vaccinated. 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

References:
1. www.cdc.gov/mmwr/PDF/wk/mm6011.pdf
2. www.cdc.gov/Features/WorldTBDay/

3. www.idph.state.il.us/public/press11/3.23.11TB_Awareness.htm
4. www.cdc.gov/tb/topic/testing/default.htm
5. www.cdc.gov/tb/publications/factsheets/testing/IGRA.htm



111 North County Farm Road
Wheaton, IL 60187
(630) 682-7400
www.dupagehealth.org

Linda Kurzawa
President, Board of Health

Maureen McHugh
Executive Director

Rashmi Chugh, MD, MPH
Medical Officer

General Information

Communicable Disease and Epidemiology
(630) 682-7979, ext. 7553

Environmental Health
(630) 682-7400

Immunizations
(630) 682-7400

Sexually Transmitted Diseases
(630) 682-7979, ext. 7553

HIV/AIDS
(630) 682-7979, ext. 7553

Tuberculosis
(630) 682-7979, ext. 7522

School Health
(630) 682-7979, ext. 7300

Travel Clinic
(630) 682-7400

Animal Care & Control
(630) 407-2800

Please contact Communicable Disease and Epidemiology at (630) 682-7979, ext. 7553 or ebarajas@dupagehealth.org to send suggestions or to be added to the distribution list.

DUPAGE COUNTY HEALTH DEPARTMENT
CASES¹ OF REPORTABLE DISEASES*

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

CD REVIEW

Volume 7, No. 3 March 2011

	Report Within	2011		2010		2009		2008		2007		Median	
		Feb	Jan - Feb	Jan - Feb	Total	Jan - Feb	Total	Jan - Feb	Total	Jan - Feb	Total	Jan - Feb	Total ('07-'10)
Vaccine Preventable Diseases													
Chickenpox (varicella)	24 hrs	2	8	16	96	24	146	47	236	31	177	24	161.5
Diphtheria	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae, invasive	24 hrs	2	2	1	6	1	11	0	6	1	5	1	6
Hepatitis A	24 hrs	1	2	1	6	2	14	3	16	6	26	2	15
Hepatitis B	7 days	0	0	0	3	3	8	0	4	3	9	0	6
Hepatitis B (carriers)	7 days	4	10	14	96	26	129	29	128	28	168	26	128.5
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	1	0	0	NR	NR	0	0
Measles (rubeola)	24 hrs	0	0	0	0	1	1	0	15	0	0	0	0.5
Mumps	24 hrs	1	1	0	1	0	2	1	2	5	13	1	2
Neisseria meningitidis, invasive	24 hrs	0	0	0	1	2	6	0	4	0	1	0	2.5
Pertussis (whooping cough)	24 hrs	11	22	1	77	4	26	1	13	6	9	4	19.5
Poliomyelitis	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
Streptococcus pneumoniae, invasive disease, in those < 5 yrs old	7 days	3	4	2	8	2	8	1	6	0	10	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	0	0	0	0	0	NR	NR	0	0
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	1	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	NR	NR	0	0
Cholera	24 hrs	0	0	0	0	0	0	0	1	0	0	0	0
Creutzfeldt-Jakob disease	7 days	0	1	0	0	0	0	0	0	NR	NR	0	0
Cryptosporidiosis	7 days	0	0	0	5	1	5	0	2	0	5	0	5
Cyclosporiasis	7 days	0	0	0	0	0	1	0	0	0	0	0	0
Dengue fever ³	7 days	0	0	1	4	0	4	0	0	0	1	0	2.5
Ehrlichiosis ²	7 days	0	0	0	0	0	0	0	0	0	1	0	0
Enteric E. coli infections ⁴	24 hrs	0	2	2	20	2	12	1	21	0	7	2	16
Giardiasis	7 days	1	1	12	50	7	42	7	57	9	68	7	53.5
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	0	0	1	0	0	0	0
Hepatitis C (cases & carriers)	7 days	7	20	36	182	54	238	44	261	53	301	44	249.5
Hepatitis D	7 days	0	0	0	0	0	0	0	0	NR	NR	0	0
Histoplasmosis	7 days	0	0	0	2	1	2	2	6	0	6	0	4
Influenza A, ICU admissions	3 hrs	13	17	0	3	NR	NR	NR	NR	NR	NR	NR	NR
Influenza A, novel virus	3 hrs	0	0	8	11	0	181	0	0	NR	NR	0	11
Legionellosis	7 days	0	0	2	11	0	13	1	5	0	13	0	12
Leprosy	7 days	0	0	0	0	1	1	0	0	0	0	0	0
Leptospirosis	7 days	0	0	0	0	0	0	0	0	0	1	0	0
Listeriosis	7 days	0	1	0	6	1	3	0	1	0	1	0	2
Lyme disease ²	7 days	0	0	0	18	0	18	0	17	0	16	0	17.5
Malaria	7 days	0	0	0	4	1	4	1	5	1	7	1	4.5
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	2	2	0	54	0	15	1	46	1	52	1	49
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	0	0	0
Salmonellosis	7 days	5	8	16	139	13	90	14	108	17	140	14	123.5
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	NR	NR	0	0
Shigellosis	7 days	0	4	204	277	4	13	6	28	2	18	4	23
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	NR	NR	0	0
St. Louis encephalitis ³	7 days	0	0	0	0	0	0	0	0	NR	NR	0	0
Staphylococcus aureus, methicillin resistant (MRSA), in those < 61 days old	24 hrs	0	1	0	6	2	6	0	3	NR	NR	0.5	6
Staphylococcus aureus, methicillin resistant (MRSA), community cluster ⁷	24 hrs	0	0	0	1	0	1	0	4	NR	NR	0	1
Staphylococcus aureus (vancomycin-resistant)	24 hrs	0	0	1	1	0	0	0	0	0	1	0	0.5
Streptococcal infections, group A invasive disease ⁹	24 hrs	3	5	3	21	5	14	1	16	2	11	3	15
Toxic shock syndrome ⁹	7 days	0	1	0	0	0	0	0	1	0	2	0	0.5
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	7 days	2	5	2	24	5	29	2	43	4	27	4	28
Tularemia	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Typhoid fever	24 hrs	0	1	2	3	1	5	0	3	0	7	1	4
Typhus	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Vibriosis (non-cholera)	7 days	0	0	0	1	0	2	0	0	0	1	0	1
West Nile disease ³	7 days	0	0	0	17	0	0	0	1	0	10	0	5.5
Yersiniosis	7 days	0	0	0	0	2	5	0	1	0	1	0	1
STDs, HIV and AIDS													
AIDS ¹⁰ (January - March)	7 days	--	--	10	26	**	19	6	22	**	20	4.5	21
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia	7 days	78	193	233	1326	285	1555	239	1587	196	1522	233	1538.5
Gonorrhea	7 days	15	29	36	199	33	225	46	268	31	251	33	238
HIV infection ¹⁰ (January - March)	7 days	--	--	13	27	11	40	6	23	**	22	8.5	25
Syphilis	7 days	2	3	1	23	6	33	8	18	1	18	3	20.5

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) 682-7979, ext. 7553
24 hours: (630) 682-7400

Tuberculosis
(630) 682-7979, ext. 7522

STDs
(630) 682-7979, ext. 7553

HIV/AIDS:
(630) 682-7979, ext. 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