



DuPage County Health Department R E V I E W

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

Environmental Health
(630) 682-7979, ext. 7046

Immunizations
(630) 682-7400

Sexually
Transmitted Diseases
(630) 682-7979, ext. 7575

HIV/AIDS
(630) 682-7979, ext. 7310

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
Peggy Iverson, BS at
(630) 682-7979, ext. 7534 or
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to send 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 Rabies

All animal bites to humans that occur in DuPage County must be reported to Animal Care and Control at 630-407-2800. All potential rabies exposures must be reported to the DuPage County Health Department at 630-682-7400, extension 7553.

Rabies is a preventable, fatal viral disease of mammals most often transmitted from the bite of a rabid animal. Any wild mammal, like a raccoon, skunk, fox, coyote, or bat, can have rabies and transmit it to people.¹ **The virus is present primarily in the saliva, brain tissue and spinal fluid of a rabid animal.**² Tens of thousands of people are successfully treated prophylactically each year after being bitten by an animal that may have rabies. **In the U.S., human fatalities associated with rabies occur in people who fail to seek medical assistance, usually because they were unaware or do not recognize the risk of their exposure.**¹ The last human case in Illinois was reported in 1954.

Most of the recent cases of human rabies that have occurred in the U.S. have been caused by bat strains of rabies. Rabid bats can be found in any county in Illinois. Bats are the primary carrier of rabies in Illinois and already this year (as of July 28, 2009), 36 bats have tested positive for rabies, including 2 bats in DuPage County.²

Bats, like all wild animals, should never be handled. People usually know when they have been bitten by a bat, but there are instances when a bite may not be apparent. **Bats have very small teeth and a physical inspection cannot be used to establish whether a bite occurred.** Exposure may occur if the animal's saliva enters an open cut or mucous membrane (nose, mouth, eyes).²

The presence of a bat in a home, or any contact with a bat, represents a possible hazard for rabies and should be reported to a physician or the local health department so that the circumstances can be evaluated.^{2,3} For example, if a person awakens and finds a bat in the bedroom, or sees a bat in the room of an unattended young child, or sees a bat near a mentally impaired or intoxicated person, a physician or local health department should be consulted, and prophylaxis considered if the bat cannot be tested negative.^{2,4} **The bat should not be discarded, and the bat's head should not be damaged, so the bat may be tested for rabies immediately.**

Post-exposure Prophylaxis (PEP)

If an animal suspected of having rabies cannot be submitted for testing (e.g., escaped bat, skunk) or observed (dogs, cats, or ferrets only), or if it tests positive for rabies, PEP of the individual with **(1) rabies immune globulin and (2) the vaccine series** must begin immediately. According to the 2008 recommendations of the Advisory Committee on Immunization Practices (ACIP), PEP consists of a regimen of **one dose of immune globulin and five doses of rabies vaccine over a 28-day period.**⁴

Rabies immune globulin and the first dose of rabies vaccine should be administered as soon as possible after exposure. Because animal rabies testing is a priority at the state laboratories, initiation of rabies treatment can await prompt testing of the animal brain. **Additional doses of rabies vaccine should be given on days 3, 7, 14, and 28 after the first vaccination.** Current vaccines are relatively painless and are given intramuscularly in the arm, like an influenza or tetanus vaccine.

On June 24, 2009 the ACIP voted in favor of accepting a recommendation from the ACIP rabies work group to reduce the number of rabies vaccine doses for PEP, from 5 doses as recommended in the 2008 ACIP document on Human Rabies Prevention, to 4 doses (on days 0, 3, 7, and 14) for most individuals. These recommendations will not become official until accepted by the CDC Director and published in the MMWR in several months.⁵

References:

1. www.cdc.gov/rabies/

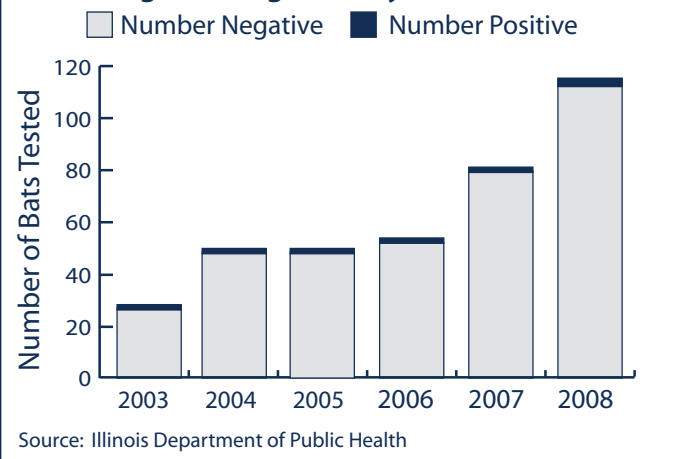
2. www.idph.state.il.us/health/infect/reportdis/rabies.htm

3. www.idph.state.il.us/envhealth/pcbats.htm

4. www.cdc.gov/mmwr/PDF/rr/rr5703.pdf

5. www.cdc.gov/rabies/news/2009-06-24_ACIPvote.html

Bat Testing in DuPage County, 2003 -2008 (n=379)



DUPAGE COUNTY HEALTH DEPARTMENT

CASES¹ OF REPORTABLE DISEASES*

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

CD REVIEW

Volume 5, No. 7 July 2009

Vaccine Preventable Diseases	Report Within	2009		2008		2007		2006		2005		Median ('05-'08)	
		June	Jan - June	Jan - June	Total	Jan - June	Total	Jan - June	Total	Jan - June	Total	Jan - June	Total
Chickenpox (varicella)	24 hrs	4	85	110	236	117	177	139	252	159	232	117	234
Diphtheria	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae, invasive	24 hrs	0	5	1	7	3	5	5	7	6	10	5	7
Hepatitis A	24 hrs	0	7	9	15	11	23	5	9	1	9	7	12
Hepatitis B	7 days	0	4	0	4	3	6	2	5	4	6	3	5.5
Hepatitis B (carriers)	7 days	0	51	67	126	83	156	83	139	67	147	67	143
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	NR	NR	NR	NR	NR	NR	--	--
Measles (rubeola)	24 hrs	0	1	14	15	0	0	0	0	0	0	0	0
Mumps	24 hrs	1	2	2	2	10	13	19	129	0	0	2	7.5
Neisseria meningitidis, invasive	24 hrs	1	3	2	4	1	1	2	2	3	4	2	3
Pertussis (whooping cough)	24 hrs	0	7	1	13	8	9	15	26	12	29	8	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	0	5	1	5	3	7	5	8	6	9	5	7.5
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	0	NR	NR	NR	NR	NR	NR	--	--
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	1	1	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	NR	NR	NR	NR	NR	NR	--	--
Cholera	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Creutzfeldt-Jakob disease	7 days	0	0	0	0	NR	NR	NR	NR	NR	NR	--	--
Cryptosporidiosis	7 days	0	3	2	2	1	4	1	9	0	3	1	3.5
Cyclosporiasis	7 days	1	1	0	0	0	0	0	0	1	2	0	0
Ehrlichiosis ²	7 days	0	0	0	0	1	1	1	2	0	0	0	0.5
Enteric E. coli infections ⁴	24 hrs	1	6	7	22	4	10	1	11	9	17	6	14
Giardiasis	7 days	3	17	21	54	38	62	20	43	26	47	21	50.5
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	1	0	0	0	0	0	0	0	0
Hepatitis C (cases & carriers)	7 days	1	118	119	243	143	207	142	239	126	238	126	238.5
Hepatitis D	7 days	0	0	0	0	NR	NR	NR	NR	NR	NR	--	--
Histoplasmosis	7 days	0	1	1	5	3	4	0	1	0	0	1	2.5
Influenza A, novel virus	3 hrs	49	140	0	0	NR	NR	NR	NR	NR	NR	--	--
Legionellosis	7 days	1	4	1	4	2	9	4	8	3	4	3	6
Leprosy	7 days	0	1	0	0	0	0	1	0	0	0	0	0
Leptospirosis	7 days	0	0	0	0	1	1	0	0	1	1	0	0.5
Listeriosis	7 days	0	1	0	1	0	1	1	6	0	2	0	1.5
Lyme disease ²	7 days	2	2	3	17	3	16	1	10	4	12	3	14
Malaria	7 days	0	1	4	5	5	7	3	6	3	5	3	5.5
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 ⁵	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	0	4	8	46	11	34	14	27	12	24	11	30.5
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	1	1	1	1	0	0.5
Rocky Mountain spotted fever ²	7 days	0	0	0	0	0	0	1	1	0	0	0	0
Salmonellosis	7 days	9	41	49	108	57	129	44	98	50	120	49	114
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	NR	NR	NR	NR	NR	NR	--	--
Shigellosis	7 days	0	5	14	28	5	17	9	26	11	35	9	27
Smallpox	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Smallpox vaccination, complications	24 hrs	0	0	0	0	NR	NR	NR	NR	NR	NR	--	--
St. Louis encephalitis ³	7 days	0	0	0	0	NR	NR	NR	NR	NR	NR	--	--
Staphylococcus aureus, methicillin resistant (MRSA), in those < 61 days old	24 hrs	1	4	0	3	NR	NR	NR	NR	NR	NR	--	--
Staphylococcus aureus, methicillin resistant (MRSA), community cluster ⁷	24 hrs	0	0	1	4	NR	NR	NR	NR	NR	NR	--	--
Staphylococcus aureus (vancomycin-resistant)	24 hrs	0	0	0	0	1	1	0	0	0	0	0	0
Streptococcal infections, group A invasive disease ⁸	24 hrs	0	7	7	12	8	11	15	17	3	10	7	11.5
Toxic shock syndrome ⁹	7 days	0	2	3	5	0	1	0	1	1	3	1	2
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	7 days	1	14	15	43	17	28	22	44	14	33	15	38
Tularemia	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Typhoid fever	24 hrs	0	3	1	3	0	7	1	2	1	2	1	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	0	NR	NR	NR	NR	NR	NR	--	--
West Nile disease ³	7 days	0	0	0	1	0	10	0	42	0	47	0	26
Yersiniosis	7 days	0	2	0	1	1	1	0	0	2	2	1	1
STDs, HIV and AIDS													
AIDS ¹⁰ (January-March)	7 days	--	1	7	18	5	15	2	22	10	30	--	20
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia	7 days	89	724	710	1547	648	1522	610	1346	574	1241	648	1434
Gonorrhea	7 days	12	97	131	220	95	224	87	183	94	205	95	212.5
HIV infection ¹⁰ (January-March)	7 days	--	7	10	30	11	19	5	22	5	38	--	26
Syphilis	7 days	1	13	10	13	3	18	14	24	2	17	10	17.5

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

Tuberculosis
(630) 682-7400, ext. 7522

STDs
(630) 682-7400, ext. 7575

HIV/AIDS:
(630) 682-7400, ext. 7310

- 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

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/health_data/cd-review.html