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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 Mumps

For questions or to report suspect or known cases of mumps, please call the DuPage County Health Department at (630) 221-7553.

Mumps is a contagious disease that is caused by the mumps virus. Before the routine vaccination program was introduced in the U.S., mumps was a common illness in infants, children and young adults. Because most people have now been vaccinated, mumps has become a rare disease in the U.S.¹

In some years, there are more cases of mumps than usual because of outbreaks. **Mumps outbreaks can occur any time of year but often occur in winter and spring.** A major factor contributing to outbreaks is being in a crowded environment, such as attending the same class, playing on the same sports team, or living in a dormitory with a person who has mumps. In 2006, the U.S. experienced a multi-state mumps outbreak involving more than 6,500 reported cases. This resurgence predominantly affected college-aged students living in the Midwest (including DuPage County), with outbreaks occurring on many different Midwestern college campuses.²

The virus is acquired by **respiratory droplets**. It replicates in the nasopharynx and regional lymph nodes. The **incubation period of mumps is 14 to 18 days (range, 14 to 25 days)**. The prodromal symptoms are nonspecific, and include myalgia, anorexia, malaise, headache, and low-grade fever.³

Parotitis is the most common manifestation and occurs in 30% to 40% of infected persons. Parotitis may be unilateral or bilateral, and any combination of single or multiple salivary glands may be affected. Parotitis tends to occur within the first 2 days and may first be noted as earache and tenderness on palpation of the angle of the jaw. Symptoms tend to decrease after 1 week and usually resolve after 10 days. **Complications** can include meningitis/encephalitis, inflammation of the testicles (orchitis) or ovaries (oophoritis), and deafness.³ Persons with mumps are usually considered **most infectious from 1-2 days before until 5 days after onset of parotitis**.⁴ Persons who develop symptoms should **see their physician** for further evaluation and appropriate laboratory testing, regardless of age or vaccination status.

Recommended testing for mumps includes:

- (1) **parotid gland swab for viral culture and/or mumps antigen detection by PCR** collected within 9 days of onset of symptoms,*
- (2) **serology for IgM antibodies** (usually detectable within the first few days of illness and reach a peak about one week after onset), and/or
- (3) **serology for IgG antibodies**, with **acute-phase** collection drawn as soon as possible after symptom onset, and **convalescent-phase** collection drawn **2 weeks after** the initial collection date.³

The preferred sample is a swab from the parotid duct; serology is the simplest method for confirming mumps virus infection. However, as with measles and rubella, **mumps IgM may be transient or missing in persons who have had any doses of mumps-containing vaccine.** In addition, a **negative serologic test, especially in a vaccinated person, should not be used to rule out a mumps diagnosis** because the tests are not sensitive enough to detect infection in all persons with clinical illness. In the absence of another diagnosis, a person meeting the clinical case definition should be reported as a mumps case.³

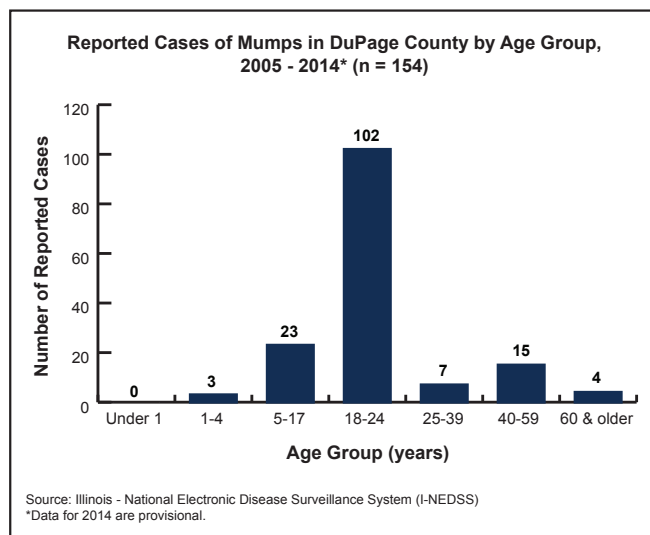
Currently, there is no specific treatment for mumps. Supportive care should be given as needed. In Illinois, the current recommendation for **home isolation** (from school, child care facilities, work, public gatherings, etc.) for suspect and known cases of mumps is **5 days** from onset of symptoms.⁵

Mumps vaccine is the best way to prevent mumps. Children should receive the first dose of mumps-containing vaccine (measles-mumps-rubella, or MMR vaccine) at **12-15 months** and the second dose at **4-6 years**. All adults born during or after 1957 should have documentation of one dose. Adults at higher risk, such as university students, health care personnel, and international travelers, and persons with potential mumps outbreak exposure should have documentation of two doses of mumps vaccine or other proof of immunity to mumps.⁷ Persons may also help prevent contracting mumps by a few simple actions, such as **frequent handwashing and respiratory hygiene.**

* **Collection of a mumps specimen for viral isolation and PCR testing:** Massage the affected parotid gland(s) for 30 seconds. Swab the buccal cavity, which is the space near the upper rear molars between the cheek and the teeth. Swab the area between the cheek and gum by sweeping the swab near the upper molar to the lower molar area.⁵

References:

1. www.cdc.gov/mumps/
2. www.cdc.gov/mumps/outbreaks.html
3. www.cdc.gov/vaccines/pubs/pinkbook/downloads/mumps.pdf
4. www.cdc.gov/mumps/clinical/qa-disease.html
5. www.cdc.gov/mumps/lab/detection-mumps.html
6. www.ilga.gov/commission/jcar/admincode/077/077006900D05500R.html
7. www.cdc.gov/mumps/vaccination.html



DUPAGE COUNTY HEALTH DEPARTMENT

CASES¹ OF REPORTABLE DISEASES*

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

Vaccine Preventable Diseases	Report Within	2014		2013	2012	2011	2010	Median
		Dec	Total	Total	Total	Total	Total	Total (*10-'13)
Chickenpox (varicella)	24 hrs	4	74	78	93	82	95	87.5
Diphtheria	3 hrs	0	0	0	0	0	0	0
<i>Haemophilus influenzae</i> , invasive	24 hrs	1	4	10	11	15	7	10.5
Hepatitis A	24 hrs	0	8	4	8	8	3	6
Hepatitis B	7 days	0	5	3	5	1	4	3.5
Hepatitis B (carriers)	7 days	10	107	110	101	113	108	109
Influenza, deaths in < 18 yrs old	7 days	0	0	1	0	0	0	0
Influenza, ICU admissions	24 hrs	72	138	78	64	24	3	44
Measles (rubeola)	24 hrs	0	0	0	0	0	0	0
Mumps	24 hrs	0	1	0	1	3	2	1.5
<i>Neisseria meningitidis</i> , invasive	24 hrs	0	0	0	0	2	1	0.5
Pertussis (whooping cough)	24 hrs	1	21	43	195	268	92	143.5
Poliomyelitis	3 hrs	0	0	0	0	0	0	0
Rubella	24 hrs	0	0	0	0	0	0	0
<i>Streptococcus pneumoniae</i> , invasive disease, in those < 5 yrs old	7 days	0	3	4	5	13	8	6.5
Tetanus	7 days	0	0	0	0	0	0	0
Other Communicable Diseases								
Anaplasmosis ²	7 days	0	3	0	2	3	0	1
Anthrax	3 hrs	0	0	0	0	0	0	0
Botulism, foodborne	3 hrs	0	0	0	0	0	0	0
Botulism, other	24 hrs	0	0	0	0	0	0	0
Brucellosis	3 hrs	0	0	0	0	0	0	0
California encephalitis ³	7 days	0	0	0	0	0	0	0
Chikungunya fever ³	7 days	0	0	NR	NR	NR	NR	NR
Cholera	24 hrs	0	0	0	0	0	0	0
Creutzfeldt-Jakob disease	7 days	0	2	0	1	3	1	1
Cryptosporidiosis	7 days	0	2	7	2	5	5	5
Cyclosporiasis	7 days	0	0	4	0	0	0	0
Dengue fever ³	7 days	0	1	3	1	1	4	2
Ehrlichiosis ²	7 days	0	1	0	0	0	0	0
Enteric <i>E. coli</i> infections ⁴	24 hrs	0	17	54	19	22	19	20.5
Glomerulonephritis ⁵	24 hrs	0	0	0	0	0	0	0
Hantavirus pulmonary syndrome	24 hrs	0	0	0	0	0	0	0
Hemolytic uremic syndrome	24 hrs	0	2	0	1	1	0	0.5
Hepatitis C (cases & carriers)	7 days	14	234	182	171	189	187	184.5
Hepatitis D	7 days	0	0	0	0	1	0	0
Histoplasmosis	7 days	0	6	1	2	1	2	1.5
Influenza A, novel virus	3 hrs	0	0	0	0	0	11	0
Legionellosis	7 days	1	26	39	25	14	11	19.5
Leprosy	7 days	0	0	0	0	0	0	0
Leptospirosis	7 days	0	0	0	0	0	0	0
Listeriosis	7 days	0	2	2	2	2	6	2
Lyme disease ²	7 days	1	21	39	27	32	19	29.5
Malaria	7 days	0	1	7	2	7	4	5.5
Ophthalmia neonatorum	7 days	0	0	0	0	0	0	0
Plaque	3 hrs	0	0	0	0	0	0	0
Psittacosis	7 days	0	0	0	0	0	0	0
Q fever	3 hrs	0	0	0	0	0	0	0
Rabies, animal case	24 hrs	0	6	NR	NR	NR	NR	NR
Rabies, human case	24 hrs	0	0	0	0	0	0	0
Rabies, potential exposure	24 hrs	0	51	44	43	30	54	43.5
Reye syndrome	7 days	0	0	0	0	0	0	0
Rheumatic fever ⁵	24 hrs	0	0	0	0	0	0	0
Rocky Mountain spotted fever ²	7 days	0	0	0	1	0	0	0
Salmonellosis	7 days	7	110	128	123	95	136	125.5
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0
Shigellosis	7 days	1	19	18	20	22	27	21
Smallpox	3 hrs	0	0	0	0	0	0	0
Smallpox vaccination, complications	24 hrs	0	0	0	0	0	0	0
St. Louis encephalitis ³	7 days	0	0	0	0	0	0	0
<i>Staphylococcus aureus</i> , methicillin resistant (MRSA), in those < 61 days old	24 hrs	2	9	3	7	3	6	4.5
<i>Staphylococcus aureus</i> , methicillin resistant (MRSA), community cluster ⁶	24 hrs	0	0	0	1	0	1	0.5
<i>Staphylococcus aureus</i> (vancomycin-resistant)	24 hrs	0	0	0	0	1	1	0.5
Streptococcal infections, group A invasive disease ⁷	24 hrs	2	29	21	20	30	20	20.5
Toxic shock syndrome ⁸	7 days	0	0	1	0	1	0	0.5
Trichinosis	7 days	0	0	0	0	0	0	0
Tuberculosis	7 days	8	33	35	26	18	26	26
Tularemia	3 hrs	0	0	0	1	0	0	0
Typhoid fever	24 hrs	1	5	2	2	3	3	2.5
Typhus	24 hrs	0	0	0	0	0	0	0
Vibriosis (non-cholera)	7 days	0	3	2	4	3	1	2.5
West Nile disease ³	7 days	0	5	6	56	2	17	11.5
Yersiniosis	7 days	0	3	2	3	3	0	2.5
STDs, HIV and AIDS								
AIDS ⁹ (October - December)	7 days	**	15	25	17	16	26	21
Chancroid	7 days	0	0	0	0	0	0	0
Chlamydia	7 days	121	1809	1883	1861	1599	1542	1730
Gonorrhea	7 days	15	192	258	239	241	223	240
HIV infection ⁹ (October - December)	7 days	**	29	28	20	24	27	25.5
Syphilis ¹⁰	7 days	3	35	34	19	24	25	24.5

CD REVIEW

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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.dph.illinois.gov

DuPage:
www.dupagehealth.org

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