



# DuPage County Health Department R E V I E W

Volume 12, No. 10

October 2016



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

Linda Kurzawa  
President, Board of Health

Karen Ayala, MPH  
Executive Director

Rashmi Chugh, MD, MPH  
Medical Officer

## 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.



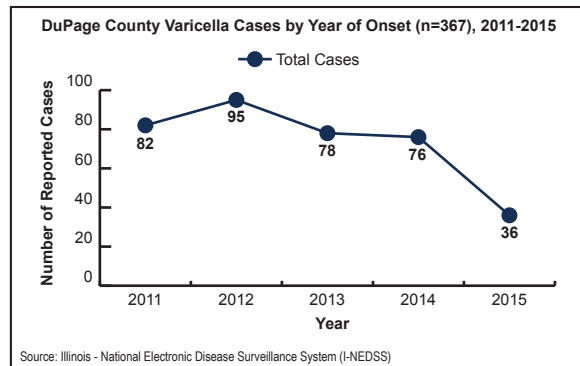
## Under the Microscope Varicella (Chickenpox)

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

**Varicella (chickenpox)** is an acute, highly infectious disease caused by the **varicella zoster virus (VZV)**. Secondary attack rates for this virus might reach 90% for susceptible household contacts. VZV causes a systemic infection that results typically in lifetime immunity. In otherwise healthy persons, clinical illness after re-exposure is rare.<sup>1</sup> Acute varicella is generally mild and self-limited, but it **may be associated with severe complications**. The most common complications from varicella are **bacterial infections of the skin and soft tissues in children and pneumonia in adults**.<sup>2,3</sup>

**Herpes zoster (HZ), or shingles**, occurs when latent VZV reactivates and causes recurrent disease. Factors associated with recurrent disease include aging and immunosuppression. In immunocompromised persons, zoster may disseminate, causing generalized skin lesions and central nervous system, pulmonary, and hepatic involvement.<sup>2</sup> The most common complication of HZ, particularly in older persons, is **postherpetic neuralgia (PHN)**, the persistence of sometimes debilitating pain weeks to months after resolution of HZ.<sup>1</sup>

VZV is **highly contagious**; the virus is **transmitted from person to person** by direct contact, inhalation of aerosols from vesicular fluid of skin lesions of acute varicella or zoster, or infected respiratory tract secretions that also might be aerosolized. The virus enters the host through the upper respiratory tract or the conjunctiva.<sup>1</sup>



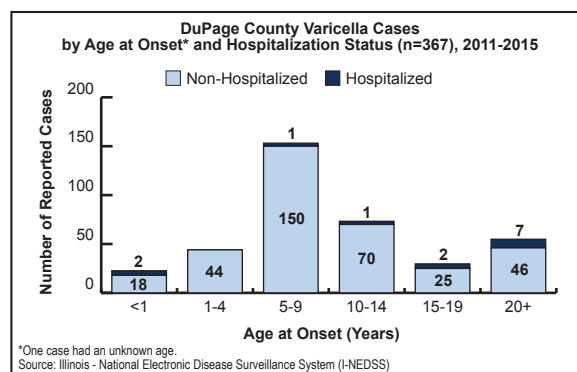
**recently** in 1) an unvaccinated, previously healthy adolescent female aged 15 years from Ohio in 2009, and 2) a 4-year-old female child with leukemia from California in 2012.<sup>5,6</sup> **Chickenpox vaccine is the best way to prevent chickenpox**. Vaccination not only protects vaccinated persons, it **also reduces the risk for exposure in the community for persons unable to be vaccinated** because of illness or other conditions, including those who may be at greater risk for severe disease.<sup>7</sup>

**Varicella Vaccine:** Current CDC recommendations include 1) implementation of a **routine 2-dose varicella vaccination** program for children, with the **first dose administered at age 12-15 months** and the **second dose at age 4-6 years**; 2) a **second dose catch-up varicella vaccination** for children, adolescents, and adults who previously had received 1 dose; 3) **routine vaccination of all healthy persons aged 13 years and older without evidence of immunity** (2 doses of single-antigen varicella vaccine 4-8 weeks apart); and 4) **prenatal assessment** and postpartum vaccination. These recommendations also include approved **criteria for evidence of immunity to varicella**, and advise healthcare institutions to ensure that **all healthcare providers have evidence of immunity to varicella**.<sup>1,8,9</sup>

**Herpes Zoster Vaccine:** Zoster vaccine is recommended for **all persons aged ≥60 years** who have no contraindications, including persons who report a **previous episode of zoster** or who have chronic medical conditions.<sup>10</sup>

### References:

- www.cdc.gov/mmwr/PDF/rr/rr5604.pdf
- www.cdc.gov/vaccines/pubs/pinkbook/downloads/varicella.pdf
- www.cdc.gov/chickenpox/hcp/clinical-overview.html
- www.cdc.gov/chickenpox/hcp/lab-tests.html
- www.cdc.gov/mmwr/preview/mmwrhtml/mm6214a1.htm
- www.cdc.gov/mmwr/preview/mmwrhtml/mm6307a6.htm
- www.cdc.gov/vaccines/vpd-vac/varicella/default.htm
- www.cdc.gov/vaccines/vpd-vac/varicella/default-hcp.htm
- www.cdc.gov/vaccines/vpd-vac/varicella/hcp-vacc.htm
- www.cdc.gov/vaccines/vpd-vac/shingles/default.htm



**Laboratory confirmation** of varicella zoster virus is not normally required, because varicella diagnosis is most commonly made by clinical assessment. Laboratory testing has been recommended to **confirm the diagnosis of severe or unusual cases**, determine the cause of an outbreak, establish cause of death, or to determine susceptibility to varicella. Skin lesion testing is the preferable method for laboratory confirmation of varicella, and blood specimens should be used to test for varicella immunity.<sup>4</sup> **Varicella used to be very common in the U.S. before varicella vaccine became available**, and was frequently diagnosed by clinical assessment alone. The reduced incidence has had the combined effect of increasing the number of atypical cases (either vaccine adverse events or breakthrough wild-type infection in immunized persons) and of reducing physicians' experience in diagnosing varicella. **Therefore, laboratory confirmation of varicella is becoming increasingly important in routine clinical practice**.<sup>4</sup>

**Prevention:** Although varicella vaccination has led to significant declines in varicella disease in the U.S., **deaths due to varicella have been reported**

DUPAGE COUNTY HEALTH DEPARTMENT

CASES<sup>1</sup> OF REPORTABLE DISEASES\*

\* Last updated by the Illinois Department of Public Health in April 2016

CD REVIEW

Volume 12, No. 10 October 2016

Vaccine Preventable Diseases	Report Within	2016		2015		2014		2013		2012		Median	
		Sep	Jan-Sep	Jan-Sep	Total	Jan-Sep	Total	Jan-Sep	Total	Jan-Sep	Total	Jan-Sep	Total ('12-'15)
Chickenpox (varicella)	24 hrs	6	44	26	36	56	76	52	78	71	95	52	77
Diphtheria	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Haemophilus influenzae, invasive	24 hrs	0	6	11	15	3	5	6	10	9	11	6	10.5
Hepatitis A	24 hrs	1	2	4	5	8	8	4	4	7	8	4	6.5
Hepatitis B	7 days	0	2	2	2	3	5	2	3	4	5	2	4
Hepatitis B (carriers)	7 days	7	83	95	137	73	112	92	110	73	101	83	111
Influenza, deaths in < 18 yrs old	7 days	0	0	0	0	0	0	1	1	0	0	0	0
Influenza, ICU admissions	24 hrs	0	63	36	43	46	152	52	78	10	64	46	71
Measles (rubeola)	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Mumps	24 hrs	0	8	6	8	2	2	0	0	1	1	2	1.5
Neisseria meningitidis, invasive	24 hrs	0	1	1	1	0	0	0	0	0	0	0	0
Pertussis (whooping cough)	24 hrs	6	82	24	49	13	22	32	43	170	195	32	46
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
Streptococcus pneumoniae, invasive disease, in those < 5 yrs old	7 days	0	2	0	0	3	3	4	4	4	5	3	3.5
Tetanus	7 days	0	0	0	0	0	0	0	0	0	0	0	0
<b>Other Communicable Diseases</b>													
Anaplasmosis <sup>2</sup>	7 days	0	1	2	3	1	3	0	0	1	2	1	2.5
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 <sup>3</sup>	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Campylobacteriosis	7 days	21	134	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
Chikungunya fever <sup>3</sup>	7 days	2	2	2	2	0	0	NR	NR	NR	NR	2	1
Cholera	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Creutzfeldt-Jakob disease	7 days	0	0	1	1	2	2	0	0	1	1	1	1
Cryptosporidiosis	7 days	3	13	3	5	2	2	5	7	2	2	3	3.5
Cyclosporiasis	7 days	0	4	1	1	0	1	4	4	0	0	1	1
Dengue fever <sup>3</sup>	7 days	0	1	3	3	1	1	1	3	1	1	1	2
Ehrlichiosis <sup>2</sup>	7 days	0	1	1	1	0	0	0	0	0	0	0	0
Enteric E. coli infections <sup>4</sup>	24 hrs	3	19	10	14	17	18	50	54	16	19	17	18.5
Glomerulonephritis <sup>5</sup>	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	2	2	0	0	1	1	0	0.5
Hepatitis C (cases & carriers)	7 days	21	199	192	237	177	242	132	181	141	196	177	216.5
Hepatitis D	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Histoplasmosis	7 days	0	6	3	3	5	7	0	1	2	2	3	2.5
Influenza A, novel virus	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Legionellosis	7 days	4	23	13	18	23	26	31	39	20	25	23	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	2	2	1	2	1	2	1	2	1	2
Lyme disease <sup>2</sup>	7 days	2	27	28	30	20	22	37	39	26	27	27	28.5
Malaria	7 days	0	9	2	4	1	2	7	7	2	2	2	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	1	10	16	16	6	6	NR	NR	NR	NR	10	11
Rabies, human case	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rabies, potential exposure	24 hrs	2	49	69	73	50	51	44	44	42	43	49	47.5
Reye syndrome	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Rheumatic fever <sup>5</sup>	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Rocky Mountain spotted fever <sup>2</sup>	7 days	0	3	0	0	0	0	0	0	1	1	0	0
Salmonellosis	7 days	18	89	110	133	76	115	101	128	94	123	94	125.5
Severe Acute Respiratory Syndrome	3 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Shigellosis	7 days	0	18	17	27	15	18	16	18	17	20	17	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 <sup>3</sup>	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Staphylococcus aureus, methicillin resistant (MRSA), in those < 61 days old	24 hrs	1	10	5	10	6	9	2	3	4	7	5	8
Staphylococcus aureus, methicillin resistant (MRSA), community cluster <sup>6</sup>	24 hrs	1	1	0	0	0	0	0	0	1	1	0	0
Staphylococcus aureus (vancomycin-resistant)	24 hrs	0	0	0	0	0	0	0	0	0	0	0	0
Streptococcal infections, group A invasive disease <sup>7</sup>	24 hrs	0	14	18	22	25	29	18	21	17	20	18	21.5
Toxic shock syndrome <sup>8</sup>	7 days	0	0	0	0	0	0	1	1	0	0	0	0
Trichinosis	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Tuberculosis	7 days	1	30	18	39	20	34	23	35	17	26	20	34.5
Tularemia	3 hrs	0	0	0	0	0	0	0	0	1	1	0	0
Typhoid fever	24 hrs	0	0	2	3	4	5	0	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	2	6	4	4	3	3	2	2	4	4	4	3.5
West Nile virus disease <sup>3</sup>	7 days	2	9	8	9	5	5	6	6	55	56	8	7.5
Yersiniosis	7 days	0	3	1	1	2	3	2	2	3	3	2	2.5
Zika virus disease <sup>3</sup>	7 days	2	8	NR	NR	NR	NR	NR	NR	NR	NR	NR	NR
<b>STDs, HIV and AIDS</b>													
AIDS <sup>9</sup> (July - September)	7 days	**	9	11	11	14	15	22	26	14	17	14	16
Chancroid	7 days	0	0	0	0	0	0	0	0	0	0	0	0
Chlamydia	7 days	106	1598	1780	2382	1558	2056	1411	1883	1402	1861	1558	1969.5
Gonorrhea	7 days	21	237	226	307	166	242	199	258	180	239	199	250
HIV infection <sup>9,10</sup> (July - September)	7 days	**	227	26	38	30	37	37	47	26	33	26	37.5
Syphilis <sup>11</sup>	7 days	1	39	27	42	31	41	23	34	13	19	27	37.5

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

<sup>1</sup> Provisional cases, based on date of onset

<sup>2</sup> Listed in CD Rules and Regulations under "Tickborne Disease"

<sup>3</sup> Listed in CD Rules and Regulations under "Arboviral Infections"

<sup>4</sup> O157:H7, STEC, EIEC, ETEC, EPEC

<sup>5</sup> Listed in CD Rules and Regulations under "Streptococcal infections, group A invasive disease sequelae"

<sup>6</sup> Two or more laboratory-confirmed cases of community onset MRSA infection during a 14 day period

<sup>7</sup> Includes streptococcal toxic shock syndrome and necrotizing fasciitis

<sup>8</sup> Due to *Staphylococcus aureus*

<sup>9</sup> HIV/AIDS data are provided quarterly by IDPH and are provisional, based on date of diagnosis.

<sup>10</sup> HIV counts reflect all newly diagnosed HIV cases regardless of stage of disease at diagnosis.

<sup>11</sup> 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](http://www.cdc.gov)

**IDPH:**  
[www.dph.illinois.gov](http://www.dph.illinois.gov)

**DuPage:**  
[www.dupagehealth.org](http://www.dupagehealth.org)

Archived issues of CD Review are available at:  
[www.dupagehealth.org/publications](http://www.dupagehealth.org/publications)