

# TECHNICAL NOTES

## NOTES ON SPECIFIC DISEASES:

***Anaplasma phagocytophilum***: formerly known as human granulocytic ehrlichiosis (HGE).

***Ehrlichia chaffeensis***: formerly known as human monocytic ehrlichiosis (HME).

***Ehrlichia ewingii***: formerly known as other human ehrlichiosis.

**Encephalitis, Post Other Infection**: includes encephalitis following a non-central nervous system viral illness or after vaccine was administered.

**Hepatitis B and C**: due to the chronic nature of hepatitis B and C, all conditions associated with hepatitis B and C are shown by date of report to better capture and describe disease incidence. Data in the "Month of Onset" table are by the month the case was reported to the Centers for Disease Control and Prevention (CDC). There is no staff person at the ODH who verifies that cases meet the CDC/Council of State and Territorial Epidemiologists (CSTE) case definitions. Algorithms in the electronic reporting system have been developed for this purpose but it is unknown how accurate they are. In addition, duplicate cases and case completeness are not able to be verified or corrected. Therefore, chronic hepatitis B and past or present hepatitis C data are not published although they are reportable in Ohio.

**Influenza-Associated Hospitalization**: became a reportable condition in Ohio on Jan. 1, 2009.

**Influenza-Associated Pediatric Mortality**: includes cases for children less than 18 years of age. Data in the "Month of Onset" table are by the month of death.

**Influenza A Virus, Novel Human Infection**: became a reportable condition in Ohio on Jan. 1, 2009.

**LaCrosse Virus Disease**: also known as California serogroup virus disease.

**Meningitis, Other Bacterial**: includes cases of bacterial meningitis for which the agent was specified, excluding Group A *Streptococcus*, Group B *Streptococcus* (in newborns less than 3 months of age), *Haemophilus influenzae*, *Listeria monocytogenes*, *Mycobacterium tuberculosis*, *Neisseria meningitidis* and *Streptococcus pneumoniae*. Cases of meningitis due to these agents are reported as those specific conditions.

**Rabies, Animal**: refers only to cases among animal species. The last reported case of human rabies in Ohio occurred in 1971.

***Streptococcus pneumoniae*, Invasive Disease, Ages <5 Years**: numbers include cases for all children less than 5 years of age, regardless of drug-resistance pattern.

***Streptococcus pneumoniae*, Invasive Disease, Drug Resistant, Ages 5+ Years**: numbers include cases 5 years of age and older with intermediate resistance or resistance to one or more antimicrobial agents.

***Streptococcus pneumoniae*, Invasive Disease, Drug Susceptible, Ages 5+ Years**: numbers include cases 5 years of age and older with invasive *Streptococcus pneumoniae* that are susceptible or of unknown susceptibility to all antimicrobial agents tested.

## NOTES ON OUTBREAKS:

Data indicate the number of suspected, probable and confirmed outbreaks reported and do not reflect the number of cases involved in the outbreak, except as noted. Outbreak data for vaccine-preventable diseases (VPDs), including influenza, only include confirmed outbreaks.

Outbreak data are not included in the "Age in Years" and "Sex" tables, and rates were not calculated in any table. Outbreak data are by year of report, so "Month" refers to the month of report, except as noted. The source of outbreak data is the ODH Bureau of Infectious Diseases and the Ohio Disease Reporting System. ***Eight multistate outbreaks are not included in the "County" table; thus, county totals do not match totals.*** A multistate outbreak is an outbreak where the exposure occurred in more than one state.

Definitions for the six categories of outbreaks are from the ODH [Infectious Disease Control Manual \(IDCM\)](#); foodborne outbreaks and waterborne outbreaks are also defined on the CDC's Nationally Notifiable Disease Surveillance System's [website](#). Outbreak definitions for VPDs are located in the [disease-specific chapters](#) of the IDCM.

**Community:** became a Class C reportable outbreak on Jan. 1, 2009. A community outbreak is defined as two or more cases of similar illness with a common exposure in the community and not considered a foodborne or waterborne disease outbreak.

**Conjunctivitis:** outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included conjunctivitis outbreaks of bacterial, viral or unknown etiology.

**Foodborne:** An incident in which two or more persons experience a similar illness after ingestion of a common food, and epidemiologic analysis implicates the food as the source of the illness. Agent-specific criteria to confirm foodborne outbreaks can be found at: [http://www.cdc.gov/outbreaknet/references/resources/guide\\_confirming\\_diagnosis.html](http://www.cdc.gov/outbreaknet/references/resources/guide_confirming_diagnosis.html).

**Healthcare-associated:** became a Class C reportable outbreak on Jan. 1, 2009. The definition of a healthcare-associated outbreak is the occurrence of cases of a disease (illness) above the expected or baseline level, usually over a given period of time, as a result of being in a healthcare facility. The number of cases indicating the presence of an outbreak will vary according to the disease agent, size and type of population exposed, previous exposure to the agent and the time and place of occurrence.

**Institutional:** became a Class C reportable outbreak on Jan. 1, 2009. An institutional outbreak is defined as two or more cases of similar illness with a common exposure at an institution (e.g., correctional facility, day care center, group home, school) and not considered a foodborne or waterborne disease outbreak.

**Nosocomial:** outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included hospital-acquired outbreaks of all etiologies.

**Pediculosis:** outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included louse-associated outbreaks of all origins (head, body and pubic or crab lice).

**Scabies:** outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included scabies outbreaks, both confirmed and suspected.

**Staphylococcal Skin Infections:** outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included staphylococcal outbreaks in which isolates were antibiotic-susceptible as well as outbreaks in which isolates were methicillin-resistant *Staphylococcus aureus* (MRSA).

**Unspecified:** outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included outbreaks of reportable disease agents that were neither foodborne, waterborne nor nosocomial.

**Unusual Incidence of Non-Class A, Class B or Class C Disease:** outbreaks were no longer reportable as this entity beginning Jan. 1, 2009. Data prior to 2009 included outbreaks in which the causative agent was not a Class A, B or C disease. Most of these were outbreaks of norovirus that were point-source or person-to-person spread.

**Waterborne:** the definition of a waterborne disease outbreak is any outbreak of an infectious disease, chemical poisoning or toxin-mediated illness where water is indicated as the source by an epidemiological investigation

**Zoonotic:** became a Class C reportable outbreak on Jan. 1, 2009. The definition of a zoonotic outbreak is the occurrence of two or more cases of a similar illness with a common exposure to an animal source and not considered a foodborne or waterborne disease outbreak.

## NOTES ON RATE CALCULATIONS:

Population estimates for rates in the "Age in Years," "Sex" and "County of Residence" tables come from the 2011 U.S. Census estimates. Population data for rates in the "Year of Onset" table come from the U.S. Census estimates for each year except 2010, which uses the actual count. Rates were not calculated for the following conditions because they pertain to selected age populations and not the entire population. Rates were calculated in the "Age in Years" table only for the conditions below containing an asterisk (\*) because appropriate population data were available for the denominator:

- Botulism, infant
- Cytomegalovirus (CMV), congenital
- Hepatitis B, perinatal infection
- Influenza-associated pediatric mortality\*
- Streptococcal disease, group B, in newborn
- *Streptococcus pneumoniae*, invasive disease, ages < 5 years\*
- *Streptococcus pneumoniae*, invasive disease, drug resistant, ages 5+ years\*
- *Streptococcus pneumoniae*, invasive disease, drug susceptible, ages 5+ years\*
- Toxoplasmosis, congenital

## DISEASES NOT INCLUDED IN TABLES:

There were no known cases in Ohio of the following reportable diseases during at least the past five years; thus, they are not included in the 2007-2011 disease tables (pp. 6-8):

- Anthrax
- Diphtheria
- Eastern equine encephalitis virus disease
- Encephalitis, post mumps
- Encephalitis, post chickenpox
- Hantavirus
- Plague
- Poliomyelitis
- Powassan virus disease
- Rabies, human
- Reye syndrome
- Rubella, congenital and not congenital
- Severe acute respiratory syndrome
- Smallpox
- St. Louis encephalitis virus disease
- *Staphylococcus aureus*, resistant to Vancomycin (VRSA)
- Trichinosis
- Viral hemorrhagic fever
- Western equine encephalitis virus disease
- Yellow fever

There were no outbreaks of the following reported 2007-2008:

- Blastomycosis
- Histoplasmosis
- Sporotrichosis
- Toxoplasmosis

Reportable diseases not included in the "Age in Years," "Sex," "Month of Onset" and "County of Residence" tables (pp. 9-44) had no known cases reported in 2011.

## NOTE ON SALMONELLA SEROTYPES AND MENINGOCOCCAL DISEASE SEROGROUPS:

The bacteriology laboratory at ODH performs serotyping of *Salmonella* isolates and serogrouping of *Neisseria meningitidis* isolates. Hospital and other clinical laboratories are encouraged to send *Salmonella* and *Neisseria meningitidis* isolates to the ODH Laboratory for serotyping and serogrouping. The ODH Laboratory also requests Shiga toxin-producing *Escherichia coli*, *Listeria* and *Vibrio*. *Haemophilus influenzae* (in children under 5 years of age) and Vancomycin-resistant *Staphylococcus aureus* isolates with a minimum inhibitory concentration (MIC) of 8 or greater are requested to be sent directly to the Centers for Disease Control and Prevention (CDC) Laboratory. For further information on the submission of isolates, please contact the bacteriology laboratory at (614) 644-4656.

## REFERENCES

1. Ohio Department of Health. LaCrosse Virus Disease. In: *Infectious Disease Control Manual*. Columbus, OH: Ohio Department of Health; 2012: 1-8. Available at: <http://www.odh.ohio.gov/pdf/IDCM/lac.pdf>. Accessed January 2, 2013.