

What is an Outbreak?

- **General**- An outbreak is defined as the occurrence of illness in a person or a group of epidemiologically associated persons, with the rate of frequency clearly in excess of normal expectations (IDPH Communicable Disease Rules and Regulations)
 - Number of cases indicating presence of an outbreak is disease specific
- **Foodborne**- An outbreak is defined as any clusters of illnesses in which two or more persons (usually residing in separate households) associated in time and place experience onset of a similar, acute illness (usually gastrointestinal) following ingestion of common food or drink (IDPH Principles and Procedures for Investigating Suspected Outbreaks of Foodborne and Waterborne Illness, 2004).
- **Waterborne**- An outbreak is defined as clusters of illness in which two or more persons (usually residing in separate households) associated in time and place experience onset of a similar, acute illness (usually gastrointestinal) following ingestion of drinking water or recreational contact with water. (IDPH Principles and Procedures for Investigating Suspected Outbreaks of Foodborne and Waterborne Illness, 2004).
- **Acute gastroenteritis (AGE) in a LTCF**- An outbreak is defined as two or more A.G.E. cases occurring in a unit with initial dates of onset within 48 hours of each other. (IDPH Guidelines for the Prevention and Control of Viral Acute Gastroenteritis Outbreaks in Illinois Long-Term Care Facilities, 2012).
- **Clostridium Difficile Infection (CDI)**- At least three persons in the same unit/area of the facility with symptoms consistent with *C. difficile* infection (e.g. diarrhea) within a period of seven days OR five cases within a four week period

and

who **meet case definition for CDI**

and

when not otherwise ruled out by laboratory identification of other pathogens (e.g. norovirus) among 2 or more persons.

(Clinical presentation should be a component in determination of outbreak etiology.)

Clostridium difficile infection (CDI) **Case Definition:**

Diarrhea (defined as passage of 3 or more unformed stools in 24 or fewer consecutive hours)

AND one of the following:

- Laboratory confirmed: a stool test result positive for the presence of toxigenic *C. diff* or its toxins

OR

- Histopathologic findings demonstrating pseudomembranous colitis.

OR

- Colonoscopic findings demonstrating evidence of pseudomembranous colitis.

- **AGE in a school or daycare setting**- An outbreak is defined as four or more persons with acute onset of vomiting and/or diarrhea in a classroom or in an otherwise defined group of students; or cases in more than 10% of the school's/daycare's census in a single day. (IDPH Guidance for Prevention of Acute Gastroenteritis (AGE) Outbreaks in Daycare Facilities and Schools, 12/20/2011).
- **Hand, Foot, and Mouth Disease**- An outbreak is defined as 10 epidemiologically linked persons with clinically compatible illness with onsets within a 10 day period.
- **Herpes simplex**. Two or more suspect cases of herpes simplex epidemiologically linked within a 5 day period. If not laboratory testing is done, these would be suspect outbreaks.

- **Influenza Outbreak Definition**: Two or more cases of ILI occurring within 72 hours among residents in a unit of the facility with at least one of the ill residents having laboratory-confirmed influenza.
 - Congregate Settings Include (but are not limited to):
 - Long-Term Care Facilities
 - Correctional Facilities
 - Group Homes

- **Methicillin Resistant Staphylococcus aureus (MRSA) Infection- Section 690.658 Staphylococcus aureus, Methicillin Resistant (MRSA) Infection, Clusters of Two or More Laboratory Confirmed Cases Occurring in Community Settings (Including, but Not Limited to, Schools, Correctional Facilities, Day Care and Sports Teams) (Reportable by telephone or facsimile as soon as possible, within 24 hours)**

For the purposes of this Section, a MRSA cluster is defined as two or more laboratory confirmed cases of MRSA infection occurring in a community setting during a 14-day period for whom an epidemiological link is readily apparent to the reporter.

- **Methicillin Susceptible Staphylococcus aureus (MSSA)-** A MSSA outbreak is defined as 10 epidemiologically linked persons with lab confirmed MSSA with onsets within a 10 day period.
- **MRSA Cluster Associated with a NICU or Newborn Nursery- Section 690.660 Staphylococcus aureus, Methicillin Resistant (MRSA), Any Occurrence in an Infant Less Than 61 Days of Age**

For the purpose of this Section, an MRSA cluster is defined as two or more patients associated with a neonatal intensive care unit (NICU) or newborn nursery with a clinical culture positive for MRSA during a 14-day period for whom an epidemiologic link is feasible and a pulse field gel electrophoresis (PFGE) or other typing method result is identical or a PFGE or other typing method result is not yet performed.

- **Mumps**- An outbreak is defined as three or more laboratory confirmed cases linked by time and place.
- **Mycoplasma pneumoniae** - An outbreak is defined as five or more illnesses consistent with *M. pneumoniae* and at least two persons confirmed as *M. pneumoniae*.

- **Pertussis in a school or childcare setting**- Defined as two or more non household contacts linked by time and place (within 42 days); the outbreak case definition may be used to count cases if one case has been confirmed.
- **Respiratory Syncytial Virus (RSV)**- An outbreak is defined as two laboratory confirmed cases during a 14-day period that are healthcare associated. Health care associated will be defined as RSV-positive specimen collected more than 2 days after admission to the hospital (i.e., on or after day 3).
- **Rhinovirus**- Rhinovirus outbreaks are not reportable.
- **Scabies**- One case of healthcare provider diagnosed Norwegian (crusted) scabies, OR TWO or more symptomatic persons with epi-linked exposure and at least TWO are skin scraping positive.
- **Suspect scabies outbreak**: Two or more symptomatic persons with epi-linked exposure AND None of the affected persons are diagnosed with Norwegian (crusted) scabies AND Only ONE person is skin scraping positive, OR Healthcare provider diagnosis of scabies (either skin scarping is not performed or skin scraping performed with negative results) AND scabicide treatment is ordered for TWO or more persons.
- **Outbreak case definition for invasive GAS**
The following epi linked cases with onsets within a 21 day period will meet criteria to count as a confirmed invasive GAS outbreak
 - 2 or more confirmed cases with GAS isolated from a sterile site
 - At least one invasive GAS case (isolate from sterile site) and at least one invasive disease in the absence of another identified etiology with isolation of GAS from a sterile site (ex. Necrotizing fasciitis with isolation from wound).

Outbreak case definition for non-invasive GAS

- 10 epi linked persons with lab confirmed GAS (not from sterile site) with onsets within a 10 day period
- **Varicella**- An outbreak is defined as five or more confirmed cases linked by time and place.