

## INSTITUTIONAL OUTBREAKS

### REPORTING INFORMATION

- **Class C:** Report by the end of the next business day to the local public health department in whose jurisdiction the outbreak has occurred. The exception: if the outbreak, unusual incident, or epidemic has an unexpected pattern of cases, suspected cases, deaths, or increased incidence of disease that is a major public health concern, then such outbreak, unusual incident, or epidemic shall be reported immediately via telephone.
- The local health department should report the outbreak to the Ohio Department of Health (ODH) Outbreak Response and Bioterrorism Investigation Team (ORBIT) at 614-995-5599.
- Institutions include, but are not limited to, the following facilities or organizations: correctional facilities, day care centers, group homes, schools, homeless shelters, assisted-living facilities.\* **Please note:** disease outbreaks in healthcare facilities are reported separately under the healthcare-associated outbreak category. \*An outbreak in an assisted-living facility may be considered healthcare-associated if the outbreak occurs in a facility that is attached to a concurrently affected nursing home.
- Reporting Form(s) and/or Mechanism: [Ohio Confidential Reportable Disease form](#) (HEA 3334, rev. 1/09), [Positive Laboratory Findings for Reportable Disease form](#) (HEA 3333, rev. 8/05), the local public health department via the Ohio Disease Reporting System (ODRS), or telephone.

### AGENT

Institutional outbreaks are caused by many different microorganisms, fungus and parasites. In Ohio, institutional-associated outbreaks have been caused by agents such as *Campylobacter*, Coxsackie virus, influenza virus, pediculosis (i.e., head lice), Shiga-Toxin producing *E. coli*, norovirus, *Staphylococcus*, group A *Streptococcus*, *Sarcoptes scabiei* (i.e., scabies) and *Bordetella pertussis*. All multi- drug resistant organisms involved in outbreaks should be reported. Institutional-associated outbreaks of respiratory illness, gastroenteritis, and rashes should be reported. If the causative agent identified is reportable as an individual listing under the Ohio Administrative Code (e.g., *Shigella*, *E. coli* O157), the individual case(s) should be reported.

### CASE DEFINITION

#### Definition of an institutional outbreak

Two or more cases of similar illness with a common exposure at an institution (e.g., correctional facility, day care center, group home, school, assisted-living facility) and not considered a foodborne or waterborne disease outbreak.

### WHAT SHOULD BE REPORTED

Any outbreak or significant increase in institutional-associated infections above the norm or baseline in an institution or employees who work there should be reported to the local health district. The governing bodies of institutions are expected to recognize clusters or outbreaks of illness or conditions and report significant increases above those rates. Categories and examples of institutional infections/conditions that should be reported include:

- An outbreak or increased incidence of disease or condition due to any agent (e.g., *Staphylococcus*, *Streptococcus*, *Clostridium difficile*, pediculosis, scabies, pertussis, tuberculosis, drug-resistant agents) occurring in institutionalized persons or persons working in the institution;
- Institutional outbreaks of unknown etiology such as, but not limited to respiratory illness, rashes and gastroenteritis;
- Closure of a unit or service due to infections/conditions.

## **SIGNS AND SYMPTOMS**

Symptoms vary depending on the agent. Incubation and duration of illness vary from a few hours to several days or longer, depending upon the agent.

## **DIAGNOSIS**

Depends on the suspected agent(s). To discuss diagnostic testing options and to make arrangements for laboratory testing, contact the ODH Outbreak Response and Bioterrorism Investigation Team (ORBIT) at 614-995-5599.

If the symptoms are enteric, stool specimens may be collected and sent to the ODH Laboratory. In some circumstances testing can be done at the ODH Laboratory without charge. To obtain the fee exemption and to arrange for receipt of the stool transport kit, contact the ODH ORBIT at 614-995-5599. Depending upon the suspected organism, C&S transport medium and/or parasite kits will be used for transport of the specimens. Testing for *Norovirus* requires the collection of bulk stool specimens.

Other organisms may be tested by Pulsed-Field Gel Electrophoresis. Please contact the ODH ORBIT at 614-995-5599 for assistance in determining whether this is an option for your outbreak.

## **EPIDEMIOLGOYY**

### **Source**

Varies depending upon the agent.

### **Occurrence**

There is no seasonality to institutional outbreaks.

### **Mode of Transmission**

Varies depending upon the agent.

### **Period of Communicability and Carrier State**

Varies depending upon the agent.

## **PUBLIC HEALTH MANAGEMENT**

Institutional outbreaks should be investigated to uncover the source of infection so that interventions can be instituted and further cases prevented. Most institutional-associated outbreaks are handled through telephone consultation between the LHD and ODH ORBIT. Depending on the agent, laboratory support may be available to institutions reporting suspect outbreaks. On-site technical assistance is available upon request in some situations. Please contact the ODH ORBIT at 614-995-5599.