QUICK FACTS FOR PROVIDERS: Salmonellosis

REPORTING INFORMATION
• **Class B1**: Report by the close of the next business day after the case or suspected case presents and/or a positive laboratory result to the local public health department where the patient resides. If patient residence is unknown, report to the local public health department in which the reporting health care provider or laboratory is located.

Agent
Over 2000 serotypes of *Salmonella* are known. *Salmonella* serotype Typhimurium and *Salmonella* serotype Enteritidis account for nearly half of all human *Salmonella* isolates typed in Ohio. *Salmonella* Typhi is the agent of typhoid fever.

Source
Animals and humans are the reservoir of *Salmonella*. Domestic or wild animals may be infected, including livestock, poultry and pets (including dogs, cats and reptiles). Food and water may be contaminated with *Salmonella* from animals or their waste. Raw meats and shell eggs may be contaminated with *Salmonella*. Raw produce may be contaminated from raw meat juices or animal feces (e.g. through contaminated irrigation water, during transport or processing).

Occurrence
Salmonellosis occurs worldwide. In Ohio, there is a slight increase in mid-summer. Most recognized cases occur in children <5 years of age, adults 20-39 years of age and adults >60 years of age. All ages are at risk.

Mode of Transmission
Humans may acquire *Salmonella* directly (via the fecal-oral route) from animals (e.g. pets, livestock, reptiles) or from ingestion of contaminated food or water. Direct person-to-person transmission may occur via the fecal-oral route but is uncommon.

Period of Communicability
*Salmonella* is shed in the feces while the patient is acutely ill and perhaps for a week or two after symptoms end. Antibiotic use may prolong the period of shedding. The carrier state develops in <5% of patients.

Incubation Period
The incubation period is 6-72 hours, usually 12-36 hours.
Treatment
Antibiotics are generally not administered in cases of uncomplicated gastroenteritis, as they can lead to the carrier state. Antibiotic treatment may be indicated for salmonellosis in infants, the elderly or those with underlying medical conditions.

Isolation and Follow-up Specimens
Ohio Administrative Code 3701-3-13 (U) states:
“Salmonellosis: a person with salmonellosis who attends a child care center or works in a sensitive occupation shall be excluded from the child care center or work in the sensitive occupation and may return when the following conditions are met:
1. The child may return to the child care center after diarrhea has ceased.
2. A person may return to work in a sensitive occupation after diarrhea has ceased, provided that his or her duties do not include food handling.
3. A person who is a food handler may return to work after diarrhea has ceased and after two consecutive follow-up stool specimens are negative for Salmonella.”

Obtain the first stool specimen no sooner than 48 hours after cessation of diarrhea or, if being treated, at least 48 hours after completion of antibiotic therapy. Obtain the remaining specimen(s) at least 24 hours apart.
Note: Even if Salmonella was initially recovered from blood or urine, the follow-up testing as described above is done on stool samples.

Prevention and Control
All meat and egg dishes should be thoroughly cooked. Avoid cross-contamination of food (especially raw fruits and vegetables) with raw meat juices. Hand washing after contact with animals can help prevent salmonellosis. Chicks, ducklings and all reptiles, which might be Salmonella carriers, are inappropriate pets for small children. Thorough hand washing should be emphasized, especially after bowel movements, after changing diapers, and before eating or preparing food.