

Salmonella

DISEASE IN ANIMALS

There are over 2,500 known serovars of salmonella bacteria. Some serovars have a narrow host range but most can affect multiple species, including humans. Salmonella can be found in most mammals, birds, reptiles and amphibians. Infections in swine and reptiles are particularly prevalent.

Reporting: *Salmonella pullorum* and *S. gallinarum* (poultry) are reportable animal diseases in Ohio and all suspected cases must be reported to the Ohio Department of Agriculture (ODA), Division of Animal Industry at (614) 728-6220 or (800) 300-9755 or to the USDA APHIS Veterinary Services at (614) 856-4735 or (800) 536-7593. Other animal salmonella's are not reportable to ODA or USDA, although voluntary reporting to the [local health department](#) (LHD) is encouraged when there is a risk of transmission to humans.

Transmission: The organism is mainly transmitted by the fecal-oral route. Fecal shedding occurs in apparently healthy animals. The duration of shedding may be quite variable and intermittent, making test and removal control programs impossible at this time. Salmonella are considered part of the normal flora of reptiles; all reptiles should be considered carriers.

Clinical signs: Asymptomatic infection in animals is common and shedding of salmonella can be intermittent. Stress may exacerbate disease. The predominant presentation is enteritis (dehydration, abdominal pain and diarrhea that may be bloody). Septicemia may occur in very young animals and pigs and is characterized by marked depression, high fever and acute death. Abortion is also seen.

Diagnostocs:

- Isolation of the organism from tissue or feces
- Genetic fingerprinting of isolates by PFGE or MLVA

Case classification:

- Suspected: a clinical case with signs consistent with salmonella.
- Probable: a clinically suspect case with laboratory evidence from a screening or unvalidated test.
- Confirmed: a case that meets confirmatory testing criteria determined by a state or federal diagnostic laboratory (e.g. culture).

DISEASE IN HUMANS

Reporting: Report by the end of the business day any suspected human illness or positive laboratory result to the LHD where the patient resides. If unknown report to the LHD of the health provider or laboratory.

Human illness: An acute gastrointestinal illness characterized by headache, diarrhea, abdominal cramps, fever and sometimes vomiting. Infection may progress from gastroenteritis to septicemia or a focal infection (e.g., cholecystitis, meningitis). Asymptomatic infections may occur.

Transmission: Although primarily a pathogen associated with foods of animal origin, direct transmission from animals (especially poultry, ruminants and reptiles) or their feces to humans can occur through the fecal-oral route. Direct person-to-person transmission may occur but is less uncommon.

Personal protection: Avoid eating and drinking when working around animals or animal manure. Hand washing after contact with animals or animal feces will prevent salmonellosis. Chicks, ducklings and all

reptiles are likely to be *Salmonella* carriers and are inappropriate pets for small children. All meat and egg dishes should be thoroughly cooked. Avoid cross-contamination of food (especially raw fruits and vegetables) with raw meat juices.

FOR MORE INFORMATION

Reportable Diseases in Ohio

[ODA Division of Animal Industry](#)

[OAC Chapter 901:1-21 Dangerously Contagious or Infectious and Reportable Diseases](#)

[USDA Animal and Plant Health Inspection Service](#)

Disease in Animals

[Ohio Animal Disease Diagnostic Laboratory](#)

[Iowa State University Center for Food Security and Public Health Animal Disease Factsheets](#)

[AVMA Zoonosis Updates](#)

Disease in Humans

[ODH Infectious Disease Control Manual](#)

[CDC Salmonella](#)

[Animals: Reptiles | CDC Healthy Pets Healthy People](#)