Salmonellosis Fact Sheet

1. What is salmonellosis? Salmonellosis is an infection caused by salmonella bacteria that generally affects the intestinal tract, and occasionally the bloodstream and other organs. It is one of the more common causes of bacterial gastroenteritis (diarrhea and/or vomiting) with approximately 2,000 cases reported annually in Pennsylvania and 40,000 cases reported annually in the United States. Since many milder cases are not diagnosed or reported, the actual number of infections may be thirty or more times greater. Most cases occur in the summer months, and are seen as single cases, clusters or outbreaks.

2. Who gets salmonellosis? - Any person can become infected with salmonella, but it is diagnosed more often in infants and children. The rate of diagnosed infections in children less than five years old is higher than the rate in all other persons. Young children, the elderly, and immunocompromised persons are the most likely to have severe disease. Approximately 400 persons die each year in the United States from acute salmonellosis.

3. How do people become infected by salmonella? People generally become infected by salmonella by either eating or drinking contaminated food or water, by contact with infected people or animals, or through contact with contaminated environmental sources. Salmonella bacteria live in the intestinal tracts of humans and other animals, including birds. These bacteria are usually transmitted to humans by eating foods contaminated with feces. Contaminated foods usually look and smell normal. Contaminated foods are often of animal origin, such as beef, poultry, milk, or eggs, but any food, including vegetables, may become contaminated. It is well known that thorough cooking kills salmonella bacteria. Food may also become contaminated by the hands of an infected food handler who did not correctly wash his/her hands with soap and water after using the bathroom.

4. Can pets carry salmonella? – Salmonella bacteria may also be found in the feces of some pets (baby poultry, rodents, dogs, cats, hamsters, and hedgehogs) especially those with diarrhea. People often become infected if they do not correctly wash their hands after contact with pets or pet feces. Reptiles, such as turtles, lizards, and snakes, are particularly likely to harbor and spread salmonella bacteria. Many chicks and young birds normally carry salmonella bacteria in their feces.
People should always wash their hands immediately after handling a reptile or bird, even if the animal appears healthy. Adults should also assure that children wash their hands after handling a reptile or bird, or after touching its cage or habitat.

5. **What are the symptoms of salmonellosis?** - People with salmonellosis may experience mild or severe diarrhea (sometimes bloody), fever and occasionally vomiting 12 to 72 hours after infection. They also may become infected, but without symptoms. Salmonella infection may spread internally from the intestines to the blood stream, and then to other body sites and can cause death unless the ill person is treated promptly with antibiotics. Bloodstream infections can be quite serious, particularly in the very young or elderly. Some forms of salmonella bacteria can also cause urinary infections.

6. **How soon after exposure do symptoms of salmonellosis appear?** - The symptoms generally appear 1 to 3 days after exposure.

7. **Where are salmonella bacteria found?** - Salmonella bacteria are widely distributed in our national food chain and environment. The organisms routinely contaminate raw meats, eggs, unpasteurized milk and cheese products. Vegetables may also become contaminated. Other common sources of exposure include contact with pet turtles and other reptiles, pet chicks, dogs, cats, rodents, hamsters, and hedgehogs.

8. **How is salmonellosis diagnosed?** - It is diagnosed by collecting stool specimens and culturing the organism.

9. **How long can an infected person carry the salmonella bacteria?** - The salmonella carrier state varies from several days to many months. Infants and people who have been treated with oral antibiotics tend to carry the bacteria longer than others.

10. **Do infected people need to be isolated or excluded from work or school?** - As a general rule, food handlers, health care workers, and workers and children in a child care setting should not work or attend child care while having active diarrhea. Since salmonella bacteria are shed in the feces, people with active diarrhea who are unable to control their bowel habits (infants, young children, certain handicapped individuals, for example) should be isolated. Most infected
people may return to work or school when their stools become formed provided that they carefully wash their hands after toilet visits. Food handlers, health care workers, and workers and children in a day care setting diagnosed as having salmonellosis should obtain the approval of the local or state health department before returning to their routine activities.

11. **What is the treatment for salmonellosis?** - Most people with salmonellosis will recover within 5 to 7 days on their own or may require fluids to prevent dehydration. Antibiotics and antidiarrheal drugs are generally not recommended for typical cases with intestinal infections. Antibiotics may be indicated for more complicated cases, especially bloodstream infections.

12. **How can salmonellosis best be prevented?** -
   a. Always treat raw poultry, beef and pork as if they are contaminated with salmonella bacteria and handle accordingly:
      (1) Wrap fresh meats in plastic bags at the market to prevent blood from dripping on other foods.
      (2) Refrigerate foods promptly; minimize holding at room temperature.
      (3) Cutting boards and counters used for preparation should be washed immediately after use to prevent cross contamination with other foods.
      (4) Avoid eating raw or undercooked meats.
      (5) Ensure that the correct internal cooking temperature is reached particularly when using a microwave.
   b. Avoid eating raw eggs or undercooking foods containing raw eggs.
   c. Avoid drinking raw milk, or undercooking foods containing raw milk.
   d. Encourage careful hand washing before and after food preparation.
   e. Make sure those who handle pets of all kinds, properly attend to hand washing.

13. **For more information about salmonellosis:**
    http://www.cdc.gov/salmonella/

This fact sheet provides general information. Please contact your physician and/or veterinarian for specific clinical information related to you or your animal.

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