

Foodborne illness short answer questions

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Food borne Illness Salmonella What is the infectious agent (pathogen) that causes this infectious disease? For example, the name of the bacteria, virus, or parasite. Salmonella is a genus name used to refer to a large bacteria group primarily exceeding 25, 000 types (Porwollik 66). Each type possesses a distinct, identifiable body protein coating, though having closely related rod shape and flagellated. Salmonella bacterium causes diseases globally primarily in people, animals and birds. The key maladies attributed with this bacterium encompass Typhoid Fever and Gastroenteritis, mainly evident in human beings (Porwollik 176). The main pathogen is a bacterium, whose dwelling preference is in both cold and warm-blooded creatures where encompasses humans. Salmonella may also inhabit in moist environments where the transmitting physical media may pick them up prior finding their way into food. For instance, in America chicken eggs pick the bacteria from unhygienic surfaces besides, which they contact while harvesting or from the poultry feces (Porwollik 120). This is due to their capability to inhabit in both wet and dry contaminated surfaces. How is this infectious agent transmitted through food or water? Salmonella related illnesses emanate from the injection of bacteria into the body via food. Primarily, this is due to inappropriate food handling devoid of necessary hygiene. It has two species, where Salmonella Typhi is liable for food poisoning due to its ability to acclimatize effectively in wet places (Porwollik 112). Unhygienic food handling especially when cooking, immensely contributes to the transmission of salmonella bacteria. This results from undercooked food or that which had already contacted bacteria from infected surfaces. Pets and animal farms sometimes contribute mainly in the transmission of the bacteria, where they

act as organism carriers (Porwollik 189). The pets encompass dogs, turtles, snakes and cats who have contacted contaminated surfaces prior humans touch them with bare hands and fail to maintain hygiene effectively.

Consequently, enabling bacteria injection in the food yielding to poisoning, this affects people especially when they take poorly cooked food. Sometimes the bacteria may be in human or animal feces, which contacts foodstuff while in the line of processing, harvesting or packaging especially eggs. For instance, the recent US epidemic incidence that involved approximately 500 Million eggs contaminated with the bacteria (Porwollik 95). What is an

example of a real life outbreak of this food borne illness in the United States?

The most notable and memorable epidemic occurred in 2010, which encompassed over 500 million contaminated eggs. This was from two key Iowa firms (Wright County Egg and Hillandale) who used to distribute eggs in 14 US states. The incidence prompted to an immediate recall of the supply to ensure that the outbreak does not continue spreading. In this occurrence, the witnessed illnesses amounted to 2, 000 people from months of May to July. According to the then News and CDC experts, approximately 228 Million packages were recalled that were already in the market for ready sale by various brands like Lucerne and Albertson (Porwollik 105). Recall entailed returning the eggs and the business owners reclaiming their funds from the supply companies. The launching of recall was on 13 of August to guarantee that all the supplies packed from May 16 to Aug. 13; the commercial brands returned them to the company. Medical and lab experts arrived at this decision when they realized that the mean acceptable number of 50 incidences related to Salmonella Enteritidis reached 200 illnesses per week

(Porwollik 100). This was a whopping alarm, which called for an immediate resolution to curb the situation and make sure no more deaths occurred related to the epidemic. What are the clinical symptoms, duration of the disease, and treatment if any? Salmonella victim exhibits signs of diarrhea, vomiting and nausea, which when they persist yield to dehydration (Porwollik 244). Sometimes, if the victim hesitates in seeking medical care may die due to immense fluid loss that originates from dehydration. The bacterium may possess symptoms that are similar to food poisoning, but the latter signs are mild in comparison. Patient also experiences abdominal cramps and headache that prolongs if a person has severe salmonella infection. The patients upon infection to the period when symptoms emerge may take between 8- 48 hours while its infection duration is amid 4-7 days before it clears out (Porwollik 246). Unlike other common diseases, salmonella if maintained properly via intake of more fluids and various electrolytes, it clears out within a short duration. Since diarrhea may be, two to three times per day for mild infections. The treatment is controversial since, in some incidences, the doctors can recommend antibiotics besides fluids' intake (Porwollik 245). Children may take antibiotics while the expectant females referred to their OB physicians. What steps can be taken to prevent further outbreaks? Include individual as well as environmental precautions and methods. Maintaining high hygiene standards is the sure measure in shunning any potential salmonella epidemic (Porwollik 117). This entails proper food handling especially when storing and cooking. People should adopt the culture of utilizing antibacterial soaps especially when washing hands both at home and in the food joints. Food cooking should be thorough

such that no traces of salmonella bacteria are in the already cooked food meant for people to eat. This entails when one is preparing food must exercise high cleanliness like washing hands when switching diverse activities. For instance, after cutting vegetables and she is switching to bake cake; requires one to wash hands meticulously with soap to ensure that there is no transfer of bacteria. It is advisable that people should shun touching salmonella carrying animals like pets, besides spraying their dwelling environments to ensure the places are bacteria free. Work cited Porwollik, Steffen. *Salmonella: From Genome to Function*. United Kingdom: Caister Academic Press, 2011. Print.