



Food Safety Guidance

Addendum A

S.S.E.H.N

(Send Sick Employee Home Now)

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Serve It Up Safe!

a dba for:

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This document is intended to give you an overview of S.S.E.H.N (employ the memorable acronym *Send Sick Employee Home Now* to remember the actual names of these illnesses); those foodborne illnesses that are most dangerous and of greatest concern. But first, we must understand the 3 ways in which we can become sickened by a foodborne illness. They are:

1. Foodborne **Infection**- Consumption of a pathogen that causes illness.
2. Foodborne **Intoxication**- Consumption of a chemical or other natural agent that causes illness.
3. Foodborne **Toxin Mediated Infection**- Consumption of a pathogen who's by-product (waste) causes illness.

Shigella *Shigella* are bacteria that can infect the digestive tract and cause a wide range of symptoms, from diarrhea, cramping, vomiting, and nausea, to more serious complications and illnesses. Poor hygiene causes *Shigella* to be easily passed from person to person and from infected individuals to food items. Sources: salads, unclean water, and any food handled by someone who is infected with the bacteria. Infections, called shigellosis, sometimes go away on their own; in others, antibiotics can shorten the course of the illness. Shigellosis, which is most common during the summer months, usually affects kids, the elderly and the pregnant. These infections are very contagious and can be prevented with good hand washing practices. Other symptoms of shigellosis include: abdominal cramps, high fever, loss of appetite, nausea, vomiting and/or painful bowel movements. In very severe cases of shigellosis, a person may have convulsions/seizures, a stiff neck, a headache, extreme tiredness, and confusion. Shigellosis can also lead to dehydration and in rare cases, other complications, like arthritis, skin rashes, and kidney failure.

Salmonella Salmonellosis is an infection derived from the bacteria *Salmonella* and the most common cause of foodborne illness and responsible for 1.4 million cases of foodborne illness a year. *Salmonella* is caused by raw and undercooked eggs, undercooked poultry and meat, fresh fruits and vegetables, and unpasteurized dairy products. *Salmonella* was discovered by an American scientist named Dr. Salmon, for whom it was named. Most persons infected with *Salmonella* develop diarrhea, fever, and abdominal cramps 12 to 72 hours after infection. The illness usually lasts 4 to 7 days, and most persons recover without treatment. However, in some persons, the diarrhea may be so severe that the patient needs to be hospitalized (due to dehydration). The elderly, infants, and those with impaired immune systems are more likely to experience a severe case.

E. coli *Escherichia coli* are bacteria. Although most strains of *E. coli* are harmless, others can make you sick. Beef, especially undercooked or raw hamburger, produce, and unpasteurized milk, juices and ciders. *E. coli* causes diarrhea, vomiting and nausea. One prevalent form of *E. coli* that causes disease by producing a toxin called Shiga toxin. The bacteria that make these toxins are called Shiga toxin-producing *E. coli*, commonly identified as *E. coli* O157:H7. When you hear news reports about outbreaks of "*E. coli*" infections, they are usually talking about *E. coli* O157. If there is fever, it usually is not very high (less than 101°F) and most people recuperate within 5–7 days.

Hepatitis A Hepatitis A is a contagious liver disease that results from infection with the Hepatitis A virus. It can range in severity from a mild illness lasting a few weeks to a severe illness lasting several months. Hepatitis A is usually spread when a person ingests fecal matter — even in microscopic amounts — from contact with objects, food, or drinks contaminated by the feces or stool of an infected person. Hepatitis A is usually spread when the Hepatitis A virus is taken in by mouth from contact with objects, food, or drinks contaminated by the feces (or stool) of an infected person. A person can get Hepatitis A through person to person contact when an infected person does not wash his or her hands properly after going to the bathroom and touches other objects or food or when a parent or caregiver does not properly wash his or her hands after changing diapers or cleaning up the stool of an infected person. Hepatitis A can be spread by eating or drinking food or water contaminated with the virus. This is more likely to occur in areas where there are poor sanitary conditions or poor personal hygiene. The food and drinks most likely to be contaminated are fruits, vegetables, shellfish, ice, and water. In the United States, chlorination of water kills Hepatitis A virus that enters the water supply. Furthermore, foods can become contaminated at any point along the process: growing, harvesting, processing, handling, and even after cooking.

Norovirus *Noroviruses* are a group of related viruses that cause acute gastroenteritis (diarrhea) in humans. It is passed from person to person and from infected individuals to food items. Its source is any food contaminated by someone who is infected with this virus. The most common symptoms of acute gastroenteritis caused by *Noro* are diarrhea, vomiting, and stomach pain. *Noroviruses* are found in the stool and vomit of infected people. People can become infected by eating food or drinking liquids that are contaminated with *noro*, touching surfaces or objects that are contaminated with *noro*, and then placing their hand in or near their mouth and having direct contact with an infected person; for example, by exposure to the virus when caring for or when sharing food, drinks, or eating utensils with an infected person.

Other noteworthy foodborne illnesses:

Listeria- Causes listeriosis, a serious disease for pregnant women, newborns, and adults with a weakened immune system. Sources: unpasteurized dairy products, including soft cheeses; sliced deli meats; smoked fish; hot dogs; pate'; and deli-prepared salads (egg, ham, seafood, and chicken salads).

Staphylococcus- This bacteria produces a toxin that causes vomiting shortly after being ingested. Sources: cooked foods high in protein (cooked ham, salads, bakery products, dairy products) that are held too long(4 hours or more) in the TDZ (41F-135F).

Vibrio- Causes gastroenteritis, wound infection, and severe bloodstream infections. People with liver diseases are especially at high risk. Sources: raw or undercooked seafood, particularly shellfish.

Clostridium botulinum- This organism produces a toxin which causes botulism, a life-threatening illness that can prevent the breathing muscles from moving air in and out of the lungs. Sources: improperly prepared home-canned foods; honey (which should not be fed to children less than 12 months old).

Campylobacter(Kamp-i-lo-bak-ter)- Second most common bacterial cause of diarrhea in the United States. Sources: raw and undercooked poultry and other meat, raw milk and untreated water.

... a word on bacteria & viruses

Bacteria (germs)- the planets earliest life form, are single-celled asexual micro-organisms that thrive in many (or any) different types of environments. Some varieties live in extremes of cold or heat, while others make their home in people's intestines, where they help digest food. Most bacteria cause no harm to people.

Viruses (parasites)- acellular (have no cells) and are even smaller than bacteria and require living hosts - such as people, plants or animals- to multiply. Otherwise, they can't survive. When a virus enters your body, it invades some of your cells and takes over the cell machinery, redirecting it to produce the virus. Perhaps the most important distinction between bacteria and viruses is that antibiotic drugs usually kill bacteria, but they aren't effective against viruses. In some cases, it may be difficult to determine whether bacteria or a virus is causing your symptoms. Many ailments — such as pneumonia, meningitis and diarrhea — can be caused by either type of microbe.

Although this document is intended to give you an overview of our most prevalent foodborne illnesses, it is not a complete or comprehensive guide, should not be relied on for medical advice or treatment, does not replace the advice of a licensed physician, and should not be relied on for self-treatment of said medical conditions. Always seek the advice of a licensed physician anytime you suspect you have any condition that is not normal or symptomatic of any known or unknown foodborne illness.