

# Foodborne illnesses: An overview of hospitality operations liability

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## Abstract

The purpose of this article is to provide restaurateurs and hoteliers with information they need to be aware to avoid liability due to food safety outbreaks, steps that can be taken to reduce liability, and to substantiate that how foodborne illnesses can greatly impact the hospitality industry. A number of strategies, which assist hospitality business to minimize legal responsibility caused by foodborne illnesses, are provided.

**Keywords:** Foodborne illness, Hospitality operation, Liability, Prevention, Food safety

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## 1. Introduction

There are a number of foodborne microbial pathogens known to cause illness in humans. The most common ones are *E. coli*, listeria, salmonella and hepatitis A (Buzby, Frenzen, & Rasco, 2001). Hospitality operations (e.g., hotels, restaurants) are highly subject to the influence of foodborne illness due to the increased dining frequency such that 48% of food dollars are spent in restaurants (National Restaurant Association, 2009). The restaurant industry accounts for 59% of foodborne illness outbreaks in the U.S. (Centers for Disease Control and Prevention, 2006). If the plaintiff is suing a restaurant, strict liability can apply if the plaintiff can prove that the restaurant served contaminated food. Moreover, studies indicate that it takes one year for restaurants to recover from a crisis after the outbreak (Seo et al., 2013). Restaurants with a crisis history may easily experience negative spillovers from unrelated outbreaks due to consumer memories (Seo et al., 2014). A plaintiff who prevails in a product liability action concerning microbial foodborne illness is entitled to compensatory damages such as medical costs and expenses, lost wages, and pain and suffering. The U.S. Department of Agriculture estimates that in over 30 percent of foodborne illness lawsuits, compensation has been paid to the plaintiffs (Buzby et al., 2001).

The purpose of this article is to attempt to inform restaurateurs and hoteliers of the potential liability for serving contaminated food to consumers who become ill as a result of the contaminated food, the steps that can be taken to reduce liability, and examine particular cases to provide examples of how foodborne illnesses can greatly impact the hospitality industry. Restaurant owners and hoteliers have several defenses they can employ to

defend against a product liability lawsuit. In a strict liability action, they are required to show that the exposure to the contaminated food did not cause the alleged injuries. The easiest method to relieve a restaurant or food producer of liability is to show that the plaintiff had multiple exposures to contaminated food and some of them did not occur at the restaurant. Another defense that a restaurant can employ is to prove that they complied with food and safety regulations in storing, preparing, and serving food or that the restaurant properly warned the consumer of the potential risks of consuming the food. By complying with food safety regulations or by warning consumers of the potential dangers the restaurant is able to show that they acted in a reasonable manner and cannot therefore be negligent.

## **2. Literature Review**

Foodborne illnesses are bounded to restaurant operations such that up to 96% consumers believe that restaurants are responsible for food safety and restaurants are the major source of foodborne illness outbreaks (Knight et al., 2009). Knight et al. (2007) suggest that consumers are holding less favorable attitudes towards restaurants than other food suppliers (e.g., food manufacturers and farmers) in regard to food safety. “An outbreak of foodborne illness occurs when a group of people consume the same contaminated food and two or more of them come down with the same illness” (Centers for Disease Control and Prevention, 2001). It is estimated that foodborne illnesses cost the United States between \$5 to \$6 billion dollars in direct medical expenses and lost productivity. In the U.S., foodborne illnesses result in 47.8 million ill consumers, 127, 800 hospitalizations, and 3,037 deaths each year (Centers for Disease Control and Prevention, 2011). Foodborne illnesses account for about 1 of every 100 hospital visits and about 1 out of every 500 deaths in the United States (Buzby et al., 2001). While no one is immune to the effects of foodborne illnesses, the old, young, and those with compromised immune systems are especially vulnerable to the effects if they contract a foodborne illness.

There are over 250 know foodborne illnesses caused by over 40 different foodborne microbial pathogens (CAST, 1994). Most cases are caused by bacteria, viruses, parasites, fungi, and their toxins (CAST, 1994). There is still much to be discovered about foodborne pathogens. Some chemicals used in food products can also make people sick. The most severe cases of a foodborne illness may cause septicemia (infection of the bloodstream), localized infection of other organs, and spontaneous abortion in pregnant women (Buzby et al., 2001). About 2-3 percent of foodborne illnesses result in secondary complication that may become chronic health problems like arthritis, hemolytic uremic syndrome (characterized by kidney failure), and Guillain-Barre syndrome (characterized by neuromuscular paralysis) (Buzby et al., 2001).

### **2.1 Causes of Foodborne Illness**

Animal products like meat, poultry, seafood, dairy products, and eggs are the foods most likely to cause outbreaks of human foodborne illnesses in the United States (CAST, 1994, p. 32). Foodborne illnesses may also be caused by pathogens that are introduced into uncontaminated food by handling errors or these errors allow pathogens that are already present in the food to survive or multiply to dangerous levels in prepared food. Potential errors include but not limited to:

- The use of contaminated raw food,
- Cross-contamination of prepared food by contaminated raw food,

- Poor personal hygiene of infected food handles,
- Inadequate cleaning of equipment,
- Inadequate cooking or reheating,
- Improper holding temperatures,
- Cooling food too slowly after heating,
- Eating food too long after preparation,
- Insufficient fermentation, acidification, salting, or sweetening during processing (Bryan et al., 1997).

The Centers for Disease Control and Prevention (CDC) has identified a total of five factors to account for major food safety outbreaks: contaminated equipment/prevention of contamination, food from unsafe sources, improper holding times and temperature, inadequate cooking, and poor personal hygiene (FDA, 2004). The CDC reports that the most common causes of mass outbreaks are due to improper holding temperatures, but many outbreaks are caused by multiple errors committed in the production, preparation, storage, and handling process (Olsen et al., 2000).

After foodborne pathogens are swallowed, there is a delay, called the incubation period, before the symptoms of illness begin. This delay may range from hours to days, depending on the organism, and on how many of them were swallowed. Numerous organisms cause similar symptoms, especially diarrhea, abdominal cramps, and nausea.

The CDC indicates that a foodborne illness can usually be diagnosed by specific laboratory tests that identify the causative organism. However, many foodborne infections cannot be identified by routine laboratory procedures and require specialized, experimental, and/or expensive tests that are not generally available. If the diagnosis is to be made, the patient has to seek medical attention, the physician must decide to order diagnostic tests, and the laboratory must use the appropriate procedures. In the past twenty-five years, new agents have been recognized as pathogens that cause foodborne illnesses.

## **2.2 Economic Costs of Foodborne Illness**

Food safety outbreaks impose significant costs to restaurants in a variety of manners such as negative publicity, loss of consumer credibility, and legal costs (Knight et al., 2007). The economic impact from mild illnesses is likely to be small and does not lead to medical care. The more severe cases can, however, have high monetary costs, including medical bills, lost income, and less tangible costs like pain and suffering. In the United States, one of the most unforgettable restaurant food safety outbreaks was the Jack in the Box *E. coli* outbreak in 1993, resulting illness of 700 people and death of 4 children (Golan et al., 2004). Following this incidence, Jack in the Box reported \$160 million economic costs, including reduced sales, recall of all hamburger meat, and legal costs resulted from law suits (Knight et al., 2007). Following a foodborne illness outbreak, a restaurant may suffer from a 30% reduction in sales (Grover & Dausch, 2000).

Scharff, McDowell, and Medeiros (2009) evaluate the economic costs of all foodborne illnesses in the State of Ohio. Findings suggest that only 4 million of the 76 million cases of foodborne illness were estimated for economic costs. Obviously if all of the foodborne illnesses were included the true economic costs would have been much higher than anticipated. Therefore, Scharff et al. (2009) develop a cost-of-illness model that more accurately reflects the pathogens that are responsible for the illnesses, the pathogen-specific hospital costs, and

measures to account for the loss of life quality. The effectiveness of food safety programs can be more accurately measured by this cost-of-illness model. Studies also report that consumers are willing to pay higher price in exchange for safer products. For example, a study conducted by Nayga, Woodward, and Aiew (2006) indicates that consumers are willing to pay a premium for irradiated beef to reduce risks of foodborne illness.

### 2.3 Ensuring Food Safety

Companies that produce, make, or distribute food products are under the pressure of a variety of forces to ensure food safety. This is due to the potential consequences resulting from each of these sources:

1. **Market forces:** firms could lose business reputation, market share, and sales revenue if consumers become concerned about safety problems with the products.
2. **Food safety laws and regulations:** firms that violate Federal, State, or local food safety laws or regulation may be subject to various penalties imposed by courts or government agencies, including fines, product recalls, and temporary or permanent plant closures.
3. **Product liability law:** by product liability law, firms found responsible for contaminated food products that make people ill may have to pay financial compensation to the plaintiffs, court costs, and legal fees, regardless of the outcome (Buzby et al., 2001).

Product liability law applies to products that are defective either due to a flawed design or because they are manufactured with a defect and sold without the defect being corrected. Each of these factors plays an important role in ensuring that the food we consume is safe and if the food is not safe we have a means of being compensated. For example, Odwalla, Inc. was found to be responsible for an outbreak of *E. coli* in their apple juice. Because of the increasing number of outbreaks of *E. coli* the U.S. Food and Drug Administration proposed new regulations for juice products (Buzby and Crutchfield, 1999). In addition to the market forces and the regulations that drive Odwalla to take action, they were also faced with a \$12.5 million recall, a 17 percent drop in revenue during the 6 months following the outbreak, a \$1.5 million dollar fine for shipping an adulterated food product across state lines, and 21 personal injury lawsuits (Buzby and Crutchfield, 1999). The pressure from these three forces is driving companies to compliance with procedures that ensure high levels of food safety. It is clear that consumers will not tolerate dangerous food products.

### 3. Product Liability Law

Product liability law falls under the umbrella of tort law. Product liability law allows a person who suffers some injury due to consuming contaminated foods to recover damages. Foodborne illness claims fall into three major categories: strict product liability, negligence, and breach of express or implied warranty.

#### *Strict Product Liability*

To prevail on strict product liability claim, the plaintiff must prove that the product is defective and dangerous when it leaves the manufacturer's control and that the defect in the product was the proximate cause of the plaintiff's injury (Harl, 1997). Proximate cause means that it was foreseeable that the product would cause an injury if it left the manufacturer's control in a defective state. The defendant is only liable for foreseeable damages suffered by foreseeable plaintiffs. In a restaurant setting, the restaurant is responsible for ensuring the

food provided is free from pathogens because consumers have no control over the food preparation. Consumers thus have a reasonable expectation to not get sick from eating food in a restaurant.

### *Negligence*

To prevail on a negligence claim the plaintiff must prove that the defendant fails to use “reasonable care” in producing, distributing, or selling their food products and because of their failure to use “reasonable care” someone gets sick. The elements of a negligence claim that a plaintiff must prove are:

- The defendant has a legal duty to exercise “reasonable care” in manufacturing the product and to warn all foreseeable users of all foreseeable dangers,
- The defendant fails to perform this duty, and
- The defendant’s failure to perform this duty causes the plaintiff’s injury (Harl, 1997).

The theory of negligence can be used by plaintiffs in claims against manufacturers, distributors, warehouses, and restaurants. In any situation where a consumer can expect the supplier to adhere to a reasonable standard to ensure the food is safe (American Law of Products Liability, 1987). If there are specific standards that manufacturers, distributors, warehouses, and restaurants are required to follow they are considered negligent when they fail to do so (Rosenbaum, 1998).

### *Breach of Express or Implied Warranty*

Under the Uniform Commercial Code sellers must ensure that the food they are selling meets “express or implied warranties”. An express warranty is an affirmation of fact or promise made to the consumers about the food product. Plaintiffs can recover compensation if the good does not conform to the express or implied warranty and that the non-conformance is the source of their injury. This warranty can be made in sales representatives’ statements, in pictures, menus, or advertisements. The warranty is breached when the product does not meet the representations made. An implied warranty requires that food meets the ordinary safety standards and is suitable for consumption. For example, if a seller suggests using certain type of raw fish to make sushi and the buyer relies on this advice and becomes ill after eating the sushi the implied warranty would have been breached (Buzby et al., 2001).

## **3.1 Consequences of Violating the Product Liability Law**

Swanger and Rutherford (2004) examine a series of foodborne illness lawsuits filed between 1985 and 1999, including causes, outcomes and payments. The study suggests that approximately 109 of the 214 cases are lawsuits filed against chain restaurants. A total of 52 out of the 109 lawsuits result in an award for the plaintiffs. The Food and Rural Economics Division argues that court-awarded compensation through lawsuits and out of court settlements apply pressure to producers, restaurateurs, and food production personnel to adopt food safety practices to prevent foodborne illnesses or the constant lawsuits drive the company out of business (Buzby et al., 2001).

Studies suggest that lawsuits and government regulations are not likely to prevent the occurrence of foodborne illnesses and effectuate the best outcomes because of the improbable enforcement of regulations and the unpredictable outcome of litigation (Roe 2004). Roe argues that both the end consumer and the supplier should

share the responsibility to prevent foodborne illness. In fact, it is difficult to prove that a specific provider is liable for a specific foodborne illness. As argued by Pouliot and Sumner (2008), the more intermediaries that the food passes through before reaching the consumer the more difficult for an injured plaintiff to identify who causes the injury. However, recent developments in technology are making food traceability easier (Pouliot & Sumner, 2008). Pollin (1998) argues that proving the cause of the illness is difficult to do unless the contaminant is easy to find, or doctors that treat the patients receive particular expertise. This becomes increasingly difficult with the re-emergence of number and variety of pathogens as possible contaminants. Recent technological advances provide new tools for detecting, tracking and identifying pathogens. With the help of technology, it is highly possible for companies to get caught if they produce tainted food.

#### **4. Prevention Strategies**

In hospitality context, most foodborne illnesses can be prevented if operators consistently implement and monitor preventive steps. For example, Woteki (2003) suggest that keeping hands, utensils, and surrounding areas clean before and while preparing foods, avoiding cross-contamination, and proper temperature control are likely to minimize the possibility of foodborne illnesses. Hand washing was the top-ranked behavior for the prevention of shigellosis. While these preventative strategies seem basic it can go a long way in preventing a foodborne illness and the reputational and financial costs that accompany them.

Barth (2001) proposes numerous strategies to ensure food safety in the hospitality setting, such as: 1) Serve food and beverages fit for consumption (e.g., purchase from reputable suppliers, having policies in place for proper preparation and service of food, and paying constant attention to all the details that ensure a wholesome dining experience); 2) Properly train employees; 3) Terminate employees who pose a danger to other employees or the guests. Fatimah, Boo, Sambasivan, and Salleh (2011) propose a four-factor model that captures hygiene factors that are visible to consumers. These four factors encompass “staff and handling”, “food and location”, “premise and practice”, and “scent aspect”. Therefore, restaurant and hotel managers may need to maintain favorable consumer perceptions of these four aspects to minimize the likelihood that consumers attribute their illness to the restaurant or hotel. Studies also report that initiatives from human resources administration process also contribute to food safety at commercial restaurants (e.g., Medeiros, Cavalli, & da Costa Proença, 2012). For example, restaurants adopt criteria such as health examination, personal presentation, and professional experience, for hiring new employees to ensure food handling in a safe manner (Medeiros et al., 2012).

#### **5. Discussions and Conclusion**

This paper attempts to systematically examine causes of food borne illnesses and the potential liability for restaurateurs and hoteliers of serving contaminated food to consumers. As the number of intermediaries that food passes through increases from producer to retail sales, the potential for contamination is likely to increase. Literature clearly indicates that improvements in inspection and traceability systems are likely to ensure the safety of the food supply and motivate intermediaries within the supply chain to deliver safe food.

Illness from foodborne pathogens can range from subtle to debilitating, with a wide range of incubation periods before the symptoms of illness appear, sometimes making it hard to identify the source of the infection. If consumers do not report the illness or seek attention, the source of the contamination may go undiagnosed. It is easy to discount a claim of contaminated food if a group of people consume the same contaminated food and only a few of them suffer the effects of an illness. In order to succeed with a product liability claim in such

cases, the plaintiff must prove that the product was defective and unreasonably dangerous when it left the manufacturer's control and that the defect in the product was the proximate cause of the plaintiff's injury.

Assuring a safe food supply in the United States has come a long way in preventing illness from consumption of contaminated food. Competition and market forces, regulations, and legal components all motivate firms to produce, distribute, and sell safe food. However, remedial measures continue to be somewhat of an obscure topic in the food safety debate. Many studies have examined and recommended strategies to minimize the potential liability of hospitality operations as a result of contaminated food. The competition and market forces, food safety laws and regulations, and product liability law impose pressures for food and hospitality firms to ensure food safety. When restaurateurs and hoteliers are more aware of the potential for food contamination and better recognize the need to improve the safety of the food supply, they are likely to take positive action, rather than simply following the strategy of defending themselves after negative consequences such as product liability lawsuits from those who become ill from eating at their establishment. Developing and offering proactive educational programs such as the effective training programs on sanitary conditions may be a way to improve food service performance and reduce the chance of outbreak of food borne illnesses. In the United States, one such program to proactively train restaurant employees and managers is the ServSafe food safety program of the National Restaurant Association (National Restaurant Association, N.D.). ServSafe offers training and certification for both restaurant employees and managers blending the latest U.S. Food and Drug Administration food safety research with industry food sanitation best practices, working to build a culture of food safety within the business. It is vital for restaurateurs and hoteliers to fully comprehend the consequences of serving contaminated food. It is also important to understand that customers expect to be served food that is safe to eat. To minimize lawsuits and their negative consequences, restaurateurs and hoteliers should do everything in their power to ensure food served in their establishments is safe to consume.

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