
Off-Site Catering: Prevention of Food Borne Illnesses

By Robert O'Halloran

Introduction

In every food service operation a major concern is to keep food safe. It is generally assumed that consumers have the right to expect, at a very minimum, safe food. To assure implementation of socially responsible catering marketing strategy, the optimum legal environment have to be established that ensures development of uniform and efficient food safety procedures and a high level of protection of consumers' health in general (Melngaile, 2011). From an operations perspective a guiding principle should be to identify any step within a company's activities, which is critical to food safety and to develop adequate self-control procedures based on HACCP principles (European Parliament and the Council, 2002; European Parliament, 2004, Official Newspaper of the Republic of Latvia, 1998).

Catering is a service "providing single event-based food services" (US Census Bureau, 2012). The majority of off-site catering businesses generally have the necessary equipment to transport meals to scheduled events and prepare food at off-site locations. Additionally, banquet halls with catering staffs are included in this industry (US Census Bureau, 2006). The National Restaurant Association's Restaurant Industry Forecast calls these businesses "social caterers" and predicts that revenues for this foodservice category in the USA will reach \$5.7 billion in 2006 (National Restaurant Association, 2006, p. 10). Off-site catering, in particular, involves preparing food off-site and transporting food off-site. This is an important issue to address considering that many states lack regulations for off-site catering (US FDA, 2009). Local, state, tribal, and federal regulators use the FDA Food Code as a model to develop or update their own food safety rules and to be consistent with national food regulatory policy (US FDA, 2009). For example, in 2010 the American catering industry includes approximately 10,000 companies, with a combined annual revenue of \$5 billion dollars (NRA, 2010). Hertzman and Barrash, (2007) indicated that the specialized requirements of off-site catering produce many concerns about the potential outbreaks of food-borne illness. Off-site catering business operators have to ensure that activities under their control comply with the legal requirements (Melngaile, 2013).

Off-site catering establishments like other food businesses have a legal obligation to evaluate production and serving methods from

the viewpoint of food safety to promote high level of protection of consumers' health (Guzewich, 1995, Hertzman and Barrash, 2007). The Hertzman and Barrash (2007) study reported that food service employees were most knowledgeable about personal hygiene, but did not practice proper hygiene during the catering functions. The [US Food and Drug Administration \(2000\)](#) found that the majority of foodborne illnesses can be attributed to five risk factors: food from unsafe sources, inadequate cooking, improper holding temperatures, contaminated equipment, and poor personal hygiene.

It is hypothesized that in the USA, lack of food safety training may be a significant contributor to the prevalence of the risk factors of foodborne illness. The USA does not have national standards for food safety training or certification of foodservice managers; regulations vary on a state-to-state basis (Hertzman & Barrash, 2007). [Almanza and Nesmith \(2004\)](#) found that only 17 of 50 states require mandatory food safety manager certification in their state food codes. While health code rules and enforcement policies differ from state to state, it is a serious consideration for businesses in the catering industry. Between health code laws and the dangers and prevalence of Salmonella, caterers must ensure they serve safe food. Cross-contamination, improper storage of leftovers and undercooking raw foods often result in serving bacteria laced foods.

Despite these differences the National Restaurant Association Educational Foundation (NRAEF) sponsors the country's (USA) most prominent food safety training program – ServSafe. To receive certification, which is valid for five years, a 90-question exam must be passed with a score of 75 percent or higher. Over a million people currently hold certification ((NRAEF, 2010). The Hertzman and Barrash, (2007) study noted specific food safety violations. Those noted include: personal hygiene, cooking methods and procedure, holding procedures, equipment use, plus additional violations that include e.g. staff ignoring food and drink spills etc... The question then is how to prevent and or correct these violations and insure food safety in catering operations. Food safety problems are the catalyst for food safety crises which cloud catering operation image and food service credibility in general.

Food Safety and Crisis Management

A crisis by dictionary definition is a turning point or a crucial time. In business, two criteria generally define a crisis; the first characteristic is potential for injury to guests or staff and damage to company assets.

Robert O'Halloran is affiliated with East Carolina University.

The second is urgency or how fast events are occurring and how fast decisions have to be made (Brewton, 1987). The frequency of business crisis events has more than doubled since 1985 (Maturi, 1993). In particular, food safety crises in the hospitality industry can have far reaching impacts. For example, the E.coli deaths associated with Jack in the Box. Crises also tend to have similar characteristics such as, escalating in intensity, close media scrutiny, interfering with business and profits, and potentially damaging public image and personal reputation. Many crises in general and food safety in particular evoke a response from government agencies.

Prevention Framework

Food borne illnesses are a very serious concern because they can be so easily passed to the consumer. Those in the food industry have to be particularly careful about contaminating customers' food. By setting up certain precautions and procedures, a company can avoid a crisis. A food crisis is costly in time and company finances but it also affects a company's reputation. Just as easy as it is to contaminate food and ruin a business, it is very simple to prevent. Not only are the managers required to oversee the proper preparation, storage, and serving of food, but all of those involved in food handling must adhere to proper food-handling regulations (Ghezzi and Ayoun, 2013). Prevention of food borne illnesses is a key consideration in any event that food and drink are provided. Surprise parties, weddings, graduation events, corporate functions, fundraisers – these are examples of events that use catering services to provide food for hundreds of guests. Preparing food for so many people is a huge task that most would prefer to (and many do) contract out. The catering business is an eight billion dollar industry (www.ibisworld.com/industry); providing food for so many people puts a lot of responsibility on the food handlers.

A study by Ghezzi and Ayoun (2013) suggested that employees in the catering industry who work part-time need more training and development. Management was seen as more knowledgeable than non-management personnel and was seen to have more training. Overall the study found that there is a need to focus on training for employees, with even greater emphasis for new employees. With the number of food-borne illnesses continuing to grow, and millions of people attending catered events every year, training and consistent reinforcement of proper food-handling practices is essential for catering services. Personal hygiene, specifically hand washing, is one of the most important practices in successful food safety production. According to the FDA Food Code, hands should be washed after using the restroom, coughing, sneezing, eating, drinking, and using tobacco products (US FDA, 2009). It is, therefore, vital that management enforces these guidelines in the workplace. Catering servers need to be aware of proper sanitation procedures of the equipment that they use every day in the operation. According to the FDA Food Code, utensils

need to be sanitized before use and also after they are cleaned and stored properly to prevent contamination (US FDA, 2009).

To avoid harming consumers, catering companies must not only put procedures in place but also educate their workers on the severity of food borne illnesses and allergies. An educated staff with an understanding of the harmful effects of cross contamination will be more apt to follow said procedures. When food handlers are careless in the work area, it can lead to the illnesses. According to the Centers for Disease Control and Prevention, there are over 42,000 cases of Salmonella infections each year in the United States (CDC, 2012). About 1,800 deaths occur every year due to Salmonella, Listeria and Toxoplasma (Statistics Brain, 2013). For caterers, this is a serious consideration. Large amounts of Salmonella, Listeria and Toxoplasma are often found in raw meats; these naturally occurring bacteria are the cause of many food-borne illnesses such as food poisoning (AVA, 2010). Food poisoning occurs when someone consumes raw meats or eggs or when cooked food has been contaminated with these bacteria.

According to Weinberg (2010) within 12-72 hours of eating the contaminated food, symptoms will begin. These symptoms tend to last anywhere from 4 days to a week. Food-borne illnesses are not only harmful to consumers, but the public opinion of a company can be greatly tarnished after an outbreak. The FDA can put a company on suspension for serving harmful food; in fact, in 2012 Sunland Inc's food facility registration (which allows the company to enter into inter- and intra-state commerce) was suspended by the FDA for selling contaminated peanut butter (CDC, 2012). Food service companies can also be shut down or face legal actions for serving mishandled or undercooked foods from which serious illnesses occur. This leads to costly crisis control procedures in an attempt to avoid negatively affecting the business' reputation. Recently, Firefly, a Las Vegas tapas bar served food that was improperly prepared ensuing 39 cases of serious food-borne illnesses (News Desk, 2013). The FDA shut Firefly down after counting 40 health violations and fining the restaurant \$700 (News Desk, 2013).

In another incident example, several years ago in Colorado, a hepatitis-A outbreak traced to a particular caterer. Health department officials stated that they had traced the hepatitis-A outbreak to a caterer's kitchen manager, who had apparently served to least two holiday (Christmas) parties. Some health officials believe that only 1 in 109 food related illnesses are reported. People do not always make the connection between being sick and meals outside the home unless others in the party they were with or attending are also sick and these facts are communicated. In this scenario by the New Year there were 24 reported cases of hepatitis-A, and estimates for additional cases by health officials ranged from 50 to 100. It was also estimated that 15,000 area residents may have eaten food from the caterer during the holiday period (O'Halloran, 1995). The potential for a major food safety crisis was great and highlighted in the local media.

Business Dilemma

A successful and growing seafood festival has had some concerns about a small number of foodborne illnesses that were reported during last year's festival. The organizers of the event are determined to eliminate this problem. You have joined the festival planning team and your role has been to evaluate the effectiveness of the off-site caterer's efforts to prevent food safety problems. Your initial conclusion is that there is a lack of food safety training provided by the off-site caterers. This plan will be coupled with the risk management plan for the event as a whole in the event of a food borne illness outbreak.

Your recommendations are going to be made with the knowledge that off-site caterers have the intention of improving their food safety practices. The planning team has charged you with the development of a food safety plan with a focus on content that can be applied to the diverse settings, companies, outlets and food types that will participate in the festival. As would be expected at this event, there is a substantial amount of seafood, served both hot and cold ranging from cooked shrimp, to chowder to clams and fish filets. There will also be non-seafood options available to attendees of the festival. Your thinking is to use the old restaurant adage, serve hot food hot and cold foods cold and add food safety to that adage.

You are beginning to collect data and materials for this plan and you want to prepare something that could be operationalized quickly. Now you are wondering how to begin to write a plan? Your initial thoughts are that your plan should include plan that will:

- Allow off-site caterers to assess product quality,
- Identify relevant product selection and procurement procedures, (fish, meat, produce etc...)
- Identify proper preparation, holding and service activities: inclusive of hand washing, cross contamination and holding equipment and temperature procedures,
- Consider what assumptions if any that need to be made, and

Ultimately, create a food safety training plan. Make recommendations for how the off-site caterers will share this information with their employees for training. You are also considering food safety certifications etc... as part of the training program. A study completed by Mitchell et al. (2007) determined that job stress, work pressure, and a high-paced environment contribute to improper food safety practices in workplace. So it has been professionally determined that the catering workplace is demanding, which lends to a stressful and fast-paced environment, making the occurrence of food safety violations all the more rampant. Overall, differences in the level of food-handling knowledge and frequencies were noted in regard to management status, training, employment status, age groups, and years of experience. Factors that should also be evaluated include: gender, management, training, and status. Additionally, from a catering specific perspective, factors should also include:

- If chafers are cleaned after use,
- Ensuring glassware are free of chips,
- If chafers are checked before an event,
- If ice was mixed with raw and cooked product,
- Hot holding devices were working properly,
- Hand washing available,
- The temperature of water was optimal,
- Cleanliness of uniform,
- Employee health,
- Eating and drinking in back of the house,
- Glove use, and the
- Amount of jewelry allowed (Ghezzi and Ayoun, 2013).

Conclusion

Food borne illnesses are so easily passed to the consumer and can cause such problems for the caterer that they are a very serious concern. Those in the food industry have to be particularly careful about contaminating customers' food. Without setting up certain precautions and procedures, a company's life in the food industry can be over because of a simple oversight in food preparation safety.

"Leaders are resource handlers and their willingness to provide resources will have an impact on quality" (Crick and Spencer, 2011). Managers play a key role in ensuring food quality to their guests. The lack of training for non-management personnel can pose a tremendous detriment to catering services since their employees come into direct contact with the food that is distributed to the consumer. In order to ensure that food safety practices are practiced and enforced, management must take a leadership role in providing training regimens to all staff members. Food safety training, HACCP and safety policies are wasted if food safety cultures are absent. Food safety professionals discuss these cultures but their ideas are not always translated into tangible support, training, and materials for small independent catering businesses. (MacAuslan, 2013)

The concept of food safety and prevention requires a better understanding of organizational culture and the human dimensions of food safety. To improve the food safety performance of a...food service establishment... you must change the way people do things. You must change their behaviour (MacAuslan, 2013). Without acknowledging the level of responsibility caterers take on in serving people food, they can't be prepared to handle it. In order to maintain repeat customers and keep a profitable business, caterers must avoid business crises and give customers what they want. In dealing with food, there can be a large margin of error which is why it is important for caterers to impose specific procedures in the work areas. Educating workers on the importance of safely handling food and monitoring the work space will decrease the chance of food borne illnesses or cross-contamination of food allergens. With simple procedures, many dangers can be

avoided and happy customers will ensue.

References

- Almanza, B.A. & Nesmith, M.S. (2004). "Food safety certification regulations in the United States", *Journal of Environmental Health*, 66 (9), pp. 10-14.
- AVA. (2010). AgriFood Food Safety, <http://www.ava.gov.sg/FoodSector/FoodSafetyEducation/FoodSafetyTips/AvoidCrossContamination/index.htm>, [Accessed April 13, 2014].
- Brewton, C. (1987). Managing a crisis: A model for the lodging industry, *Cornell Hotel, Restaurant Administration Quarterly*, 28, 10-15.
- CDC. (2012, November 30). MultiState breakout of salmonella linked to peanut butter. Centers for Disease Control and Prevention, <http://www.cdc.gov/salmonella/bredeney-09-12/index.html>, [Accessed March 9, 2014].
- CDC. (2012, April 5). Salmonella. Centers for Disease Control and Prevention, <http://www.cdc.gov/salmonella/general/index.html>, [Accessed April 5, 2012].
- Crick, A.P. & Spencer, A. (2011). Hospitality quality: new directions and new challenges, *International Journal of Contemporary Hospitality Management*, 23(4), 463-78.
- European Parliament. (2004). Regulation (EC) No 852/2004 of the European Parliament and the Council of 29 April, 2004 on the hygiene of foodstuffs, *Official Journal of the European Union*, L139, 1-54.
- European Parliament and the Council of 28. (2002) European Parliament, Regulation (EC) No 178/2002, January, Laying down the general principles and requirements of food law, establishing the European Food Safety Authority and laying down procedures in matters of food safety, *Official Journal of the European Communities* L31, 1-24.
- Ghezzi, S. & Ayoun, B. (2013). Food safety in the US catering industry: Empirical findings, *International Journal of Contemporary Hospitality Management*, 25(3), 365-382. <http://www.emeraldinsight.com/doi/full/10.1108/09596111311311026>, [Accessed 9-14-14].
- Guzewich, J.J. (1995). "The anatomy of a glove rule", *Environmental Digest*, Fall.
- Hertzman, J. & Barrash, D. (2007). An assessment of food safety knowledge and practices of catering employees, *British Food Journal*, 109(7), 562-576, <http://www.emeraldinsight.com/doi/full/10.1108/00070700710761545>. [Accessed 9-14-14].
- IBIS World. (2013, October). Caterers in the US: Market research report. IBIS World, <http://www.ibisworld.com/industry/default.aspx?indid=1682>, [Accessed March 2014].
- MacAuslan, E. (2013). Developing food safety cultures-are small catering businesses being neglected? *Perspectives in Public Health*, 133.6: 304-5. <http://search.proquest.com/docview/1491201821?pq-origsite=summon>, [Accessed 9-14-14].
- Maturi, R.J. (1993). Taking the crisis out of crisis management, *Colorado Business*, June 20(6), 104, 108-109.
- Melngaile, A. (2011). Implementation of food safety legislation in catering establishments in Latvia, *Journal of Food Science and Engineering*, 1, 331-338, <http://search.proquest.com/docview/1468437095?pq-origsite=summon>. [Accessed 9-14-14].
- Mitchell, R., Fraser, A.M. & Bearon, L.B. (2007). Preventing food borne illness in food service establishments: broadening the framework for intervention and research on safe food handling behaviors, *International Journal of Environmental Health Research*, 17(1), 9-24.
- National Restaurant Association (NRA). (2010). available at: www.restaurant.org/ [Accessed March 5 2010]. In Hertzman, J. & Barrash, D. (2007). An assessment of food safety knowledge and practices of catering employees, *British Food Journal*, 109(7), 562-576, <http://www.emeraldinsight.com/doi/full/10.1108/00070700710761545>. [Accessed 9-14-14].
- National Restaurant Association Educational Foundation (NRAEF). (2010). "ServSafe", available at: www.servsafe.com (accessed 10 February 2010)
- In Hertzman, J. & Barrash, D. (2007). An assessment of food safety knowledge and practices of catering employees, *British Food Journal*, 109 (7), 562-576. [Accessed 9-14-14] <http://www.emeraldinsight.com/doi/full/10.1108/00070700710761545>.
- News Desk. (2013, May 1). Salmonella Outbreak Linked to Las Vegas Restaurant. Retrieved from Food Safety News: <http://www.foodsafetynews.com/2013/05/salmonella-outbreak-linked-to-las-vegas-restaurant/#.UuKcINIo4nl>. [Accessed April 2014].
- Official Newspaper of the Republic (1998). of Latvia Law on the Supervision of the Handling of Food, "Latvijas Vēstnesis" 60, 1-7.
- O'Halloran, R.M. (1995). Le Petit Gourmet Catering: A Crisis Management Case Study, *FIU Hospitality Review*, Fall, 13 (2) 5-14.
- Statistics Brain. (2013, November 12). Food poison statistics. *Statistics Brain*, <http://www.statisticbrain.com/food-poison-statistics/>, [Accessed April 3, 2014].
- Weinberg, E. (2010). Salmonella symptoms and food poisoning, *Food Poisoning*, <http://www.foodpoisoning.com/salmonella.html>, [Accessed April 2014].
- US Census Bureau. (2012). Economic Census business.census.gov NAICS 72232, Industry Definition, http://www.census.gov/econ/census/snapshots_center/72232.html, [Accessed 9-21-14].
- US Food and Drug Administration. (2000). FDA retail food program database of foodborne illness risk factors, available at: www.cfsan.fda.gov/dma/retrsk.html [Accessed October 22, 2002] In Hertzman, J. & Barrash, D. (2007). An assessment of food safety knowledge and practices of catering employees, *British Food Journal*, 109(7), 562-576, [Accessed 9-14-14]. <http://www.emeraldinsight.com/doi/full/10.1108/00070700710761545>.
- United States Food and Drug Administration (US FDA). (2009). Food Code, available at: www.fda.gov/food/foodsafety/retailfoodprotection/foodcode/default.htm, [Accessed April 2014].