Summary

This case study is designed to have students: (a) identify/detect and anticipate food safety errors; (b) understand the conditions (causes) that lead to such errors; (c) prevent errors; (d) resolve errors once it occurs; and (e) learn from errors (share information and communicate about errors). As future managers in the hospitality industry, students must be able to effectively reduce the risk of negative consequences of food safety errors (foodborne illness outbreaks).

Teaching and Learning Objectives

The objective of this case study is to provide real-world examples of food safety errors in food-service organizations and to have a discussion on how these errors can be resolved and how to prevent them from occurring in the future. The errors that organizations and employees make often result in disastrous consequences affecting organizations' reputation and revenues. The scenario within the case study gives students the opportunity to think about how errors occur and how such errors impact customers and organization. Through this case study, students have the opportunity to understand how to manage errors effectively.

By the end of this session, students should be able to:

- Detect different types of food safety errors (Bloom's Taxonomy
 Analysis)
 - Employee errors (behaviors) that contribute to foodborne illnesses
 - System errors that contribute to foodborne illnesses
- Detect conditions (cause) that lead to food safety errors (Bloom's Taxonomy – Analysis)
- Propose error resolution techniques (Bloom's Taxonomy Synthesis)
- Propose error prevention techniques (Bloom's Taxonomy Synthesis)
- Generate a list of skills required to handle errors effectively (Bloom's Taxonomy – Synthesis)
- Design error reporting channels (Bloom's Taxonomy Synthesis)
- Propose training techniques to prepare employees to handle errors effectively (Bloom's Taxonomy – Synthesis)
- Critique the error management techniques (justify why yours are better than the company's) (Bloom's Taxonomy – Evaluation)

Target Audience

The target audience for this case study is both undergraduate and graduate students enrolled in various hospitality and business courses including food safety and sanitation, service operations, quality assur-

ance, strategic management, and organizational behavior. This case study provides students with actual examples of food safety errors and organizations' attempts to resolve the errors. This case study is useful for training future hospitality employees and leaders about managing food safety errors effectively. This case will benefit students and hospitality industry leaders in recognizing the importance of error management practices and training.

Teaching Approach

Prior to discussing the case study, students should know the basic principle of food safety in restaurants and be familiar with the concept of violations from a regulatory perspective. Additionally, before beginning the case study, instructors should review effective error management strategies and practices and its significance (Van Dyck et al., 2005; 2013; Rybowiak et al., 1999; Frese, 1995). Once this foundation is created, begin the discussion with food safety errors students have observed and how the organization and managers resolved the errors (based on their personal experiences). The instructor can ask questions like: "What food safety errors have you observed? What was done to resolve the errors? What steps are taken to prevent such errors? Were these error management practices effective?"Through these incidents students will have the opportunity to know about various food safety errors and what steps organizations take to prevent and resolve such errors effectively. In doing so, the first three levels of Bloom's Taxonomy (2001) are applied. The students memorize information about different types of errors and error management practices (Knowledge). The students explain the types of errors and error management practices in their own words (Comprehension). Then, students provide examples of food safety errors and error management practices based on their personal experiences (Application).

Next, students will be asked to form small groups of no more than 4 to 5 people per group. Each group will be given instructions to read the case study and understand the impact of this foodborne illness outbreak. It works well if you have students write down their answer to discussion questions below and turn it in so that you can see how many were able to think critically and apply principles learnt in the course. The group work takes approximately 20 to 25 minutes to complete followed by a class discussion.

The discussion questions are designed to emphasize each of the objectives.

Discussion Points:

1. What were the errors, failures, mistakes, and violations that occurred in this case?

Possible answers: First, a restaurant employee who had a norovirus infection came to work and made the other employees and restaurant customers sick. Also, based on the restaurant inspection reports by county health authorities that was conducted after the outbreak, there seems to be systemic failures towards being compliant. Some of these are as follows:

- Failures in pest control, sanitation, and maintenance
- Employees were working without food handler cards
- Restrooms were unclean and not in good condition
- Mildew was observed in ice machine
- Food debris was found in the lower compartment of the deep fryer
- Cooked beef was observed the be held at 118°F (in the temperature danger zone)
- 2. What are the causes of these errors? What are the conditions that lead to these errors?

Possible answers: Negligence the employee who decided to come to work sick. Negligence by the management who did not fix the errors found by the health department (e.g. failures in sanitation, food held in the danger zone, etc.) in a timely manner. A lack of food safety culture from the top down leading to the impression that food safety was not a priority at this restaurant. Through discussion of question #2 (detecting types of food safety errors) and question #3 (detecting causes of such errors) the fourth level of Bloom's taxonomy is applied (Analysis).

3. How could the errors be resolved more effectively?

Possible answers and discussion points: Effective management and ensuring that the manager creates an atmosphere of following good sanitation practices. This goes beyond ensuring that the ice machine is cleaned, food debris removed, and hot food is held at 135°F. This occurs when food safety is on top of the priority list and is part of regular day-to-day activity. Here a discussion could be started about whether food safety practices can be a priority for employees if it is not the manager's priority.

4. How could the errors be detected more quickly?

Possible answers and discussion points: First, managers must support and follow company initiatives such as the current sick policy and not encourage employees to come to work sick. Managers must also ensure that employees have the correct tools (thermometers) and have set times or procedures when food temperatures are being taken and monitored. By establishing hand washing training and monitoring em-

ployee behaviors, personal hygiene related incidents could be reduced. As these practices become the employee norms, non-compliance will be identified by other employees and will either self-monitor or report each other.

5. How could the errors be prevented (from occurring in the first place)?

Possible answers and discussion points: Food safety errors can be prevented by using a crisis management approach during the initial training session with employees. This could enable your employees to look at the big picture and understand the implications of a foodborne illness outbreak and how it can lead to fatalities. One of the challenges of comprehending the implications of a foodborne illness caused due to errors in a restaurant is that the restaurant employee is not able to see how his/her negligence may affect customers (unlike a clinical setting).

6. How can the organization learn from this incident? How can they prevent future errors?

Possible answers: In order to prevent future foodborne illness outbreaks, a change in the overall culture and approach to food safety and good sanitation practices need to be followed. This can only be done by ensuring that the manager cares about food safety. While training may not be the silver bullet, it may be a good first step followed by actually incorporating and following best practices.

7. How can organizations encourage employees to report errors (and share information about errors)?

Possible answers: Encourage employees to do that right thing. Reward employees (even if its simply words of encouragement) for bringing up any issues that they may have observed instead of ignoring/belittling their concerns.

8. What kind of skills managers and employees need to handle such errors: to prevent, detect, and resolve?

Possible answers: Prevent: by using a risk management approach. This is best done by envisioning the worst case scenario and working backwards to ensure that those scenarios do not take place.

Detect: by being vigilant at all times to any possibilities that food may become contaminated. This can be done by following the flow of food in the restaurant and making sure that risks are reduced. Walking the talk is also crucial to ensure that your employees take you seriously and follow your lead.

Resolve: If an error occurs, take responsibility and fix it.

9. What kind of training techniques/strategies can be used to prepare managers and employees to handle such errors: to prevent, detect, and resolve?

Possible answers: In an ideal case scenario, the company/

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owner may want to hire a manager who genuinely cares about food safety and/or who is worried about a foodborne illness outbreak and the implications that follow. One of the most effective strategies for ensuring that employees handle food safety related errors effectively is by making the scenario visceral and personal.

Through discussion of questions 2-9, the fifth level of Bloom's taxonomy is applied (Synthesis), since the students propose new techniques to resolve and prevent errors; they generate a list of skills required to handle errors effectively; they design error reporting channels; and propose error management training techniques.

10. Overall, how do you think these extreme negative consequenc-

es (illnesses, bad PR, loss of revenues) could have been avoided?

Possible answers and discussion points: It is the responsibility of the food service manager to ensure that employees do not come to work when they are sick. There should be no exception to this policy and managers have to walk the talk when it comes to good food safety practices. This will create a culture of ensuring that good practices, including staying at home when sick, are followed. However, this may not be as simple as it sounds since in some cases the employee may be a sole income provider for her/his family and/or a single parent. This can spark a class discussion on what the restaurant industry can do to address the fundamental challenges associated with

this practices of coming to work sick. A plausible solution may

restaurant is "food with integrity". This does not mean safe food.

A discussion if loyal customers may feel more let down because

of an outbreak at this restaurant versus another restaurant that

be paid sick leave. Also, one of the main PR highlights of this

Finally, through discussion of question #10, the final level of Bloom's taxonomy is applied (Evaluation), since the students critique the ways the company in the case study handled the food safety errors, and they justify why their propositions/strategies are better than the company's.

does not carry a similar message may be interesting.

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Additional Reading

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