Learn more about the virus that causes food poisoning

Keep bacteria at bay with these food hygiene practices

The hotel shares tips on implementing a food safety management system

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FoodSafety Bulletin
Be food safe! A publication for retail food establishment licensees and food handlers.
A hearty welcome to the inaugural newsletter, Food Safety Bulletin, presented to you by the National Environment Agency (NEA)!

This newsletter marks the beginning of a new communication channel to keep our licensees and food handlers updated about the happenings in the areas of food and environmental hygiene. It brings you relevant food safety news, useful tips and updates on changes in our regulations and guidelines. We encourage you to stay engaged with NEA through this newsletter.

Over the last 40 years, the food and environmental hygiene standards of Singapore have improved tremendously. Outbreaks of diseases such as cholera, typhoid and dysentery are less prevalent now. Concerted efforts by licensees, food handlers and NEA are crucial in achieving high standards of hygiene and cleanliness of food establishments.

Most outbreaks of foodborne diseases are due to the mishandling of food. With more people eating out, the responsibility of food handlers who prepare and serve food to consumers increases. To ensure hygienic food preparation, licensees need to oversee and implement effective food hygiene systems, conduct frequent in-house supervision and correct any irregularities detected.

In this issue, you will find out about norovirus and its preventive measures, a food poisoning case study and an update on the Points Demerit System (PDS) for main operators. We urge you to share these with your food handlers so as to keep them abreast of the relevant food safety news and knowledge. With this, we aim to inculcate the importance of preparing food safely to licensees and food handlers.

We welcome your contributions and encourage you to provide feedback so that we can make this newsletter more useful for you. If you miss a copy of the bulletin, you can catch-up with an archived copy on our website: http://app2.nea.gov.sg/public-health/food-hygiene/food-hygiene-practices-guidelines

I wish you an enjoyable reading experience.

Derek Ho
Director-General
Environmental Public Health Division
National Environment Agency
Saying ‘No’ to Norovirus

Food poisoning is often the result of improper handling of food. As food handlers, it is important for you to remain vigilant during food preparation and ensure that the food you prepare is safe so as to keep food poisoning at bay.

It is necessary to understand the causes of foodborne illnesses so as to minimise them. In this article, you will learn more about norovirus, a common causal agent of acute gastroenteritis: infection of the stomach and intestines.

**TRANSMISSION AND SYMPTOMS**

Norovirus was originally named Norwalk virus and the name was given after the first reported outbreak in Norwalk, Ohio (United States).

Norovirus is highly contagious and can cause people to fall sick with vomiting, diarrhoea, abdominal pain, and nausea. A person can be infected with the virus through the following ways: 1) eating food or drinking liquids that are contaminated with norovirus, 2) touching surfaces or objects contaminated with norovirus then putting your fingers in your mouth, or 3) having contact with someone who is infected with norovirus.

The infected person can spread the infection to others and he/she is most contagious while having symptoms. Based on the norovirus outbreaks documented between 1993 and 2011 in the United States, the virus had spread through food or in a food service setting in most of the cases.

Once infected, the person can develop symptoms within one to two days. Norovirus-related illnesses may last one to three days and are usually not serious. However, if a child or an elderly is infected, the illness may lead to severe dehydration, hospitalisation and even death.
PREVENTIVE MEASURES

Till now, there are no available vaccines or specific treatments for norovirus-related illnesses. The best way to prevent the spread of norovirus is to practise the 8 steps of hand washing with soap and water after using the toilet and before preparing or handling food. Here are some tips to prevent the spread of norovirus.

• Do not cook, prepare or serve when you are sick. Report the symptoms to your management immediately.

• Wear clean gloves when handling cooked / ready-to-eat food.

• Wash fruits and vegetables thoroughly before preparing and eating them.

• Clean dirty surfaces such as tabletops and chopping boards thoroughly after each use with food-grade disinfectant. These surfaces are a hotbed for norovirus.

• Use a food thermometer to ensure that food, especially seafood, has reached the recommended internal cooking temperature. Adequate heat generated during the cooking process will kill norovirus.

• Wear clean gloves when handling cooked / ready-to-eat food.

• Clean dirty surfaces such as tabletops and chopping boards thoroughly after each use with food-grade disinfectant. These surfaces are a hotbed for norovirus.

• Wash cloths, aprons and linens with a bleach-based cleaning solution at the end of each work day.

Good personal hygiene and proper food preparation processes are the best ways to prevent norovirus from spreading!

FOOD HYGIENE tips and guidelines

THE IMPORTANCE OF WASHING HANDS WITH SOAP

What happens when customers consume contaminated food? The consequences can be dire. In severe cases, food poisoning can even claim the lives of unsuspecting patrons. Very often, food poisoning is attributed to the food handlers’ poor hygiene practices.

Germs, including bacteria and viruses, are present everywhere. They can be found on most contact surfaces and even on our hands. Harmful germs are the underlying cause of both foodborne and non-foodborne diseases. Because germs are invisible to the naked eye, we typically assume that our hands are clean.

Getting rid of germs takes only one simple act: washing hands with soap for 20 seconds! Follow the 8 hand washing steps on the next page to clean your hands effectively.
FOLLOW THESE 8 HAND WASHING STEPS TO CLEAN YOUR HANDS EFFECTIVELY

A) Wet hands with water and apply soap

B) Follow these 8 steps to wash your hands for 20 seconds

1. Step 1: Wash your palms.
2. Step 2: In between your fingers.
4. Step 4: At the base of both thumbs.
5. Step 5: On the back of your fingers.
7. Step 7: On both of your wrists.
8. Step 8: Rinse and wipe dry.

With reference from the Health Promotion Board Website: http://www.hpb.gov.sg/HOPPortal/health-article/5652

AN EXPERIMENT TO SHOW EFFECTIVE HAND WASHING

1. Apply glow powder onto both hands. The glow powder simulates the presence of germs.
2. Place your hands under UV light to see the glow powder before hand washing.
3. Wash your hands under running water.
4. View your hands under UV light again to see if there are any residues left. Presence of the residual glow powder indicates ineffective hand washing.
5. Apply glow powder on the hands again and practise the recommended eight hand washing steps with soap and running water.
6. After washing, view your hands under UV light again to see if there are any residues left. Proper hand washing will not leave glow powder on your hands.
FOOD POISONING CASE STUDY:

With contributions from the Ministry of Health

In an outbreak of norovirus gastroenteritis, a total of 120 individuals who attended separate functions over a span of three days, came down with gastroenteritis symptoms after consuming food provided by the same restaurant. The outbreak was possibly due to poor food hygiene and handling practices by food handlers.

FOOD HANDLERS ISSUES

A total of three food handlers were tested positive for norovirus. They were involved in the preparation of cut fruits, sandwiches, salads and desserts which require a considerable amount of food handling without further cooking. Two out of the three food handlers had not attended the Basic Food Hygiene Course as required by NEA. In addition, one of the two untrained food handlers, who was in-charge of cutting fruits, had continued to work despite having diarrhoea.

Learning Points

• Food handlers should be adequately trained on proper food hygiene, preparation and handling practices (i.e. by attending the Basic Food Hygiene Course) before they are allowed to prepare or handle food.

• The management of food premises should ensure that food handlers who are ill (e.g. with fever, diarrhoea, vomiting, stomach cramps or flu-like symptoms) are not allowed to prepare or handle food and that they should seek early medical attention.

FOOD HYGIENE LAPSES

Finding 1: Salad was prepared one day in advance and was left at ambient temperature for an hour after preparation.

Issue: Prolonged storage of food at ambient temperature could lead to the proliferation of foodborne pathogens in the food.

Recommendation: If food items are intended for later use, store them in clean containers and keep them in the refrigerator. Use the prepared food as soon as possible.

Finding 2: The same knife and chopping board were used to remove the husk / skin of fruits prior to cutting them.

Issue: Using the same knife and chopping board to remove the husk / skin of the fruits and to cut them could lead to cross-contamination, especially if the fruits were not washed properly.

Recommendation: Wash all fruits thoroughly before removing the husk / skin. Use designated and separate clean knives and chopping boards for removing husk / skin and cutting the peeled fruits.

Finding 3: Cut fruits were placed on a damp cloth to remove excess water before placing them on a plate.

Issue: This practice could cause cross-contamination between the cloth and fruits as the same cloth was used throughout for the different types of fruits.

Recommendation: Cut the fruits just before serving. If cut fruits are not served immediately, store them in the refrigerator. Drain excess juice before serving. Avoid using cloth to remove excess juice.

Finding 4: Foodborne pathogens were detected in two food samples (sandwiches and cakes).

Issue: Detection of foodborne pathogens indicates improper food hygiene and handling practices.

Recommendation: Food handlers should maintain good food and personal hygiene practices when handling food and should eliminate any chances of food being contaminated.
Food safety is the secret ingredient at Shangri-La Hotel. Implemented in the year 2000, the Shangri-La Food Safety Management System (SFMS) comprises 43 policies that guide its food handlers on food safety.

To draw up these policies, Shangri-la Hotel engaged a consultancy firm to determine the requisites of a FSMS. They then improved their practices using Hazard Analysis and Critical Control Points (HACCP) principles as a benchmark. We speak with Ms Irene Ong, Area Hygiene & Sanitation Manager, to find out more about Shangri-la Hotel's success with the FSMS.

1. Why did Shangri-la Hotel decide to implement the FSMS?

Guests’ safety and well-being are of paramount importance to Shangri-La Hotels and Resorts. The FSMS was developed to ensure that our guests and colleagues are all protected by the most immaculate system in food safety, hygiene and sanitation.

2. Please share with us some of the best practices that Shangri-la Hotel has put in place.

Some of our best practices are:

**Supervisory Regime**

All staff are not permitted to work if they are sick or suffering from any symptoms such as diarrhoea, vomiting, fever, cough and flu. They are to stop handling food and seek medical attention immediately. It is the responsibility of managers and supervisors to stop their team members from handling food or serving food to anyone when they are not feeling well. All food handlers adhere to the hand washing policy that requires them to wash their hands every 30 minutes and this will be monitored by their managers or supervisors.

**Monitoring and Auditing**

Shangri-La Hotel, Singapore is certified according to international standards: HACCP and ISO 22000. Shangri-la Hotel’s food safety team conducts internal food safety audits thrice weekly. Any findings will be rectified immediately as we strive for continual improvement. External audit is carried out on our system every 6 months. Once a year, we will also be audited by our head office’s Food and Beverage team based on our proprietary food system.

The hotel also has a reward system whereby during the internal audit, the kitchen which receives the highest score in that week would be given a small monetary reward. Every member of the food safety team, including the General Manager and Hotel Manager, attends the food safety meeting held every month, to discuss and explore areas where food safety can be further improved. The meeting is also a platform to resolve any food safety issues that can compromise the well-being of our consumers.

Food and environmental sampling (including hand and surface swabs) are conducted monthly to ensure that food prepared is safe. Samples of high risk food items served in buffet lines for all meal times are also kept daily for microbiological testing.

**3. How does the FSMS affect your personnel in the respective departments?**

From the point of recruitment, all food handlers and service colleagues are trained to accept our stringent food safety system as an integral part of their jobs. The success and sustainability of any FSMS system depends on the belief of the owners and the support of its management. In order to inculcate in our staff the right values, the management will share motivational factors with the staff. For example, they will link the staff’s passion for food with real-life situations. Continuous monitoring is needed to ensure that the system is adhered to. Different departments will continually check on each other to ensure that the FSMS standards are followed.

4. Following the implementation, what benefits did Shangri-la Hotel reap?

The benefits include:

- Increase in overall business value
- ‘Protect our guests’ and colleagues’ well-being
- Identify and control food safety hazards
- Improve product and service quality
- Good market access

5. Why is it important for food operators to implement the FSMS?

Food safety should be the primary concern of all food establishments. Preventing foodborne illnesses by understanding and using safe food handling procedures is the main benefit of food safety.

A food operator that understands the benefits of food safety and implements a proper food safety system will impart this knowledge to his staff. Thus, this allows the entire operation to function effectively. Consistent safe food practices also reduce food wastes and create better quality products and work culture procedures.

6. What advice would you give to food establishments to make the FSMS work effectively for their businesses?

It is important that the management is fully committed and supports the implementation of the FSMS, and inculcates this belief in their staff. Staff should be continuously trained on food safety to maintain high level of awareness and to update their knowledge on FSMS. Routine training needs to take place across all levels of the workforce. In addition, it is important to continuously monitor the system, for FSMS to work effectively.
The revised PDS for main operators was implemented on 1 March 2013. This regime affects main operators of food courts, canteens and coffee shops as well as licensees of stalls in these food outlets. This is to encourage operators and licensees to keep their premises clean and to maintain good hygiene standards.

Under the revised PDS, the threshold for the suspension of licence is 12 demerit points. Any operator who accumulates 12 demerit points or more within a 12-month period will have his licence suspended for up to 3 days.

The table below shows the PDS Penalty Regime for Main Operators:

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<tr>
<th>ACCUMULATED DEMERIT POINTS</th>
<th>SUSPENSION PERIOD</th>
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<tr>
<td>12 points within 12 months</td>
<td>1st Suspension</td>
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<tr>
<td>12 points within 12 months after 1st suspension</td>
<td>2nd Suspension</td>
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<tr>
<td>12 points within 12 months after 2nd suspension</td>
<td>3rd Suspension</td>
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During the suspension, all individual stalls within the food establishment will also be required to cease business for the same period of time.

PDS for Individual Stalls and Other Food Establishments

Licensees of individual stalls and other food establishments who accumulate 12 demerit points or more within a 12-month period, will have their licences suspended for two weeks. The table below shows the PDS Penalty Regime for licensees of individual food stalls and other food establishments.

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The demerit points, grades and suspension history of all food establishments in the past one year are available online. Licensees and members of the public can access these records on NEA’s website at https://eservices.nea.gov.sg/TRV or use the search engine in the myENV app under the information tab “Track Records of Food Outlet Operators”.

Scan the QR Code on the licence to access the track records found on NEA’s Website.