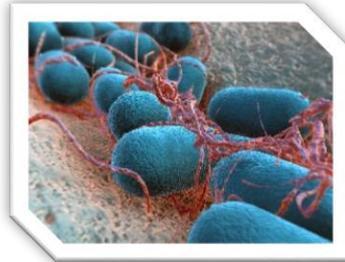
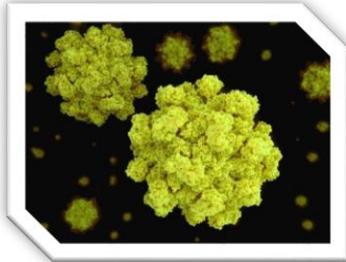


10 December 2018

Advisory on Gastroenteritis



Background

Singapore has seen a spate of four food poisoning outbreaks since November 2018, affecting more than 400 people. The most serious involved a fatality, after more than 80 people were taken ill when they consumed bento box lunches. More than 20 people were hospitalised, including a 38-year-old auxiliary police officer who died.

The latest outbreak, first reported on December 2 affected 175 people after they had taken meals during four separate events over a three-day period.

What is Gastroenteritis (also known as stomach flu or food poisoning)?

Gastroenteritis (commonly referred to as “stomach flu”) is a stomach and/or intestinal infection which produces watery diarrhoea, abdominal cramps, nausea or vomiting, and sometimes fever. Possible causes include ingestion of food or water that have been contaminated by viruses / bacteria, their toxins and occasionally parasites. Symptoms may start within hours to days after consuming the contaminated food. Depending on the cause of the inflammation, symptoms may last from one day to more than a week.



What is an outbreak of food poisoning?

An outbreak is the occurrence of more cases of food poisoning than expected for a particular place and time resulting from the ingestion of a common food / water source.



Who is at risk for gastroenteritis?

People who may be more susceptible to gastroenteritis include:



- **Young children.** Children in child care centres or schools may be especially vulnerable because it takes time for a child's immune system to mature.
- **Older adults.** Older adults in nursing homes, in particular, are vulnerable because their immune systems weaken and they live in close contact with others who may pass along germs.
- **Schoolchildren, churchgoers or dormitory residents.** Anywhere that groups of people come together can be an environment for an intestinal infection to get passed.
- **Anyone with a weakened immune system.** If your resistance to infection is low — for instance, if your immune system is compromised by chemotherapy, HIV/AIDS or another medical condition — you may be especially at risk.

What are some common viruses / bacteria that commonly cause gastroenteritis?

In the recent outbreaks, investigations by NEA and MOH found six different types of pathogens that were detected from food samples, food handlers and the restaurant. Here's what they are:

SALMONELLA TYPHIMURIUM AND SALMONELLA ALBANY

What is it?

Salmonella infection, caused by salmonella bacteria, is through contaminated water or food, or through ingestion of raw or undercooked meat, poultry, or eggs. It was the main cause of illness among those who ingested food from Spize Restaurant at River Valley.

Symptoms

Nausea, vomiting, stomach cramps, diarrhoea, fever, headaches and blood in stool.

SALMONELLA

SYMPTOMS AND PREVENTION

SYMPTOMS

Fever, abdominal cramps and diarrhoea

Starts 12-72 hours after infection

Usually lasts 4-7 days

Can spread from animals to people
Always wash your hands after contact with animals

Can be more dangerous for children younger than 5, older adults and sick people

More common in warmer weather and in unrefrigerated food

Can be found in vegetables, eggs, chicken, pork, fruits and even processed food

Infographic by Rafa Estrada Source: US Centers for Disease Control and Prevention



FAECAL COLIFORMS

What is it?

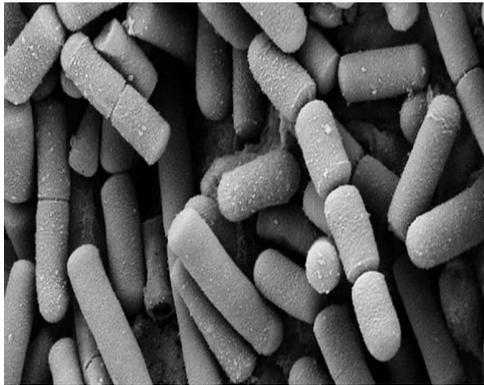
Faecal coliforms are a group of bacteria common found in faeces.

Symptoms

Ingestion of such bacteria may not be immediately harmful, but their presence indicates a high risk of other harmful pathogens.

BACILLUS CEREUS

What is it?



Consumption of Bacillus cereus and the toxins it produces results in an illness nicknamed "fried rice syndrome" due to the first recognised outbreaks being linked to fried rice.

The heat from cooking stimulates the bacteria to reproduce, and leaving the food at room temperatures allows the bacteria to incubate. Reheating the food briefly does not kill Bacillus cereus nor does it neutralise the toxins it produces.

Symptoms

Diarrhoea, stomach cramps, nausea and vomiting.

NOROVIRUS

What is it?

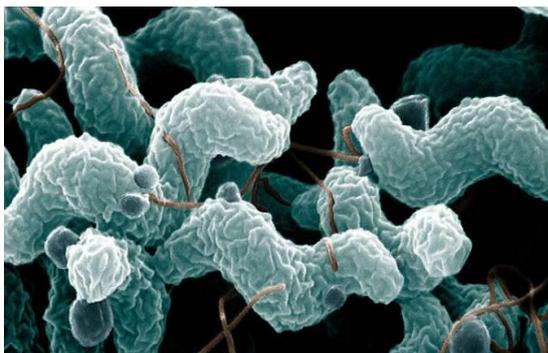
Norovirus is highly contagious and is usually transmitted by consuming contaminated food or drink, touching contaminated surfaces or objects and then placing your fingers in your mouth, or having contact with an infected person (e.g. caring for or sharing utensils with an infected person). Norovirus gastrointestinal disease (GID) outbreaks occur frequently in closed settings, with high attack rates. It has been responsible for several outbreaks in Singapore in recent years.

Symptoms

Diarrhoea, stomach cramps, nausea and vomiting. Other symptoms may include fever, headache and body aches

CAMPYLOBACTER JEJUNI

What is it?



It is a bacteria that can be contracted through ingestion of the organism in undercooked chicken or pork, contaminated food, water or unpasteurised milk. It is also commonly found in animal faeces.

Symptoms

Diarrhoea, stomach cramps, nausea, fever and vomiting.

What treatment is available for food poisoning?

In most cases of food poisoning, treatment is mainly supportive. This means drinking adequate fluids and isotonic drinks, eating small, low-fat meals, and resting as needed. Make sure that you're urinating normally and that your urine is light and clear.

Antibiotics are not usually recommended but may be used for some types of bacterial or parasitic infections. In most cases, symptoms resolve quickly and no special treatment is necessary. Those with persistent diarrhoea and/or vomiting leading to poor intake will need to be given intravenous fluids in order to prevent dehydration. Based on your doctor's assessment, blood and stool samples may be needed for further assessment of your condition and assist in the investigation of the outbreak.



How soon can I resume my duties at work?

All workers having symptoms of vomiting, diarrhoea and fever should be regarded as infectious, and should stay away from places such as school, child-care and avoid duties requiring handling of food and beverage. This would help minimise further transmission of the infection.

It is recommended that workers who still have symptoms and are directly involved in handling/packing/preparing food should not work until 48hrs after their symptoms have resolved.

Your doctor would issue you a medical certificate of 1-2 days based on the severity of your symptoms and arrange for you to return for a review, if necessary.

When do I need to return to see the doctor?

You are advised to revisit the doctor sooner should you develop any of the following:

- ❖ Frequent episodes of vomiting and inability to keep liquids down
- ❖ Bloody vomit or stools
- ❖ Diarrhoea for more than three days
- ❖ Extreme pain or severe abdominal cramping
- ❖ Fever that is not settling.
- ❖ Signs or symptoms of dehydration — excessive thirst, dry mouth, little or no urination, severe weakness, dizziness, or light-headedness, dry diapers for infants (for more than 4-6 hours)
- ❖ Neurological symptoms such as blurry vision, muscle weakness and tingling in the arms



What part can I play to stop a gastroenteritis outbreak?

- ✓ Contain the infection through proper handwashing / sanitising technique.
- ✓ Stay off work, school or nursery until at least 48 hours after the symptoms have passed.
- ✓ Don't share towels, cutlery or utensils while still having symptoms.
- ✓ Food handlers should ensure proper food storage and cleanliness of food preparation areas. Perform environmental cleaning on frequently touched surfaces two to three times daily including:
 - Toilets,
 - Hand railings,
 - Tables and chairs,
 - Door handles,
 - Telephones,
 - Computer equipment etc
- ✓ Staff directly involved in food handling duties , who are still having vomiting/diarrhoea or fever should not perform their duties till 48 hours after resolution of symptoms or as recommended by their doctor.
- ✓ Suspend all group events during the outbreak to reduce food sharing opportunities, eg functions, outings.
- ✓ All food handlers even if they have not reported symptoms, should be screened by a doctor for symptoms and undergo stool examination to ensure that they are not passing the infection unknowingly.



How can I minimise my risk of contracting gastroenteritis?

- Washing your hands frequently, especially after going to the bathroom and when you are working with food.
- Cleaning and disinfecting kitchen surfaces, especially when working with raw meat or eggs.
- Keeping raw meat, eggs, and poultry away from foods that are eaten raw.
- Drinking bottled water and avoiding ice cubes when traveling, especially in developing countries.
- Young children can have the rotavirus vaccination when they are 2 to 3 months old, which can reduce their risk of developing rotavirus gastroenteritis.



Hand Hygiene

Hand Rubbing and Washing Techniques At A Glance

Objective:

remove micro-organisms which may cause transmission of infections.



Hand Rub

Start by applying a palmful of sanitiser for hand rub



Hand wash

Wet hands before applying soap for hand wash



1. Rub hands palm to palm



2. Right palm over left dorsum and left palm over right dorsum



3. Palm to palm with fingers interlaced



4. Backs of fingers to opposing palms with fingers interlocked



5. Rotational rubbing of right thumb clasped in left palm and vice versa



6. Rotational rubbing, backwards and forwards with clasped fingers of right hand in left palm and vice versa



7. Rotational rubbing of right wrist and vice versa



Hand wash

For hand wash, rinse off soap completely and dry hands thoroughly after washing



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