

PATHOGENIC MICROBES

PARTS III & IV

Listeria and Staphylococcus

LISTERIA

What is Listeria?

- Listeria is a pathogenic bacteria
- The bacterium is called *Listeria monocytogenes*
- When a person is infected with listeria it is call listeriosis

How is Listeria Transmitted/sources?

- Common contaminated food items include
 - Soft cheese
 - Raw sprouts
 - Cold/unheated deli meats and hot dogs
 - Unpasteurized milk (raw)
 - Smoke seafood (example: smoked salmon)
 - Melons

Who are the groups most at Risk Of contracting (getting) Listeria?

- People who are immunocompromised
- Pregnant Woman
- Fetuses
- Newborn babies
- The elderly (65+)

What are the symptoms of Listeria?

Pregnant Women

- Fever
- Fatigue and muscle aches similar to flu symptoms
- Additional concerns
 - Miscarriage
 - Still birth
 - Premature deliver
 - Life-threatening infection to newborn

Everyone else

- Headaches
- Stiff neck
- Confusion
- Loss of balance
- Fever
- Muscle aches

Diagnosis and Treatment of Listeria

- Diagnosis requires a bacterial culture and is obtained from the following
 - Blood
 - Spinal fluid
 - Placenta
 - Etc.
- Treatment
 - Antibiotics

Prevention of the spread of listeria

- Thoroughly cook sprouts
- Eat cut melon right away put left overs in the fridge
- Hot dogs and deli meats should be eaten within 2 weeks of opening and be refrigerated right after opening
 - Avoid cross contamination (that is do not put other food items in contact with deli meat juices)
- Keep smoked seafood refrigerated
- Do not drink unpasteurized milk and keep milk and milk products refrigerated

STAPHYLOCOCCUS

What is Staphylococcus?

- Staphylococcus is a bacterium
- The bacterium is called *Staphylococcus aureus*
- It is called Staphylococcal food poisoning when it is caused by food consumption that is contaminated with the bacterium

How is Staphylococcus Transmitted?

- Through the consumption of contaminated foods including
 - Unpasteurized milk and cheese products
 - Sliced meats
 - Puddings
 - Pastries
 - Sandwiches
- Not washing your hands after handling contaminated food items

What are the symptoms of Staphylococcus?

- Symptoms appear within 30 minutes to 6 hours
- Vomiting
- Nausea
- Stomach cramps
- Diarrhea
- Symptoms typically last 24 hours

Who are the groups most at Risk Of contracting (getting) Staphylococcus?

- Infants
- The elderly
- People who are immunocompromised

Diagnosis and Treatment of Staphylococcus

- Diagnosis requires a
 - Stool or vomit sample
- Treatment
 - Antibiotics are NOT recommended
 - Drinking lost of fluids
 - Severe cases may require intravenous fluids at a hospital

Prevention of the spread of Staphylococcus

- Wash hands and under fingernails thoroughly with soap and water before handling and preparing food.
- Do not prepare food if you are ill.
- If you have wounds or infections on your hands or wrists, wear gloves while preparing food.
- Keep kitchens and food serving areas clean.
- If food is to be stored longer than two hours, keep hot foods hot (warmer than 140°F) and cold foods cold (40°F or colder).
- Store cooked food in a wide, shallow container and refrigerate as soon as possible.

References

- Listeria:
 - <https://www.cdc.gov/listeria/faq.html>
 - <https://www.cdc.gov/vitalsigns/listeria/infographic.html>
- Staphylococcus:
 - <https://www.cdc.gov/foodsafety/diseases/staphylococcal.html>