

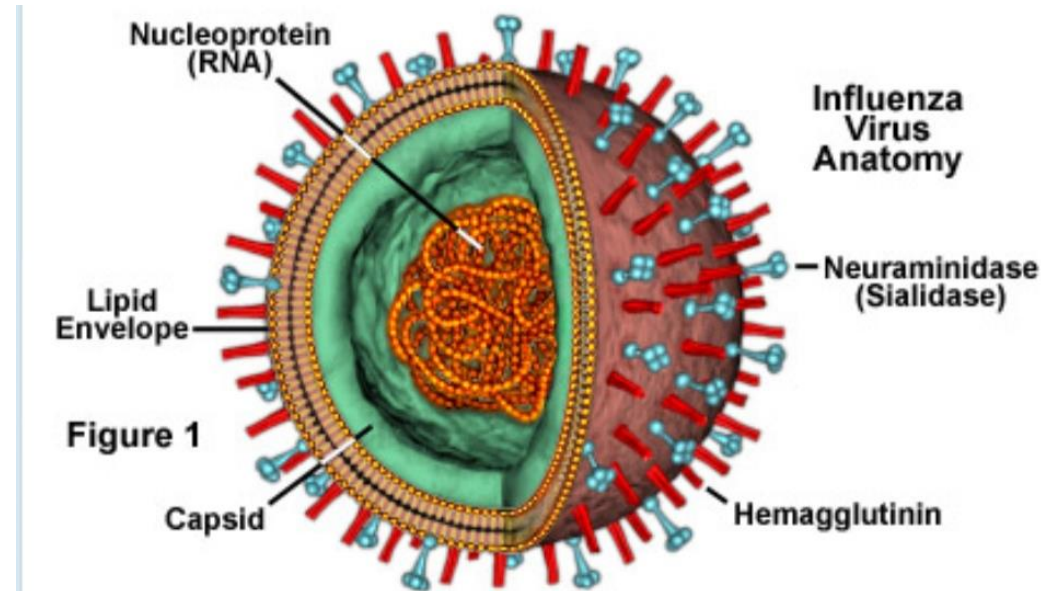
Harmful microorganisms

Harmful microorganisms:

- Microorganisms that causes diseases – **Pathogens or germs**
- Diseases spread by microorganisms and spread from an infected person to healthy person through
 - Air
 - Food and water
 - Direct contact with sick person
 - Insects
 - Cuts and wounds are called **communicable diseases**

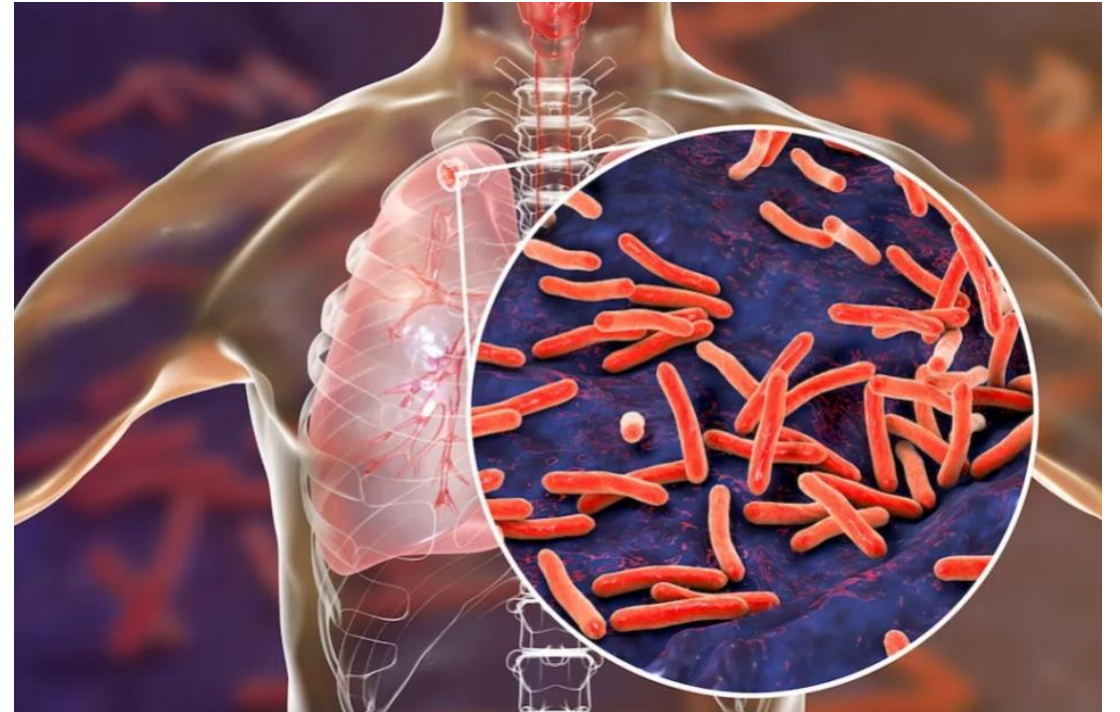
Through air: spreads by respiratory droplets when an infected person coughs, sneezes or spits

- Flu – respiratory disease caused by Influenza virus



Through air:

- Tuberculosis: bacterial disease that affects lungs



Through air:

- Measles: viral infection that infects small children



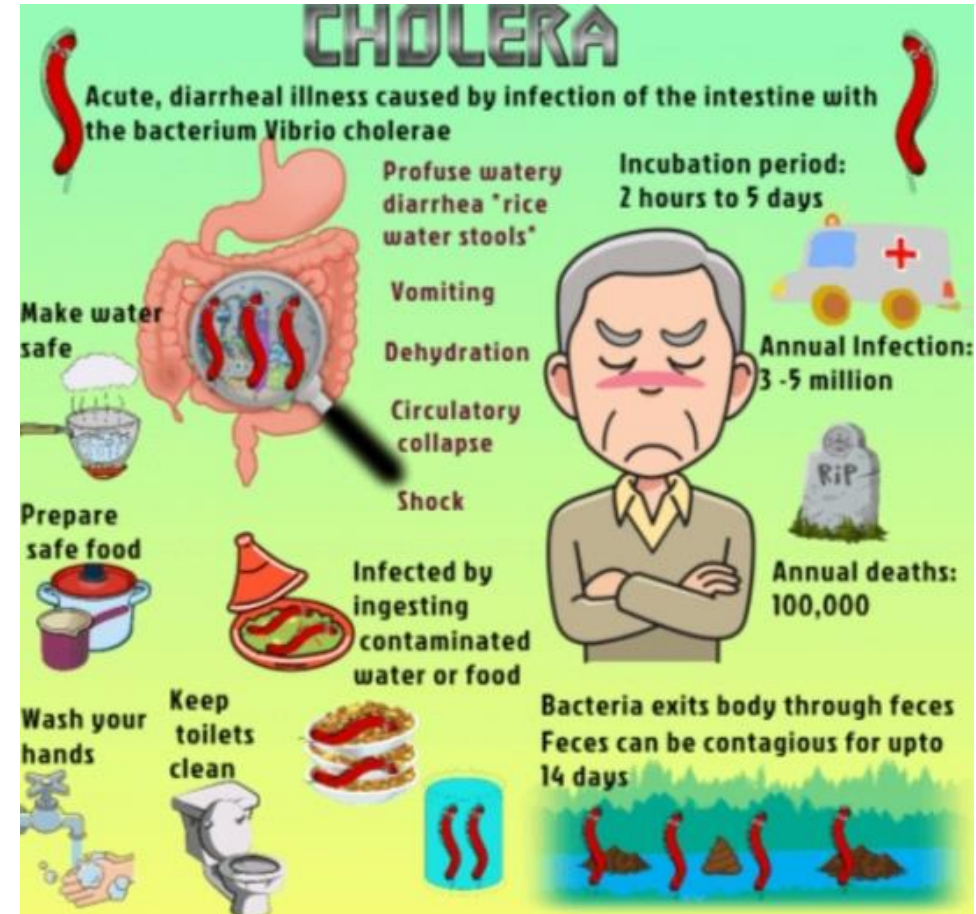
Through contaminated food and water:

- Polio: Viral infection that cause paralysis
- Contaminated refers to made impure by exposing food and water to poisonous or polluting substance



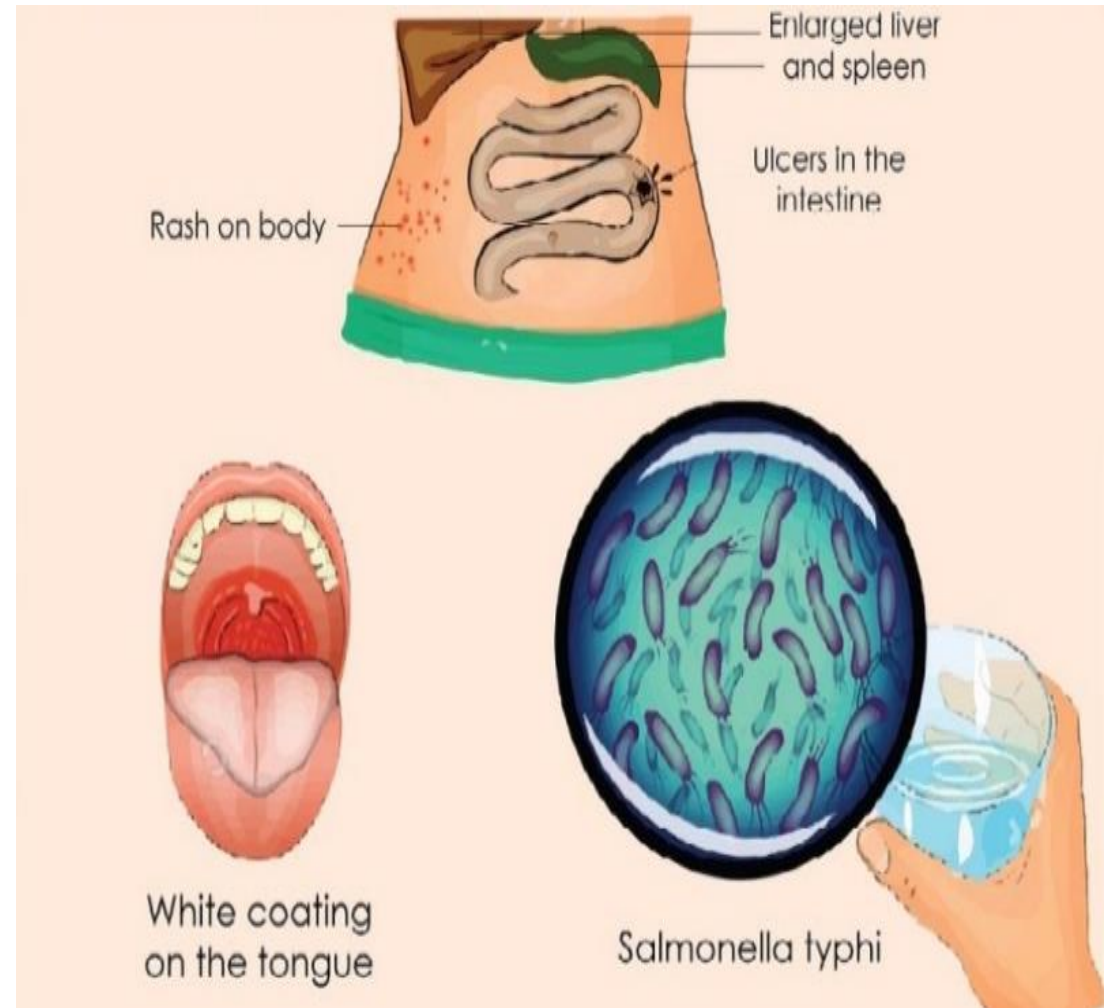
Through contaminated food and water:

- Cholera – bacterial disease causing diarrhoea and dehydration (severe)



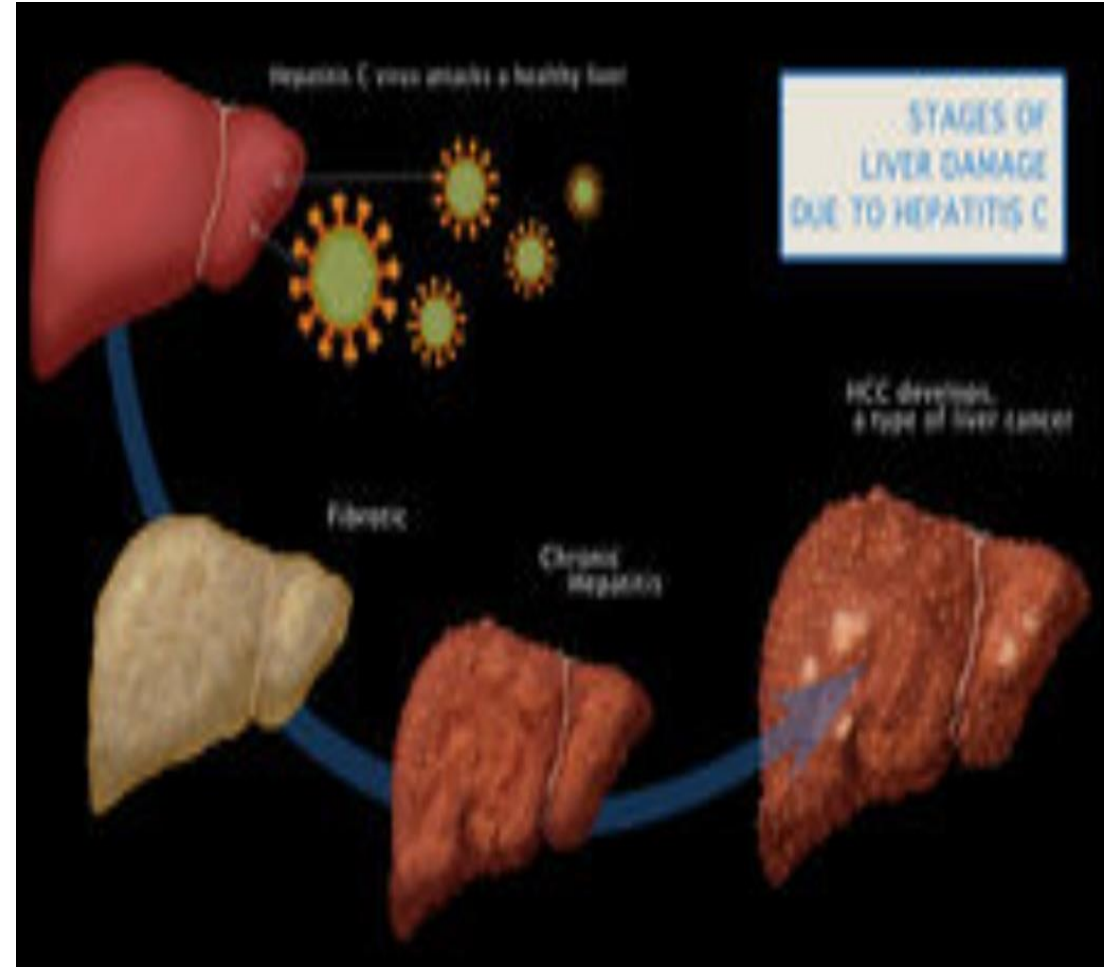
Through contaminated food and water:

- Typhoid: bacterial infection
- Also caused by using a toilet contaminated with bacteria and touching the mouth before washing hands
- Reaches bloodstream and affects liver, muscles, gallbladder, lungs, kidneys and spleen



Through contaminated food and water:

- Hepatitis: liver infection and inflammation Caused by virus
- Types – B,C and alcoholic hepatitis
- Spreads by contact with contaminated blood like sharing needles from unsterile tattoo equipment



Through direct contact: with a sick person

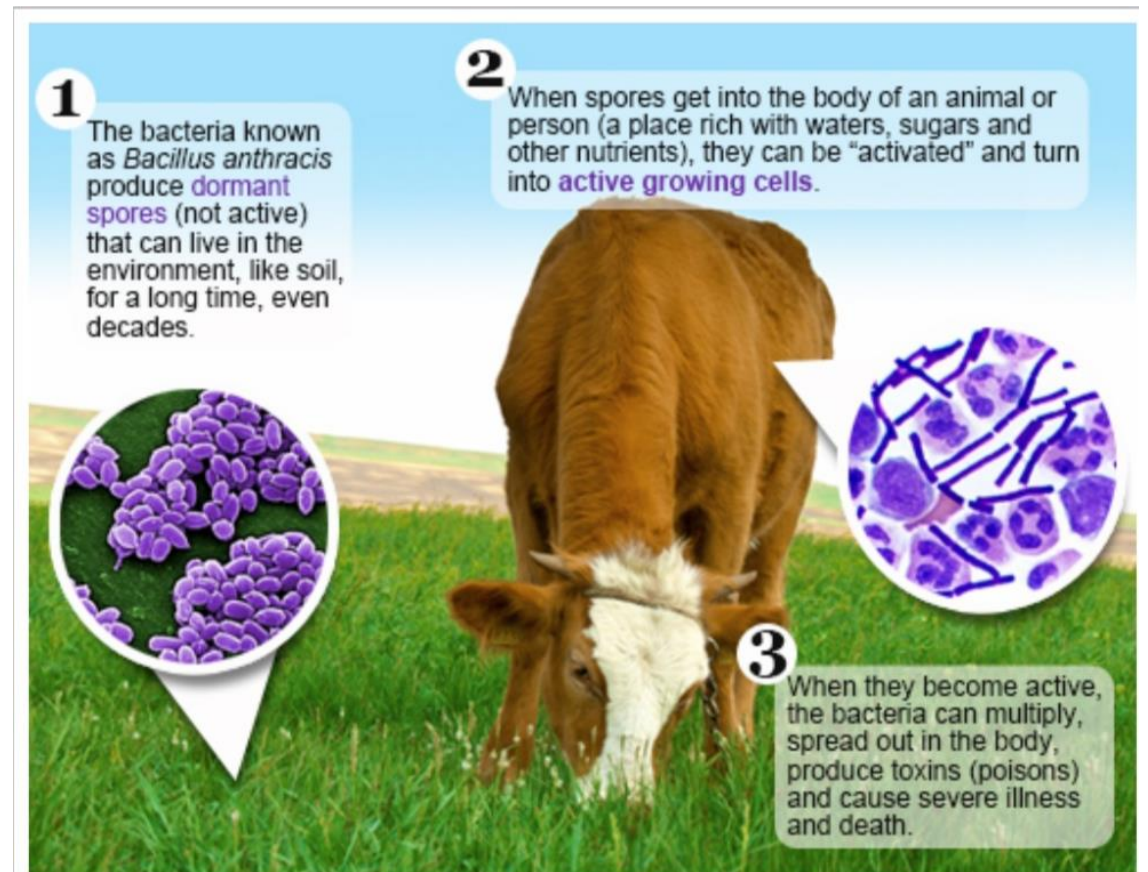
- Ringworm: fungal infection in scalp or skin
- Skin-skin contact by touching the infected person or animal
- usually during handshakes or hugs



Diseases in Animals:

Through cuts and wounds(Tetanus)

Anthrax

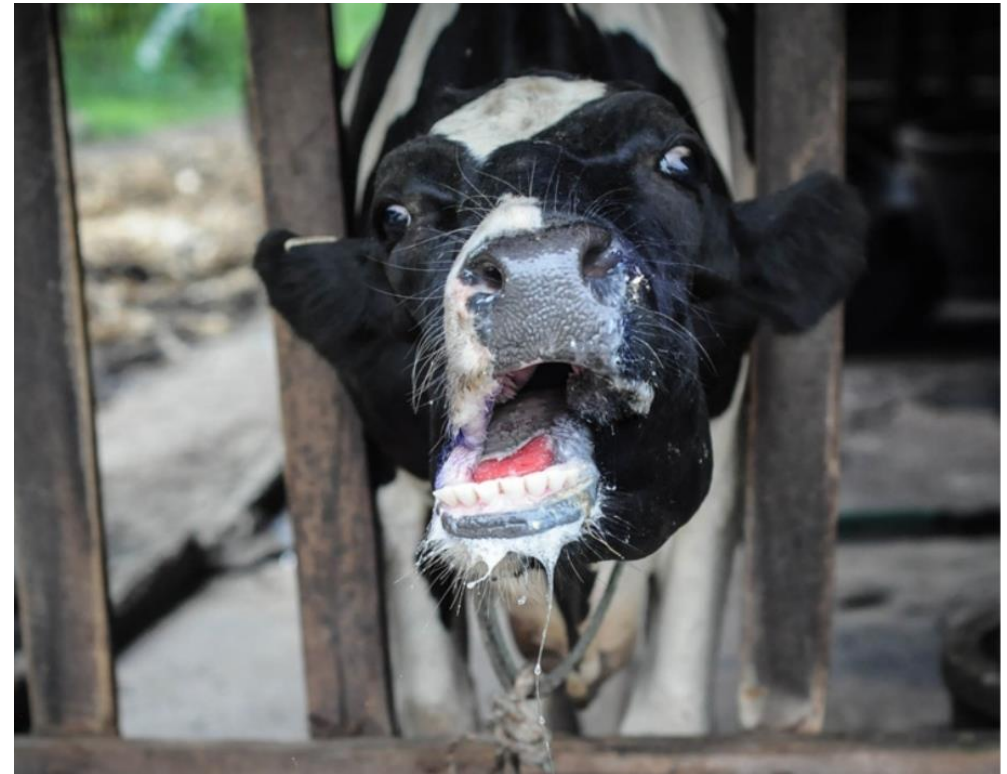


Diseases in animals and plants:

Citrus canker (through air –bacteria)



Foot and mouth disease (cattle-virus)



Ways to prevent spread of communicable diseases:

- Quarantine
- Wearing mask
- Using handkerchief while sneezing
- Mosquitoes – keeping the environment clean
 - avoiding stagnant water collection in our neighbourhood

Spoilage of food:

- Spoils food like milk, meat, potatoes, vegetables and fruits(bacteria)
- Fermentation of juices (yeast)



TRADITIONAL PRESERVATION METHODS

PREPARED BY: J.A.S.S. JAYAWEERA

Canning / Bottling

Process of heating the product at a specified temperature for a specific length of time. Vacuum sealing the pasteurized food in special glass jars.



Fermenting

Encourage the growth of helpful microbes to inhibit the bad microbes that can spoil food. Produce wide range of products such as wine from grapes, yogurt from milk, curd from buffalo milk.



Curing

Similar to pickling used salt, acids or nitrites. Used for meat and sea food.



Sugaring

Dips into a sugar syrup or honey. Used with fruits and meat.



Salting

The salt draws out moisture and prevent microbes growing foods such as lemon, fresh fish and meat.



Drying

One of the most ancient food preservation techniques. Reduce water activity sufficiently to prevent bacterial growth.



Freezing

Process of chilling foods at least -6 °F. Use with fruits, vegetables, meats, seafood, grains, nuts, dairy and prepared foods.



Pickling

Soaking food in a solution containing salt, acid or alcohol. Pickling is often combined with other methods such as fermenting, canning or just refrigerating.



Smoking

Complementary process of lots smoke over long time can impart final to curing that improves flavor and appearance, can also act as drying agent. Used for Meat and fish.



Jellying

Food may be preserved by cooking a material that solidifies to form a gel. Such materials included gelatin, agar, maize flour.



Burying in the ground

Lack of light, oxygen, low pH, cool temperature, desiccants in soil. Century eggs are made by placing eggs in alkaline mud, resulting inorganic fermentation through raised pH instead of spoiling.



Thank You!