

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ



Pakistan School  
Kingdom of Bahrain

# Microorganisms & Diseases 2

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Grade: 9th

# RULES OF THE CLASS

- ❖ Be on **time**
- ❖ Enter the class with your **name** and **CPR number**
- ❖ **Respect** all participants
- ❖ Do **not** create any disturbance
- ❖ **Raise your hands** for questions (the teacher will respond when the time is suitable)
- ❖ Pay **attention** to the teacher
- ❖ Follow the **time table**

**Roundworms**



**Threadworms**



**One of the ways to spread germs: Air**

# Objectives:



By the end of the lesson, the students will be able to describe:

1. Description of **Ascariasis**
2. Description of **Threadworm**
3. Understanding of **ways for germs to spread**



# Ascariasis

It is a parasitic roundworm. The infection is caused when a person eats the small eggs of the worm along with food, water or by using dirty/dusty hands.

**Size:** Worm is of 35 cm or 14 inches long. It is also cylindrical with pointed ends.

**Site:** Found in human intestines

**Age:** most commonly found in children 8 years old or younger

**Cause:** *Ascaris lumbricoides* of animal kingdom, phylum Nematoda

**Symptoms:** a) weakness b) paleness c) anaemia d) jaundice e) pneumonia f) appendicitis

**Treatment:** Anthelmintics are antiparasitic drugs which kill the parasites in body

**Precautions:** a) wash hands before eating b) use boiled water for drinking purposes c) proper disposal of feces and sewage d) clean environment



**Roundworm in child's body**

# Threadworm (aka Pinworms)

This condition occurs mostly in [children](#). It causes intense [itching](#) around [anus](#). By touching the area, [eggs](#) attach to hands of infected child, which may re-infect the child.

**Site:** Threadworm lays eggs around anus. [Female threadworm](#) rests in last part of [alimentary canal](#)

**Cause:** [Enterobius vermicularis](#) of [animal](#) kingdom, phylum [Nematoda](#)

**Symptoms:** In children, they will repeatedly scratch the anal area of the body

**Treatment:** [Anthelmintics](#)

**Precautions:** a) [wash hands](#) before eating b) bed & clothes of infected person washed with [antiseptic](#) c) proper [disposal](#) of [feces and sewage](#) d) [trimmed nails](#)





**Threadworm under a microscope**



# Spreading of Germs:

Germs are spread in various ways. Main 8 ways are:

1. **Air:** Most germs are in form of spores. They enter the human body through breathing. The dust in the air contains large numbers of spores. T.B. is spread by air.
2. **Water:** It is better to boil drinking water to kill germs. In villages, water is boiled before drinking. Germs of cholera and diarrhea can spread through water.
3. **Food:** Rotten fruits, vegetables and spoilt, contaminated food can spread germs. Always cover the food. Germs from rotten food cause great trouble in alimentary canal.
4. **Touch of direct contact:** Diseases like AIDS, T.B. and plague are spread through contact. Infected person must be isolated.

## Cont'd...

5. **Feces:** Proper burial of feces in the soil is very important because if they are not properly disposed off, after they get dried, they spread in the air and transmit germs to healthy people.
6. **Animals:** Germs are attached to animals' bodies. Pet animals and cattles must be given regular baths with antiseptics to avoid contamination to humans.
7. **Cuts & Wounds:** Open cuts/wounds are gateways for germs. Any kind of cut must be washed with antiseptic and covered properly.
8. **Blood Transfusion:** Blood must be checked by labs before transfusion, as diseases like AIDS and Hepatitis spread through blood.

# ACTIVITY 1:

## Complete the following statements

- 1) \_\_\_\_\_ is disease of human intestine.
- 2) \_\_\_\_\_ is a roundworm with pointed ends.
- 3) The children get shortage of \_\_\_\_\_ in Ascariasis.
- 4) The scratching habit of a child in the anal part of the body is the indication of \_\_\_\_\_.

# ACTIVITY 2:

## MCQS

1) The disease-causing germs in air are present in the form of:

- a) bubbles                                      b) small eggs                                      c) spores                                      d)  
parasites

2) Which germs are spread through water?

- a) AIDS & Hepatitis                      b) T.B. & Plague                                      c) Cholera & Diarrhea

3) Which germs are spread due to direct contact with infected person?

- a) Plague & T.B.                                      b) Cholera & Diarrhea                      c) Roundworms &  
Threadworm

4) Which germs are transmitted through the blood?

- a) T.B & Cholera                      b) Diarrhea & AIDS                      c) AIDS & Hepatitis

# PLENARY

1) All of the following diseases are caused by bacteria except:

- a)** Whooping cough      **b)** Tetanus      **c)** Diphtheria      **d)** Hepatitis

2) Ringworm is caused by:

- a)** Bacteria      **b)** Virus      **c)** Amoeba      **d)** Fungus

3) It is a type of medicine that can kill the germs:

- Antigen      **b)** Antibody      **c)** Antibiotics      **d)** Anti coagulant      **a)**

4) Which of the following is the disease of the digestive tract:

- a)** Cholera      **b)** Tetanus      **c)** Smallpox      **d)** Diphtheria

4) All of the following methods are used to cure cancer except:

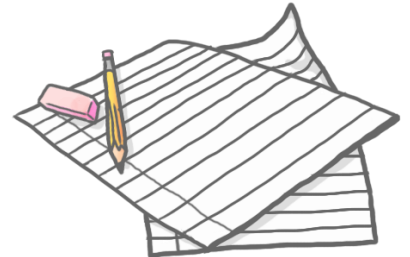
- a)** Chemotherapy      **b)** Surgery      **c)** Radiotherapy      **d)** Hydrotherapy



# HOMEWORK

**Q1)** Describe causes of Ascariasis and threadworm.

**Q2)** Write a note on the ways germs can be spread.



السَّلَامُ عَلَيْكُمْ وَرَحْمَةُ اللَّهِ وَبَرَكَاتُهُ

CLASS IS OVER!



**YOU ARE DOING GREAT, MASHA'ALLAH!**

SEE YOU NEXT CLASS INSHA'ALLAH!