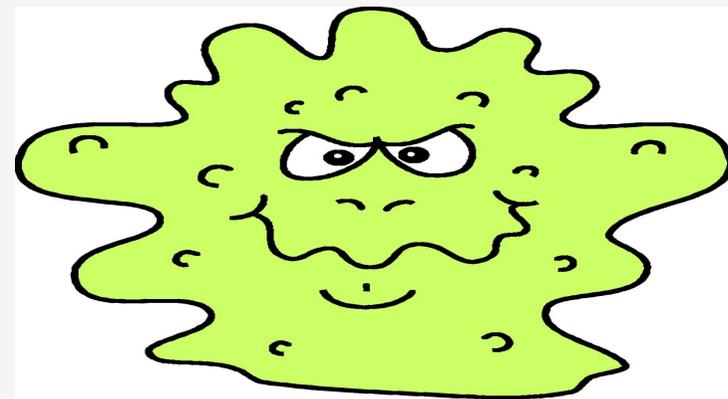


# **Communicable and Non-Communicable Diseases**



# Let's See If you can guess...

- There are 2 Diseases with definitions on your table, one-by-one I will call you up and tell you “Yes” or “No”, the “Yes” group goes to one side of the room and the “No” group to the other.
- Try and guess how I am grouping the diseases and in what ways.
- Yes: Cold, Flu, Mono, Chicken Pox, Pneumonia, Rubella, Hepatitis, Tuberculosis, Strep Throat.
- No: Cancer, Heart Disease, Diabetes, Allergies, Asthma, Arthritis.



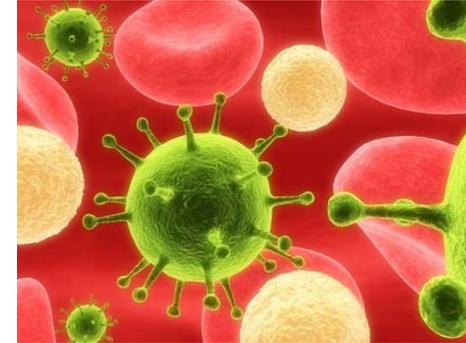
## Definitions

- Communicable disease: a disease that can be spread to a person from another person, an animal or object. Ex: common cold, influenza, mononucleosis, etc.
- Non-communicable disease: a disease that can NOT be spread from person to person. Ex: cancer, heart disease, asthma, etc.





# Definitions



- Disease: Any condition that interferes with the proper functioning of the body or mind.
- Pathogens: Disease-Causing Organisms that are so small they can only be seen through a microscope. Also known as *Pathogens*
- Infection: A condition that occurs when germs enter the body, multiply and cause harm.

# Four Types of Pathogen:

- **Virus**: smallest simplest life form. Not alive, and cause upper respiratory infections and many other type of diseases.



- **Bacteria**: simple one-celled organisms. They are everywhere. Not all bacteria is bad.



- **Fungi**: more complex than bacteria, but cannot make their own food. Thrive in warm, moist environments.



- **Protozoa**: one celled, animal like organisms.

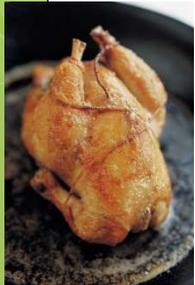


# How do Pathogens Spread??



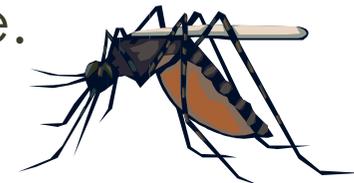
- Direct contact with others; EXAMPLE: Shaking hands with someone or kissing an infected person.

- Indirect contact with others; EXAMPLE: Sharing drinking glasses or eating from the same spoon or fork as an infected person.



- Contact with contaminated food and water; EXAMPLE: Undercooked foods or water that doesn't look very clean.

- Contact with animals and insects; EXAMPLE: A tick bite which can spread Lyme disease. Mosquitos and other bugs.



# LESSON REVIEW!

- Make Vocabulary flashcards for each of the UNDERLINED words we have covered in this lesson.
- Work on Chapter Lesson Review. Questions 1-5.  
**COMPLETE SENTENCES!**

# How can you keep pathogens from spreading?

- List 3 ways you think you can stop germs from spreading? (2 minutes to complete)
- Create a commercial or skit as a group about one way to keep germs from spreading and present it to the class. Be CREATIVE! Must Include:
  1. Information from the PowerPoint
  2. Vocabulary Words
  3. Must be at least 1 page in length written out.



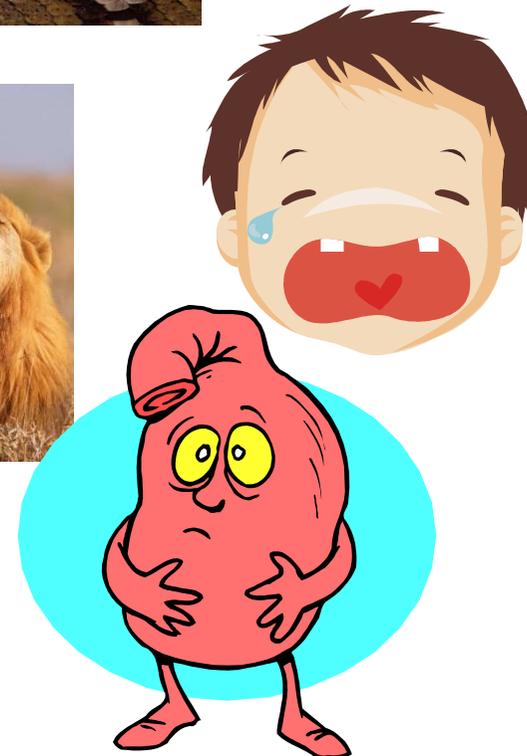
# The Body's Defense Against Infection

- The Immune System is a combination of body defenses made up of cells, tissues, and organs that fight germs and disease in the body.
- It's purpose is to help you get better when you are ill and to prevent you from becoming ill in the first place.
- Immunity: Your body's ability to resist germs that cause a particular disease.



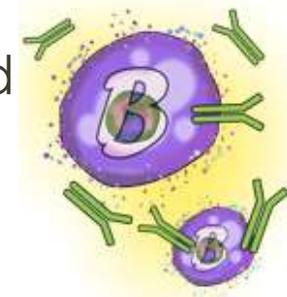
# 5 Major Barriers to help keep pathogens away.

- Our body is an amazing machine which has five main barriers (first line of defense) for keeping our body healthy. They are:
  - 1. Skin – acts as a protective barrier
  - 2. Mucous Membranes – line the mouth, nose, throat, eyes and other body parts. These trap germs. Coughing and sneezing gets rid of the germs trapped by these mucus membranes.
  - 3. Saliva – contains chemicals that destroy many harmful organisms.
  - 4. Tears – wash away germs. Contains chemicals that kill some harmful organisms.
  - 5. Stomach Acid – acid kills many germs!



# Non-specific and Specific Immune Response

- Inflammation: The body's response to injury or disease, resulting in a condition of swelling, pain, heat, and redness.
- <http://youtu.be/hu9Xlwm0fKE>
- Antigens: a substance that sends your immune system into action when your body is invaded by pathogens. The body sees these as “invaders”.
- Antibodies: proteins that attach to antigens, keeping them from harming the body. How our body responds to antigens, by producing antibodies – our body's “army of soldiers”.
- Vaccine: A preparation of dead or weakened pathogens that causes the immune system to produce antibodies.



# LESSON REVIEW!

- Make Vocabulary flashcards for each of the UNDERLINED words we have covered in this lesson.
- Work on Chapter Lesson Review. Questions 1-5.  
**COMPLETE SENTENCES!**

# Let's Put it all together.



- So we've learned about how the body defends itself from diseases and how to prevent getting germs. Now let's see what you can come up with.
- I want you to create a brochure about fighting diseases and preventing them from what we have learned. Must include:

1. Title
2. Information from the slide show
3. Pictures or drawings
4. Use vocabulary from the chapter





# Communicable Diseases

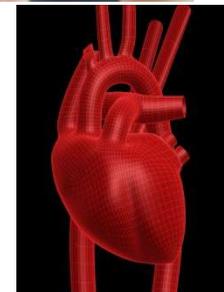
Contagious Period: The length of time that a particular disease can be spread from person to person.

- Colds- Caused by hundreds of different viruses, spread by direct or indirect contact.
- Flu- Caused by one of 3 main types of influenza viruses.
- Mononucleosis- Viral disease having a severe sore throat and swelling of your throat.
- Hepatitis- Viral Disease
- Tuberculosis- Bacterial Disease
- Pneumonia- Inflammation of the lungs
- Strep Throat- Sore throat caused by bacteria



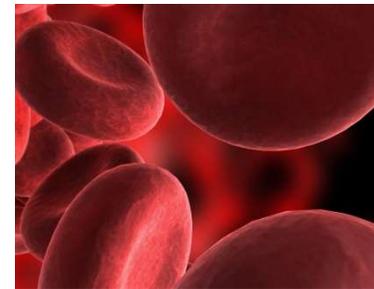
# Non Communicable Disease

- Cancer- A disease characterized by the rapid and uncontrolled growth of abnormal cells.
- Heart Disease- Any condition that weakens the heart and blood vessels and makes them less functional.
- Diabetes- A disease that prevents the body from converting food into energy.
- Arthritis- A disease of the joints marked by painful swelling and stiffness.
- Allergies- Extreme sensitivity to a substance.
- Asthma- A condition in which small airways in the lungs narrow, making breathing difficult.



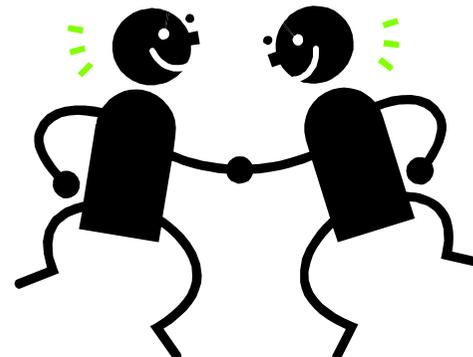
## Just Remember:

- Communicable; comes from the community, other people.
- Non-Communicable; can't get it from others.



# Getting to know you.

- Each person has a notecard at their table.
- Mingle around the room and give your name to 3 different people.
- Write your name on their card after you introduce yourself.
- Once you have 3 names on your card go back to your seat.





## Bad News

- Check the bottom of your card.
- If you have an X on the bottom of your card you just found out you have been infected.
- Stand up and read the 3 names on your card.
- If your name is called go ahead and stand up.

# Sexually Transmitted Diseases

- STDs are infections that are spread from person to person through sexual contact.
- Common STDs are:
  - Chlamydia
  - Genital Herpes
  - Genital Warts
  - Trichomoniasis
  - Gonorrhea
  - Syphilis
  - Pelvic Inflammatory disease (PID)
  - HIV/AIDS
- How can you avoid an STD? Abstain or don't have sex until marriage.



# What you should know about STDs...

- Most STDs are spread ONLY through sexual contact.
- You cannot tell if someone has an STD by his or her appearance.
- Most STDs have either very mild or no symptoms.
- Many STDs can be treated and cured, but early diagnosis is important.
- Because treatments for STDs vary, they must be accurately identified.
- STDs can recur because the body does not build up an immunity to them.
- STDs can cause sterility, blindness, deafness, and birth defects.

# HIV/AIDS



- HIV (human immunodeficiency virus) is the virus that causes AIDS (acquired immunodeficiency syndrome).
- AIDS is a deadly disease that interferes with the body's natural ability to fight infection.
- Opportunistic infection is an infection that rarely occurs in a healthy person. Ex. AIDS patients developing pneumonia that cause death.
- Carriers are people who appear healthy but are infected with HIV and can pass it to others.
- A blood test is the only way to know whether you have HIV or not.

# How does HIV spread?

- 1. Sexual Contact with an infected person. Just one time is all it takes to spread the virus.

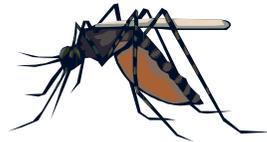


- 2. Sharing Needles of any kind, mostly through drug users but also there is a risk from getting a tattoo or body piercing because their needles may be unclean.
- 3. From mother to child either before or after delivery, or through breast-feeding.



# How HIV is NOT Spread

- Being bitten by a mosquito



- Sharing Utensils



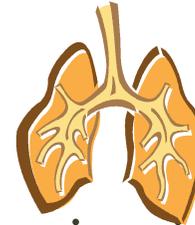
- Hugging and shaking hands



- Using the same shower, bathtub, or toilet as an infected person.



- Breathing the air



- Swimming in a pool



- Donating blood



# LESSON REVIEW!

- Make Vocabulary flashcards for each of the UNDERLINED words we have covered in this lesson.
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**COMPLETE SENTENCES!**