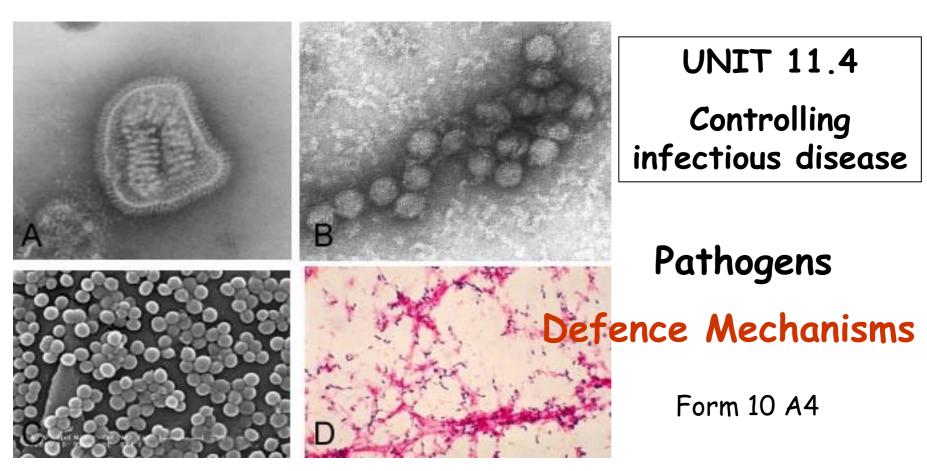
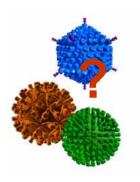
### **Holy Family Catholic High School**

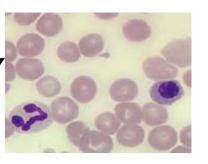




## Learning Objectives



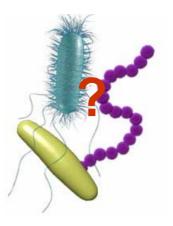
Today's Lesson



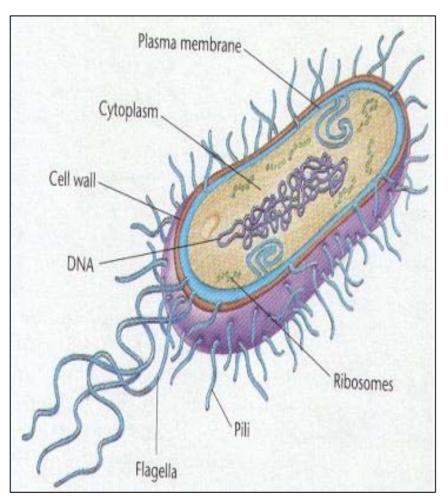
How do white blood cells protect us from disease?

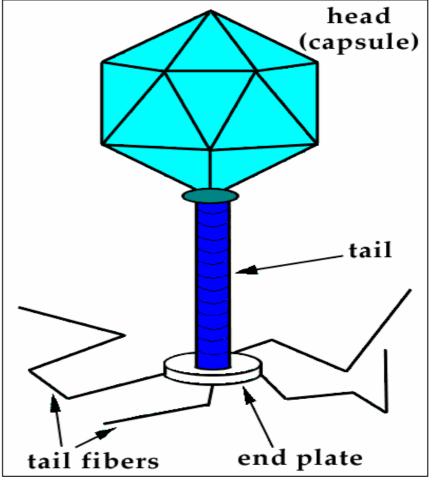


How does the body stop pathogens getting in.



### Bacteria & Viruses...





#### **Droplet Infection**

e.g. 'Flu, tuberculosis or the common cold.

#### Direct Contact

e.g. Impetigo and some sexual transmitted diseases like genital herpes.

Different ways in which infectious diseases are spread.

#### Contaminated food and drink

e.g. Diarrhoea or salmonellosis.

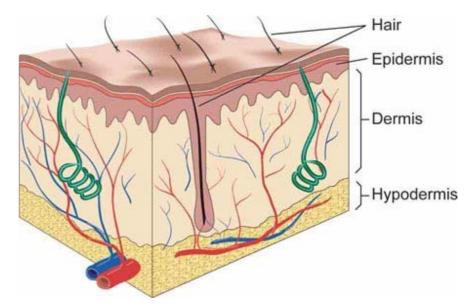
Through a break in your skin

e.g. Hepatitis or HIV/AIDS

# How can we stop pathogens getting in?

- 1. The skin acts as a barrier.
- 2. If we damage or cut the skin, in any way we will bleed. The platelets in the blood help to form a clot which dries into a scab.

The scab forms a seal over the cut stopping pathogens getting in.



# How can we stop pathogens getting in?

3. The breathing organs produce a sticky liquid called mucus that covers the lining of the lungs and tubes.

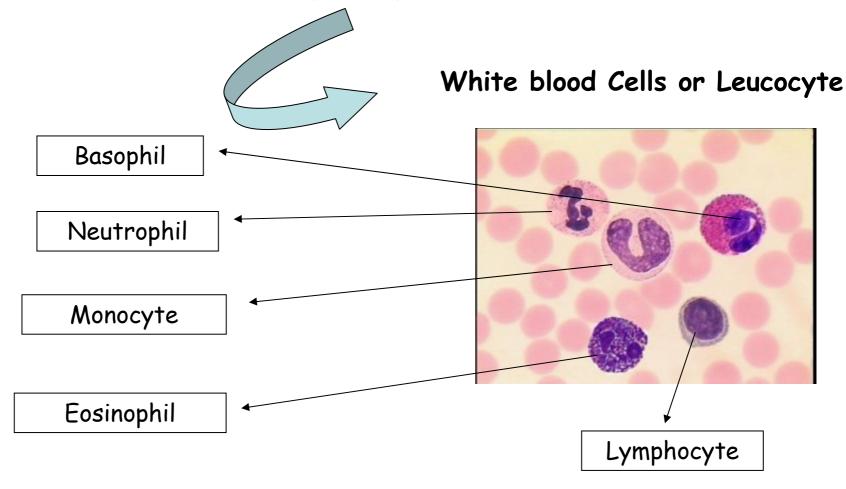
The **mucus** is moved out of the body or swallowed down into our gut.

The acid in our stomach will destroy most of the microorganisms. Mucus traps the pathogens.



# How white blood cells protect us from disease?

The second line of defence



### Pathogens and defence mechanisms...

### **Summary Questions:**

Page 63 – Questions 1 and 2

Page 65 – Questions 1, 3 and 4.

### **Supporting material:**

- Text book
- Unit 11.4 booklet

