

FACTORS AFFECTING THE IMMUNE SYSTEM

Vaccines:

- Are **altered versions** of a disease pathogen
- They are given to people either by mouth or needle
- Once a vaccine is in the body, the immune system starts making **ANTIBODIES** against the antigens
- Some vaccines are given multiple times to extend the immune system's memory for that antigen: **“BOOSTER”** shots

Allergies:

- Are an **UNUSUALLY HIGH SENSITIVITY** to a substance
- The substance that causes the reaction is called the **ALLERGEN**
- Common allergies include: **foods, pollen, dust, and animals**
- **HISTAMINES** are chemicals released by the body to fight the allergens. They cause **runny nose and watery eyes** (antihistamines in allergy medicines reduce the effects of histamines)
- **ANAPHYLACTIC SHOCK** is a **SEVERE** allergic reaction that can cause **swelling, breathing difficulty and sometimes death.**

AIDS:

ACQUIRED IMMUNODEFICIENCY SYNDROME

- Caused by HIV: **human immunodeficiency virus**
- HIV attacks: **the immune system**, therefore, killer T cells and B cells are not **activated when a foreign substance is present**.
- HIV is contracted mainly by bodily fluids: **SEMEN & BLOOD**
- There is **NO KNOWN CURE** for HIV and developing a vaccine is difficult since HIV **keeps changing its structure**, making it difficult to recognize its antigens.

Copy out TABLE 3.2 on pg 114:

TAKING CARE OF YOUR IMMUNE SYSTEM