

The Host



Recall...

- ◆ When someone gets sick, they become the host for an agent/microbe.
- ◆ There can be more than one host, and they don't all express symptoms (ex Lyme disease)



Think and share...

Infectious Disease	Symptoms
Strep Throat	Sore throat, fever tired, vomiting
Pink Eye	swelling, red/inflamed itchy, pus/crust
Shingles	tingling, hot itchy skin painful movement
Mono	sore, vomiting, fever fatigue

The Host and their Symptoms

- 1. There may be some variation in symptoms for the same disease.
- Example: Chicken Pox



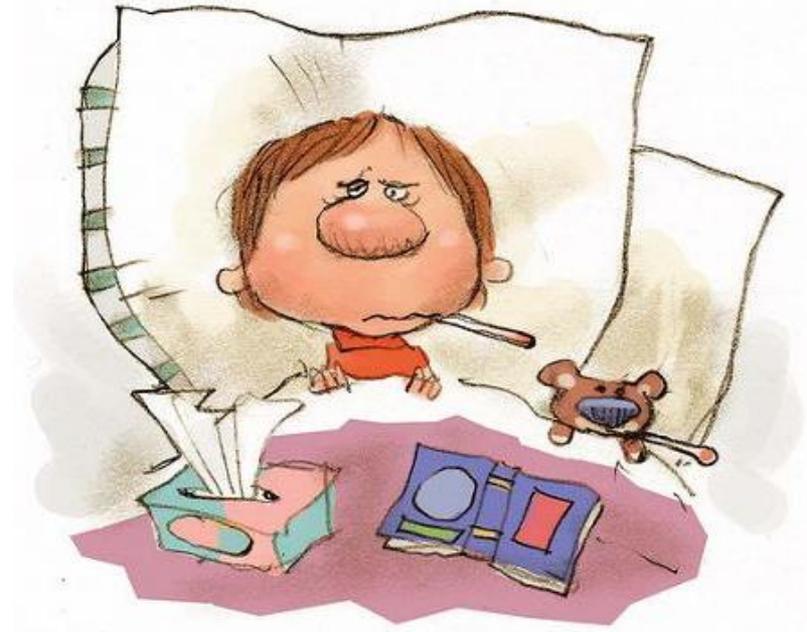
The Host and their Symptoms

- 2. Some categories of people are more seriously affected by a disease.
 - Example: Elderly, infants, compromised immune systems



The Host and their Symptoms

- 3. You cannot always determine the disease from the symptoms.
- Example: cold vs flu – same symptoms. Throat swab required.



Question...

- Why are babies in diapers not allowed in swimming pools?
- Have you ever been at a pool when a child had an accident and the pool had to be shut down?



Giardiasis

- ◆ Caused by a parasite: giardia lamblia that lives in the intestines of a human.
- ◆ The “swimming pool” disease – transmitted via water from a pool that has been contaminated by feces from an infected swimmer.



Giardiasis

- ◆ Spreads when one person **swallows** water that has been contaminated by the feces from a person who is already infected with the disease.
- ◆ Does not spread like cold or flu (by sneezes and coughs), or by infected blood or body fluids like AIDS or hepatitis

Why giardiasis is so hard to eradicate

- 1. For most of its life cycle the protozoan is encased in a microscopic cyst. The cyst can live for a long time outside the intestines of a human. It can live in warm water, like a pool or lake, and it can live in soil.



Why giardiasis is so hard to eradicate

- 2. it only takes one microscopic Giardia parasite to cause symptoms in its host, the human or animal that gets the disease. For many infectious diseases, like food poisoning or the stomach flu, millions of bacteria are necessary before the host has symptoms.



Dick Despommier

Why giardiasis is so hard to eradicate

- 3. The symptoms of giardiasis do not appear in those infected for between 7 and 14 days. It is also difficult to culture in the lab. That means many people may be infected with *Giardia* before the source is known.