Bacterial Diseases and Treatments
Identification of Infectious Diseases

1. Physical symptoms and x-rays
2. Gram stained and examined under a microscope
3. Cultured (grown) and treated with antibiotics in a petri dish
Spread of Disease

- Coughing and sneezing
- Contact with infected people (kissing, sex, etc.)
- Contact with contaminated surfaces, food, and water
- Contact with infected creatures, including pets, livestock, and insects such as fleas and ticks
Treatment of Bacterial infections

- Discovery of antibiotics one of the biggest medical breakthroughs of all time
- Broad spectrum vs. specific antibiotics
Prevention

- Wash hands (soap, sanitizer, etc.)
- Wash surfaces that come into contact with bacteria
- Wash wounds and cover
  - Antiseptic: A substance that prevents or stops the growth of bacteria
MOST DANGEROUS BACTERIA ON EARTH
Clostridium botulinum (Botulism)

- **Cause**: Drug injection, improperly canned food
- **Symptoms**: Trouble swallowing, vomiting, paralysis
- **Treatment**: Hospitalization, antibiotics or antitoxin, therapy
Salmonella

- **Causes:** Food contamination, small pets
- **Symptoms:** Diarrhea, fever, dehydration
- **Treatment:** Home care, occasional antibiotics
Vibrio cholera (Cholera)

- **Causes:** Contaminated water
- **Symptoms:** Severe diarrhea, dehydration, death
- **Treatment:** Hydration, antibiotics, vaccine
Tetanus

- Causes: Bacteria in soil, dust, feces
- Symptoms: Muscle spasms, trouble breathing
- Treatment: Antitoxin, antibiotics, wound treatment
Staphylococcus

- **Cause:** Open wound, entry through nose, mouth, etc.
- **Symptoms:** Boils, pus, fever
- **Treatment:** Antibiotic ointments or pills
Tuberculosis

- **Cause:** Person to person contact
- **Symptoms:** Fever, chest pain, bloody cough
- **Treatment:** Antibiotics for 6-9 months