

# ***Antibiotics & Resistance: Gee, I'm Feeling Sick, So Why Can't I Have An Antibiotic?!***

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## **Objective:**

Students will fully understand and appreciate why and when physicians prescribe antibiotics (i.e. only when deemed medically necessary and appropriate).

**Utilizing:** Microbe Lecture #2, *The Microbes Strike Back* (section on antibiotics & resistance)

Animation **B** - Conjugation

Video Clip **B** – Penicillin Killing E. Coli

**Pre-Teach:** bacterial structure and function, modes of infection, and treatment

**Ability Level:** all

## **Methods/Materials:**

- 1) Students view Lecture #2
- 2) Review key concepts of Lecture #2 (on DVD)
  - Bacteria & Viruses
  - Antibiotics & Resistance
  - Vaccines
- 3) Each pair of students will prepare a short in-class presentation on one type of bacterial infection, and include the following:
  - a) Name and type of bacterium
  - b) mode of transmission/risk factors
  - c) signs/symptoms/population most at risk
  - d) antibiotic treatment/how drug specifically targets that microorganism
  - e) why antibiotics must be taken for full course of treatment
- 4) Assessment: Students to be evaluated for inclusion and correctness of all mentioned criteria, with sources cited.

## **Standards Addressed:**

State (PA): 3.1.10 (B)  
3.2.10 (A)  
3.2.10 (B)  
3.3.10 (A)  
3.3.10 (D)  
3.8.10 (A)  
3.8.10 (C)

National: Content Standard C  
Teaching Standards A & B

