



## Infection Prevention Control (IPC) Topic: Antibiotic Use/Stewardship for Frontline Staff.

**Intro:** Antibiotics are used to treat bacterial infections; antibiotics won't work for viruses such as a cold or flu. When antibiotics aren't needed, they won't help you, and the side effects could lead to other serious conditions. Using antibiotics when they aren't needed, can lead to antimicrobial resistance, meaning the antibiotics are less likely to work on future infections.

### **What is the risk?**

Bacteria are germs, that live in the environment and our bodies. Most bacteria are harmless, but some cause infections.<sup>2,1</sup> People whose immune systems are stressed, such as by disease or surgery, are at greatest risk of becoming ill when exposed to germs. When you practice infection control, you help stop the spread of all germs, including resistant germs, throughout your facility.

### **Highlights:**

- What is an antibiotic?
  - "Antibiotics are medicines that fight infections caused by bacteria in humans and animals by either killing the bacteria or making it difficult for the bacteria to grow and multiply<sup>1</sup>."
- What are antibiotics used for?<sup>1,2</sup>

Antibiotics ONLY treat infections caused by bacteria, such as:

  - Strep throat
  - Whooping cough
  - Urinary tract infection (UTI)
  - Bacterial infection causing sepsis.

Antibiotics DO NOT work on viruses, such as those that cause:

- Colds and runny noses, even if the mucus is thick, yellow, or green
- Flu
- Most cases of chest colds (bronchitis)
- Most sinus infections and some ear infections

**When antibiotics are prescribed inappropriately, they can become less effective at treating bacterial infections.**

- Educate patients and caregivers on antibiotics:
  - Tell patients how long they are going to take an antibiotic course and to finish the entire dose of medications as prescribed.
  - Educate on getting plenty of rest and fluids and any over-the-counter medication that can be used to help symptoms.
  - Instructions for follow-up medical care.
    - Remind patients to take medication course exactly as prescribed.
  - Signs and symptoms of worsening infection and sepsis.
    - Extreme fatigue, ongoing fever, confusion, high heart rate.<sup>4</sup>
    - Seek immediate medical care if having any of the above symptoms.
  - Signs and symptoms of antimicrobial resistance include adverse side effects such as *Clostridioides difficile* or C-diff infection<sup>3</sup>.

**Summary:** We can all be antibiotic stewards. We can work to improve patient antibiotic use so that antibiotics are only used when needed. Recognizing overuse of antibiotics and taking the time for education are important steps towards stopping the spread of antimicrobial resistance.

For more information on recognizing risk in antibiotic therapy and related Project Firstline materials, see References below:

1. [Germs Live in and on the Body | Project Firstline | Infection Control | CDC](#)
2. [Antibiotic Do's & Don'ts | Antibiotic Use | CDC](#)
3. [BAA-Hospital-Discharge-Flowchart-P.pdf \(cdc.gov\)](#)
4. [What is Sepsis? | Sepsis | CDC](#)
5. [Improving Antibiotic Use \(cdc.gov\)](#)
6. [Healthcare-Training-RecognizingRiskTK-S1-Slides-508.pptx \(live.com\)](#)
7. [19 301793-A Avery Graphics and Infographics-2019 AR ThreatsReport \(cdc.gov\)](#)
8. [Sore Throat | Antibiotic Use | CDC](#)