

**Antibiotic Resistance:
What is it?**

Infections resistant to antibiotics are real dangers to the community.

Infectious “bugs” or bacteria can develop ways to “outsmart” antibiotics that are taken the wrong way:

- When you don't take the full course of antibiotics, it allows a small group of bacteria to survive.
- This small group of bacteria figures out a way to *live* with antibiotics that are supposed to be killing them. This creates what we know as antibiotic resistance!
- These bacteria can spread when people don't wash their hands. They go on to cause infections that are resistant to antibiotics.

**The Result of
Antibiotic Resistance:**

Think of **D.I.A.L.** to remember what happens when bacteria are resistant to antibiotics:

- **D**ifferent antibiotics will need to be given to overcome infection.
- **I**nfection and its symptoms will stay around longer.
- **A**ntibiotic you incorrectly use will no longer fight your infection.
- **L**ess choice of antibiotics for future infections.

For more information:

www.cdc.gov/drugresistance

OR

Ask your local pharmacist.

**A program provided by
The Student Section of the
Texas Society of Health-System
Pharmacists**



*An educational program
about antibiotics and
you.*

Bacteria versus Virus: What is the difference?

Bacteria are single-celled organisms that live on the outside and inside of our bodies. Many will not harm you; however some of the bacteria which cause diseases can cause infections in humans.

- Infections caused by bacteria *can* be treated with antibiotics.

Viruses, on the other hand, cannot survive outside our bodies. They need our own healthy cells to reproduce and cause illness.

Some of the most common infections caused by *viruses*, not bacteria, are:

- Colds
- Flu
- Most coughs and bronchitis
- Sore throats (except for those resulting from strep throat)
- Some ear infections

The above list should NOT be treated with antibiotics. Remember: antibiotics are only used to treat infections caused by *bacteria!*

- Using antibiotics for a viral infection will only increase antibiotic resistance.
- If your healthcare provider says that you do not have a bacterial infection, ask about ways to treat the symptoms you are having.
- Do not pressure your doctor to give you an antibiotic.

Use your antibiotics the RIGHT way:

Important Tips:

- Take the antibiotic exactly as you and your medical expert have talked about.
- Do not skip doses.
- Do not share it with others. Their infection may be different than yours.
- Finish the antibiotic even if you feel better. The full amount of antibiotics is needed for the infection to be completely gone.
- Do not save it for later. Your infection may be different the next time and taking the wrong antibiotic could slow down getting the right treatment.

These tips help prevent:

- Your infection from coming back even worse!
- Infections that are resistant to common antibiotics.

Taking antibiotics incorrectly not only can harm you, but also can harm others in your community.

Four of the most common antibiotics:

Azithromycin (Z-Pak®, Zithromax®)

- Take at least 2 hours before or 4 hours after antacids
- May make you sensitive to the sun. Be sure to wear sunscreen.

Ciprofloxacin (Cipro®)

- Take 2 hours before or 6 hours after taking antacids, vitamins, minerals
- May make you sensitive to the sun. Be sure to wear sunscreen.
- Avoid drinking coffee or tea during treatment

Penicillin VK (Veetids®)

- Do NOT take with acidic foods or carbonated drinks
- 10% of patients have a Penicillin allergy (skin rash, hives, itching, swelling of face)

Tetracycline

- Take either 1 hour before meals or 2 hours after meals
- Avoid taking with dairy products
- Take vitamins, iron, zinc, calcium, or antacids at least 2 hours before or 4 hours after tetracycline
- NEVER take expired tetracycline
- May make you sensitive to the sun. Be sure to wear sunscreen.