**Be Antibiotics Aware: Smart Use, Best Care**

*Be Antibiotics Aware* is the Centers for Disease Control and Prevention’s (CDC) national educational effort to help improve antibiotic prescribing and use and combat antibiotic resistance.

Antibiotic resistance is one of the most urgent threats to the public’s health. Antibiotic resistance occurs when bacteria develop the ability to defeat the drugs designed to kill them. Each year in the United States, at least 2 million people get infected with antibiotic-resistant bacteria, and at least 23,000 people die as a result.

Antibiotics save lives, but any time antibiotics are used, they can cause side effects and lead to antibiotic resistance. About 30 percent of antibiotics, or 47 million prescriptions, are prescribed unnecessarily in doctors’ offices and emergency departments in the United States, which makes improving antibiotic prescribing and use a national priority.

Helping healthcare professionals improve the way they prescribe antibiotics, and improving the way we take antibiotics, helps keep us healthy now, helps fight antibiotic resistance, and ensures that these life-saving drugs will be available for future generations.
When Antibiotics Are Needed

Viruses or Bacteria
What’s got you sick?

Antibiotics are only needed for treating certain infections caused by bacteria. Viral illnesses cannot be treated with antibiotics. When an antibiotic is not prescribed, ask your healthcare professional for tips on how to relieve symptoms and feel better.

<table>
<thead>
<tr>
<th>Common Condition</th>
<th>Common Cause</th>
<th>Are Antibiotics Needed?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Bacteria</td>
<td>Bacteria or Virus</td>
</tr>
<tr>
<td>Strep throat</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Whooping cough</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Urinary tract infection</td>
<td>✓</td>
<td>Yes</td>
</tr>
<tr>
<td>Sinus infection</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Middle ear infection</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Bronchitis/chest cold (in otherwise healthy children and adults)*</td>
<td>✓</td>
<td>No*</td>
</tr>
<tr>
<td>Common cold/runny nose</td>
<td>✓</td>
<td></td>
</tr>
<tr>
<td>Sore throat (except strep)</td>
<td>✓</td>
<td>No</td>
</tr>
<tr>
<td>Flu</td>
<td>✓</td>
<td></td>
</tr>
</tbody>
</table>

* Studies show that in otherwise healthy children and adults, antibiotics for bronchitis won’t help you feel better.

To learn more about antibiotic prescribing and use, visit [www.cdc.gov/antibiotic-use](http://www.cdc.gov/antibiotic-use).

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Antibiotics are only needed for treating certain infections caused by bacteria. We rely on antibiotics to treat serious infections, such as pneumonia, and life-threatening conditions including sepsis, the body's extreme response to an infection. Effective antibiotics are also needed for people who are at high risk for developing infections. Some of those at high risk for infections include patients undergoing surgery, patients with end-stage kidney disease, or patients receiving cancer therapy (chemotherapy).

When Antibiotics Aren’t Needed

Antibiotics do not work on viruses, such as those that cause colds, flu, bronchitis, or runny noses, even if the mucus is thick, yellow, or green.

Antibiotics are only needed for treating infections caused by bacteria, but even some bacterial infections get better without antibiotics. Antibiotics aren’t needed for many sinus infections and some ear infections. Antibiotics save lives, and when a patient needs antibiotics, the benefits usually outweigh the risk of side effects and antibiotic resistance. When antibiotics aren’t needed, they won’t help you, and the side effects could still cause harm. Common side effects of antibiotics can include:

- rash,
- dizziness,
- nausea,
- diarrhea, and
- yeast infections.

More serious side effects include Clostridioides difficile infection (also called C. difficile or C. diff), which causes severe diarrhea that can lead to severe colon damage and death. People can also have severe and life-threatening allergic reactions.

What You Can Do To Feel Better

Talk with your healthcare professional about the best treatment for your or your loved one’s illness. If you need antibiotics, take them exactly as prescribed. Talk with your healthcare professional if you have any questions about your antibiotics, or if you develop any side effects especially severe diarrhea, since that could be a C. difficile infection, which needs to be treated immediately.

Respiratory viruses usually go away in a week or two without treatment. Ask your healthcare professional about the best way to feel better and get relief from symptoms while your body fights off the virus. To stay healthy and keep others healthy:
• Clean your hands.
• Cover coughs.
• Stay home when sick.
• Get recommended vaccines, such as the flu vaccine.

Content Source: CDC (Centers for Disease Control and Prevention)