

# Antibiotics

**Antibiotics are medicines used to treat infections caused by bacteria. Many bacteria are now resistant to commonly used antibiotics. Infections caused by these antibiotic-resistant bacteria are difficult to treat. Wise use of antibiotics can help slow antibiotic resistance.**

Infections in the human body are caused by micro-organisms such as bacteria, viruses, fungi and parasites. Antibiotics interfere with the growth and function of bacteria, but do not affect viruses or other micro-organisms.

## Antibiotic resistance

Bacteria can develop resistance to antibiotics. Some bacteria have now become resistant to most of the antibiotics in common use. Examples of resistant bacteria are methicillin-resistant *Staphylococcus aureus* (MRSA), multi-drug resistant *Streptococcus pneumoniae*, vancomycin-resistant enterococci (VRE) and multi-drug-resistant *Mycobacterium tuberculosis* (MDR-TB). Infections of these resistant bacteria are very difficult to treat.



## Why is correct use of antibiotics important?

Using antibiotics often and when there is no need increases the growth of bacteria that are resistant to antibiotics. Bacterial resistance to antibiotics is increasing. In the future, many of our common antibiotics may not work.

Antibiotics affect bacteria and can be used to treat bacterial infections. They do not work against viral infections such as the common cold, most sore throats, most sinus infections, most coughs, acute bronchitis and the 'flu'.

Viruses and bacteria are completely different types of micro-organisms. When an antibiotic is taken for a viral infection it:

- has no effect against the virus. It will not help a viral infection get better faster or stop it spreading to others
- may allow the growth of resistant bacteria. Then the antibiotic will not work when it is really needed. Bacterial infections that are resistant to antibiotics are a lot more difficult to treat and may not be curable
- may cause side effects such as stomach upset, diarrhoea and thrush
- may cause an allergic reaction.

## Self care

There are a number of simple things that you can do to help reduce antibiotic resistance.

### Use antibiotics wisely:

- Do not ask your doctor to prescribe antibiotics. Remember that most coughs, colds, sore throats and runny noses are caused by viruses which cannot be killed by antibiotics. Many minor bacterial infections will clear up on their own and do not need antibiotics.

- Carefully follow the instructions for antibiotics. Take them for as long as you have been told to, even if you feel better.
- Never share antibiotics with family or friends.
- Do not use antibiotics left over from a previous infection, or old prescriptions for antibiotics, without a doctor's instruction.

### Protect against the spread of infection:

- Wash your hands well with soap and water before eating or touching food, treating a cut or wound, or touching contact lenses.
- Wash your hands well with soap and water after going to the toilet, changing a nappy, blowing your nose, coughing, sneezing, touching food (especially uncooked meats), touching garbage, gardening or looking after someone who is sick.
- If there is nowhere to wash your hands, use an alcohol-based hand sanitiser.
- Cover your nose and mouth when coughing and sneezing. Use the bend of your elbow not your hand.
- Use tissues to wipe or blow your nose and throw the tissues away in the rubbish or toilet.
- Do not spit.
- Do not share drink containers or eating utensils.

- Stay at home when you feel unwell and keep your children at home when they feel unwell.
- Keep your immunisations and your children's immunisations up-to-date. Immunisation *prevents* infection. The elderly and people with chronic illnesses should be immunised against influenza and pneumonia.

### **Use antibacterial and disinfectant cleaning products wisely:**

Do not use cleaning products that contain antibacterials, antimicrobials or disinfectants (e.g. sponges, soaps, hand wash lotions, surface sprays, household cleaners, garbage bags) unless told to by a doctor, pharmacist or nurse. If used often, many of these products can add to the growth of resistant bacteria. Usually, washing with soap, rinsing with running water and complete drying is effective cleaning.

## **Important**

Antibiotic resistance can affect us all. Help limit antibiotic resistance by working with your doctor and pharmacist to use antibiotics correctly.



## For more information

### Healthdirect Australia

Phone: 1800 022 222

Website: [www.healthdirect.org.au](http://www.healthdirect.org.au)

### Consumer Medicine Information (CMI)

Your pharmacist can advise on CMI leaflets.

### NPS Medicine Wise

#### Medicines Information Line

Phone: 1300 MEDICINE (1300 633 424)

Website: [www.nps.org.au](http://www.nps.org.au)

### The Poisons Information Centre

In case of poisoning phone 13 11 26  
from anywhere in Australia.

***Pharmacists are medicines experts.***

***Ask a pharmacist for advice when  
choosing a medicine.***

## Related fact cards

» *Childhood Immunisation*

» *Colds and Flu*

» *Coughs*

» *Ear problems*

» *Sinus Problems*

» *Travel Health*

» *Vomiting and diarrhoea*

Your Self Care Pharmacy: