What are antibiotics used for?

Antibiotics are valuable and useful medicines that treat **bacterial** infections. Used in the right way, antibiotics save lives.

Antibiotics do not treat infections caused by viruses, such as:

- Colds and flu
- Coronavirus (COVID-19)
- Most coughs and bronchitis
- Most sore throats.

Taking antibiotics for these infections won't help – but it may increase the risk of antimicrobial resistance and your chances of experiencing side effects like nausea and diarrhoea.

Antibiotics not only kill the bad bacteria that can make you sick, but they can also kill the good bacteria that keep you healthy. Without these good bacteria, other types of bacteria have more room to grow, possibly leading to other infections.

Overusing antibiotics leads to antibiotic resistance or antibiotic-resistant infections.

If you have a cold or flu, antibiotics won't help you.

What are we doing?

The Australian Commission on Safety and Quality in Health Care helps to manage antimicrobial resistance by monitoring the spread of antibiotic-resistant infections, checking how much antibiotics we are using, and how appropriate that use is.

The AURA (**A**ntimicrobial **U**se and **R**esistance in **A**ustralia) Surveillance System helps us to better understand the level of antimicrobial resistance in Australia and to develop strategies to prevent and contain it.

For more information about the AURA Surveillance System please visit **safetyandquality.gov.au/AURA**

> **Many infections get better without antibiotics**
>
> **Talk to your doctor about whether you need antibiotics**

AUSTRALIAN COMMISSION ON **SAFETY** AND **QUALITY** IN **HEALTH CARE**

Do I really need antibiotics?

Antibiotics are useful medicines for treating some **bacterial** infections.

They are part of a larger group of medicines called antimicrobials, which are used to treat a range of infections.

If you take antibiotics when they are not needed, you give bacteria the chance to develop resistance to the antibiotic you are using.

Find out about antibiotic resistance and what you can do to stop antibiotic-resistant infections.
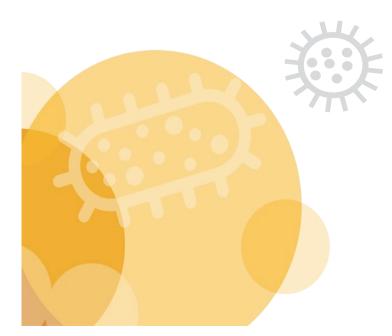
AURA Antimicrobial Use and Resistance in Australia

What are antibiotic-resistant infections?

Antibiotics are important medicines that we rely on to treat infections caused by bacteria (e.g. pneumonia). This does not include viruses (e.g. flu), fungi (e.g. thrush), or parasites (e.g. threadworm or scabies).

When bacteria or the germs that cause an infection can't be treated with common antibiotics, they are called 'antibiotic-resistant'.

The more we use antibiotics, the more bacteria can change, and prevent the medicine from working.

Eventually, antibiotics may no longer help to cure the infections caused by these bacteria.

Why is antibiotic resistance a problem?

Antibiotic resistance is a problem throughout the world and is a major threat to our health. If we take antibiotics when we don't need them, or if we take them for too long, infections are more likely to become resistant to that antibiotic.

Antibiotic resistance increases the risk posed by some treatments and procedures that have a high risk of causing infections – like surgery. If there is too much antibiotic resistance, this will impact on the effectiveness of these treatments.

Because of antibiotic resistance, sometimes even simple infections now need to be treated in hospital with intravenous antibiotics, when they otherwise could have been treated with oral antibiotics at home.

In Australia, we use a large amount of antibiotics in the community, in hospitals and in aged care homes. We use antibiotics more than many other developed countries, and sometimes these medicines are prescribed when they're not really needed, which increases the risk of more bacteria developing resistance.

safetyandquality.gov.au/AURA

What can I do to help?

1 **You can prevent spreading germs by:**

- Washing your hands after sneezing or touching your eyes, nose or mouth
- Coughing into your elbow
- Staying away from work or school if you are unwell
- Having the vaccinations your doctor recommends for you
- Ensuring your home environment is clean.

2 **If you do get sick:**

- Ask what you can do to feel better and ease your symptoms while your body recovers – especially for viral infections such as the flu, where antibiotics will not help to make you better
- Let your doctor know that you are worried about antibiotic resistance and only want an antibiotic if you really need it
- Ask your doctor if a test can be used to identify what caused your infection.

3 **If your doctor prescribes an antibiotic:**

- Make sure you know exactly how long to take the antibiotic
- Never take leftover antibiotics or give them to someone else
- Don't keep any repeats of the prescription 'just in case' of future sickness – always see your doctor each time
- Ask about the risks of taking the antibiotic and whether it can affect your other medicines.