

# ANTIBIOTICS EXPLAINED

## Information for Patients

Antibiotics are medicines used to treat a wide variety of infections or diseases caused by bacteria, such as respiratory tract infections (eg, pneumonia and whooping cough), urinary tract infections, skin infections and infected wounds. Antibiotics have saved millions of lives since they were first introduced in the 1940s and 1950s. However, because they have been overused, many antibiotics are no longer effective against the bacteria they once killed.

This booklet is designed to provide information about antibiotics – how they work, side effects of antibiotics, antibiotic resistance and how you can help to prevent antibiotic resistance.

### What are the side effects of antibiotics?

Like all medicines, antibiotics have the potential to cause side effects. When antibiotics are necessary, the benefits far outweigh the risks, but when they are not needed, you are taking an unnecessary risk.

Up to 10% of people taking an antibiotic may experience these common side effects:

- stomach problems like diarrhoea, nausea and vomiting
- thrush infections, which can affect the mouth and in women can also occur in the vagina

Other less common side effects include:

- ongoing diarrhoea caused by an intestinal infection
- allergic reactions, such as hives (large, red, raised areas on the skin), fever and breathing problems.

*Ask your doctor or pharmacist about the possible side effects of your medicine. You should also ask if there are any medicines you should not take with your antibiotic.*

### Do I need antibiotics for a common cold or the flu?

Good-quality, reliable clinical studies have shown that antibiotics do not improve the symptoms of a cold or the flu. This is because antibiotics work only on infections caused by bacteria – common colds and the flu are infections caused by viruses.

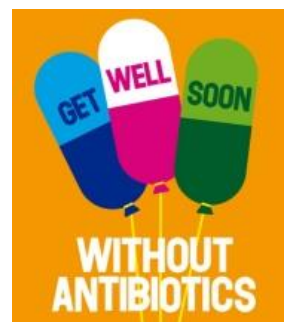
#### Antibiotics will not:

- ⊗ Help a cold or the flu get better faster
- ⊗ Stop a cold or the flu from getting worse or
- ⊗ Stop a cold or the flu from spreading to other people.

If you are usually healthy and well, your immune system will take care of most respiratory tract infections – both viral and some bacterial infections – by itself.

#### However, antibiotics are more likely to be needed for people who:

- Have serious infections caused by bacteria (eg, whooping cough)
- Have an ongoing health condition (eg, asthma, diabetes or lung disease)
- Are older or in generally poor health, or have a weakened immune system (eg, due to HIV infection)
- Have a higher risk of complications with a respiratory tract infection (complications often include bacterial infections)



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### What is antibiotic resistance?

Antibiotic resistance happens when bacteria change to protect themselves from an antibiotic. Bacteria become resistant when their genes mutate after being in contact with an antibiotic. These changes allow the bacteria to survive or 'resist' the antibiotic, so that the antibiotic no longer works to kill the bacteria or stop them from multiplying.

The more antibiotics are used, the more chances bacteria have to become resistant to them. As more antibiotics stop working against bacterial infections, doctors will have fewer antibiotics to use. Many common infections may eventually become untreatable with medicines.

### What does antibiotic resistance mean for me?

Using antibiotics when you don't need them may mean that they won't work for you when you do need them in the future.

#### If you have an antibiotic-resistant bacterial infection:

- # You will have the infection for longer
- # You may be more likely to have complications of the infection
- # You could remain infectious for longer, and pass your infection to other people, which increases the problem.

#### You could be passing it on:

- # If you take antibiotics for cold and flu viruses
- # If you don't take antibiotics as prescribed
- # If you neglect good hygiene.



### Can I help prevent antibiotic resistance?

Australia has one of the highest rates of antibiotic consumption in the developed world, but the good news is that there are steps you can take to prevent the spread of antibiotic resistance:

- ✓ Understand that colds and flu are caused by viruses, and that antibiotics treat bacterial infections, not viruses
- ✓ Tell your doctor you only want an antibiotic if it is really necessary
- ✓ Take the right dose of your antibiotic at the right time, as prescribed by your doctor
- ✓ Take your antibiotic for as long as your doctor tells you to
- ✓ Take the pledge to fight antibiotic resistance and encourage your friends and family to as well.

### There are five things you can pledge to do to reduce antibiotic resistance:

1. I will not ask for antibiotics for colds and the flu as they have no effect on viruses.
2. I understand that antibiotics will not help me to recover faster from a viral infection.
3. I will only take antibiotics in the way they have been prescribed.
4. I understand that it is possible to pass on antibiotic-resistant bacteria to others.
5. I will make a greater effort to prevent the spread of germs by practicing good hygiene.