



# **ANTIBIOTIC AMNESTY**

# **Frequently Asked Questions for Pharmacy Staff**

# 1 What is an 'antibiotic amnesty'?

An 'antibiotic amnesty' is a campaign to encourage people to return their unused antibiotics to pharmacies for safe disposal and to help raise awareness about the risks associated with antibiotic resistance. This document explains why returning antibiotics to a pharmacy for safe disposal is important, and why saving or sharing antibiotics or using old antibiotics is discouraged. It aims to help you talk with your patients and the public about appropriate antibiotic use and antibiotic resistance.

# 2 What is antibiotic resistance?

Antibiotic resistance occurs when bacteria change over time and no longer respond to antibiotic medicines making infections harder to treat and increasing the risk of disease spread, severe illness and death. The more antibiotics are used, the more likely bacteria will adapt and find new ways to survive which means they become 'resistant' to antibiotics. This is why we want to make sure antibiotics are used appropriately and only when needed.

# 3 Why should people care about antibiotic resistance?

Antibiotic resistance is a major concern because it means some infections will become harder, and sometimes impossible, to treat. Antibiotic resistance is one of the biggest threats to modern medicine and global health. It currently kills around 1.3 million people annually but is predicted to kill 10 million people globally each year by 2050 (more than die from cancer). Medical procedures such as surgery and cancer treatments will become more difficult, or impossible, as they rely on antibiotics to manage the risk of infection. Antibiotic resistance is increasing in Aotearoa New Zealand and around the world. It can affect anyone at any age. It can also affect pets.

Antibiotics are unique in that they are 'societal' medicines – how one person uses them can affect how well they work for others. When antibiotics are used bacteria can develop resistance to that antibiotic and to others at the same time. The resistant bacteria can then spread to other people and cause infections that usual antibiotics cannot treat. It is the bacteria that become resistant, not the person.

# 4 What can people do to help prevent antibiotic resistance?

- Prevent infections and the need for antibiotics regularly wash hands and keep up to date with vaccinations. Use the 3Cs when cooking to prevent food poisoning *Clean, Cook, Chill*.
- If antibiotics are not needed for an infection, provide advice on other ways to relieve symptoms.
- If antibiotics are prescribed, give advice on how to take them. Discourage using or sharing of leftovers.
- Encourage return of unused antibiotics to a pharmacy for safe disposal.

For more information on antibiotic resistance, see the Manatū Hauora – Ministry of Health website: <u>www.health.govt.nz/antibioticresistance</u>

# 5 What are the risks of keeping antibiotics for later use?

Antibiotics should only be used when advised by a health professional for a specific patient and illness because:

- antibiotics only treat bacterial infections they don't work for viral infections. It can be hard to tell the difference between viral and bacterial illness. Severity is not a good indicator (COVID-19 taught us this).
- different bacterial infections may need different antibiotic regimens, even if symptoms are similar. To treat a bacterial infection effectively it is important to have the *right* antibiotic, at the *right* dose, for the *right* duration.

As with food, antibiotics can deteriorate or 'go off'. Taking leftover expired antibiotics may means they won't work as well or may even make people feel more ill. Liquid antibiotics often require refrigeration and expire quickly. Other antibiotics may not be labelled with a specific expiry date.

# 6 What is the risk of sharing antibiotics with others?

The antibiotics may not work for someone else's illness or may harm them by causing adverse effects. The other person might not need antibiotics at all or might need a different type or dose of antibiotic. The person could also have an allergy, another health condition or be taking other medicines that mean the antibiotic is not suitable for them.

Using antibiotics when they are not needed or taking the wrong antibiotic exposes bacteria to antibiotics unnecessarily, which encourages antibiotic resistance.

#### 7 What is the risk of putting antibiotics down the toilet or sink?

There is a risk that antibiotics poured down the sink or flushed down the toilet may pass through treatment systems and enter rivers, lakes and even drinking water supplies. In homes that use septic tanks, antibiotics flushed down the toilet could leach into the ground and seep into ground water. Antibiotics that get into the environment may drive bacteria to become more resistant. Appropriate disposal of antibiotics by the pharmacy minimises this risk.

# 8 Where does the pharmacy dispose of the antibiotics?

Unused medicines taken to pharmacies are disposed of by specialist waste disposal companies according to the New Zealand Standard for the management of healthcare waste (<u>NZS 4304:2002</u>).

# 9 Does the entire antibiotic course need to be taken?

People often feel better before the course of antibiotics is finished. More studies show that shorter courses of antibiotics are as effective as longer courses. Treatment guidelines are being updated with this new information, so prescribers should be taking this into account when they decide on treatment plans. For some infections it is important to take antibiotics for a while after people feel better to make sure the infection is gone, so it is best to complete the antibiotics as advised the prescriber. If in doubt, patients should talk to their prescriber about the shortest course that would be best for them.



Antibiotic Amnesty also supported by Te Whatu Ora – Health New Zealand, Manatū Hauora – Ministry of Health, PHARMAC, Health Quality and Safety Commission, Australasian Society for Infectious Diseases (NZ), Infection Prevention and Control Nurses College, bpacnz, University of Auckland, the Royal New Zealand College of General Practitioners and ESR.