

Information on community use of antibiotics in Aotearoa New Zealand

New data shows 47 percent of those who visited their GP in 2018 were dispensed at least one antibiotic.

The data is part of the [Atlas of Healthcare Variation](#) on community use of antibiotics released by the Health Quality & Safety Commission. It shows variation in community antibiotic use, although it is not possible to know whether the antibiotic use was appropriate or not from the data.

Overuse of antibiotics is one of the causes of antimicrobial resistance, which is a problem worldwide. In Aotearoa New Zealand there is evidence of both under- and over-use and the data can be used to identify areas for further investigation.

Dr Sally Roberts, clinical lead for the Commission's infection prevention and control programme, says that in Aotearoa New Zealand, up to 95 percent of antibiotics are dispensed in the community.

'This suggests that a focus on promoting appropriate community use of antibiotics is an important way to address antimicrobial resistance.'

Antibiotic use was highest in those aged 0–4 years old, and those aged over 85 years living in aged residential care.

Some antibiotics are prescribed more in winter than in summer, with 54 percent more antibiotics dispensed in winter for children under four years old.

'The data may indicate that antibiotics are being prescribed for individuals with colds and flu, showing there is an opportunity to reduce antibiotics use,' Dr Roberts says.

Of people dispensed penicillin, 81 percent received a broad-spectrum penicillin such as amoxicillin. Broad-spectrum antibiotics act against a wide-range of disease-causing bacteria and are therefore a particular risk factor for antimicrobial resistance.

'Antibiotics are important, but it's best to avoid prescribing broad-spectrum penicillins where possible. There's an opportunity to raise awareness that amoxicillin is in fact broad-spectrum, as many GPs seem to be unaware of this,' Dr Roberts says.

The dispensing of antibiotics specifically indicated for urinary tract infections increased sharply with age and for people living in aged residential care. The rate of dispensing was three times higher in aged residential care than in the community.

Topical antibiotic use (antibiotics that are applied directly to the skin) has reduced over the last three years from 6 percent to 4 percent. The reduction in rates may reflect more appropriate use of these antibiotics.

Dr Roberts encourages primary health organisations and general practices to look at their data. 'This is data for improvement – to help start a conversation about ways to address antimicrobial resistance.'

'Ask questions such as, "Does this pattern of prescribing seem appropriate? Is it consistent with guidelines and are these regularly reviewed?"'

She says the data varies greatly between DHBs due to several reasons including population and climate.

'We recommend each area conducts further local analysis. The Atlas domain highlights variation but not the reason for this variation or what would be an appropriate level of prescribing in each setting.'

Australia has similar statistics on antibiotics, with 43 percent of the population being prescribed antibiotics in 2015. Amoxicillin and amoxicillin with clavulanic acid are also the most dispensed antibiotics there.

More information:

- [Choosing Wisely](#) has patient and consumer resources on antibiotics for coughs, colds and sore throats, antibiotics for sinusitis and antibiotics for your skin.
- PHARMAC has [information](#) on when to use antibiotics and when they are not recommended.
- Health Navigator has online information for all New Zealanders, including [antibiotic use](#).
- [Let's PLAN for better care](#) is a health literacy initiative to help consumers prepare well for their visit to the GP or other primary care health professional. A flyer encourages people to plan ahead for practice visits and to ask questions when there, so they fully understand their diagnosis and treatment. It also suggests questions they can ask pharmacy staff when they pick up their medicine.