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## Population with access to safe drinking-water supplies

#### **HIGHLIGHTS:**

- Around 81% of New Zealanders received drinking-water that met all the requirements of the Drinking-Water Standards for New Zealand.
- People in the North Island were more likely to be supplied with drinking-water meeting the requirements for protozoa.



#### Monitoring compliance of drinking-water Standards

Safe drinking-water is vital for human health, but water that is contaminated with pathogens (disease-causing organisms) may cause diseases, particularly gastro-intestinal diseases (e.g. diarrhoea, vomiting). Drinking-water supplies can be treated to remove these pathogens and make the water safe to drink.

Drinking-water supplies in New Zealand are tested for microbiological and chemical compliance with the *Drinking-water Standards for New Zealand* (the Standards). These Standards set maximum acceptable levels to protect human health.

Microbiological compliance of drinking-water supplies is based on two main microbiological reference organisms (Ministry of Health 2018):

- monitoring of *E.coli* is used to determine the bacteriological compliance
- monitoring of *Cryptosporidium* is used to determine the protozoal (protozoa=single-celled organisms) compliance

#### Data for this indicator

The datasets for this indicator come from the Ministry of Health Annual on drinking-water quality reports. Drinking-water statistics are presented for all registered community drinking-water supplies that served more than 100 people. This describes the access to safe drinking-water for 3.8 million New Zealanders (Ministry of Health 2018).

#### Four in five New Zealanders received drinking-water that met all the requirements of the Standards

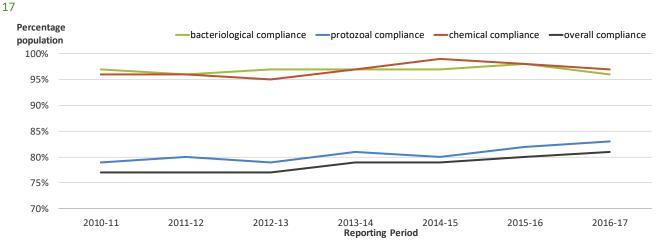
About **81% of New Zealanders** (3 million) on registered supplies received drinking-water that met all the requirements (microbiological, protozoal and chemical) in the reporting period 2016-17. This is an improvement over the previous reporting periods (Figure 1).

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### Population with access to safe drinking-water supplies

Figure 1: Percentage of population on registered community drinking-water supplies with access to safe drinking water, 2010-



Source: Ministry of Health (Annual Reports on Drinking-Water Quality)

Around 96% of the population (3.7 million) on registered supplies was served by bacteriological compliant drinking-water, and 83% (3.2 million) by protozoal compliant drinking-water (Table 1).

#### Table 1: Population on registered community drinking-water supplies that had access to safe drinking-water, 2016-17

Access to safe-drinking water	Estimated population	Percentage population
Bacteriological compliance		
E.coli requirements met	3,669,424	96%
E.coli requirements not met	145,731	4%
Protozoal compliance		
Protozoal requirements met	3,170,366	83%
Protozoal requirements not met	644,789	17%

Source: Ministry of Health 2018

# People in the North Island were more likely to be supplied with protozoal compliant drinking-water than those in the South Island

In the 2016-17 reporting period, 96% (2.8 million) of the North Island population on registered community drinking-water supplies was served by bacteriological compliant drinking-water as well as 96% (0.9 million) of the South Island population (Figure 2).

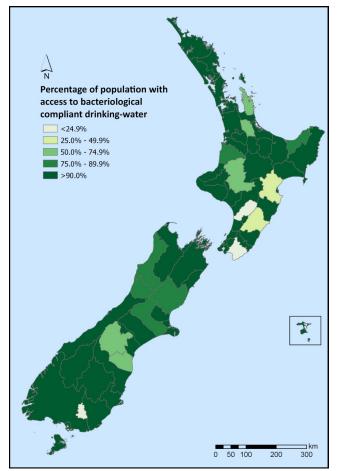
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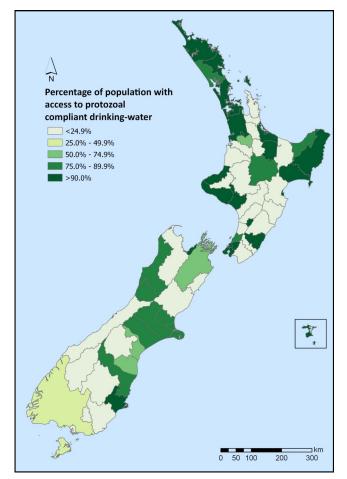
## Population with access to safe drinking-water supplies

In the North Island, 89% (2.5 million) of the population on registered supplies was served by drinking-water known to comply with the protozoal requirements, whereas in the South Island 66% (0.6 million) received protozoal compliant drinking-water (Figure 3).

**Figure 2:** Percentage of population with access to bacteriological compliant drinking-water by territorial authority, 2016-17



**Figure 3:** Percentage of population with access to protozoal compliant drinking-water by territorial authority, 2016-17



Source (Figure 2 and 3): Ministry of Health 2018

#### **RELATED INDICATORS**

Related environmental health indicators for the drinking-water quality domain, available from the **EHINZ website**, include:

- Water-borne diseases related to drinking-water
- Access to fluoridated water
- Oral health of children



#### CITATION:

EHINZ. 2018. *Population with access to safe drinking-water supplies*. Wellington: Environmental Health Indicators Programme, *Massey University*.

#### **REFERENCES:**

Ministry of Health. 2018. Annual report on drinking-water quality 2016-2017. Wellington: Ministry of Health.