



Environmental Health Indicators for New Zealand

EHI #43

December 2012

CONTACT:

Helene Marsters
t.h.marsters@massey.ac.nz

Estimated number of people with access to safe water supplies

Access to safe drinking-water is a fundamental tenet of public health, vital for human health. However, access to safe drinking-water is not equal across New Zealand. The majority of the New Zealand population is supplied water by a reticulated supply (piped water distribution). About half of New Zealand's drinking water is pumped from the ground, and the other half comes from surface sources (Pricewaterhouse Cooper 2004). Treatment plants can be used to remove actual or potential contaminants from the water, such as bacteriological and protozoal contaminants.

Drinking-water supplies are not always safe, especially those that are untreated or insufficiently treated. These supplies often contain *E. coli*, an indicator bacterium that indicates the presence of faeces and hence an increased likelihood of waterborne pathogens. As a result, people can be exposed to contaminated drinking-water, which can lead to disease or death. Since 1996, the number of people in New Zealand on registered supplies that complied with the bacterial and protozoan requirements has steadily increased (Ministry of Health 2008).

In the previous reports, the population attributed to non-registered supplies was derived from the difference between the New Zealand population and the total population served by registered supplies. However, zone populations not being updated by water suppliers shifted people on complying supplies to unregistered supplies. As a result, from 2009 onwards the denominator of population reporting has been changed from the total Census population to the population served by registered supplies (Ministry of Health 2012).

TABLE 1

Percentage of New Zealanders on registered supplies served by compliant community drinking water supplies, 2010-2011

Population by access to drinking-water	New Zealand population (%)
Bacteriological compliance	
Served by a registered reticulated drinking-water supply known to comply with <i>E. coli</i> requirements	97%
Served by a registered reticulated drinking-water supply known not to comply with <i>E. coli</i> requirements	3%
Protozoal compliance	
Served by a registered reticulated drinking-water supply known to comply with protozoal requirements	79%
Served by a registered reticulated drinking-water supply known not to comply with protozoal requirements	21%

Note: The denominator of population reporting has been changed from the total Census population to the population served by registered drinking-water supplies.
Source: Ministry of Health 2012

Bacteriologically compliant water from a registered supply served approximately 97% of New Zealanders in 2010-2011 (Table 1), 3% more than in 2009-2010. A further 3% of the population was served by a supply known not to comply. Approximately 79% of New Zealanders on registered supplies were served by drinking-water supplies that complied with then protozoa standard and this has also increased by about 4% since the previous survey (Ministry of Health 2012).

References

- Ministry of Health. (2008). Drinking-water Standards for New Zealand 2005 (Revised 2008). Wellington: Ministry of Health.
- Ministry of Health. (2012). Annual report on Drinking-Water in New Zealand 2010-2011. Wellington: Ministry of Health.
- Pricewaterhouse Cooper. (2004). Ministry of Economic Development Infrastructure Stocktake: Infrastructure Audit. Prepared for the Ministry of Economic Development.