

Executive Summary

South African water institutions are regarded as producing and providing some of the highest qualities of drinking or potable water in the world. The SANS 241 drinking water standard compares well with the best in the world.

The launch of the Blue Drop Report in 2010 by DWA has highlighted some new concerns regarding the compliance of drinking water in South Africa. It reported that in urban centres we continue to produce high quality drinking water, but this is not the case in rural areas and small towns. The status quo has contributed to some serious negativity and concerns amongst the public. However, despite the negative publicity around water quality issues in South Africa, we are still producing high quality water in urban centres.

Between March 2011 and May 2011, the Water Research Commission commissioned a dipstick survey which investigated, with a national syndicated survey, urban South Africans' current perceptions of their water quality and the variables that influence perceptions. Five questions were included on one of the existing syndicated studies, conducted by the major market research houses. The OMNIBUS survey of Nielsen South Africa was used because the time frame and sample suited the research best.

The OMNIBUS survey covered adults, aged 16 years and over, from all race groups. An area-stratified, probability sample of 2437 urban households was drawn.

The main findings of the study confirm the results found in similar studies done in other countries.

81% of urban South Africans perceive their tap water to be safe to drink. This concurs with international studies, which found that most people in countries with a reliable water supply perceive tap water as having a low safety risk.

More specifically the study also found that:

- Women are less confident about the safety of tap water than men. The difference is statistically significant. This supports the findings of the international studies.
- Women are also more likely than men to boil or filter drinking water and women are more inclined than men to drink only bottled water.
- The younger age categories (16-34) were found to be more positive about the safety of drinking water than the older age categories (35+).
- Consumers in the Metro Municipalities perceive their tap water to be significantly safer to drink than consumers in the other urban municipalities.
- For Metro Municipalities, the study found a large gap between the highest consumer confidence in the safety of tap water (eThekweni Metro) and the least confidence (Mangaung Metro).
- Consumers of non-metro municipalities in the Northern Cape, the Eastern Cape, Free State and Mpumalanga have the lowest confidence in the safety of their tap water.

➤ A wide range of factors influence the individual's perception of the safety of drinking water. The **top six** reasons why people think tap water is **safe to drink** are:

- a. The water looks clean.
- b. Nobody gets sick.
- c. The water tastes good.
- d. The water smells good.
- e. The water is not polluted.
- f. The water is purified.

The **top six** reasons why people think tap water is **unsafe to drink** were: "the water looks dirty"; "the water tastes bad"; "the water is not purified"; "the water smells bad"; "some people got sick from the water" and "there are chemicals in the water".

➤ International studies found that media reporting has very little impact on the individual's risk perception of drinking water safety. In this study as well, a very small percentage of the population base their perception that tap water is safe or unsafe to drink on what they have heard or read in the media.

➤ The Blue Drop status of Metros is very low on the list of drivers of perceptions. Although the study did not test it, the results seem to indicate that the general awareness of Metros' Blue Drop status is very low.

➤ A perception that tap water is clean and safe to drink and regularly tested is a major indicator of good municipal service. On the other hand, factors other than water safety, such as a perception that the municipality does not care about consumers, refuse removal is inadequate and that roads are bad, are the main drivers of perceptions of bad and very bad municipal service.

Although the scope of this study was small, it provides a baseline with which to compare future studies. It also gives the water sector and its stakeholders an understanding of how South Africans perceive the quality of drinking water.

The findings show that multiple factors determine consumers' perceptions about the safety of drinking water. The findings also confirmed international research and add insight into the drivers of risk perception.

The findings also have several implications for policy, management and further research:

➤ Sensory aspects such as appearance, taste and odour have the strongest influence on South Africans' perceptions of the safety of tap water. Therefore, the Blue Drop criteria should take consumers' perceptions into consideration, as recommended by the World Health Organisation (2004).

➤ Municipalities' Water Safety Plans should take the drivers of risk perceptions into consideration when emergency plans are developed.

➤ The findings point out several areas of drinking water quality which are insufficiently communicated to the general public:

- Blue Drop status as an indicator of safe drinking water: Currently this factor is a very weak driver of consumer perceptions. Consumers in the Metros seem unaware of the Blue Drop

status of their municipalities and the implication that the status has for the safety of drinking water.

- Clean and safe water is an important driver of positive perceptions about municipal services. Municipalities with high quality water should use this finding to improve their image and to build consumers' trust in their services.
 - The impact of chlorine on water safety: Consumers seem confused about whether the addition of chlorine makes water safe or unsafe to drink. They also have ambivalent perceptions about the impact of "chemicals in water" for water safety.
 - Water treatment processes: The general public, especially lower LSM groups seem to lack knowledge of water treatment processes. This could be addressed with educational programmes and visits to municipal water and wastewater treatment plants.
- First-hand experience will, however, remain the strongest factor and consumers will use past experience as a reference point. Because consumers use their own experience as the point of reference, any change in the organoleptic qualities of tap water, for example as a result of maintenance work, will probably be negatively perceived by consumers. Municipalities should therefore educate and warn consumers if any change in the organoleptic qualities is expected.

A multiple strategy, including school and above the line and below the line media campaigns, is recommended for communicating information about water safety. Because family and friends have a strong influence on perceptions, social networks and the relationship between adults and children in a community should be harnessed in communication campaigns.