Title	The change in diarrhoea trends and the increasing importance of microbiological water quality due to HIV/AIDS in South Africa
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### Abstract (no more than 1000 words):

Although South Africa has made major progress in providing people with sustainable regulated water supply and basic sanitation since 1994, many still lack access to improved supplies. People often have access to treated water via communal standpipes – leaving a window for contamination before consumption.

The 2001 population survey found that 51% of people in South Africa have access to regulated water supply and basic sanitation, while 4% had no improved water supply and no sanitation. Research done by the CSIR of comparing factors potentially contributing to diarrhoeal disease, indicated the strongest correlation between the number of people with HIV/AIDS and people not having access to a private water supply. This is in line with the World Health Organisation (WHO, 2002) policy regarding managing water in the home and the accelerated health gains from improved water supplies.

Water-related diarrhoea is a major problem and huge concern in many parts of the world, being the cause of millions of deaths annually. Diarrhoea should be easily preventable and people should not suffer and die from it – yet it continues to be an important cause of death and disease in many parts of the world. Research has shown that 84% of all diarrhoeal disease in the country is attributable to unsafe water, sanitation and hygiene. Of the 521,028 deaths in 2000, diarrhoea was responsible for 3.1% (approximately 17,000 deaths).

Monitoring both the disease incidence as well as deaths related to diarrhoea could assist decision makers to prioritise actions in terms of healthcare as well as assist them in prioritising scarce resources towards improved water supply provision. Burden of disease studies have shown a steady increase in diarrhoea as a leading cause of death in South Africa. Diarrhoea as underlying natural cause of death for all ages has increased from 1998 as the 10<sup>th</sup> leading cause to become the 3<sup>rd</sup> leading underlying natural cause of death for two consecutive years (2004 -2005). In addition, diarrhoea is the overall 8<sup>th</sup> leading cause of death in the country, while its ranked 5<sup>th</sup> for contributing to DALYs (Disability Adjusted Life Years).

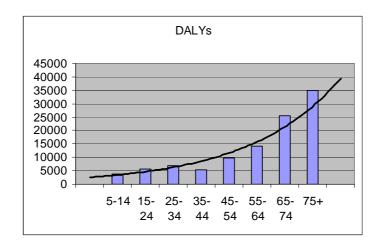
Much attention is given to the recording of diarrhoea incidence among children under the age of 5. This is used as an indicator of health of the community since diarrhoea historically has a more profound effect on children and elderly people. Diarrhoea incidence for children under the age of five is noted at each health facility and is available on a national database. Almost no attention has been given to adult diarrhoea.







Trend lines however suggest an increase in the number of deaths in adults due to diarrhoea. This suggests an increase in the number of adults suffering from this illness. From the above it is clear that adult diarrhoea in SA should be a concern. The question is therefore – are we still measuring the correct things? More attention should be given to the incidence of diarrhoea amongst people in the adult population. In addition, the provision of safe in-house water supply or access to private water supplies is becoming critical.





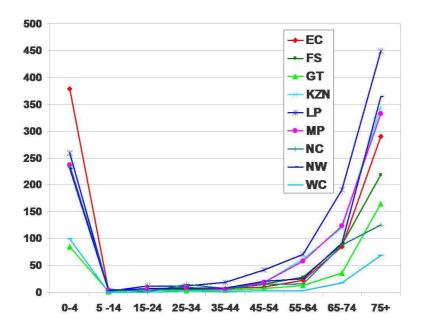


Figure 2: Diarrhoeal death rates for all ages per province, South Africa







#### Topic: Epidemiology and waterborne diseases / Water Pollution and diseases

### ☑ Oral presentation (main conference)

□ Poster presentation (main conference)□ Workshop (Greek language)

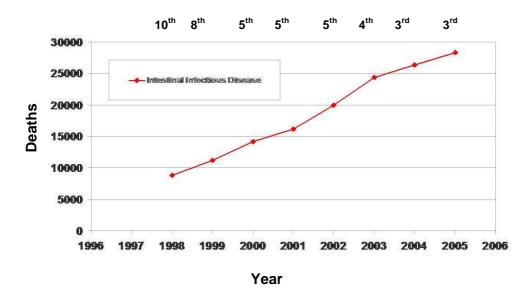


Figure 3: Diarrhoea as underlying natural cause of death for people of all ages 1997 – 2005 (STATS SA, 2005)

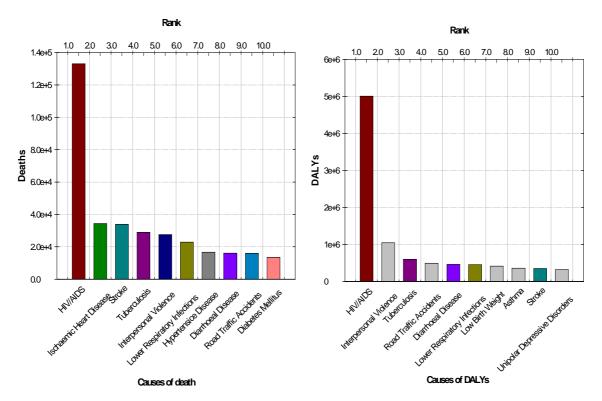


Figure 4: Leading causes of deaths and DALYs for South Africa, 2005













International Water Association