

PRESS RELEASE

RELEASE OF BIENNIAL REPORT ON THE STATE OF THE SOUTH AFRICAN HIV/AIDS EPIDEMIC

The Actuarial Society of South Africa, in collaboration with the Centre for Actuarial Research and the Medical Research Council, has published the biennial report on the state of the South African HIV/AIDS epidemic and the expected future demographic impact of HIV/AIDS. The report, titled "The Demographic Impact of HIV/AIDS in South Africa: National and Provincial Indicators for 2006", is the first publication of the results of the ASSA2003 AIDS and Demographic model, which was released in November of 2005. The model, which is freely available, uses demographic and epidemiological data to assess the impact of HIV/AIDS in South Africa and in each of the country's nine provinces.

National profile of the HIV/AIDS epidemic in 2006

The report estimates that by the middle of 2006:

- South Africa's population had grown to approximately 48 million people.
- Of these, 5.4 million were infected with HIV (11% of the total population).
- 19% of the working age population (ages 20 to 64) was HIV positive.
- The HIV prevalence rate in women was highest between ages 25 and 29 (33%) and in men prevalence was highest between ages 30 and 34 (27%).
- Approximately 230 000 HIV-infected individuals were receiving antiretroviral treatment, and a further 540 000 were sick with AIDS but not receiving antiretroviral treatment.
- 1.5 million children under the age of 18 were maternal orphans (i.e. had lost a mother or both parents), and 66% of these children had been orphaned as a result of HIV/AIDS.
- 1.8 million AIDS deaths had occurred in South Africa, since the start of the epidemic.

The report also estimates that during 2006:

- Around 530 000 new HIV infections occurred (approximately 1400 new infections every day).
- Around 740 000 deaths occurred, of which 350 000 were due to AIDS (approximately 950 AIDS-related deaths per day).
- 71% of all deaths in the 15–49 age group were due to AIDS.
- 300 000 children under the age of 18 experienced the death of their mother.

The demographic impact of HIV/AIDS on the South African population is apparent in statistics such as life expectancy, which has dropped from 63 in 1990 to 51 in 2006, and in the under-5 mortality rate, which has increased from 65 deaths per 1000 births in 1990 to 75 deaths per 1000 births in 2006. Mortality rates in 1990 suggested that a 15-year old had a 29% chance of dying before the age of 60, but mortality rates in 2006 suggest that 15-year olds have a 56% chance of dying before they reach 60. "The youth of today are facing a bleak future, and much still needs to be done to protect and support this vulnerable group," says Leigh Johnson, one of the authors of the report.

Geographical differences

The report also notes that the impact of HIV/AIDS varies substantially between South Africa's provinces. The table below compares South Africa's provinces in terms of some of the indicators for 2006.

Province	HIV prevalence	Life expectancy at birth (years)	% of children maternally orphaned
Eastern Cape	10%	49	8%
Free State	14%	47	10%
Gauteng	15%	52	9%
KwaZulu-Natal	16%	43	12%
Limpopo	7%	56	5%
Mpumalanga	13%	47	11%
Northern Cape	7%	58	6%
North West	13%	50	8%
Western Cape	5%	62	5%
South Africa	11%	51	8%

Across a range of indicators, KwaZulu-Natal appears to be the province worst affected by HIV/AIDS, while the population of the Western Cape appears to be least affected. HIV prevalence rates vary from 5.4% in the Western Cape to almost three times this level in KwaZulu-Natal (16%), while the proportion of children in KwaZulu-Natal who are orphans is 2.5 times the corresponding proportion in the Western Cape. The differences in the demographic impact of HIV/AIDS are also evident in the life expectancy, which has dropped to 43 years in KwaZulu-Natal in 2006 while remaining relatively high in the Western Cape (62 years). Other provinces which are particularly severely affected are Free State, Gauteng and Mpumalanga.

Future challenges

The report suggests that high rates of AIDS mortality will persist in South Africa at least for the next decade, though future projections are sensitive to assumptions regarding future access to antiretroviral treatment and its effectiveness. It is estimated that if 50% of people progressing to AIDS start antiretroviral treatment, then by 2010 approximately 388 000 AIDS deaths will occur per annum. This compares to approximately 291 000 deaths if 90% of people progressing to AIDS start treatment, and 505 000 deaths if no one were to receive antiretroviral treatment. Achieving 90% coverage would present significant challenges for the public health system, as it is estimated that in this scenario roughly 2.2 million people would be on antiretroviral treatment by 2015.

A further challenge will be the provision of care and support for the growing numbers of orphans. The number of AIDS orphans is expected to double between 2006 and 2015, bringing the total number of maternally orphaned children to 2.5 million by 2015.

Perhaps the greatest challenge is to develop new strategies for preventing HIV transmission. The ASSA2003 model estimates that of the 530 000 new HIV infections in 2006, approximately 250 000 occur in the 15 to 24 age group, and prevention strategies therefore need to remain particularly focussed on the youth. The rates at which new infections are occurring are highest in the provinces of KwaZulu-Natal, Free State, Gauteng, Mpumalanga and North West, with between 1.4% and 1.7% of the uninfected individuals in these provinces becoming infected with HIV every year. The need for effective prevention strategies in these provinces is therefore particularly acute.

Professor Rob Dorrington, lead author of the report, notes that, “There has been a convergence of HIV/AIDS estimates produced by different agencies over the past year, which will hopefully focus attention on the agreed significance of the impact on the population. The indicators for 2006 and the projections from 1990 to 2015 highlight the urgent need to strengthen our efforts to respond to the epidemic and should be used to guide planning the response.” With the recent reformation of the South African National AIDS Council and the restored spirit of cooperation between government and civil society, this report comes at an important time, and can play a key role in shaping future strategies to address the impact of HIV and AIDS in South Africa.

The full report can be downloaded from the following websites:

<http://www.assa.org.za/aids>

http://www.commerce.uct.ac.za/Research_Units/CARE

<http://www.mrc.ac.za/>

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