

SUMMARY OF PROVINCIAL HIV AND AIDS STATISTICS FOR SOUTH AFRICA

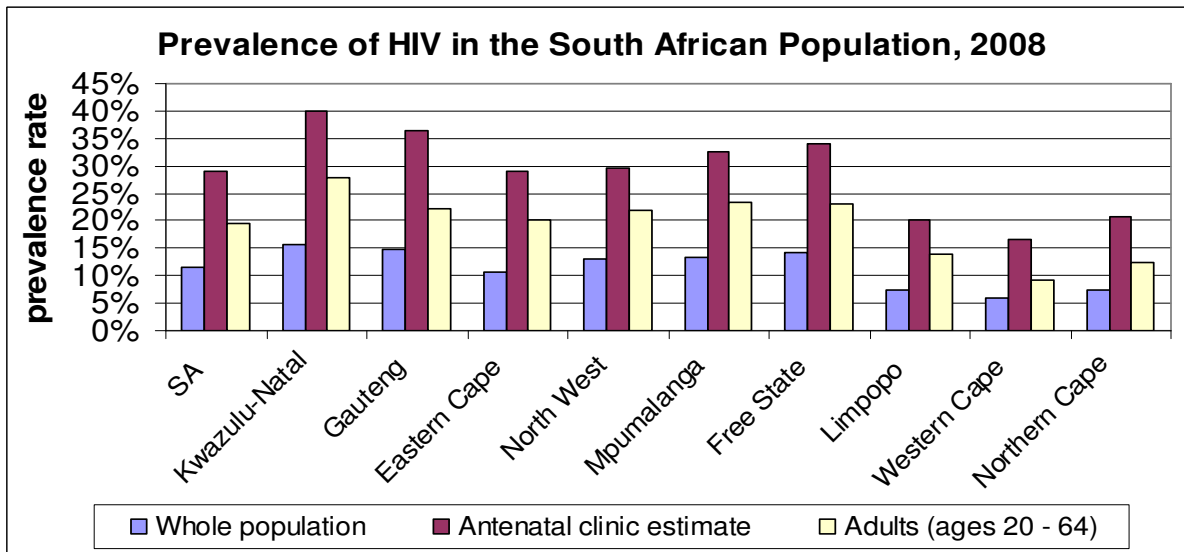
1. Introduction

South Africa is experiencing the largest HIV and AIDS epidemic in the world. An estimated 5.6 million South Africans are HIV positive¹ in 2008, the largest number of any country in the world. Different provinces in South Africa however experience different levels of HIV infections and AIDS related deaths. This illustrates the fact that the epidemic is in different stages of development in each province and that a different approach to addressing the epidemic in each province is necessary to stem the course of new infections and deaths. This document provides a regional summary of the HIV and AIDS epidemic as per the provincial version of the Actuarial Society of South Africa's model namely the ASSA2003 (full) AIDS and Demographic model.

2. HIV Prevalence Rate

The total HIV prevalence rate in South Africa is 12% whereas 20% of adults between the ages of 20 and 64 are estimated to be HIV positive. The 2008 estimate of the antenatal clinic prevalence from the model is 29% (percentage of pregnant women attending public health care clinics). The adult HIV prevalence rate for the provinces ranges from 28% in Kwazulu-Natal to 9% in the Western Cape (Graph 1).

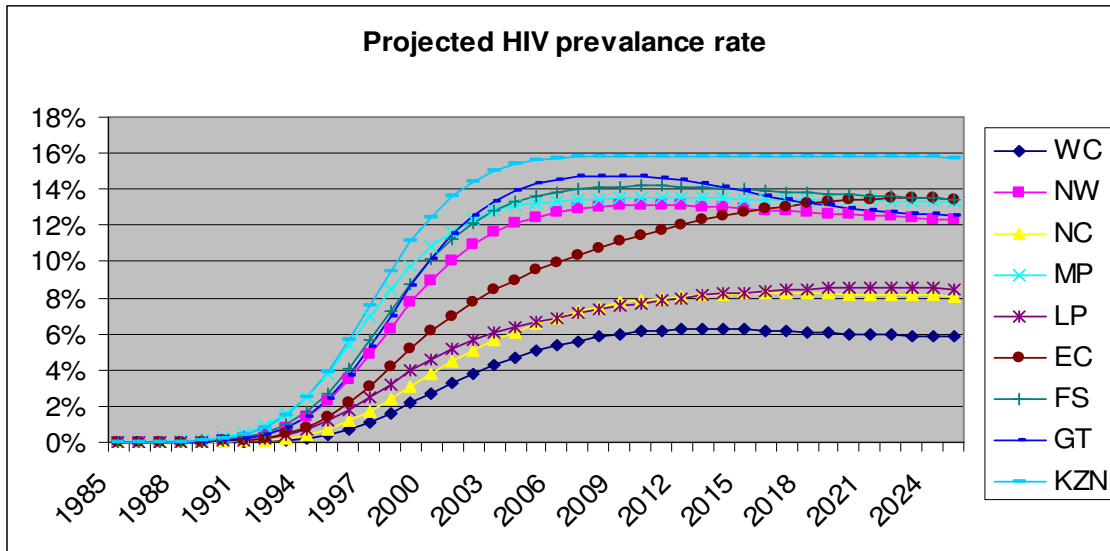
Graph 1: Provincial distribution of HIV prevalence in South Africa, 2008



Graph 2 depicts the progress of the HIV epidemic over time in each of the nine provinces. From the graph it is clear that the epidemic is still growing rapidly in the Eastern Cape and to a lesser extent in the Western Cape, Northern Cape and Limpopo, whereas it has matured in the other provinces. A mature epidemic means that new infections and deaths are more or less at the same level so that total numbers of infected people remain constant. Where HIV prevalence declines, it can often be attributed to the number of AIDS deaths being higher than new infections and does not necessarily imply that new infections are declining.

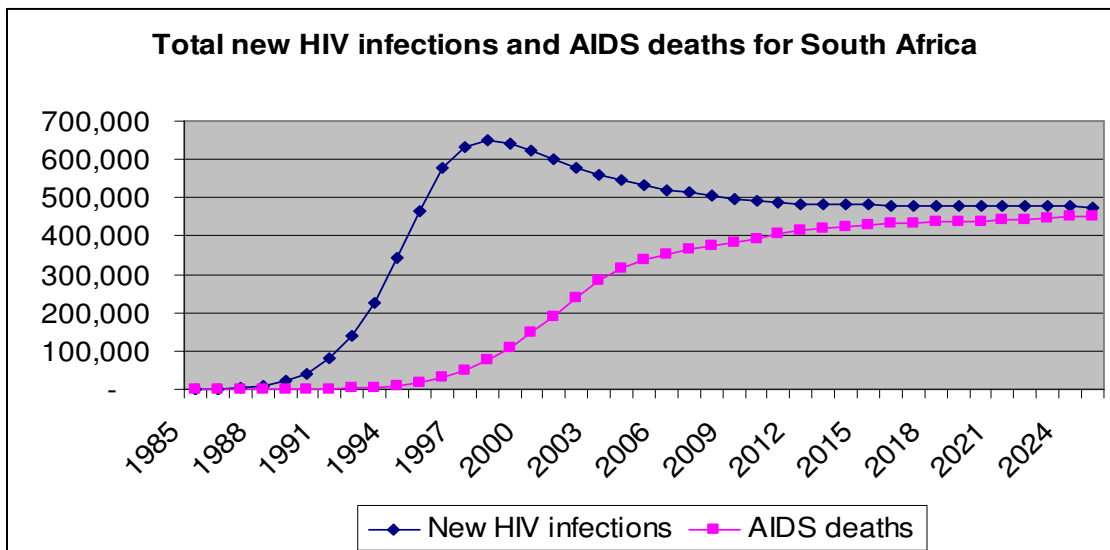
¹ ASSA2003 (full) AIDS and Demographic model available on: www.actuarialsociety.org.za
 Prepared by Nathea Nicolay, Metropolitan
 October 2008

Graph 2: HIV prevalence rate for each province projected to 2025



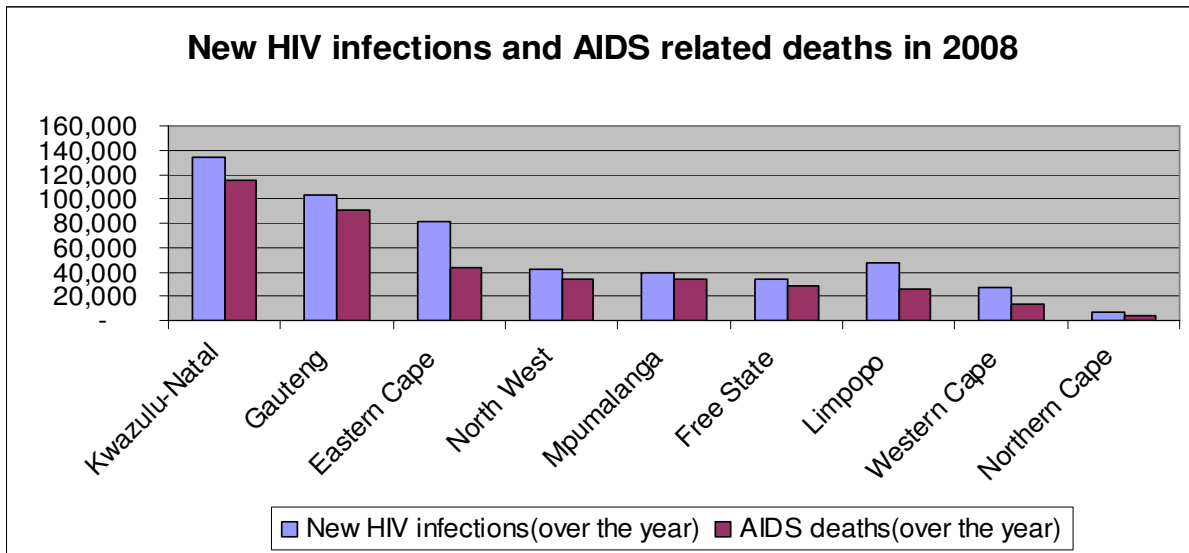
South Africa as a country is experiencing a mature epidemic with total new HIV infections and AIDS deaths converging to a level of between 400 000 and 500 000 per annum (see Graph 3). As the HIV epidemic progresses over time, the new infections will peak and then decline until it reaches a stable level per annum (mature epidemic). The growth in AIDS deaths typically lags that of new infections and converges at the same stable level over time. The SA epidemic has peaked in the late nineties and is approaching a stable level at the moment. Although new infections in all the provinces have peaked, the different provinces are in different stages of decline.

Graph 3: Projected new HIV infections and AIDS deaths for South Africa



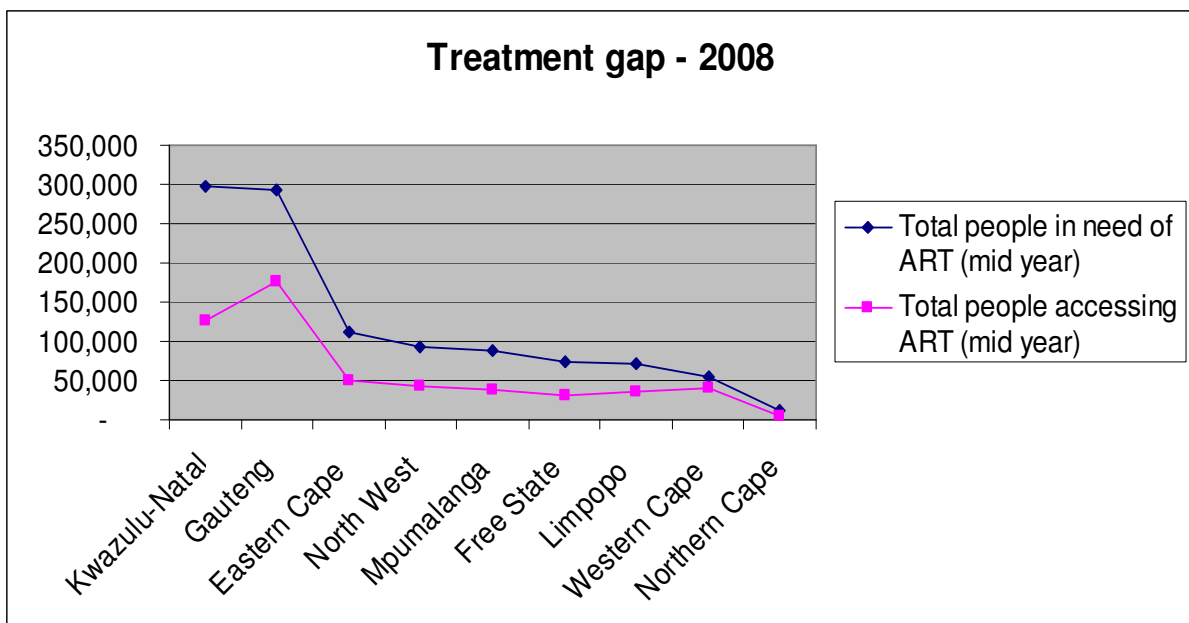
The Eastern Cape, Western Cape, Northern Cape and Limpopo are further away from reaching the number where new infections and deaths will level off. The gap between new infections and deaths are higher in these provinces (see graph 4). The HIV epidemic is still rapidly growing in these provinces where as in the other provinces the epidemic has stabilized with new infections and deaths canceling out.

Graph 4: Provincial distribution of new HIV infections and AIDS related deaths for 2008



The gap between those in need of antiretroviral treatment and those taking up treatment is a further indication of the relative impact that HIV has in each province. The largest number of people who are in need of treatment and not receiving it are in Kwazulu-Natal followed by Gauteng and the Eastern Cape (see Graph 5).

Graph 5: Provincial distribution of those in need of ART and those taking up ART for 2008



3. Provincial summary

3.1. Kwazulu-Natal

Table 1: Kwazulu-Natal HIV and AIDS statistics

	Kwazulu-Natal	
Whole population	16%	<ul style="list-style-type: none"> ▪ Kwazulu-Natal is experiencing the most severe HIV epidemic in the country. ▪ A total of 1.6 million people (16% of the population) and nearly a third of all adults are estimated to be HIV positive in 2008. ▪ The epidemic has reached a mature phase with AIDS deaths and new infections levelling off. ▪ An estimated 300 000 people are in need of antiretroviral treatment in 2008 with less than 50% having taken up treatment.
Antenatal clinic estimate	40%	
Adults (ages 20 - 64)	28%	
People living with HIV	1,561,000	
New HIV infections(over the year)	134,000	
AIDS deaths(over the year)	115,000	
Total people in need of ART (mid year)	297,000	
Total people accessing ART (mid year)	127,000	
Accumulated AIDS deaths	849,000	
New infections per day	366	
New deaths per day	316	

3.2. Gauteng

Table 2: Gauteng HIV and AIDS statistics

	Gauteng	
Whole population	15%	<ul style="list-style-type: none"> ▪ Gauteng is experiencing the second most severe HIV epidemic in the country. ▪ A total of 1.4 million people (15% of the population) and one in every 5 adults are estimated to be HIV positive in 2008. ▪ The epidemic has reached a mature phase with AIDS deaths and new infections leveling off. ▪ An estimated 300 000 people are in need of antiretroviral treatment in 2008 with a relatively high take-up on treatment (60%).
Antenatal clinic estimate	36%	
Adults (ages 20 - 64)	22%	
People living with HIV	1,446,000	
New HIV infections(over the year)	103,000	
AIDS deaths(over the year)	91,000	
Total people in need of ART (mid year)	293,000	
Total people accessing ART (mid year)	175,000	
Accumulated AIDS deaths	618,000	
New infections per day	283	
New deaths per day	248	

3.3. The Eastern Cape

Table 3: Eastern Cape HIV and AIDS statistics

	Eastern Cape	
Whole population	11%	<ul style="list-style-type: none"> ▪ The Eastern Cape has the third largest number of HIV positive people in the country. ▪ A total of 730 000 people (11% of the population) and one in every 5 adults are estimated to be HIV positive in 2008. ▪ The epidemic in the Eastern Cape has not reached a mature phase yet and is still growing
Antenatal clinic estimate	29%	
Adults (ages 20 - 64)	20%	
People living with HIV	729,000	
New HIV infections(over the year)	81,000	
AIDS deaths(over the year)	44,000	
Total people in need of ART (mid year)	111,000	

Total people accessing ART (mid year)	49,000	<p>rapidly with new infections double the number of AIDS related deaths.</p> <p>An estimated 110 000 people are in need of antiretroviral treatment in 2008 with around 44% having taken up treatment.</p>
Accumulated AIDS death s	277,000	
New infections per day	223	
New deaths per day	120	

3.4. North West

Table 4: North West HIV and AIDS statistics

	North West	
Whole population	13%	<p>The North West has nearly half a million HIV positive people, the fourth largest in SA.</p> <p>Around 13% of the population and one in every 5 adults are estimated to be HIV positive in 2008.</p> <p>The epidemic in the North West has not reached a mature phase yet and is still growing with new infections higher than the number of AIDS related deaths.</p> <p>An estimated 92 000 people are in need of antiretroviral treatment in 2008 with around 47% having taken up treatment.</p>
Antenatal clinic estimate	30%	
Adults (ages 20 - 64)	22%	
People living with HIV	496,000	
New HIV infections (over the year)	43,000	
AIDS deaths (over the year)	34,000	
Total people in need of ART (mid year)	92,000	
Total people accessing ART (mid year)	43,000	
Accumulated AIDS deaths	225,000	
New infections per day	117	
New deaths per day	93	

3.5. Mpumalanga

Table 5: Mpumalanga HIV and AIDS statistics

	Mpumalanga	
Whole population	13%	<p>Mpumalanga has just less than half a million HIV positive people. Around 13% of the population and one in every 5 adults are estimated to be HIV positive in 2008.</p> <p>The Mpumalanga epidemic is reaching maturity with new infections and AIDS related deaths approaching 40 000 per annum.</p> <p>An estimated 87 000 people are in need of antiretroviral treatment in 2008 with around 44% having taken up treatment.</p>
Antenatal clinic estimate	33%	
Adults (ages 20 - 64)	23%	
People living with HIV	455,000	
New HIV infections(over the year)	40,000	
AIDS deaths(over the year)	33,000	
Total people in need of ART (mid year)	87,000	
Total people accessing ART (mid year)	38,000	
Accumulated AIDS deaths	256,000	
New infections per day	109	
New deaths per day	92	

3.6. Free State

Table 6: Free State HIV and AIDS statistics

	Free State	
Whole population	14%	<p>The Free State has around 400 000 HIV positive people. Around 14% of the population and one in</p>
Antenatal clinic estimate	34%	
Adults (ages 20 - 64)	23%	

People living with HIV	394,000	<p>every 5 adults are estimated to be HIV positive in 2008.</p> <p>The epidemic in the Free State is reaching maturity with new infections and AIDS related deaths approaching 34 000 per annum.</p> <p>An estimated 73 000 people are in need of antiretroviral treatment in 2008 with around 44% having taken up treatment.</p>
New HIV infections(over the year)	34,000	
AIDS deaths(over the year)	28,000	
Total people in need of ART (mid year)	73,000	
Total people accessing ART (mid year)	32,000	
Accumulated AIDS deaths	194,000	
New infections per day	92	
New deaths per day	77	

3.7. Limpopo

Table 7: Limpopo HIV and AIDS statistics

	Limpopo	
Whole population	7%	<p>Limpopo has around 400 000 HIV positive people. Around 7% of the population and 14% adults between the ages of 20 and 64 are HIV positive in 2008.</p> <p>The epidemic in Limpopo has not reached a mature phase yet and is still growing with new infections almost double the number of AIDS related deaths.</p> <p>An estimated 70 000 people are in need of antiretroviral treatment in 2008 with around 49% having taken up treatment.</p>
Antenatal clinic estimate	20%	
Adults (ages 20 - 64)	14%	
People living with HIV	434,000	
New HIV infections(over the year)	47,000	
AIDS deaths(over the year)	26,000	
Total people in need of ART (mid year)	71,000	
Total people accessing ART (mid year)	35,000	
Accumulated AIDS deaths	172,000	
New infections per day	130	
New deaths per day	72	

3.8. The Western Cape

Table 8: Western Cape HIV and AIDS statistics

	Western Cape	
Whole population	6%	<p>The Western Cape has just less than 300 000 HIV positive people. Around 6% of the population, the lowest HIV prevalence rate in any single province and one in every 10 adults are estimated to be HIV positive in 2008.</p> <p>The epidemic in the Western Cape has not reached a mature phase yet and is still growing with new infections much higher than the number of AIDS related deaths.</p> <p>The Western cape has the highest estimated take-up rate on antiretroviral treatment. Around 55 000 people are in need of antiretroviral treatment in 2008 of whom 74% having taken up treatment.</p>
Antenatal clinic estimate	16%	
Adults (ages 20 - 64)	9%	
People living with HIV	298,000	
New HIV infections(over the year)	27,000	
AIDS deaths(over the year)	14,000	
Total people in need of ART (mid year)	55,000	
Total people accessing ART (mid year)	41,000	
Accumulated AIDS deaths	79,000	
New infections per day	73	
New deaths per day	39	

3.9. Northern Cape

Table 9: Northern Cape HIV and AIDS statistics

	Northern Cape	
Whole population	7%	<ul style="list-style-type: none"> ▪ The Northern Cape has the lowest number of HIV positive people living in any single province (67 000). ▪ Around 7% of the population and one in every 10 adults are estimated to be HIV positive in 2008. ▪ The epidemic in the Northern Cape has not reached a mature phase yet and is still growing with new infections almost double the number of AIDS related deaths. ▪ An estimated 11 000 people are in need of antiretroviral treatment in 2008 with around 53% having taken up treatment.
Antenatal clinic estimate	21%	
Adults (ages 20 - 64)	12%	
People living with HIV	67,000	
New HIV infections(over the year)	7,000	
AIDS deaths(over the year)	4,000	
Total people in need of ART (mid year)	11,000	
Total people accessing ART (mid year)	6,000	
Accumulated AIDS deaths	22,000	
New infections per day	19	
New deaths per day	11	

4. Conclusion

The nine South African provinces are in different stages of the HIV epidemic. The Eastern Cape, Western Cape, Northern Cape and Limpopo are still experiencing high numbers of new infections relative to AIDS deaths leading to rapidly growing HIV prevalence rates. The epidemic in the other provinces in South Africa are approaching maturity with the same numbers of people getting infected each year than dying of the disease. The adult HIV prevalence rate for the provinces ranges from 28% in Kwazulu-Natal to 9% in the Western Cape (Graph 1). In provinces with a mature epidemic, adult HIV prevalence rate is around 20% (apart from Kwazulu-Natal where the epidemic has stabilized at an adult HIV prevalence rate of 28%).

The largest number of HIV positive people live in Kwazulu-Natal (1.5 million) and an estimated 43% of those in need of antiretroviral treatment has taken this up. Gauteng is experiencing the second largest epidemic (1.4 million HIV positive people) with 60% of those in need of treatment having taken it up. The Eastern Cape is experiencing the third largest epidemic (730 000 HIV positive people) and a relatively young and rapidly growing epidemic. Only 44% of those in need of treatment are accessing it in the Eastern Cape.

The highest take-up rate on antiretroviral treatment is in the Western Cape (74%) and the highest number of people on treatment in Gauteng (175 000). The largest number of people who are still in need of treatment but not accessing it, is in Kwazulu-Natal followed by Gauteng and the Eastern Cape.

Each province in South Africa has to deal with different dynamics of the HIV and AIDS epidemic in terms of numbers new HIV infections, AIDS deaths and numbers of those in the final stages of the disease who are in need of antiretroviral treatment. Different provinces are also experiencing different growth rates in new infections. Provincial HIV strategy should take the relative dynamics of the provincial epidemics into account. HIV intervention strategies focusing on limiting new infections in those provinces where the epidemic is still relatively young can change the course of the epidemic rapidly. A stronger focus on increasing take-up on treatment in those provinces with mature epidemics will limit the impact that AIDS related deaths will have on households and economies. In general, prevention strategies should be dramatically scaled up to stem the course of the HIV epidemic in South Africa overall.