

# MPUMALANGA PROVINCIAL PROFILE



# Mpumalanga provincial profile

## Background

Mpumalanga is in the north-east of South Africa, having international borders with Mozambique and Swaziland in the east, and local borders with KwaZulu-Natal and Free State in the south, Gauteng in the west, and Limpopo in the north. The province encloses 79 490 km<sup>2</sup>, constituting 6.5% of the total land area of the country (SSA, 2003). In 2000 the average population density was estimated at 38 persons per square kilometre. During the 1996 Census 61% of the population lived in non-urban areas (SSA, 1998). Prior to 1994 the province territorially consisted of three patches of the self-governing area of Kangwane in the east, two patches of KwaNdebele in the north west, and one patch of the 'national state' of Bophuthatswana. These areas formed part of the so-called homelands, while the rest of the province was under the separate provincial administration of the then Transvaal. These territorial divisions are no longer valid. However, given the consolidation of the various administrations and differing levels of development, they are important when examining data distribution patterns (Tait, 1996).

The best performing sectors include mining, manufacturing and services. Mpumalanga is rich in coal reserves, explaining on the one hand very high levels of air pollution, and on the other the presence of huge power stations and the country's second petroleum-from-coal installation. Besides coal, the province also produces steel and vanadium. Extensive forestry plantations, timber processing and large paper mills further enrich the province's economy. In addition, agriculture plays an important role in the economy through sugar production, an abundance of tropical and sub-tropical fruits, maize, wheat, sunflowers, potatoes and other vegetables, nuts, cotton, wool and dairy products. The province's Gross Geographic Product at 2001 prices was R70 621 million, contributing 7.2% to the national Gross Domestic Product (GCIS, 2004).

## Population structure

According to ASSA estimates for 2000, 3 054 973 people lived in Mpumalanga, constituting 6.8% of South Africa's total population. The province accommodated slightly more women than men, with men constituting 49.5% and women 50.5% of the population. Just over 35% of the population were younger than 15 years, while 62% were in their 'economically active' years (15-64), and 5% were 60 years or older. [Comparison with 2001 Census: total population 3 122 990 (ASSA had 68 017 less); 7% of total population of South Africa; 52.1% female; 92.4% Black African, 0.7% Coloured, 0.4% Indian, 6.5% White.]

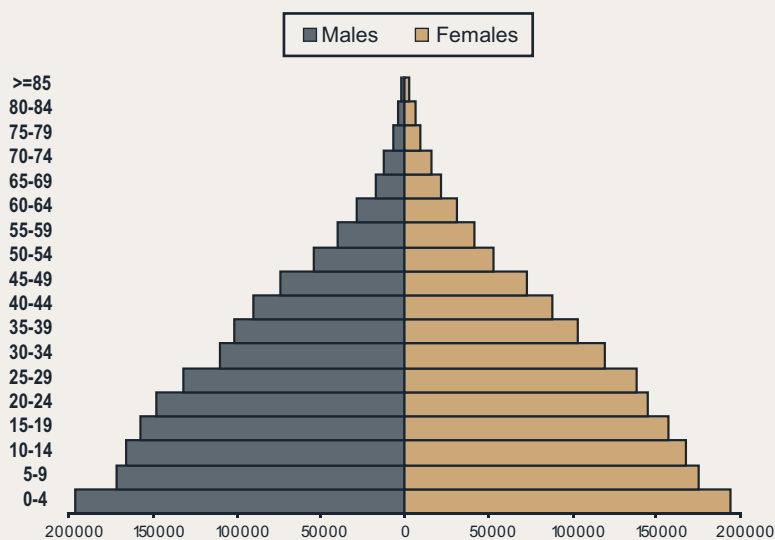


Figure MP1: Age structure of the Mpumalanga population, 2000

## Living conditions

According to the 2001 Census, 27.5% of the population aged 20 years or older had no formal school education, and 41% of those in the age group 15-64 were unemployed. Almost one-third of those who were employed were in elementary occupations (SSA, 2003). Almost 55% of the province's population lived below the national poverty line in 2002 (UNDP, 2004). About 67% of all households lived in formal dwellings, and 16% and 13% in informal and traditional structures respectively. On average, 4 persons shared a household. Piped water, either in the dwelling, on site, or from a communal tap, was available in 87% of households. About 10% of households did not have access to a toilet facility, and 39% had a refuse removal service once a week or more often. In 40% of households electricity was used as the main source of energy for cooking, while wood was used in 23% and paraffin in 17%. Of the households, 74% had a radio, 50% a television, 51% a refrigerator, 15% a telephone in the dwelling, and 32% a cell phone (SSA, 2003).

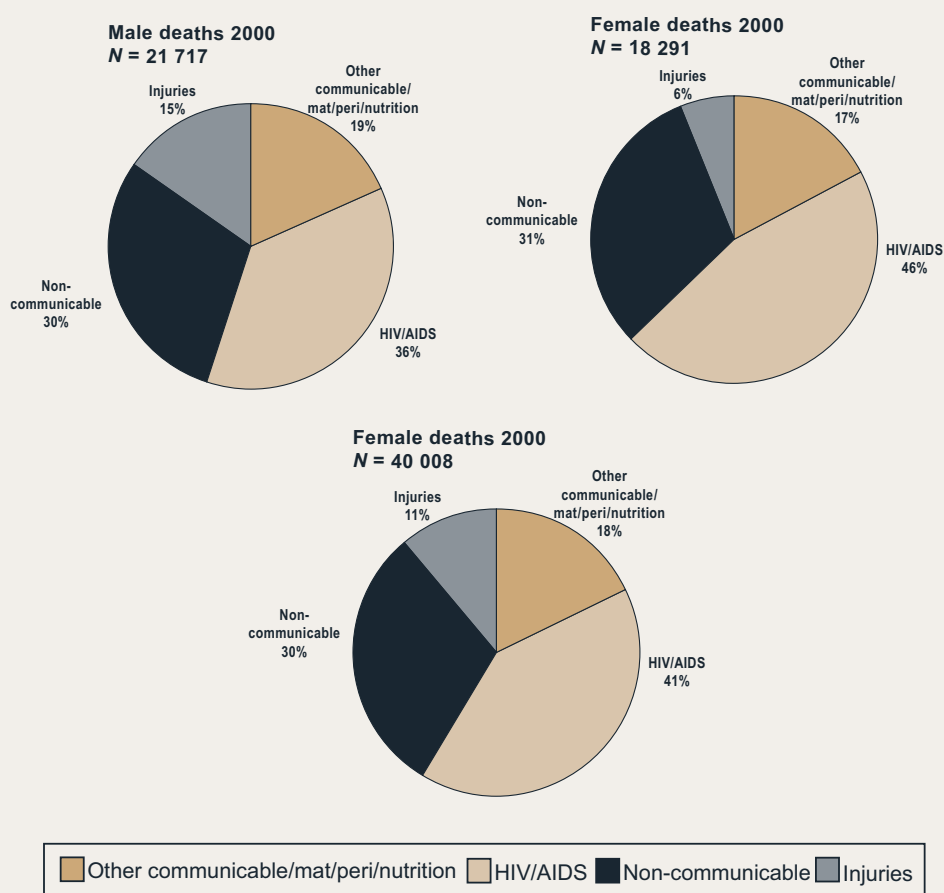


Figure MP2: Estimated deaths by Groups, Mpumalanga 2000

## Mortality profile

For the year 2000 there were an estimated 40 008 deaths in Mpumalanga, in the broad Groups I, II, III and AIDS. HIV/AIDS accounted for 46% of the female deaths and 36% of the male deaths. A considerable sex difference was also visible in the proportions of deaths due to injuries, with two and a half times more injury deaths among men. The proportions of deaths in Groups I and II were very similar for men and women.

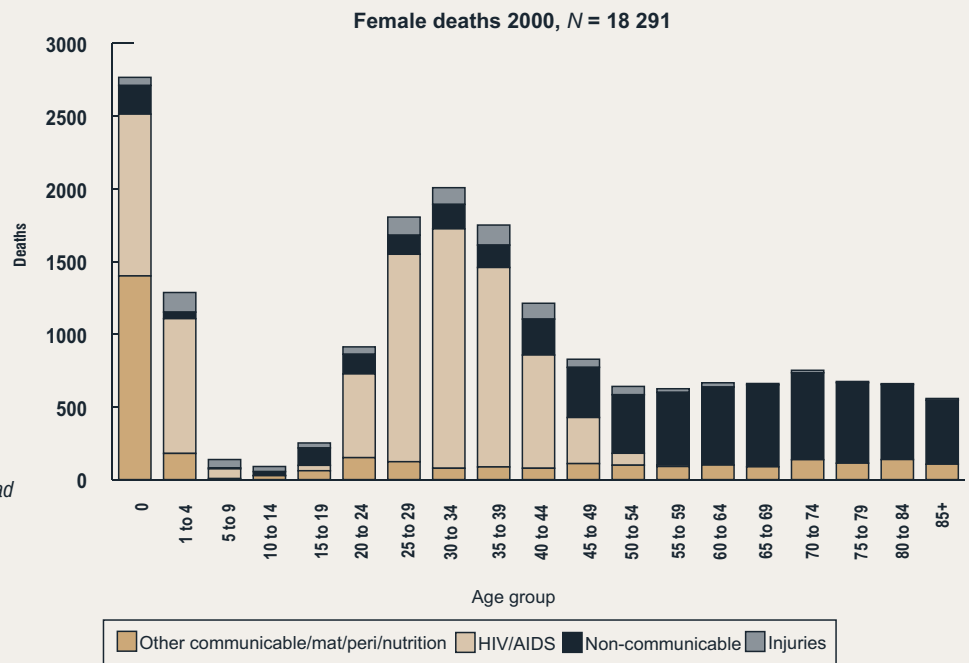
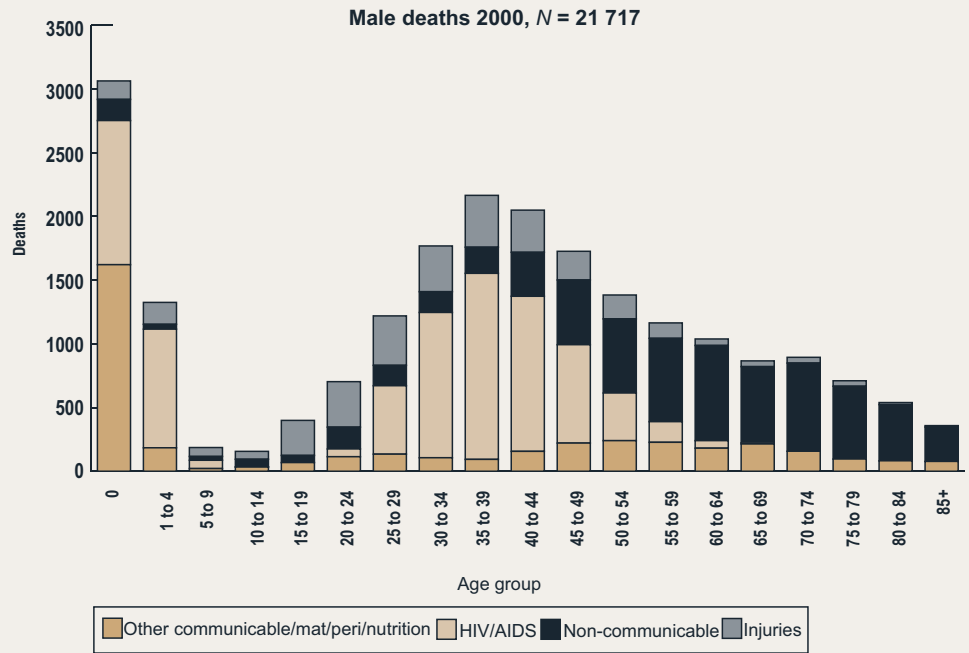
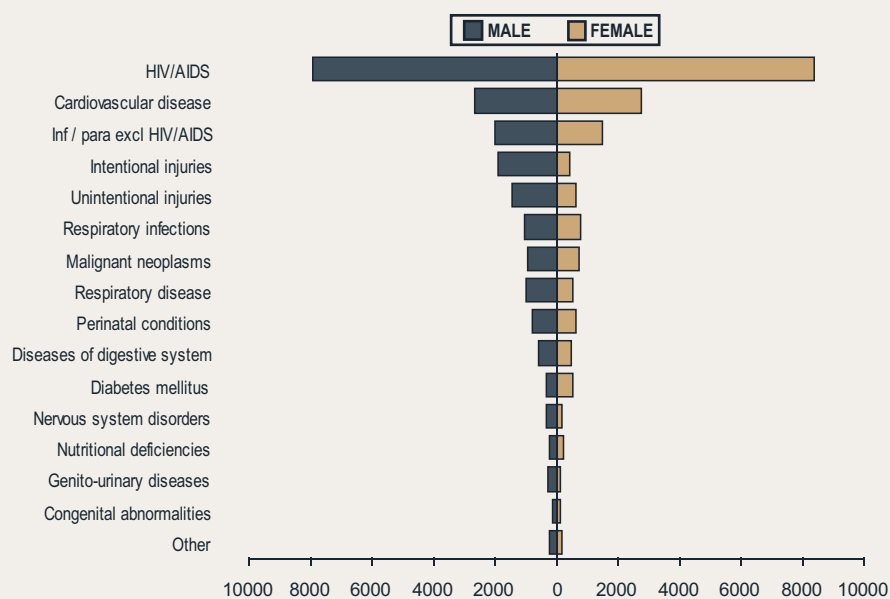


Figure MP3: Age distribution of deaths by broad Groups, Mpumalanga 2000

The age-specific cause of death profiles are presented in Figure MP3. The numbers of deaths are presented by five-year age intervals for the three broad Groups and HIV/AIDS. Due to particular disease and mortality profiles in children during the first year of life, the under 5 year age group was divided into infants less than 1 year old and children aged 1-4 years. For the infants, deaths from both HIV/AIDS and the communicable, maternal, perinatal and nutrition Group (Group I) predominated. There were more male infant deaths than female infant deaths and Group I accounted for a higher proportion of infant deaths than HIV/AIDS. For children of 1-4 years old HIV/AIDS was the main cause of death.

HIV/AIDS deaths were also exceptionally high in young adults and early middle-aged men and women (from about 20 to 54 years). Besides there being more HIV/AIDS deaths among women than men overall, there were more HIV/AIDS deaths in younger adult women than men. The number of HIV/AIDS deaths peaked for females in the 30-34-year age group, and for males in the 35-39-year age group. While injury deaths were high for young men, non-communicable deaths come to the fore as men and women age.

Each cause of death group is divided into several major categories of causes of death. Figure MP4 shows the broad cause of death categories ranked in descending order by the total number of deaths. The leading cause of death in both men and women was HIV/AIDS, followed by cardiovascular disease and infectious and parasitic disease excluding HIV/AIDS. Intentional and unintentional injuries ranked fourth and fifth respectively. Both had a larger proportion of deaths in men than in women, particularly unintentional injuries. Respiratory infections and respiratory disease ranked sixth and eighth respectively, with respiratory disease causing more deaths in males. Other disease categories ranked in the top ten (excluding HIV/AIDS) included malignant neoplasms, perinatal conditions, diseases of the digestive system and diabetes mellitus. Diabetes caused more deaths in women than in men, while the other categories accounted for more or less the same proportion of male and female deaths.



"Other" causes include endocrine and metabolic, benign neoplasms, mental disorders, maternal conditions, musculo-skeletal diseases, skin diseases, sense organ and oral conditions.

Figure MP4: Causes of death according to categories for males and females, Mpumalanga 2000

## Persons 2000, N = 40 008

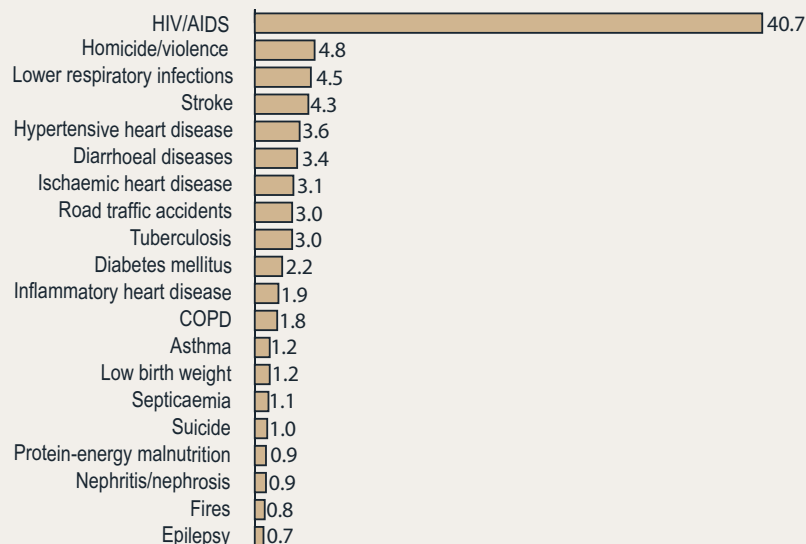


Figure MP5(a): Twenty leading single causes of death (%), Mpumalanga 2000

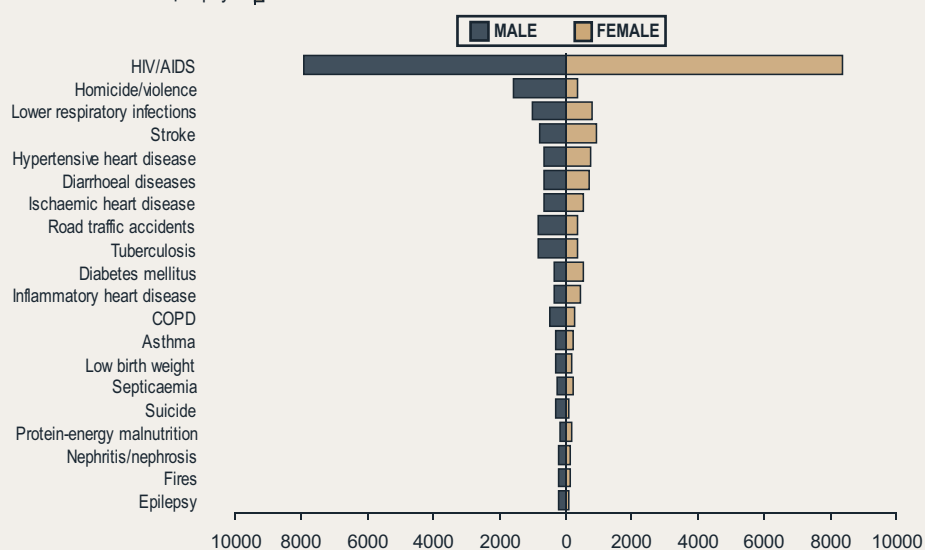


Figure MP5(b): Twenty leading single causes of death by sex, Mpumalanga 2000

The cause of death categories are further disaggregated into more specific causes of death. The twenty leading single causes of death are depicted in Figure MP5(a). HIV/AIDS accounted for 41% of all deaths in 2000, about eight times more deaths than homicide/violence, which was the next largest single cause of deaths in the province. Lower respiratory infections and stroke each accounted for less than 5% of the deaths. Hypertensive heart disease, diarrhoeal diseases, ischaemic heart disease, road traffic accidents and tuberculosis each accounted for between 3.6% and 3% of deaths.

Figure MP5(b) shows that in the top ten ranking, men had a higher number of deaths from homicide/violence, road traffic accidents and tuberculosis, as well as a slightly higher number of deaths from ischaemic heart disease than women. In addition to HIV/AIDS, women had a higher number of deaths due to stroke and diabetes mellitus than did men. For the remaining rankings, apart from inflammatory heart disease, men had higher numbers of deaths due to the various causes than women.

### Premature mortality

The years of life lost (YLLs) measure does not merely consider the number of deaths, but also takes into account the age at which the death occurred. YLLs were calculated using the age weighting parameter, discounting and standard life expectancy that were used in the Global Burden of Disease Study. Table MP1 shows that HIV/AIDS plays a major role in premature mortality, accounting for the largest proportion of female (56.8%) and male (43.5%) YLLs. This can partly be explained by the large numbers of deaths due to AIDS, and partly by the large proportion of AIDS deaths that occurred in young adults and children under the age of 5 years.

Homicide/violence and road traffic accidents ranked second and third in terms of YLLs for men, while these two single causes ranked fifth and fourth respectively for women. YLLs for diarrhoeal diseases and lower respiratory infections ranked second and third respectively for women and fifth and fourth respectively for men.

Table MP1: Leading 20 single causes of the premature mortality burden (YLLs) by sex, Mpumalanga 2000

Males				Females				Persons			
Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%
1	HIV/AIDS	209243	43.5	1	HIV/AIDS	244296	56.9	1	HIV/AIDS	453540	49.8
2	Homicide/violence	43131	9.0	2	Diarrhoeal diseases	18718	4.4	2	Homicide/violence	51949	5.7
3	Road traffic accidents	21591	4.5	3	Lower respiratory infections	15783	3.7	3	Diarrhoeal diseases	37630	4.1
4	Lower respiratory infections	20425	4.3	4	Road traffic accidents	9909	2.3	4	Lower respiratory infections	36208	4.0
5	Diarrhoeal diseases	18911	3.9	5	Stroke	8861	2.1	5	Road traffic accidents	31500	3.5
6	Tuberculosis	13532	2.8	6	Homicide/violence	8818	2.1	6	Tuberculosis	21305	2.3
7	Low birth weight	10042	2.1	7	Tuberculosis	7774	1.8	7	Stroke	17516	1.9
8	Stroke	8655	1.8	8	Hypertensive heart disease	6852	1.6	8	Low birth weight	15840	1.7
9	Ischaemic heart disease	7555	1.6	9	Inflammatory heart disease	6113	1.4	9	Ischaemic heart disease	12381	1.4
10	Suicide	7116	1.5	10	Low birth weight	5798	1.4	10	Hypertensive heart disease	12376	1.4
11	Septicaemia	6250	1.3	11	Protein-energy malnutrition	5677	1.3	11	Protein-energy malnutrition	11433	1.3
12	Protein-energy malnutrition	5756	1.2	12	Diabetes mellitus	5672	1.3	12	Septicaemia	11124	1.2
13	Fires	5660	1.2	13	Septicaemia	4874	1.1	13	Diabetes mellitus	10499	1.2
14	Hypertensive heart disease	5524	1.2	14	Ischaemic heart disease	4826	1.1	14	Inflammatory heart disease	10265	1.1
15	COPD	5461	1.1	15	Fires	3802	0.9	15	Fires	9461	1.0
16	Epilepsy	5203	1.1	16	Cervix ca	3706	0.9	16	Suicide	9339	1.0
17	Diabetes mellitus	4827	1.0	17	COPD	3205	0.7	17	COPD	8665	1.0
18	Inflammatory heart disease	4152	0.9	18	Asthma	2995	0.7	18	Asthma	6965	0.8
19	Asthma	3970	0.8	19	Nephritis/nephrosis	2407	0.6	19	Epilepsy	6910	0.8
20	Nephritis/nephrosis	3625	0.8	20	Suicide	2223	0.5	20	Nephritis/nephrosis	6032	0.7
<b>All causes</b>		<b>480 947</b>		<b>All causes</b>		<b>429 538</b>		<b>All causes</b>		<b>910 485</b>	

## Leading causes of death among children (<15 years)

The leading ten causes of death among children under 5 years of age and children aged 5-14 years are shown in Figure MP6. Almost half the deaths in the under 5 year olds were attributed to HIV/AIDS with diarrhoeal diseases, low birth weight, lower respiratory infections and protein-energy malnutrition all among the leading causes of deaths for boys and girls.

The cause of death profiles for boys and girls aged 5-14 years differed. Road traffic accidents were the leading cause of death among boys this age while HIV/AIDS was the leading cause for girls. Injuries and other infectious diseases were among the leading causes in this age group for girls. Inflammatory heart disease was responsible for 6% of girl deaths in this age group.

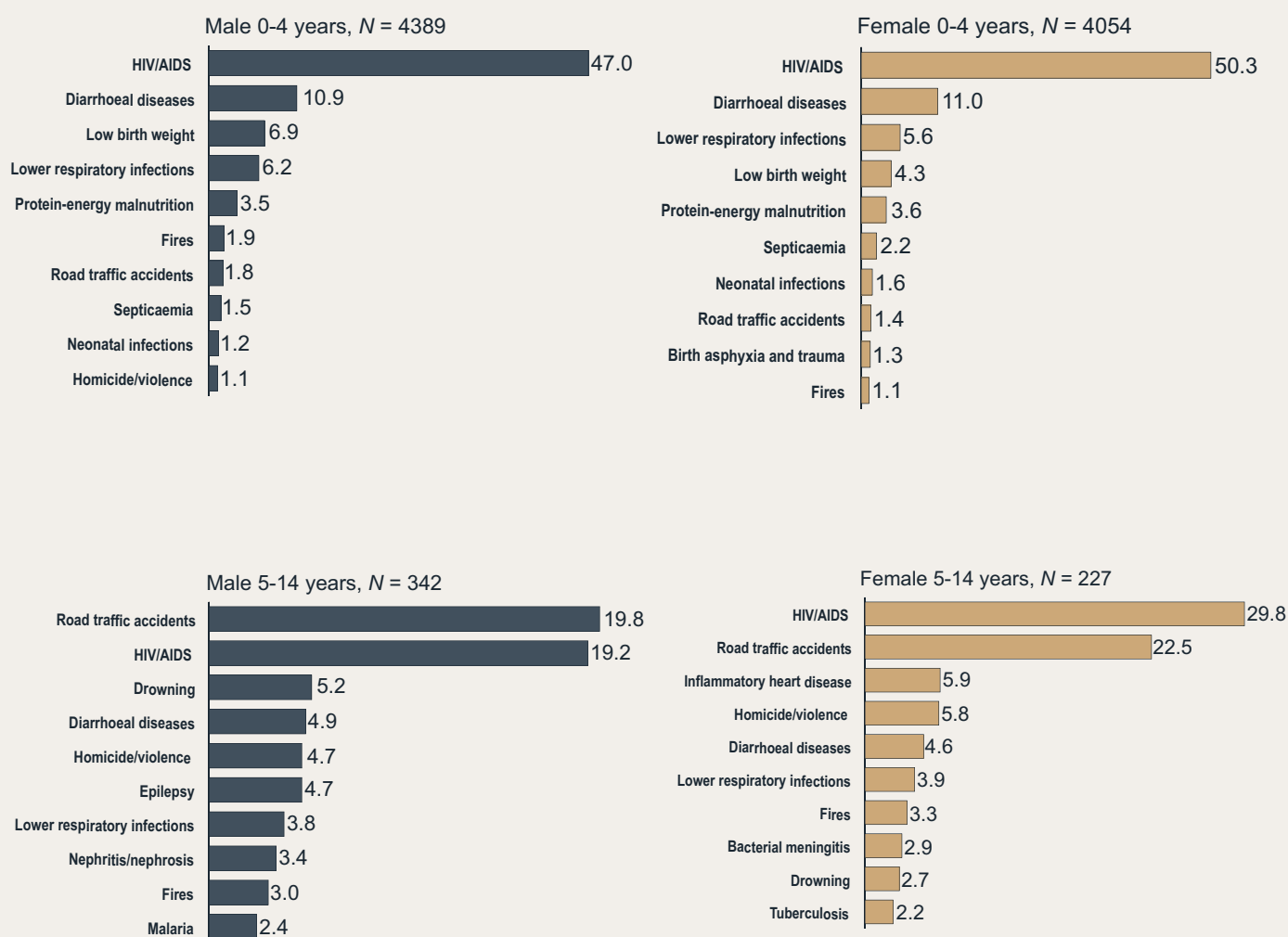


Figure MP6: Ten leading single causes of death (%) among children (<15 years) by sex, Mpumalanga 2000

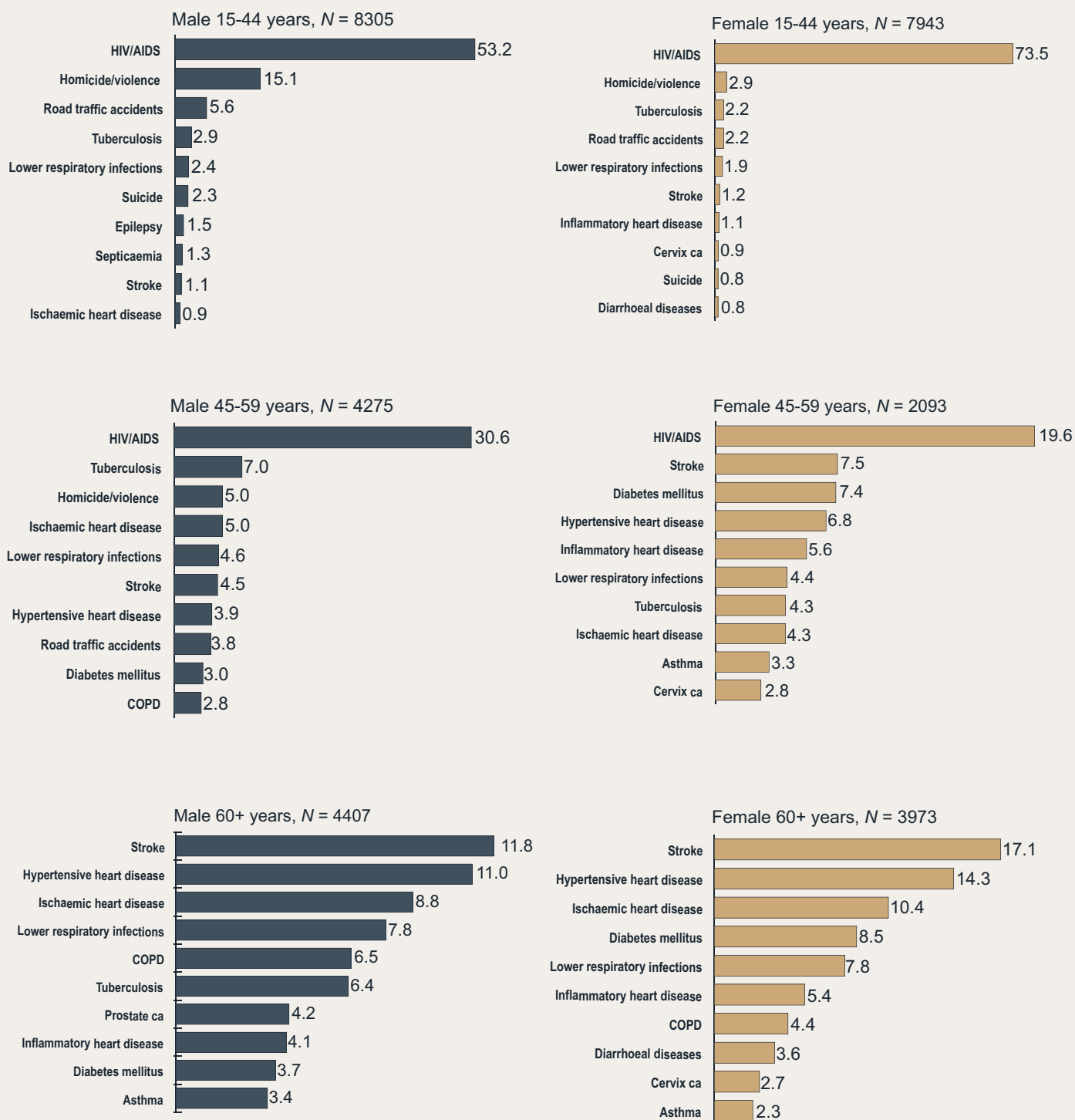
## Leading causes of death among adults

The leading causes of death for adults are shown in Figure MP7. HIV/AIDS was the leading cause of death for men and women, and accounted for 53% and 30% of the deaths respectively in the 15-44 year old age group. Deaths due to road traffic accidents and homicide and violence were also high in this age group and accounted for 21% and 28% in men and women respectively. Infectious diseases such as diarrhoeal and lower respiratory infections and tuberculosis, as well as other injuries including fires, drowning and suicide featured among the leading causes in adults.

The profile for the older adults aged 45-59 years differed from the young adult age group with an increasing number of deaths due to non-communicable diseases and fewer deaths due to infectious diseases or injuries. Although HIV/AIDS was the leading cause of death in this age group, stroke, diabetes, hypertensive and ischaemic heart disease featured in both men and women. Infectious diseases such as tuberculosis and lower respiratory infections also featured in both. Injury deaths such as homicide, violence and road traffic accidents showed up in men, while cervical cancer showed up in women.

In older persons the majority of the leading ten single causes of death were non-communicable diseases, with stroke and cardiovascular disease ranked in the top three, accounting for over 30% of the deaths in the elderly (Figure MP7). Cardiovascular disease was the primary cause of death in older persons in Mpumalanga. The fourth, fifth and sixth rankings in men were deaths attributed to respiratory conditions, accounting for a further 21% of deaths. In women respiratory conditions were ranked fifth and seventh in the elderly in the province. Figure MP7 shows that stroke was responsible for more deaths in older women than older men.

Figure MP7: Ten leading single causes of death (%) among adults by sex, Mpumalanga 2000



## How does Mpumalanga compare with the national profile?

Mpumalanga has a population age structure that resembles the national one. The age distribution of deaths by broad groups was also similar to the national profile.

HIV/AIDS deaths in this province were higher than nationally - 41% person deaths versus 30%. The 11% person deaths for injuries was comparable with the national figure of 12%. Similarly, deaths from Group I conditions, excluding HIV/AIDS, were 18% in Mpumalanga and 20% nationally. There were fewer deaths from non-communicable diseases in Mpumalanga than nationally.

The top ten leading single causes of death were the same for Mpumalanga as they were nationally, just the rankings differed. Noteworthy is that homicide and violence accounted for 5.8% of deaths nationally and 4.8% of the deaths in the province, and road traffic accidents accounted for about 3% of the deaths in both. Death rates due to lower respiratory infections and diarrhoea were high. For Mpumalanga the lower-ranked single causes of death were epilepsy and fire, while nationally they were lung and oesophageal cancer. Prostate and cervical cancer death rates were also higher in this province. The cardiovascular profile of this province showed high rates of death from stroke and hypertensive heart disease. Ischaemic heart disease was ranked lower and accounted for fewer deaths than it did nationally. Similarly, tuberculosis was ranked higher and accounted for a greater death burden nationally.



# NORTH WEST PROVINCIAL PROFILE



# North West provincial profile

## Background

North West is in the central north of South Africa and is completely landlocked, bordering Botswana in the north, Limpopo and Gauteng in the east, Free State in the south, and Northern Cape in the west. The province encloses 116 320 km<sup>2</sup>, constituting 9.5% of the total land area of the country (SSA, 2003). In 2000 the average population density was estimated at 32 persons per square kilometre. During the 1996 Census almost two-thirds of the population (65%) lived in non-urban areas (SSA, 1998). Prior to 1994 the province was territorially divided into six areas that made up the 'national state' of Bophuthatswana, part of the so-called independent 'homelands', and the rest of the province was under the separate provincial administrations of the then Cape Province and the then Transvaal. These territorial divisions are no longer valid, but given the consolidation of various administrations and levels of development, they are significant in terms of examining data distribution patterns (Tait, 1996).

With the largest single platinum production area in the world around Rustenburg and Brits, diamond mining at Bloemhof, Christiana, Koster and Lichtenburg, marble mining in Taung, Rustenburg and Brits, fluorspar exploitation at Zeerust, and gold and uranium mining at Klerksdorp, Orkney and Stilfontein, mining is the dominant sector of the North West economy, contributing 33% to the province's economy and 18% of the total formal employment (GCIS, 2004). Other main sectoral contributions to the province's Gross Geographic Product (GGP) are government services, trade and catering, manufacturing, finance and agriculture (DWAF & Urban-Econ, 2000). The province's GGP at 2001 prices was rated at R72 230 million, and the province contributed 7.3% to the national Gross Domestic Product (GCIS, 2004). A recent macro-economic overview of the province reported that North West is one of the poorer provinces of South Africa, and that it has a relatively small economic base compared to the other provinces (DWAF & Urban-Econ, 2000).

## Population structure

According to the 2000 ASSA estimates, 3 753 128 people lived in North West, constituting 8.3% of South Africa's total population. The province accommodated slightly more women (50.3%) than men (49.7%). One-third of the population were younger than 15 years, 64% were in their 'economically active' years (15-64), and 6% were aged 60 years or older. [Comparison with 2001 Census: total population 3 669 349 (ASSA had 83 779 more); 8.2% of South Africa's total population; 50.4% female; 91.5% Black African, 1.6% Coloured, 0.3% Indian, 6.7% White.]

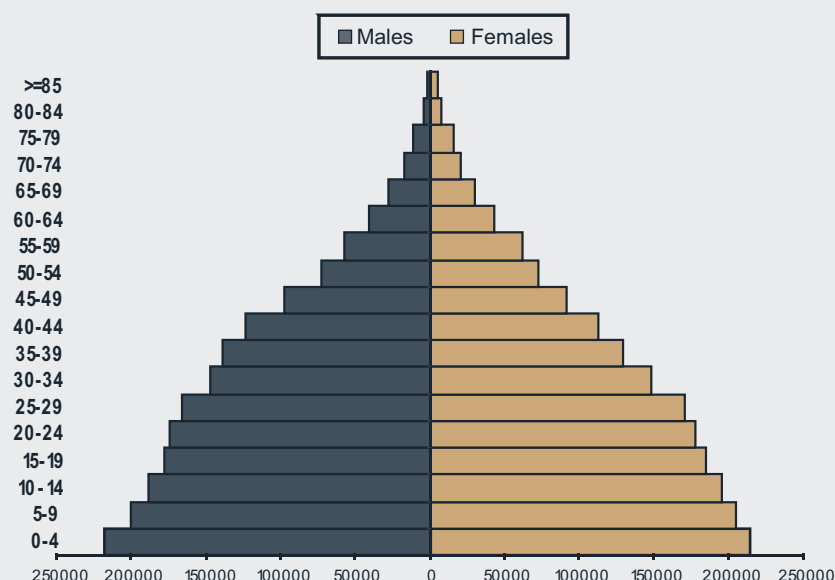


Figure NW1: Age structure of the North West population, 2000

## Living conditions

According to the 2001 Census, 20% of the population aged 20 years or older had no formal school education, and 44% of those in the age group 15-64 were unemployed (SSA, 2003). Over half of the population (57%) lived below the national poverty line in 2002 (UNDP, 2004). Nearly 69% of all households in North West lived in formal dwellings, and 22% and 5% respectively in informal and traditional structures. On average 3.7 persons shared a household. The majority of households (86%) had access to piped water, either in the dwelling, on site, or from a communal tap. One in ten households did not have access to a toilet facility, while less than four in ten, 37%, had a refuse removal service once a week or more. In 45% of households electricity was used as the main source of energy for cooking, wood in 18%, and paraffin in 32%. Almost 70% of the households had a radio, 54% a television, 50% a refrigerator, 14% a telephone and 28% a cell phone (SSA, 2003).

## Mortality profile

North West's mortality profiles are based on 25 246 male (55.9%) and 19 931 female (44.1%) deaths estimated for the year 2000, totalling 45 177 deaths. Figure NW2 shows causes of death for the broad Groups I, II, III and AIDS. Group I and II deaths were very similar for men and women, while the proportions of deaths due to HIV/AIDS were 27% in males and 34% in females. A considerable difference was seen in the proportions of deaths due to injuries, with three times more such deaths in men.

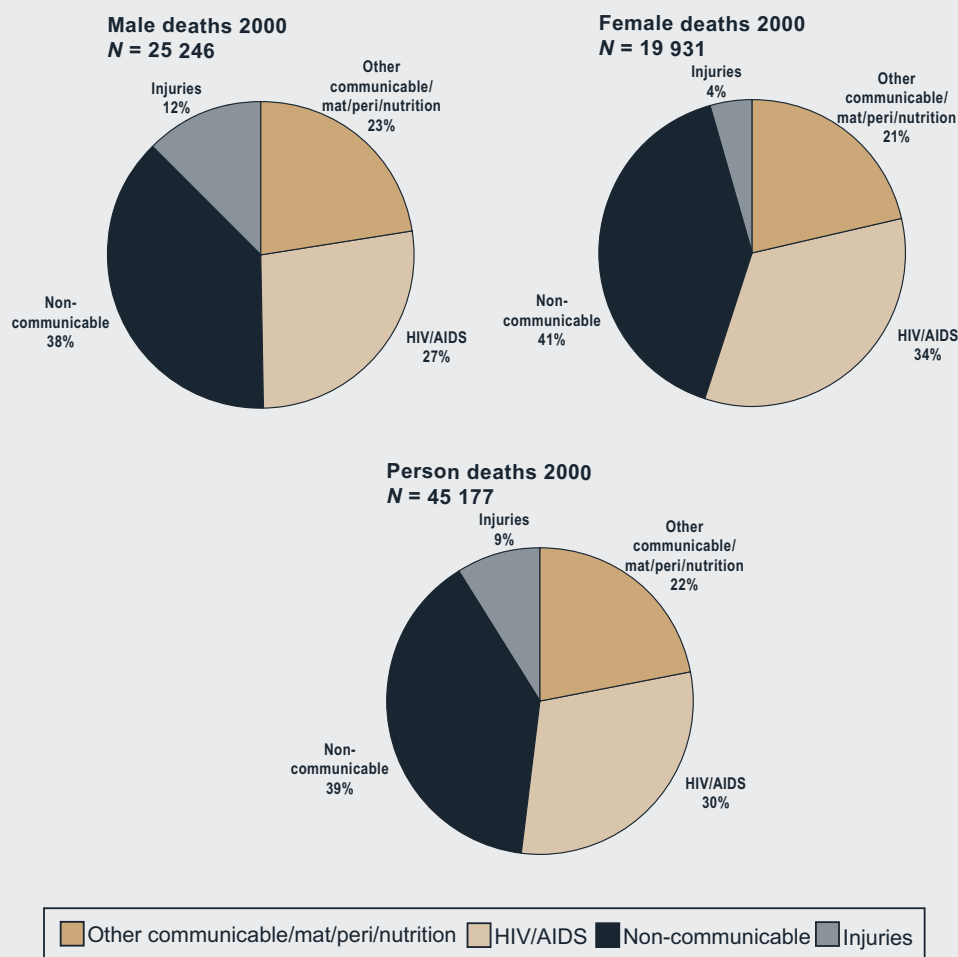


Figure NW2: Estimated deaths by Groups, North West 2000

The age-specific cause of death profiles are presented in Figure NW3. The numbers of deaths are presented by five-year age intervals for the three broad Groups and HIV/AIDS. Due to particular disease and mortality profiles in children during the first year of life, the under-5-year age group was divided into infants less than 1 year old and children of 1-4 years old. Over half of the deaths in infants were due to Group I diseases, and another third to HIV/AIDS. Over four in ten deaths in children under 5 years old were due to HIV/AIDS. HIV/AIDS deaths were also exceptionally high in young adult men and women. HIV/AIDS deaths were also exceptionally high in young adult men and women. Deaths resulting from injuries were very high in young men, while non-communicable diseases dominated in adults of 60 years or older.

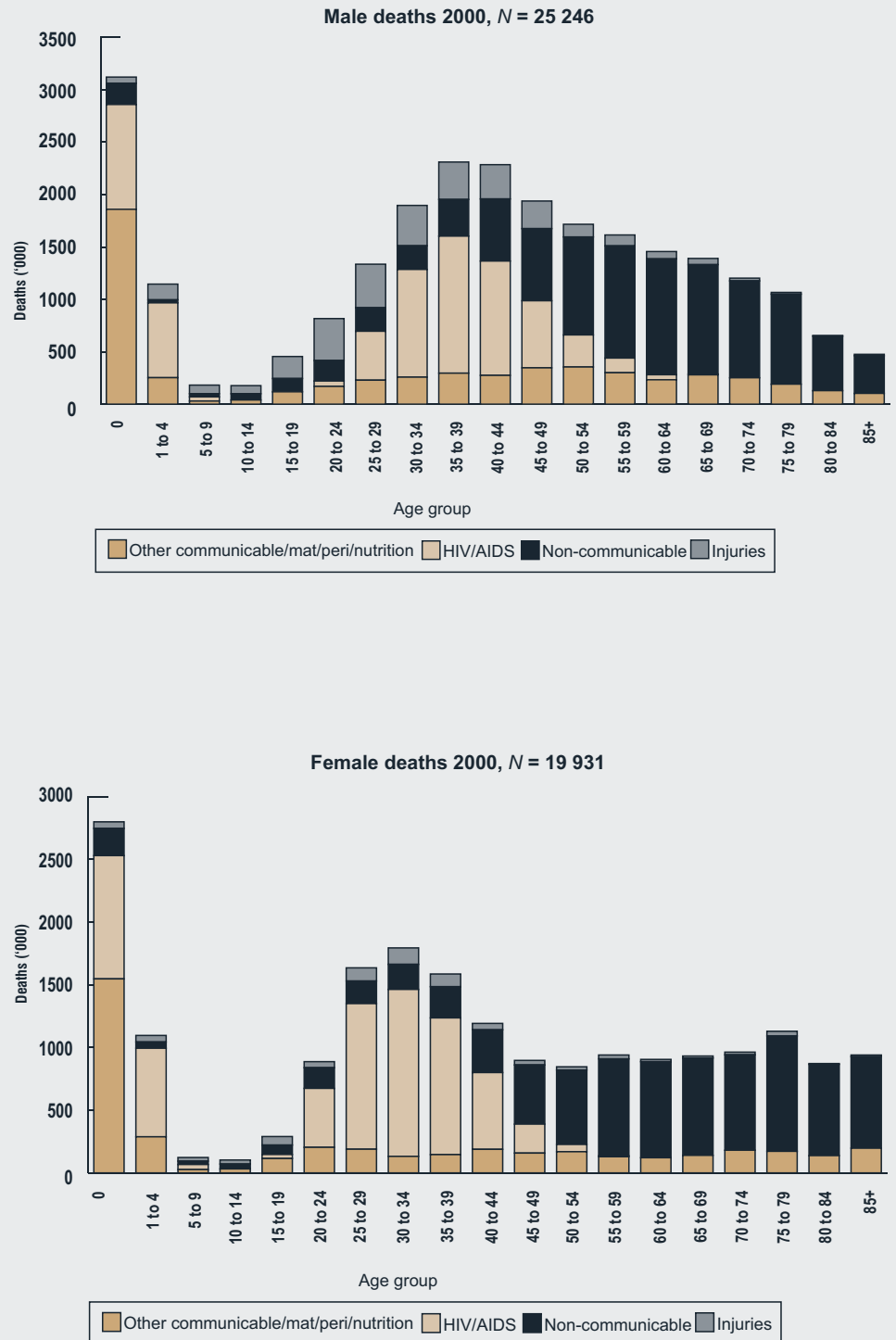


Figure NW3: Age distribution of deaths by broad Groups, North West 2000

Figure NW4 shows North West's cause of death profile for categories ranked in descending order by the total number of persons. In both men and women HIV/AIDS was the leading cause of death (30%), followed by cardiovascular disease (19%), infectious and parasitic diseases excluding HIV/AIDS (11%), respiratory infections (6%), malignant neoplasms (6%) and respiratory disease (5%). Differences were observed between men and women, with HIV/AIDS, cardiovascular disease, respiratory infections and diabetes accounting for more female than male deaths. In contrast, among the leading ten categories, other infectious and parasitic diseases, injuries, malignant neoplasms, respiratory disease, perinatal conditions and diseases of the digestive system predominated in males.

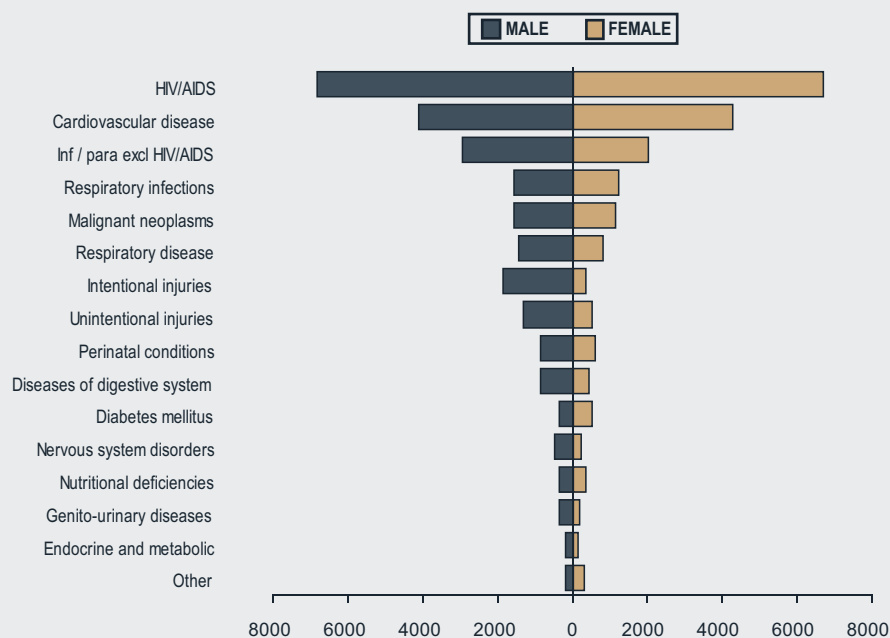


Figure NW4: Causes of death according to categories for males and females, North West 2000

"Other" causes include congenital abnormalities, benign neoplasms, maternal conditions, musculo-skeletal diseases, mental disorders, skin diseases, oral conditions and conditions of the sense organs.

The twenty leading single causes of death in the total North West population are shown in Figure NW5(a) overleaf, illustrating that HIV/AIDS was the largest single cause of death, accounting for 30% of all deaths during 2000. HIV/AIDS caused about five times more deaths than lower respiratory infections (6%), the next largest single cause. Stroke, ischaemic heart disease, tuberculosis and hypertensive heart disease were next in the ranking, each accounting for between 5% and 6% of deaths. From Figure NW5(b) it is clear that women had higher numbers of deaths due to stroke, hypertensive heart disease, diarrhoeal disease and diabetes mellitus than men, while men had higher numbers of deaths due to the remaining leading causes of death.

## Persons 2000, N = 45 177

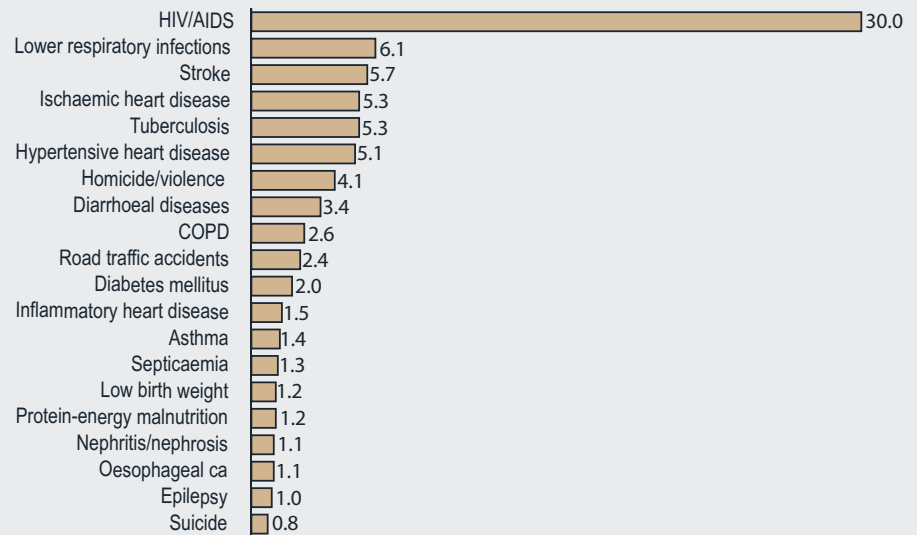


Figure NW5(a): Twenty leading single causes of death (%), North West 2000

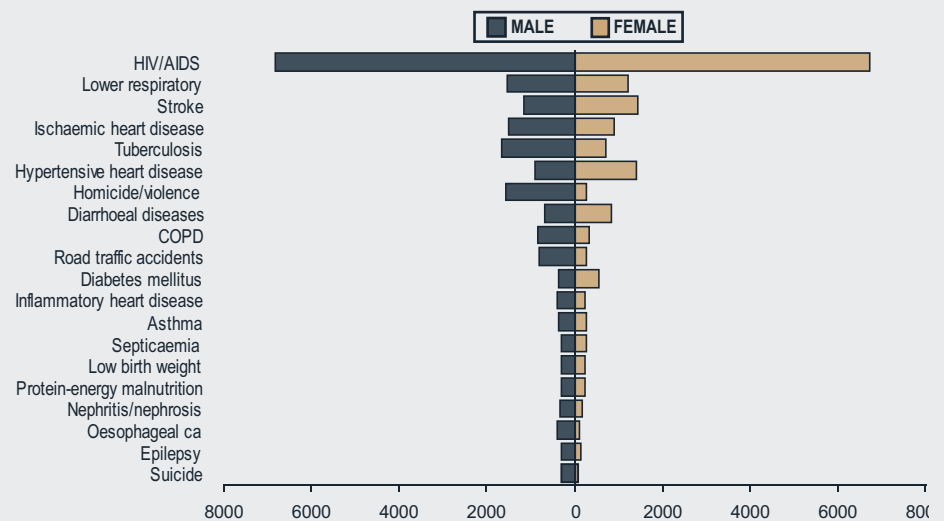


Figure NW5(b): Twenty leading single causes of death by sex, North West 2000

## Premature mortality

The years of life lost (YLLs) measure does not merely consider the number of deaths, but also takes into account the age at which the deaths occurred. YLLs were calculated using the age weighting parameter, discounting and the standard life expectancy that were used in the Global Burden of Disease Study. Table NW 1 shows that HIV/AIDS played a major role in premature mortality, which can partly be explained by the large numbers of deaths due to AIDS, and partly by the large proportion of AIDS deaths that occurred in young adults and children under the age of 5 years. The proportions attributable to other causes were much smaller, lower respiratory infections, homicide/violence and tuberculosis each being responsible for 5-6% of premature loss of life in persons. Premature mortality manifested differently in men and women, with differences in the numbers and proportions of YLLs per cause of death. HIV/AIDS, for example, accounted for just under half of all YLLs in women, and about one-third in men. While homicide/violence and road traffic accidents ranked second and fifth in men, these causes ranked tenth and eleventh respectively in women, with men experiencing a four times greater premature loss of life due to these injuries ( $\pm 63\ 000$  YLLs) than women ( $\pm 15\ 000$  YLLs).

Table NW1: Leading 20 single causes of the premature mortality burden (YLLs) by sex, North West 2000

Males				Females				Persons			
Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%
1	HIV/AIDS	180135	34.3	1	HIV/AIDS	197124	46.2	1	HIV/AIDS	377258	39.6
2	Homicide/violence	42231	8.0	2	Lower respiratory infections	24667	5.8	2	Lower respiratory infections	53083	5.6
3	Tuberculosis	32553	6.2	3	Diarrhoeal diseases	21364	5.0	3	Homicide/violence	49790	5.2
4	Lower respiratory infections	28416	5.4	4	Tuberculosis	16320	3.8	4	Tuberculosis	48873	5.1
5	Road traffic accidents	21026	4.0	5	Stroke	14371	3.4	5	Diarrhoeal diseases	41110	4.3
6	Diarrhoeal diseases	19747	3.8	6	Hypertensive heart disease	11875	2.8	6	Road traffic accidents	28443	3.0
7	Ischaemic heart disease	17073	3.3	7	Ischaemic heart disease	9231	2.2	7	Stroke	27315	2.9
8	Stroke	12943	2.5	8	Low birth weight	8103	1.9	8	Ischaemic heart disease	26304	2.8
9	Low birth weight	10309	2.0	9	Protein-energy malnutrition	7892	1.9	9	Hypertensive heart disease	20815	2.2
10	COPD	9915	1.9	10	Homicide/violence	7558	1.8	10	Low birth weight	18412	1.9
11	Hypertensive heart disease	8940	1.7	11	Road traffic accidents	7417	1.7	11	Protein-energy malnutrition	16696	1.8
12	Protein-energy malnutrition	8804	1.7	12	Septicaemia	6089	1.4	12	COPD	14374	1.5
13	Epilepsy	7061	1.3	13	Diabetes mellitus	5768	1.4	13	Septicaemia	12150	1.3
14	Suicide	7042	1.3	14	COPD	4459	1.0	14	Epilepsy	10433	1.1
15	Septicaemia	6060	1.2	15	Cervix ca	4323	1.0	15	Diabetes mellitus	10118	1.1
16	Inflammatory heart disease	5848	1.1	16	Asthma	4048	1.0	16	Asthma	9368	1.0
17	Asthma	5320	1.0	17	Epilepsy	3372	0.8	17	Suicide	9066	1.0
18	Nephritis/nephrosis	5259	1.0	18	Breast ca	3347	0.8	18	Inflammatory heart disease	8860	0.9
19	Oesophageal ca	4848	0.9	19	Inflammatory heart disease	3011	0.7	19	Nephritis/nephrosis	7857	0.8
20	Fires	4673	0.9	20	Bacterial meningitis	2752	0.6	20	Fires	7389	0.8
	<b>All causes</b>	<b>525 973</b>			<b>All causes</b>	<b>426 801</b>			<b>All causes</b>	<b>952 774</b>	

## Leading single causes of death among children (<15 years)

The ten leading causes of death in children 0-4 years old, and in those 5-14 years old, are shown by sex in Figure NW6. HIV/AIDS deaths in under 5 year olds were exceptionally high, followed by two more infectious causes, a perinatal condition and a nutritional deficiency. The leading five causes in children under 1 year reflect the same pattern (not displayed here), with one in four infants dying from HIV/AIDS, followed by other Group I causes. In girls 5-14 years old, HIV/AIDS remains the largest cause of death, while in boys of this age group, road traffic accidents accounted for the largest cause of death. Particularly in boys, but also in girls 5-14 years old, injuries take up a prominent presence in the leading ten causes of death as drowning, homicide/violence and fires are added to road traffic accidents. The presence of epilepsy and tuberculosis, both manageable conditions, is observed.

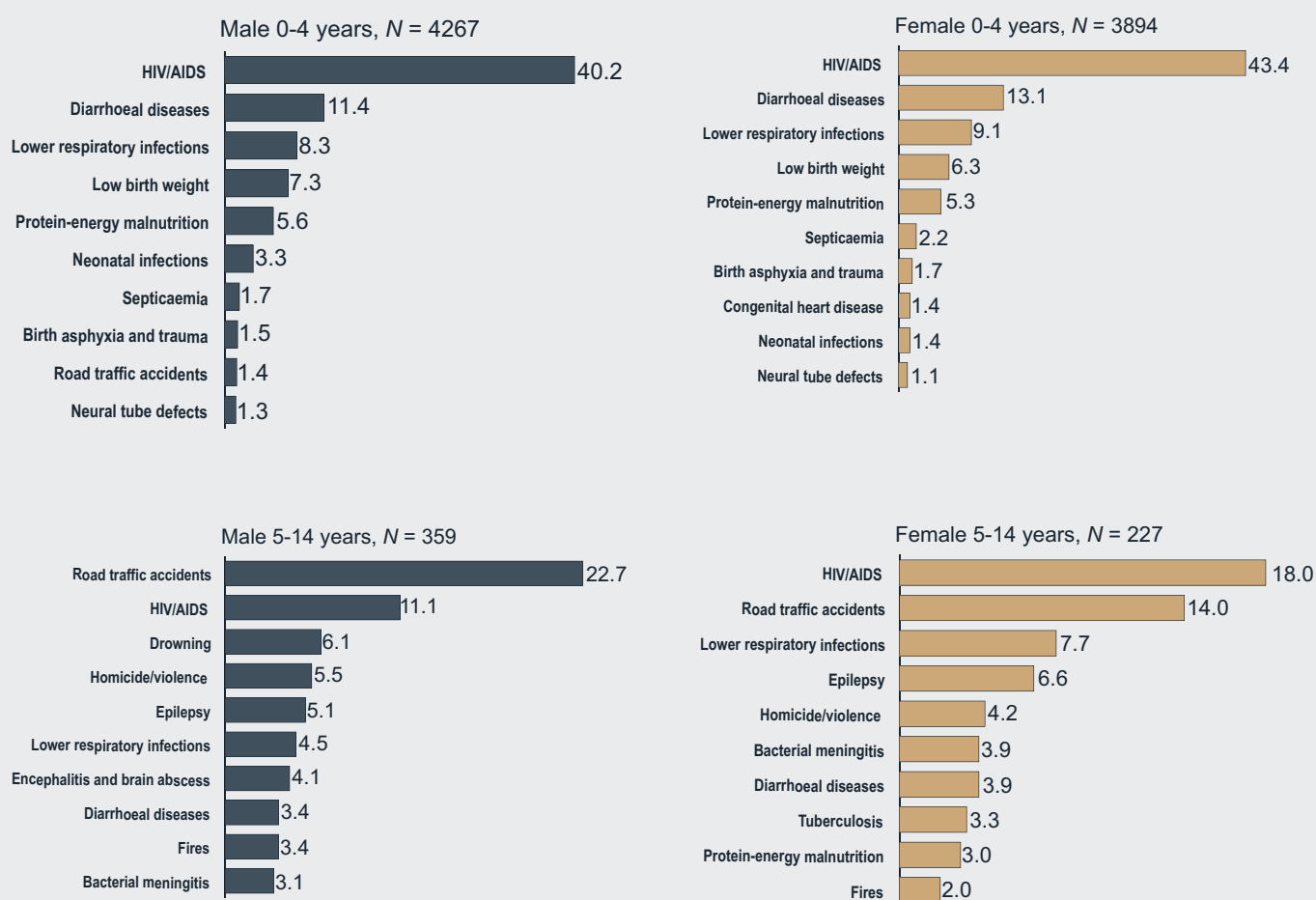


Figure NW6: Ten leading single causes of death (%) among children (<15 years) by sex, North West 2000

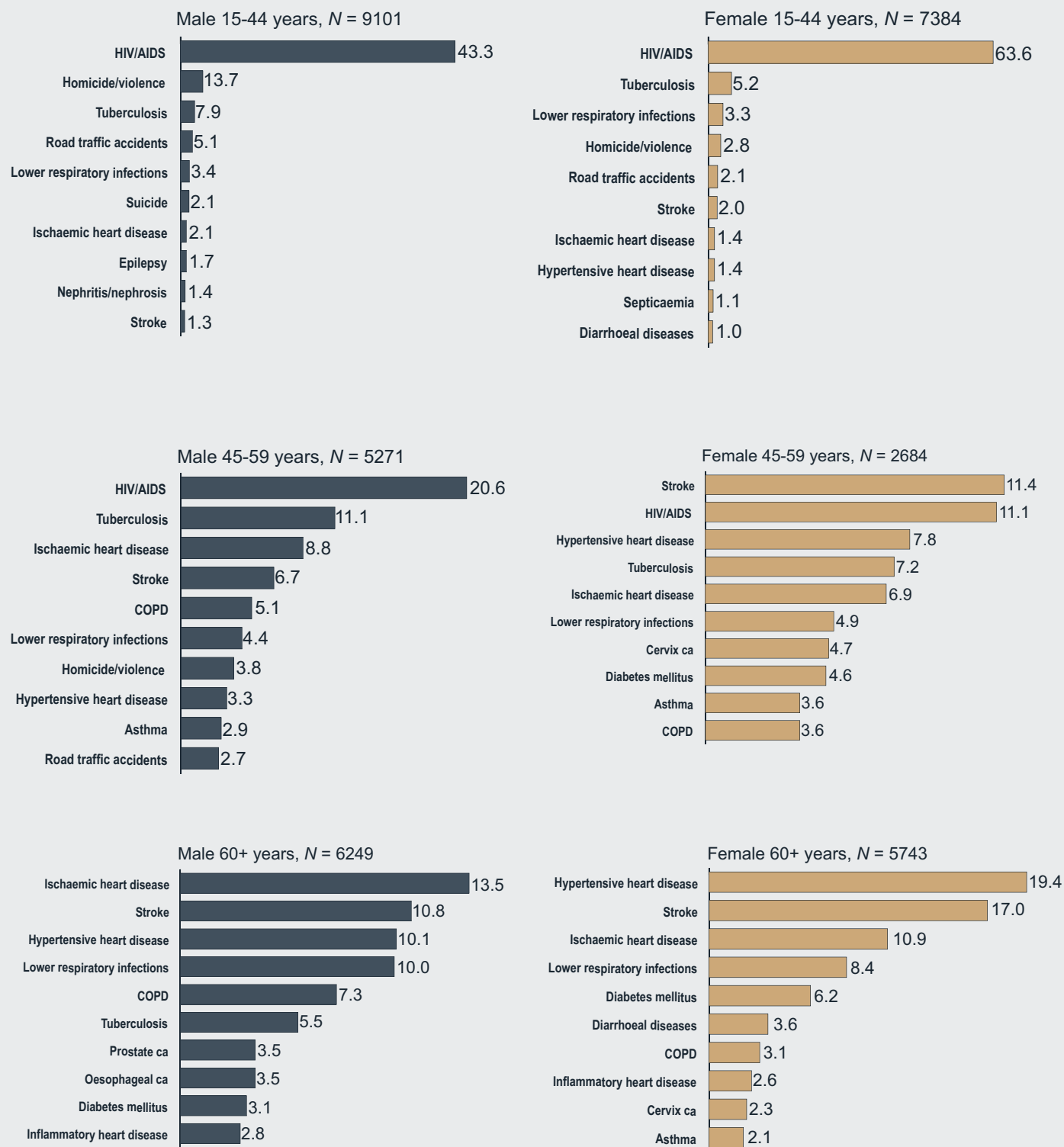
## Leading causes of death among adults

Figure NW7 presents the 10 leading single causes of death in men and women in the age groups 15-44 years, 45-59 years and those 60 years or older. In young adults 15-44 years old, HIV/AIDS was by far the leading cause of death, responsible for catastrophic proportions in young women (64%). In both men and women, homicide/violence, tuberculosis, road traffic accidents and lower respiratory infections accounted for the subsequent four causes of death, though these causes differed by sex in their ranking.

In the age group 45-59 years, HIV/AIDS was responsible for the largest cause of death in men and the second largest in women. Stroke accounted for a negligibly higher proportion than HIV/AIDS in women. The proportion of HIV/AIDS deaths in men was about double the proportion in women. While HIV/AIDS held a dominating position in the leading 10 causes in this age group, diseases of lifestyle were responsible for five of the leading 10 causes in men, and for seven in women, accounting for over a quarter of male deaths, and over 40% of female deaths.

In the age group 60 years or older, most of the ten leading causes of death were from non-communicable conditions, with lower respiratory infections, tuberculosis and diarrhoeal disease the only communicable diseases among the leading causes. In both older men and older women, ischaemic heart disease, stroke and hypertensive heart disease were the leading single causes of death, with differing ranking and proportions by sex. Another cardiac condition, inflammatory heart disease, was present among the leading causes in older persons. Diabetes, being the fifth largest cause in women, and malignant neoplasms accounted for the remaining positions in the top ten causes among older persons.

Figure NW7: Ten leading single causes of death (%) among adults by sex, North West 2000



## How does North West compare with the national profile?

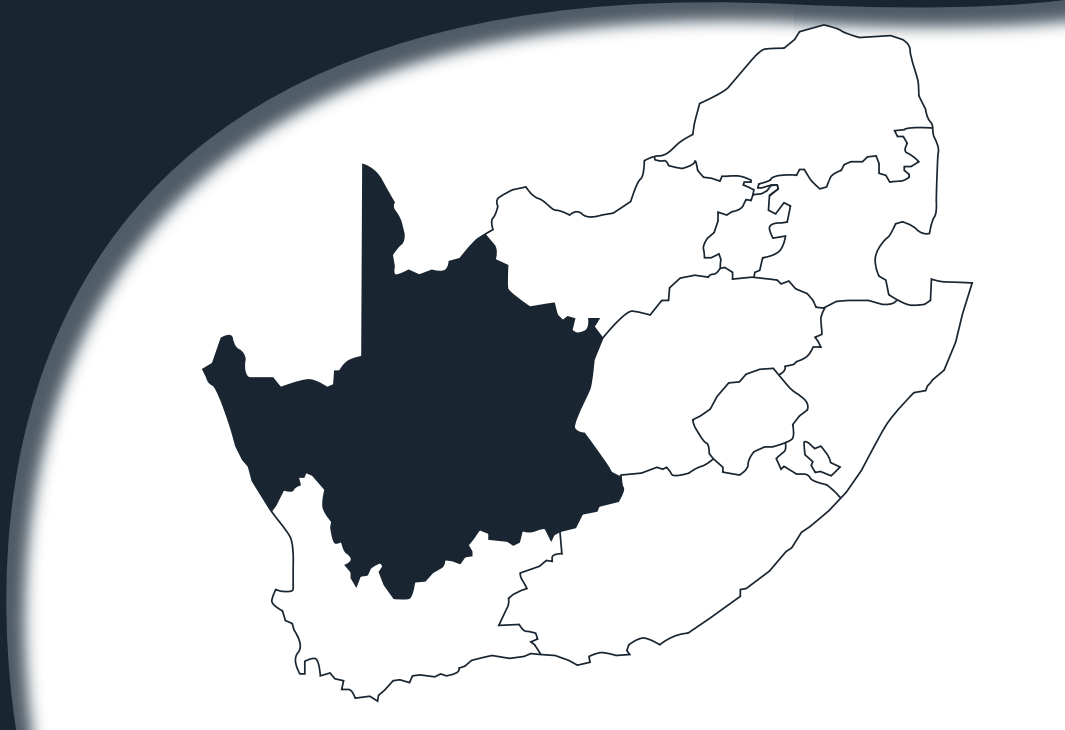
The cause of death profile for North West is similar to the country's national profile. In the broad Groups, injuries in North West (9%) constituted a smaller proportion than nationally (12%), while non-communicable diseases constituted a larger proportion in North West (39%) than nationally (38%).

Tuberculosis and lower respiratory infections accounted for higher mortality rates in this province than nationally. In contrast, lower respiratory infections ranked second in North West, but sixth nationally. This province experienced higher cardiovascular disease mortality rates as a result of high rates for stroke and hypertensive heart disease. Cancer mortality was slightly lower than the national average overall, but prostate, cervical, and breast cancer rates were markedly higher in this province. Epilepsy, which is a manageable condition, ranked as the nineteenth largest cause of death in the North West population. Injury mortality rates were slightly lower in this province, and homicide/violence, which ranked second nationally, ranked seventh in North West.

Similar to the pattern in the total population, lower respiratory infections in children under 1 and under 5 years of age ranked higher in North West than nationally. In both these child populations neural tube defects also ranked higher in North West than nationally.



# NORTHERN CAPE PROVINCIAL PROFILE



# Northern Cape provincial profile

## Background

Northern Cape is in the north-west of South Africa, having international borders with Botswana and Namibia, and local borders with Western Cape and Eastern Cape in the south, and Free State and North West in the east. The province encloses 361 830 km<sup>2</sup>, constituting 29.7% of the total land area of South Africa (SSA, 2003). In 2000 the average population density was estimated at 3 persons per square kilometre, by far the lowest density of all the provinces. During the 1996 Census 29.9% of the population lived in non-urban areas (SSA, 1998).

Northern Cape's major airports are at Kimberley, the capital, and Upington. The Northern Cape is serviced by an excellent road network, which makes it easily accessible from South Africa's major cities, harbours and airports. Upington is the centre of the karakul sheep and dried fruit industries, and the most northerly wine-making region in South Africa. Sutherland is the coldest town in the country, and sheep-farming towns are Carnarvon, Colesberg, Kenhardt and Prieska. The province has several national parks and conservation areas. The economy of the interior Karoo depends on sheep farming, while the karakul pelt industry is one of the most important in the Gordonia district of Upington. The province has fertile agricultural land; at Upington, Kakamas and Keimoes, grapes and fruit are intensively cultivated. Table grapes are mainly produced for export.

Northern Cape is rich in minerals. The country's chief diamond pipes are found in the Kimberley district. Between Alexander Bay and Port Nolloth, alluvial diamonds are extracted from the beaches and sea. The Sishen Mine near Kathu is the biggest source of iron ore in South Africa, and the copper mine at Okiep is one of the oldest in the country. Copper is also mined at Springbok and Aggenys. The province is also rich in asbestos, manganese, fluorspar, semi-precious stones and marbles. The province's Gross Geographic Product at 2001 prices was rated at R19 585 million, contributing 2% to the national Gross Domestic Product (GCIS, 2004).

## Population structure

According to the 2000 ASSA estimates 955 010 people lived in Northern Cape, constituting 2.1% of South Africa's total population. The province accommodated slightly more women (50.7%) than men (49.3%). Just over 31% of the population were younger than 15, 64% were in their 'economically active' years (15-64), and 7.3% were aged 60 years or more. [Comparison with 2001 Census: total population 822 727 (ASSA had 132 283 more); 1.8% of South Africa's population; 51.2% female; 35.7% Black African, 51.6% Coloured, 0.3% Indian, 12.4% White.]

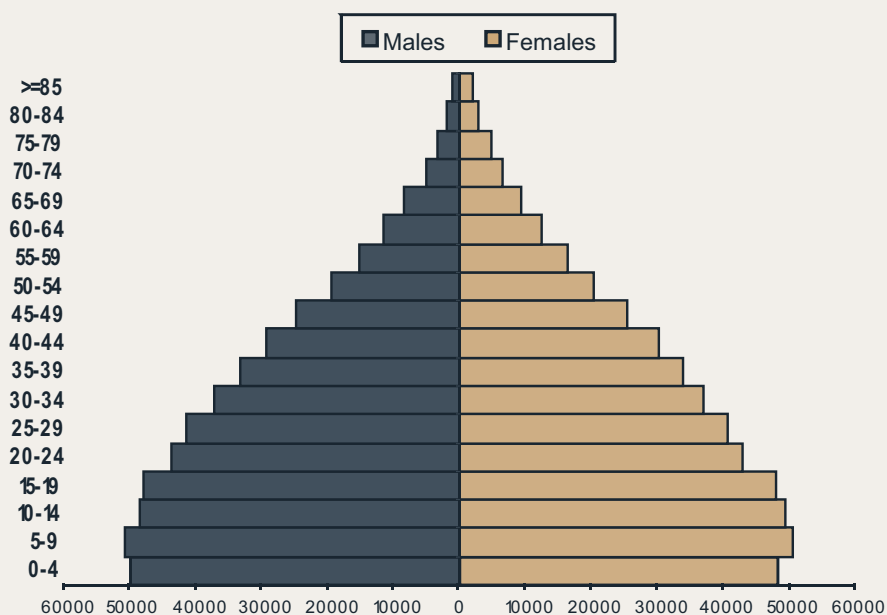


Figure NC1: Age structure of the Northern Cape population, 2000

## Living conditions

According to the 2001 Census 18% of the population aged 20 years or older had no formal school education, and over 33% of those in the age group 15-64 years were unemployed (SSA, 2003). Over 54% of the province's population lived below the national poverty line in 2002 (UNDP, 2004). About 80% of all households lived in formal dwellings, and nearly 13% and 4% respectively in informal and traditional structures. On average, 3.8 persons shared a household. Piped water, either in the dwelling, on site, or from a communal tap was available in 97% of households. Over 11% of households did not have access to a toilet facility, and 69% had a refuse removal service once a week or more often. In 59% of households electricity was used as the main source of energy for cooking, wood in 15%, and paraffin in 18%. Of the households, 68% had a radio, 56% a television, 56% a refrigerator, 30% a telephone and 26% a cell phone (SSA, 2003).

## Mortality profile

Northern Cape's mortality profile is based on 5495 (56%) male and 4314 (44%) female deaths estimated for the year 2000, a total of 9809 deaths. Figure NC2 shows causes of death for the broad Groups I, II, III and HIV/AIDS. Group I and II deaths were similar for men and women, while the proportions of deaths due to HIV/AIDS were 12% in males and 16% in females. There is double the number of deaths from injury in males than in females.

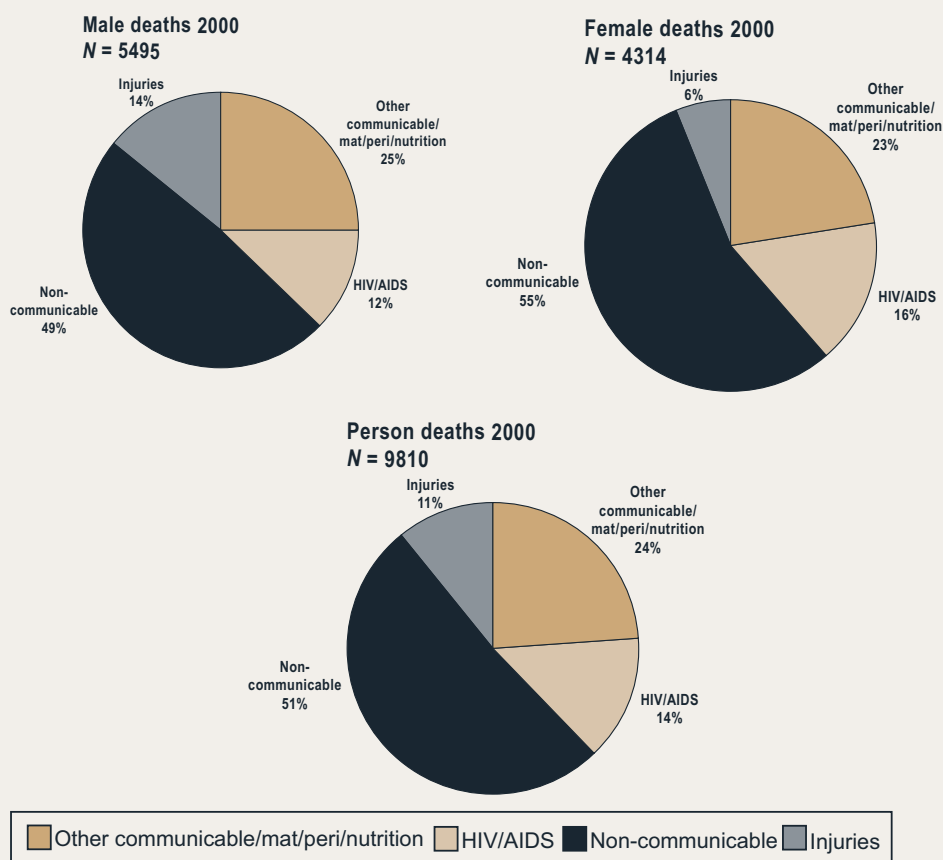


Figure NC2: Estimated deaths by Groups, Northern Cape 2000

The age-specific cause of death profiles are presented in Figure NC3. The number of deaths is presented by 5-year intervals for the three broad Groups and HIV/AIDS. Due to particular disease and mortality profiles in children during the first year of life, the under 5 year age group was divided into infants less than 1 year old and children aged 1-4 years. More than two-thirds of deaths in infants were due to Group I diseases and another quarter to HIV/AIDS. Half of the deaths in those under 5 were due to HIV/AIDS. HIV/AIDS was also the leading cause of death in young women. Injuries were the leading cause in young men, and non-communicable diseases in adults over 60 years of age.

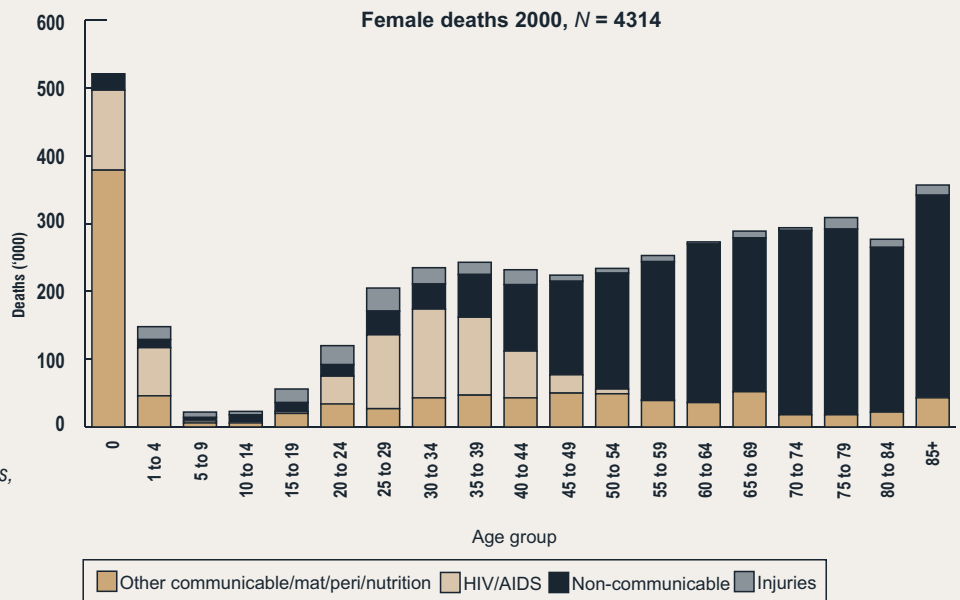
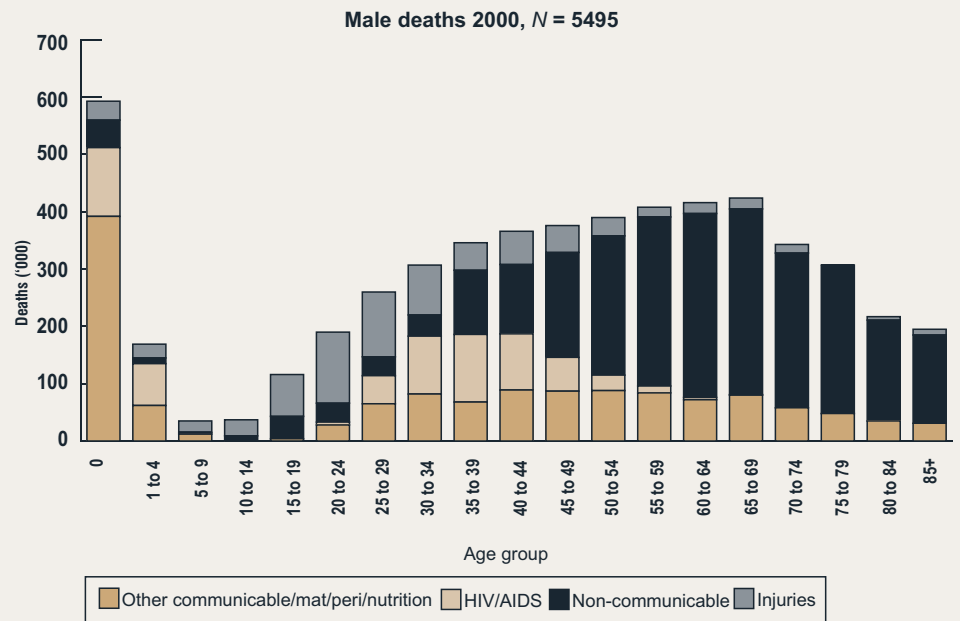


Figure NC3: Age distribution of deaths by broad groups, Northern Cape 2000

Figure NC4 shows Northern Cape's cause of death profile, with categories ranked in descending order according to total deaths. In both men and women cardiovascular disease (24%) was the leading cause of death, followed by HIV/AIDS (14%), infectious and parasitic diseases excluding HIV/AIDS (13%), malignant neoplasms (10%), and respiratory disease (7%). Considerable gender differences are observed with females experiencing 8% and 4% more cardiovascular diseases respectively than males. Males suffer 4% more death from infections and parasitic diseases excluding HIV/AIDS and 6% more intentional injuries than females.

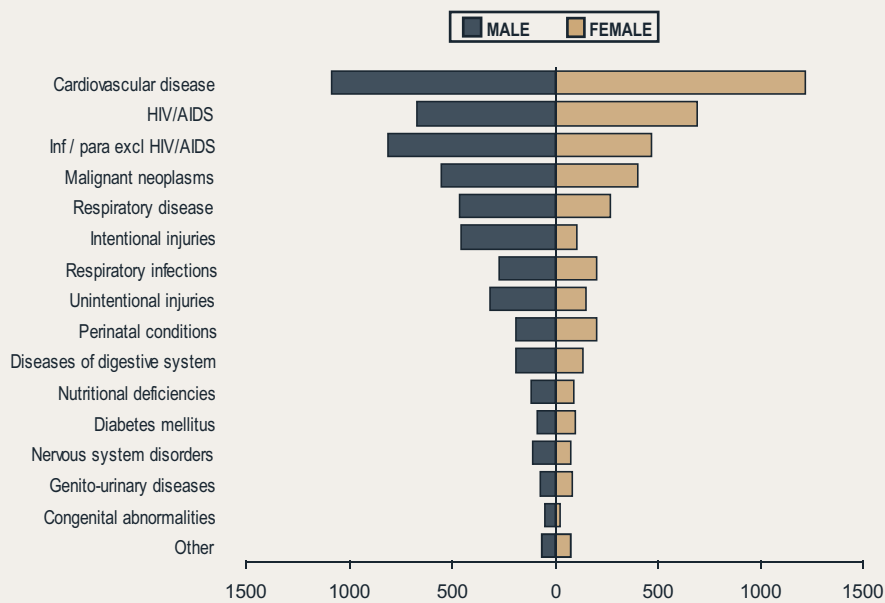


Figure NC4: Causes of death according to categories for males and females, Northern Cape 2000

"Other" causes include congenital abnormalities, benign neoplasms, maternal conditions, musculoskeletal diseases, mental disorders, skin diseases, oral and sense organ conditions.

The twenty leading single causes of death in the total Northern Cape population are shown in Figure NC5(a) below, illustrating that HIV/AIDS was the largest single cause of death, accounting for nearly 14% of all deaths during 2000. Almost twice as many deaths were caused by HIV/AIDS than stroke or ischaemic heart disease, the next largest single causes. Tuberculosis, lower respiratory infections, homicide/violence and chronic obstructive pulmonary disease were next in the ranking. From Figure NC5(b) it is clear that women had higher numbers of deaths due to HIV/AIDS, stroke and hypertensive heart disease than men.

### Persons 2000, N = 9810

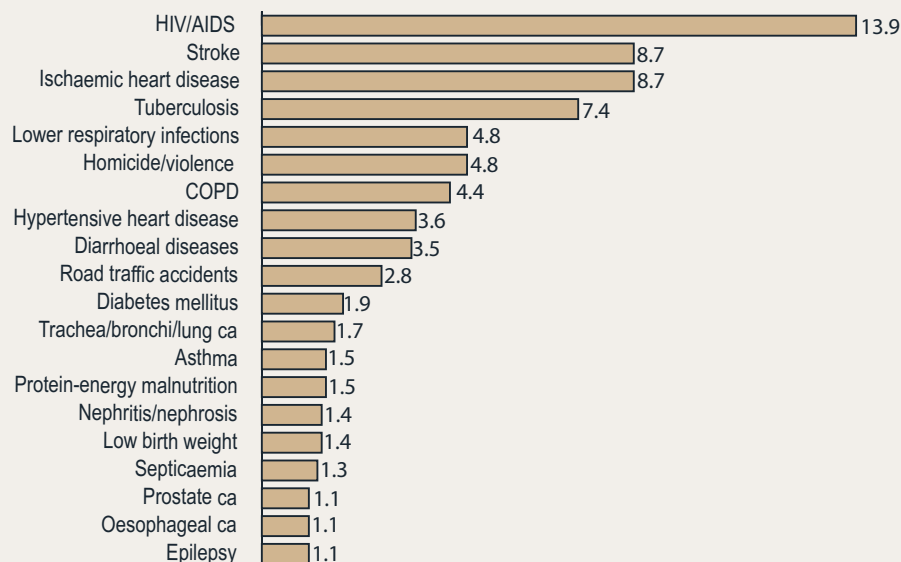


Figure NC5(a): Twenty leading single causes of death (%), Northern Cape 2000

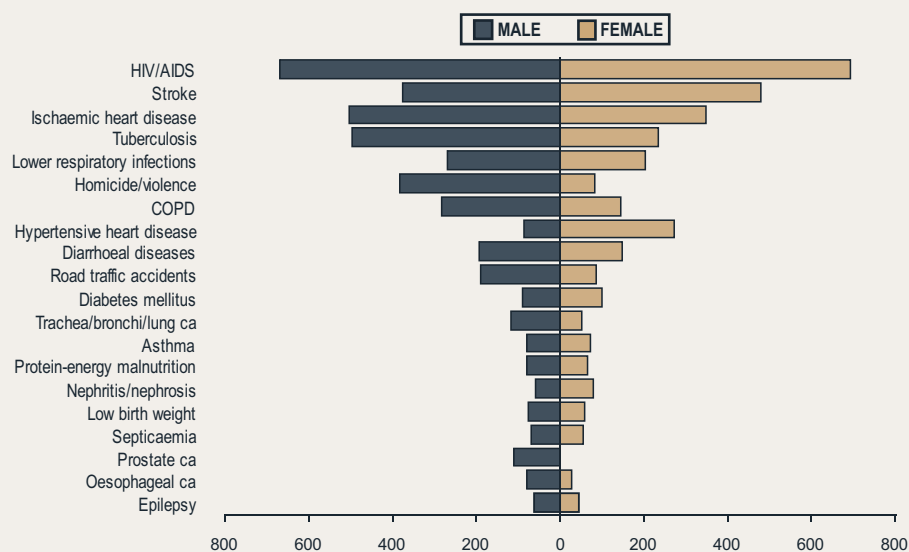


Figure NC5(b): Twenty leading single causes of death by sex, Northern Cape 2000

### Premature mortality

The years of life lost (YLLs) measure does not merely consider the number of deaths, but also takes into account the ages at which the deaths occur. YLLs were calculated using the age weighting parameter, discounting and the standard life expectancy that were used in the Global Burden of Disease Study. Table NC1 shows that HIV/AIDS played a major role in premature mortality, which can partly be explained by the large numbers of deaths due to AIDS, and partly by the large proportions of AIDS deaths that occurred in young adults and children under the age of 5 years. The proportions attributable to other causes were much smaller: tuberculosis, homicide/violence and diarrhoeal diseases each being responsible for 5-8% of premature loss of life. Premature mortality manifested differently in men and women, with differences in the numbers and proportions of YLLs per cause of death. HIV/AIDS accounted for 26% of YLLs for women and 18% of YLLs for men. Homicide/violence was ranked second in men but eighth in women

Table NC1: Leading 20 single causes of the premature mortality burden (YLLs) by sex, Northern Cape 2000

Males				Females				Persons			
Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%
1	HIV/AIDS	17936	17.6	1	HIV/AIDS	20224	26.4	1	HIV/AIDS	38160	21.4
2	Homicide/violence	10742	10.5	2	Tuberculosis	5173	6.8	2	Tuberculosis	14293	8.0
3	Tuberculosis	9120	8.9	3	Diarrhoeal diseases	3891	5.1	3	Homicide/violence	12843	7.2
4	Diarrhoeal diseases	5820	5.7	4	Stroke	3887	5.1	4	Diarrhoeal diseases	9711	5.4
5	Ischaemic heart disease	5760	5.6	5	Lower respiratory infections	3705	4.8	5	Ischaemic heart disease	8768	4.9
6	Road traffic accidents	5060	5.0	6	Ischaemic heart disease	3008	3.9	6	Stroke	7864	4.4
7	Stroke	3977	3.9	7	Road traffic accidents	2116	2.8	7	Lower respiratory infections	7559	4.2
8	Lower respiratory infections	3854	3.8	8	Homicide/violence	2101	2.7	8	Road traffic accidents	7176	4.0
9	Low birth weight	2518	2.5	9	Low birth weight	1958	2.6	9	Low birth weight	4476	2.5
10	Protein-energy malnutrition	2401	2.4	10	Protein-energy malnutrition	1764	2.3	10	Protein-energy malnutrition	4165	2.3
11	COPD	2355	2.3	11	COPD	1710	2.2	11	COPD	4065	2.3
12	Suicide	1764	1.7	12	Hypertensive heart disease	1689	2.2	12	Epilepsy	2651	1.5
13	Epilepsy	1429	1.4	13	Epilepsy	1222	1.6	13	Hypertensive heart disease	2444	1.4
14	Cirrhosis of liver	1310	1.3	14	Cervix ca	1179	1.5	14	Septicaemia	2383	1.3
15	Septicaemia	1291	1.3	15	Septicaemia	1092	1.4	15	Suicide	2354	1.3
16	Fires	1215	1.2	16	Asthma	1042	1.4	16	Asthma	2067	1.2
17	Trachea/bronchi/lung ca	1100	1.1	17	Breast ca	843	1.1	17	Fires	1928	1.1
18	Asthma	1024	1.0	18	Fires	713	0.9	18	Cirrhosis of liver	1817	1.0
19	Diabetes mellitus	836	0.8	19	Birth asphyxia and trauma	712	0.9	19	Trachea/bronchi/lung ca	1663	0.9
20	Oesophageal ca	769	0.8	20	Nephritis/nephrosis	679	0.9	20	Diabetes mellitus	1492	0.8
	<b>All causes</b>	<b>80 281</b>			<b>All causes</b>	<b>58 709</b>			<b>All causes</b>	<b>137 879</b>	

## Leading causes of death among children (<15 years)

The leading ten causes of death in children under 15 years of age are shown in Figure NC6 for boys and girls separately. The pattern for boys and girls was similar. HIV/AIDS deaths were high in those under 5 years old, followed by one more infectious disease, two perinatal conditions and a nutritional deficiency. Among children aged 5 to 14 years, the number of deaths among boys was nearly twice as high and the profile of causes differed. Injuries, including road traffic accidents, drowning, homicide and fires were among the leading causes for boys in this age group, while epilepsy, septicaemia, HIV/AIDS and bacterial meningitis were among the leading causes for girls.

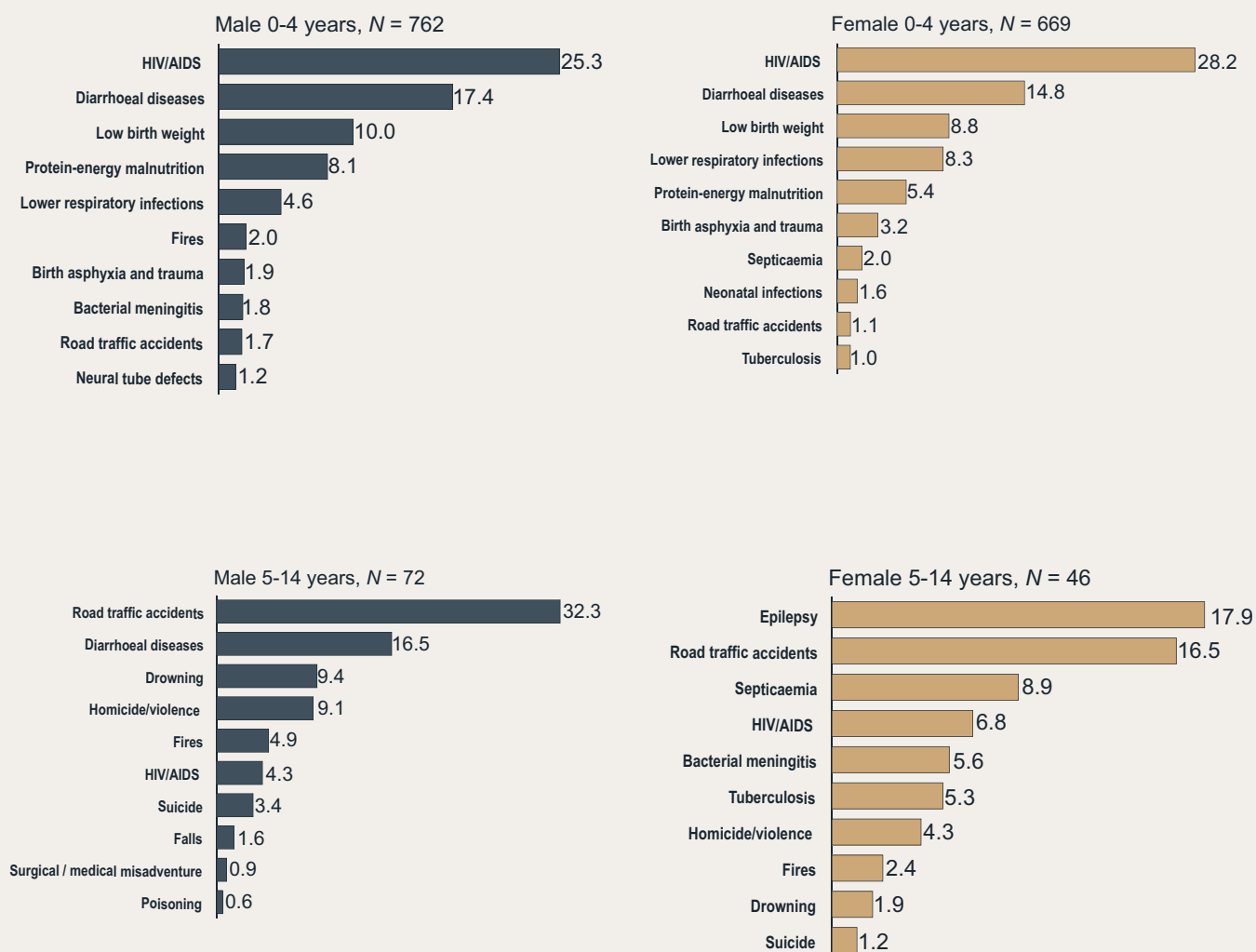


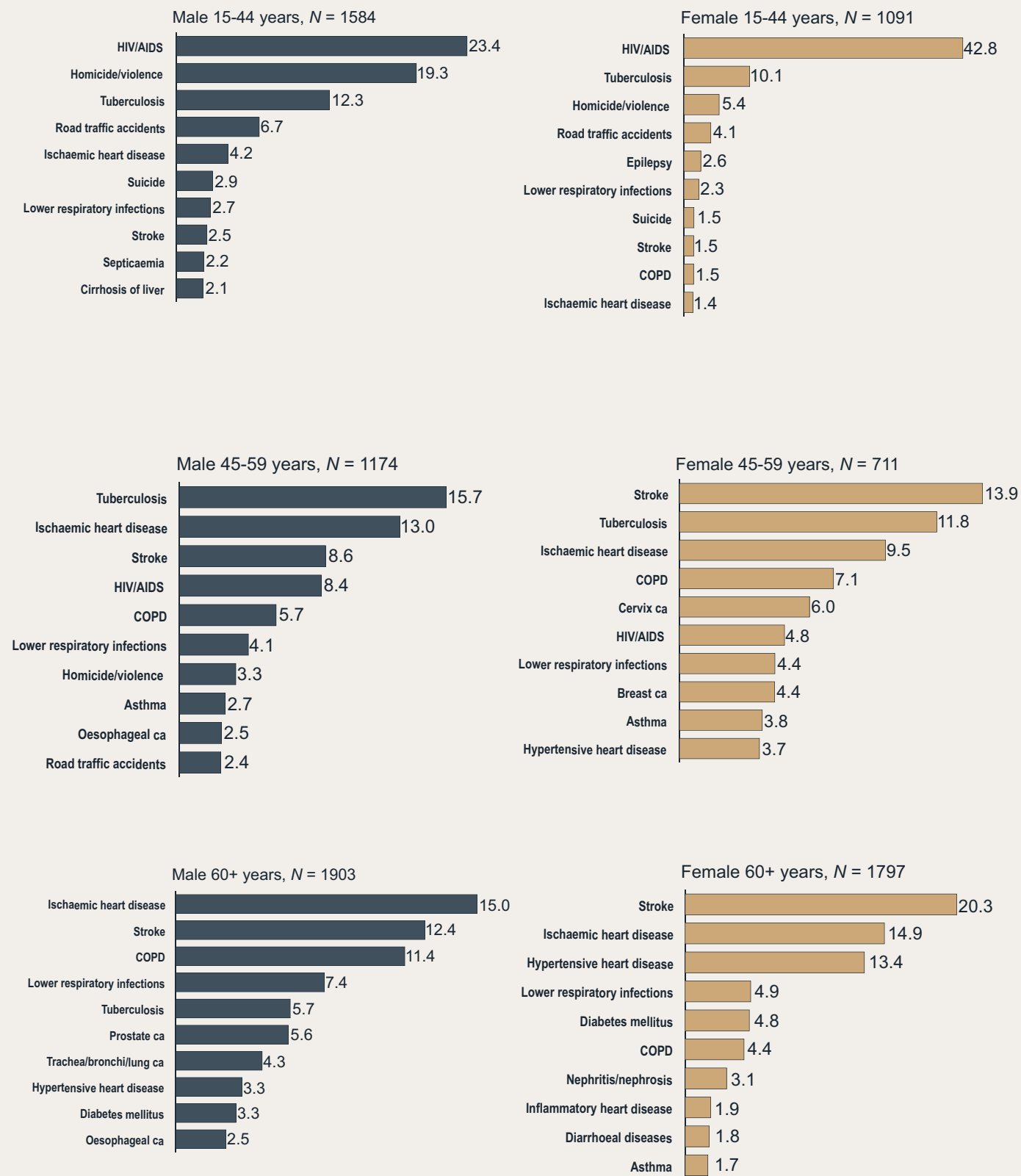
Figure NC6: Ten leading single causes of death (%) among children (<15 years) by sex, Northern Cape 2000

## Leading causes of death among adults

The leading ten causes of death among adults are shown in Figure NC7 by selected age groups and sex. Among young adults aged 15-44 years, HIV/AIDS was the leading cause for both men and women, followed by tuberculosis, homicide and road traffic accidents. These 4 conditions accounted for more than 60% of the deaths in this age group. Among the next age group, 45-59 years, the pattern for men and women differed slightly. However, tuberculosis, ischaemic heart disease and stroke were the leading causes for both men and women. Chronic obstructive pulmonary disease and HIV/AIDS were the next leading causes and in the case of women, cervical cancer also featured.

In older persons (60 years and older) most of the leading causes of death were non-communicable diseases and cardiovascular disease was clearly the primary cause of death. Stroke and ischaemic heart disease were the leading single causes of death for both men and women. For men, respiratory conditions were the next largest causes of death followed by prostate and lung cancer. For women, hypertensive heart disease and diabetes mellitus featured as well as lower respiratory infections and chronic obstructive pulmonary disease. Figure NC7 shows that hypertensive heart disease and stroke were responsible for larger numbers of deaths in older women than older men, while ischaemic heart disease and chronic obstructive pulmonary disease caused more deaths in older men than older women. Malignant neoplasms were responsible for more deaths among older men than older women.

Figure NC7: Ten leading single causes of death (%) among adults by sex, Northern Cape 2000



## How does Northern Cape compare with the national profile?

The Northern Cape had comparatively low mortality levels when compared to other provinces. In the broad Groups, Northern Cape had a similar profile to that of the country with regard to injuries and other communicable/mat/peri/nutrition diseases, but lower HIV/AIDS mortality.

Mortality due to tuberculosis was very high in this province, as well as from diarrhoea and protein-energy malnutrition. Cardiovascular death rates were high as a result of stroke and ischaemic heart disease as well as hypertensive heart disease among women. Cancer mortality rates were relatively high, including higher than average rates for oesophageal, prostate and cervical cancer. Death rates due to respiratory disease were high in the Northern Cape, particularly for chronic obstructive pulmonary disease among men.

In the leading single causes of death the top ten causes were the same as nationally, but ranked differently. Homicide was second nationally but sixth for the province. Road traffic accidents ranked seventh nationally but tenth for the province. Stroke ranked third nationally but second for the province.



# WESTERN CAPE PROVINCIAL PROFILE



# Western Cape provincial profile

## Background

Western Cape is on the south-western tip of the African continent, bordering the Northern Cape in the north, the Eastern Cape in the east, the Atlantic Ocean on the west, and the Indian Ocean in the south. The province encloses 129 370 km<sup>2</sup>, constituting 10.6% of the total land area of the country (SSA, 2003). In 2000 the average population density was estimated at 34 persons per square kilometre. During the 1996 Census 11% of the population lived in non-urban areas (SSA, 1998). Cape Town houses an international airport and a port and is served by an extensive network of roads and railways.

Agriculture, forestry, fishing, mining and quarrying all contribute to the economy. The sheltered valleys between the mountains provide ideal conditions for the cultivation of top-grade fruits such as apples, table grapes, olives, peaches and oranges. A great variety of vegetables are cultivated in the eastern part of the Western Cape region. An Ostrich-farming industry can be found in the Klein Karoo region around Outdshoorn. This industry results in exports such as leatherware, ostrich feathers and meat. The Swartland district around Malmesbury and the Overberg around Caledon are known as the bread basket of the country. Wool and mutton as well as pedigree merino breeding stock are produced in the inland Karoo region around Beaufort West, and the Bredasdorp district. Other animal products include broiler chickens, eggs, dairy products, beef and pork. Racehorse breeding is another important industry.

Cape Town houses the head offices of most of South Africa's petroleum companies, as well as those of the insurance giants and national retail chains. The clothing and textile industry is the single most significant industrial source of employment in the Western Cape. The province is also one of the world's greatest tourist attractions. During 2001 Western Cape made the third highest Gross Geographic Product contribution of the provinces to the national Gross Domestic Product (GDP), contributing R136 062 million or 13.8% of the total GDP (GCIS, 2004).

## Population structure

According to the 2000 ASSA estimates, 4 399 414 people lived in Western Cape, constituting 9.7% of South Africa's total population. The province accommodated slightly more women (51%) than men (49%). Nearly 28.3% of the population were younger than 15 years, 66% were in their 'economically active' years (15-64), while 7.8% were aged 60 or older. [Comparison with 2001 Census: total population 4 524 335 (ASSA had 124 921 less); 10.1% of country's total population; 51% female; 26.7% Black African, 53.9% Coloured, 1.0% Indian, 18.4% White.]

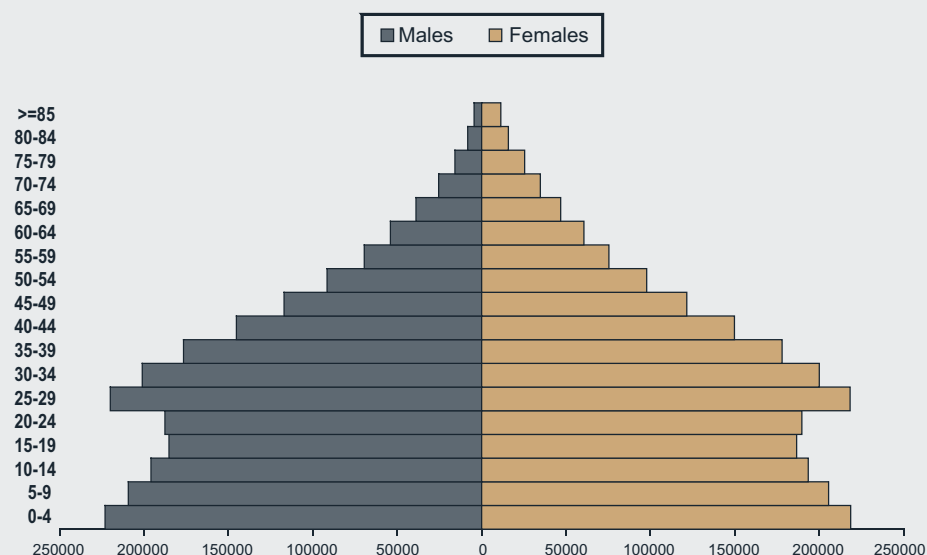


Figure WC1: Age structure of the Western Cape population, 2000

## Living conditions

According to the 2001 Census, 5.7% of the population aged 20 years or older had no formal school education; 48.5% of those in the age group 15-64 years were unemployed; and 29% of those who were employed had elementary occupations (SSA, 2003). The province has a strong network of higher education institutions.

Just less than a third of the population (28.8%) lived below the national poverty line in 2002 (UNDP, 2004). The official unemployment figure for the province, 26.1%, is the lowest in the country (Labour Force Survey 2001). About 78.4% of all households lived in formal dwellings, and 16.2% and 2.2% respectively in informal and traditional structures. On average 3.6 persons shared a household. Piped water, either in the dwelling, on site, or from a communal tap, was available in 98.3% of households. About 7.7% of households did not have access to a toilet facility, and 87.8% had a refuse removal service once a week or more. In 78.8% of households electricity was used as the main source of energy for cooking, wood in 2.9% and paraffin in 10.9%. Of the households, 79.1% had a radio, 74.1% a television, 73.5% a refrigerator, 50.5% a telephone and 41.4% a cell phone (SSA, 2003).

## Mortality profile

The mortality profile in the Western Cape is based on 23 372 male (56.3%) and 18 175 female (43.7%) deaths estimated for the year 2000, a total of 41 547 deaths. Figure WC2 shows the causes of death for the broad Groups I, II, III and AIDS. The proportions of Group I and HIV deaths were very similar for men and women. However, the proportion of deaths from injury deaths in males was more than double that for females. Group II causes were higher in women (63%) than in men (53%).

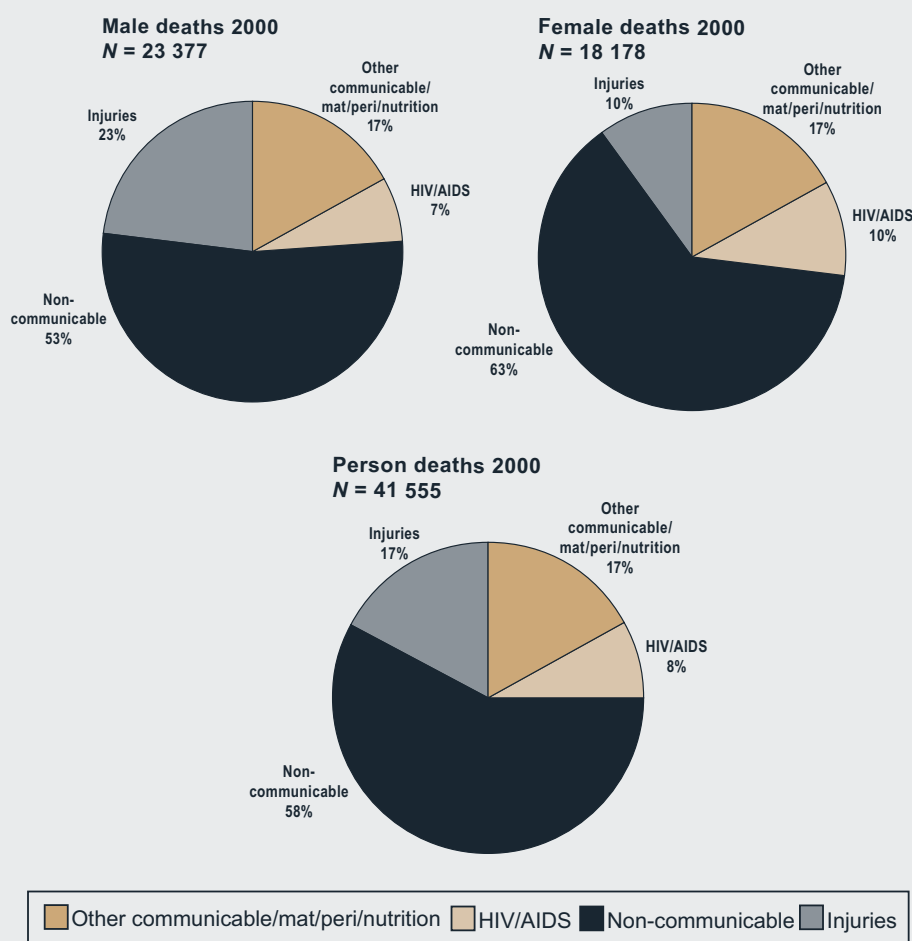


Figure WC2: Estimated deaths by Groups, Western Cape 2000

The age-specific cause of death profiles are presented in Figure WC3. The numbers of deaths are presented by five-year age intervals for the three broad Groups and HIV/AIDS. Over half of the deaths in infants were due to Group I diseases, and approximately 16% to HIV/AIDS. In children between 1 and 4 years 38% of deaths were due to HIV/AIDS. The pattern differed for adult males and females, with very high numbers of deaths resulting from injuries in young men and HIV/AIDS deaths predominating in young women. Deaths from non-communicable diseases dominated in adults of 60 years or older.

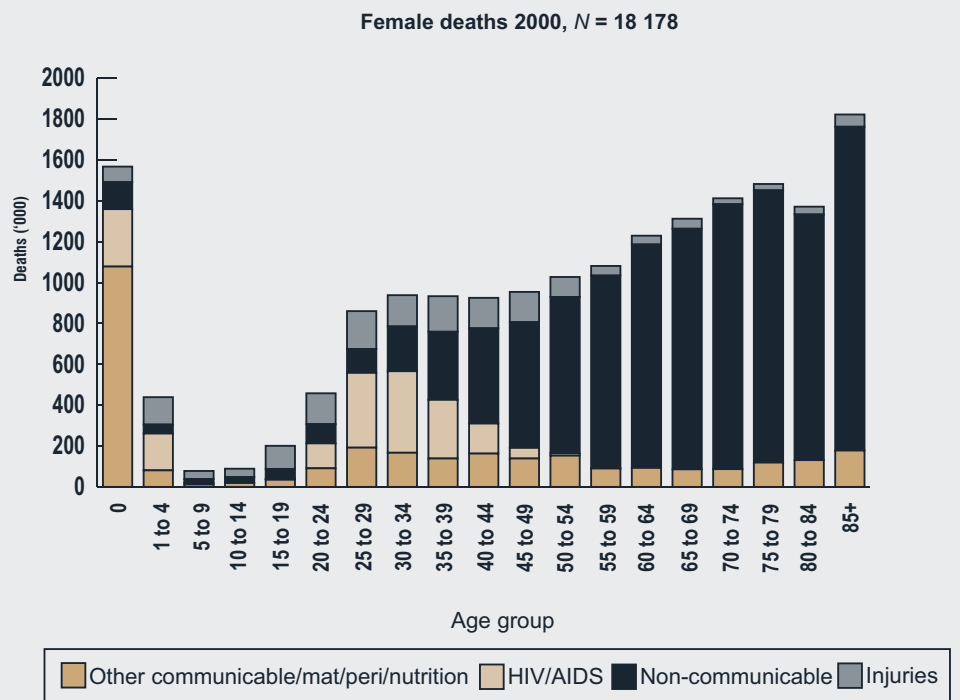
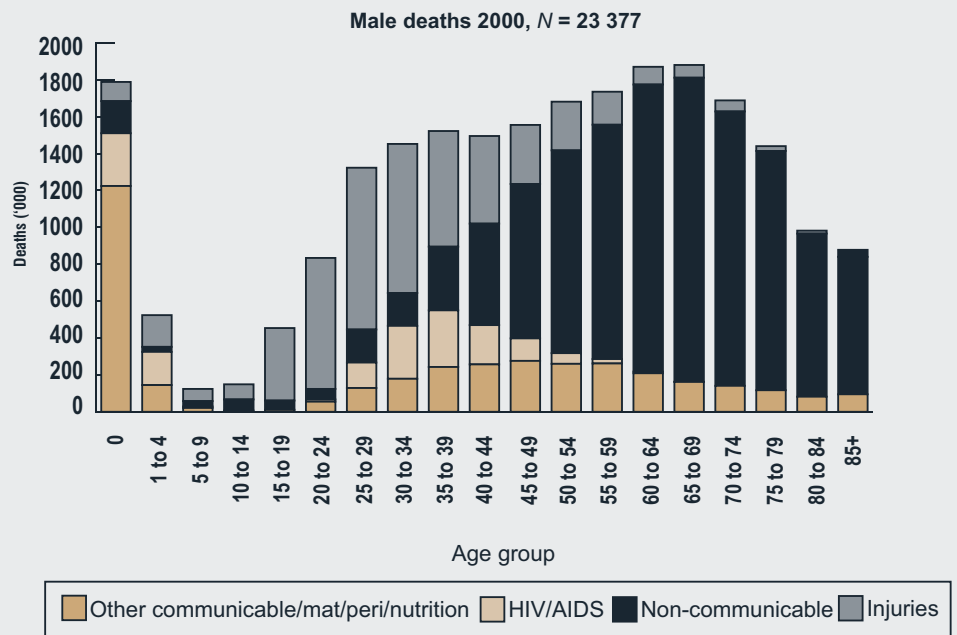


Figure WC3: Age distribution of deaths by broad Groups, Western Cape 2000

In Figure WC4 the cause of death profile is ranked for total persons. Cardiovascular disease (25%) was the leading cause of death among both men and women, followed by malignant neoplasms (16%), infectious and parasitic disease excluding HIV/AIDS (10%), intentional injuries (9.7%), HIV/AIDS (8.4%), and unintentional injuries (7.5%). Intentional and unintentional injuries and respiratory disease were higher in males than in females, while cardiovascular disease, HIV and diabetes were higher in females than in males.

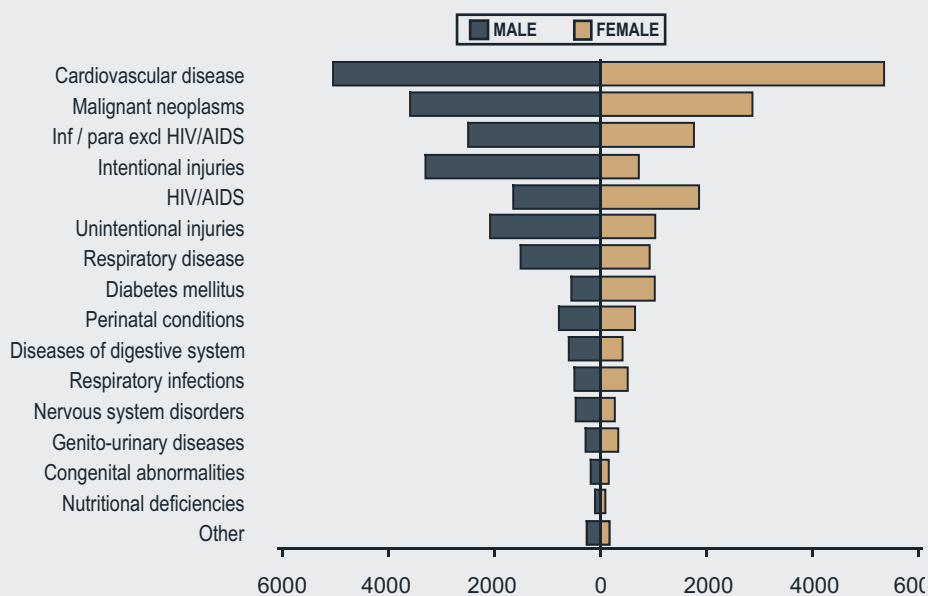


Figure WC4: Causes of death ranked according to categories for males and females, Western Cape 2000

*"Other" causes include endocrine and metabolic disorders, benign neoplasms, mental disorders, maternal conditions, musculo-skeletal diseases and skin diseases.*

The twenty leading single causes of death in the total Western Cape population are shown in Figure WC5(a) below, illustrating that ischaemic heart disease was the largest single cause of death, accounting for 12% of all deaths during 2000. This was followed by stroke (8.8%), HIV/AIDS (8.4%), homicide (8.1%) and tuberculosis (6.8%). Women had higher numbers of deaths due to stroke, HIV, diabetes and hypertensive heart disease than men (see Figure WC5(b)). In contrast, men had higher numbers of deaths than women from homicide, ischaemic heart disease, tuberculosis, road traffic accidents, lung cancer, chronic obstructive pulmonary disease, suicide, oesophageal cancer and colorectal cancer.

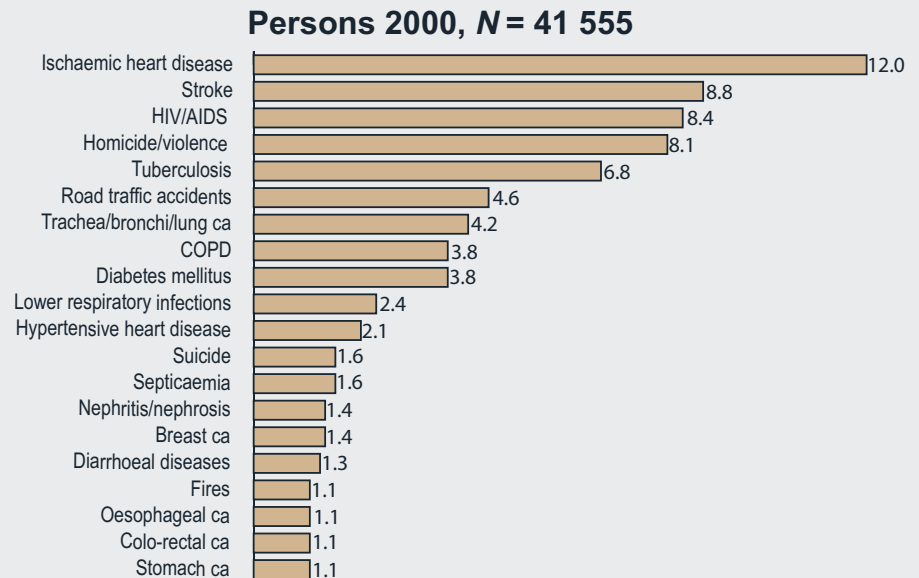


Figure WC5(a): Twenty leading single causes of death (%), Western Cape 2000

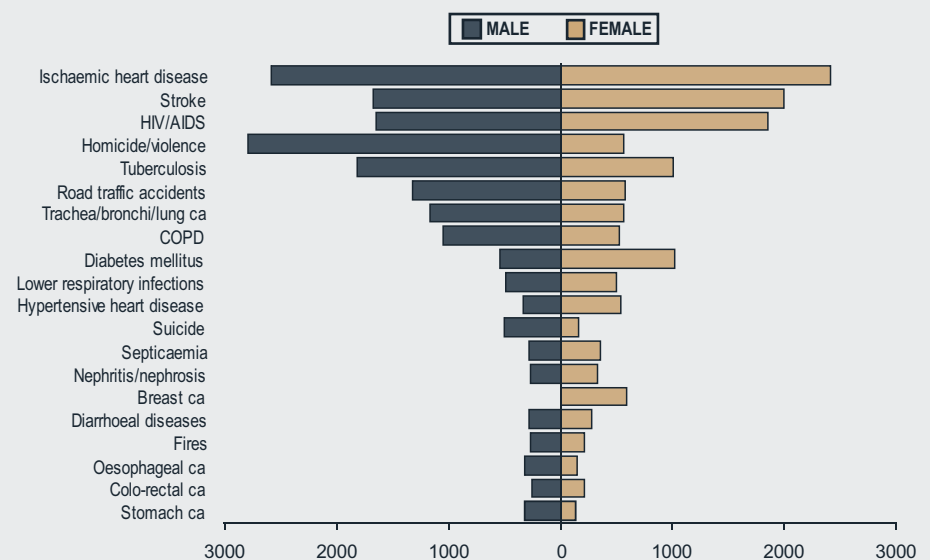


Figure WC5(b): Twenty leading single causes of death by sex, Western Cape 2000

### Premature mortality

HIV/AIDS was the leading cause of premature mortality overall in the Western Cape, followed closely by homicide (see Table WC1). These were followed by tuberculosis, road traffic accidents and ischaemic heart disease. Ranking differed by gender, however, with homicide ranking top for males and HIV/AIDS top for females. In females Group II conditions ranked higher than in males, in whom Group I and Group III conditions dominated.

Table WC1: Leading 20 single causes of the premature mortality burden (YLLs) by sex, Western Cape 2000

Males				Females				Persons			
Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%	Rank	Cause of death	YLLs	%
1	Homicide/violence	76956	18.5	1	HIV/AIDS	54893	18.8	1	HIV/AIDS	99630	14.1
2	HIV/AIDS	44737	10.8	2	Tuberculosis	22370	7.7	2	Homicide/violence	91297	12.9
3	Road traffic accidents	33963	8.2	3	Ischaemic heart disease	17576	6.0	3	Tuberculosis	55824	7.9
4	Tuberculosis	33454	8.1	4	Stroke	16970	5.8	4	Road traffic accidents	48442	6.9
5	Ischaemic heart disease	23838	5.7	5	Road traffic accidents	14480	5.0	5	Ischaemic heart disease	41414	5.9
6	Stroke	15469	3.7	6	Homicide/violence	14341	4.9	6	Stroke	32440	4.6
7	Trachea/bronchi/lung ca	12837	3.1	7	Diabetes mellitus	9480	3.2	7	Trachea/bronchi/lung ca	18835	2.7
8	Suicide	12578	3.0	8	Diarrhoeal diseases	7844	2.7	8	Lower respiratory infections	16669	2.4
9	COPD	9648	2.3	9	Breast ca	7779	2.7	9	Suicide	16504	2.3
10	Lower respiratory infections	8901	2.1	10	Lower respiratory infections	7769	2.7	10	Diarrhoeal diseases	15970	2.3
11	Diarrhoeal diseases	8125	2.0	11	Septicaemia	6285	2.2	11	Diabetes mellitus	14986	2.1
12	Low birth weight	8011	1.9	12	Trachea/bronchi/lung ca	5999	2.1	12	COPD	14906	2.1
13	Fires	7157	1.7	13	Fires	5336	1.8	13	Fires	12493	1.8
14	Diabetes mellitus	5506	1.3	14	COPD	5258	1.8	14	Low birth weight	12155	1.7
15	Epilepsy	4827	1.2	15	Cervix ca	5003	1.7	15	Septicaemia	10837	1.5
16	Septicaemia	4552	1.1	16	Hypertensive heart disease	4674	1.6	16	Hypertensive heart disease	8308	1.2
17	Asthma	3740	0.9	17	Nephritis/nephrosis	4560	1.6	17	Breast ca	7779	1.1
18	Oesophageal ca	3712	0.9	18	Low birth weight	4144	1.4	18	Nephritis/nephrosis	7713	1.1
19	Hypertensive heart disease	3634	0.9	19	Suicide	3926	1.3	19	Asthma	7275	1.0
20	Cirrhosis of liver	3562	0.9	20	Diabetes mellitus	3535	1.2	20	Epilepsy	6804	1.0
	<b>All causes</b>	<b>415 219</b>			<b>All causes</b>	<b>291 724</b>			<b>All causes</b>	<b>706 943</b>	

## Leading causes of death among children (<15 years)

The leading ten causes of death in children under 15 years of age are shown in Figures WC6 for boys and girls separately. In the under 5 year olds, HIV/AIDS accounted for one-fifth of all deaths, followed by diarrhoea, low birth weight and lower respiratory infections. The pattern was similar for boys and girls in this age group (Figure WC6). The leading five causes in children under 1 reflected a similar pattern, with HIV/AIDS ranked top, followed by other Group I causes. Figure WC6 shows that injuries were much more prominent in the 5-14 year group with road traffic accidents accounting for more than a quarter of the deaths. Homicide, drowning, fires and suicide were among the leading causes in this age group. Epilepsy, septicaemia and bacterial meningitis were also among the leading causes but the rankings of these conditions were different for boys and girls. Brain cancer was the 10th leading cause of death in this age group for boys and girls.

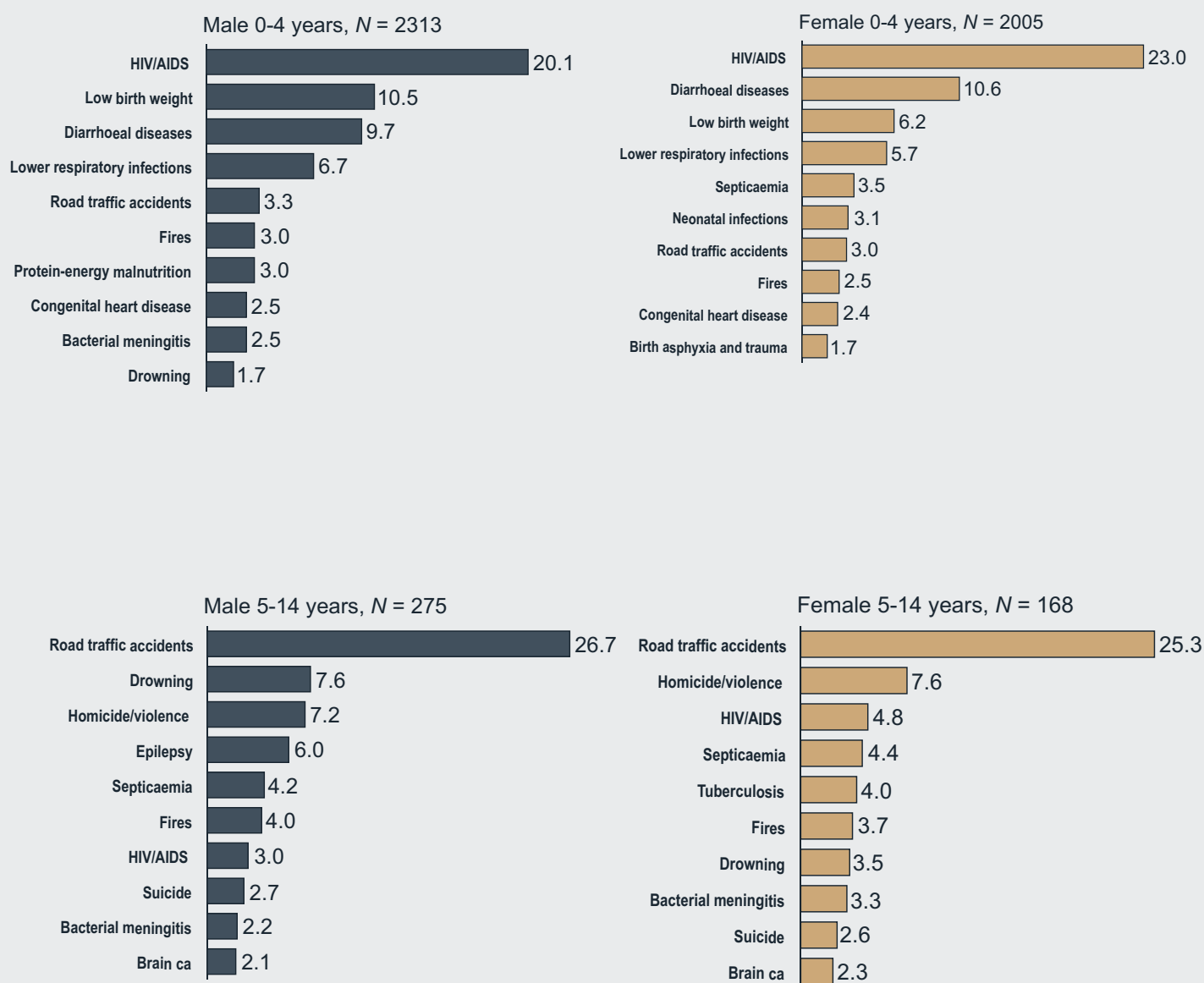


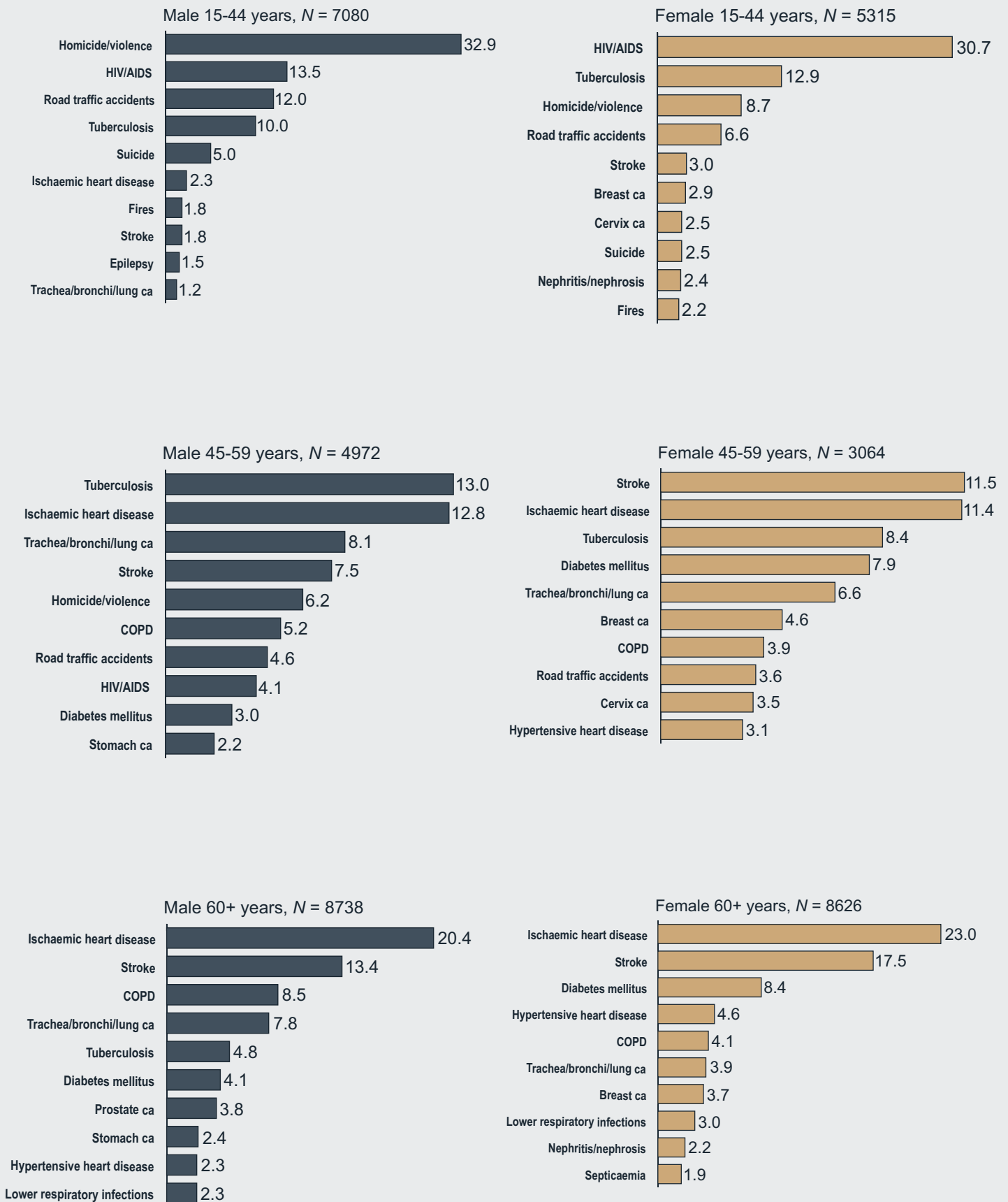
Figure WC6: Ten leading single causes of death (%) among children (<15 years), Western Cape 2000

## Leading causes of death among adults

The leading causes of deaths for adults are shown in Figure WC7 in broad age groups by sex. For men and women aged 15-44 years, HIV/AIDS, tuberculosis, homicide and road traffic accidents were the leading causes. Stroke and suicide were also among the leading causes for both men and women but the rankings were different. Ischaemic heart disease and lung cancer featured among the leading causes for young adult men while breast cancer and cervical cancer and nephritis and nephrosis featured among the leading causes for young adult women. The pattern among adults aged 45-59 years differed from the young adult pattern with more non-communicable diseases among the leading causes of death. For men of this age group, the leading cause of death was tuberculosis while for women it was stroke. Ischaemic heart disease ranked second amongst both men and women. Chronic obstructive pulmonary disease and diabetes mellitus featured among the leading causes for both men and women.

In older persons the majority of the leading causes of death were non-communicable diseases, and it is clear that cardiovascular disease was the primary cause of death in older persons (Figure WC7). Ischaemic heart disease, stroke, chronic obstructive pulmonary disease, diabetes mellitus and lung cancer were the five leading single causes of death, accounting for more than 50% of deaths. Tuberculosis was ranked seventh, accounting for 3.3% of deaths in this age group. Figure WC7 shows that ischaemic heart disease, stroke and diabetes mellitus were responsible for larger numbers of death in older women than in older men, while chronic obstructive pulmonary disease, lung cancer and tuberculosis caused more deaths in older men than in older women. Malignant neoplasms were responsible for large numbers of deaths among older men and women, and it is clear that apart from sex-specific cancers, stomach, oesophagus and mouth and oropharynx cancers were influencing men and women differently.

Figure WC7: Ten leading single causes of death (%) among adults by sex, Western Cape 2000



## How does Western Cape compare with the national profile?

The Western Cape had the lowest mortality of all the provinces. Although there was evidence of the quadruple burden of disease, this province had the lowest mortality from HIV/AIDS and other Group I conditions. Non-communicable diseases accounted for a much larger proportion of deaths in the Western Cape (58%) than nationally (38%). This is largely a result of the population in the Western Cape being older than the national population. Injuries were slightly higher as a proportion of the deaths in the Western Cape (17%) compared with South Africa overall (12%).

Despite the high incidence of tuberculosis in this province, mortality rates from this disease were average. Mortality due to lower respiratory infections, diarrhoea, protein-energy malnutrition and maternal conditions were markedly lower for this province.

The five top causes of death in the Western Cape were the same as in South Africa as a whole, but the ranking differed, with cardiovascular diseases (ischaemic heart disease and stroke) leading in the Western Cape and HIV leading in South Africa overall. Death rates from cardiovascular disease were similar to the national average, but featured low rates for hypertensive heart disease and inflammatory heart disease. Diabetes mortality rates were average, cancer mortality rates higher. Lung cancer and breast cancer death rates were particularly high in this province when compared to others. Many other non-communicable diseases were lower in the Western Cape: respiratory diseases, nephritis and nephrosis, epilepsy, and cirrhosis of the liver. This may reflect the relatively good access to tertiary level care in the province. Injury mortality rates, however, were high in the Western Cape.

When estimating the 'missing' AIDS deaths for Western Cape, we noted that the increase in age-specific tuberculosis death rates between 1996 and 2000 for the province extended across older age groups than for South Africa, where the increase followed the typical AIDS pattern of mortality. Given that the Western Cape has the highest incidence of tuberculosis in South Africa, we felt that we could not attribute all of the excess in tuberculosis deaths to AIDS, since some would be due to the tuberculosis epidemic per se. A decision was made to attribute only 75% of the excess tuberculosis deaths across all ages to AIDS.

When the mortality profile for the Western Cape is compared with that of the Cape Town metropole (Groenewald *et al.*, 2003), the proportions of deaths by broad cause group are very similar. The fifteen top causes of death were the same for both Western Cape and the Cape Town metropole, although the ranking differs. This may reflect slightly different patterns of mortality outside the metropole and also different coding practices between Statistics South Africa and the City of Cape Town. The Cape Town study highlighted the variations in the level of mortality and cause profile by sub-district.

