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Mortality and causes of death in South Africa, 2014: Findings from death notification

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Preface

This statistical release presents information mainly on mortality and causes of death in South Africa for deaths that occurred in 2014. It also provides information on death occurrences from 1997 to 2013 to show trends in mortality and causes of death. It is based on data acquired through the civil registration system that is maintained by the Department of Home Affairs.



PJ Lehohla
Statistician-General

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1. Introduction

1.1 Background

The statistics on mortality and causes of death collected through the civil registration system provide a snapshot of the current health problems; suggest persistent patterns of risk in specific subgroups; and show trends in specific causes of death over time (World Health Organization [WHO], 2013). As such, the statistics on mortality and causes of death are essential public health goods that provide evidence required to monitor and evaluate progress towards population health administration (United Nations [UN], 2014) and can contribute to the implementation of the National Public Health Institute of South Africa Bill introduced on 11 November 2015. One of the functions of the Bill is to use public health information in assessing the population health status and in formulating health plans, policies and priorities (Republic of South Africa, 2015).

Anchoring civil registration ensures the continuity, consistency, correctness, timeliness and comprehensiveness of the civil registration and vital statistics system (WHO, 2014a). The registration of deaths in South Africa falls under the mandate of the Department of Home Affairs (DHA) and is governed by the Births and Deaths Registration Act, 1992 (Act No. 51 of 1992), which was last amended in 2010 as the Births and Deaths Registration Amendment Act (Act No. 18 of 2010) (Republic of South Africa, 1992; Republic of South Africa, 2010). The principal Act No. 51 of 1992 stipulates that death notices should be given as soon as practicable. However, to better enforce the functioning of the civil registration system, the 2014 regulations of the Act mandate the registration of all deaths within 72 hours of death occurrence (Republic of South Africa, 2014). Upon completion of death registration, a death certificate is issued to the informant based on information from the death notification form. All death notification forms are then collected from DHA by Statistics South Africa (Stats SA) fortnightly for capturing, processing, assessment and analysis of data. Information on mortality and causes of death is then disseminated in the form of statistical releases and datasets.

Stats SA, in partnership with DHA, Department of Health (DoH) and other stakeholders is currently preparing a report on the strengths and weaknesses of the civil registration system based on a comprehensive assessment of civil registration and vital statistics, including causes of death undertaken in 2014. Sustained partnerships between registration and statistical production departments are essential for improvements in mortality statistics to be realised. Currently, efforts are in place for integrated coordination mechanisms in timely registration of death, complete death registration coverage, medically certified causes of death, and timely publication of information on mortality and causes of death. While the DHA envisions a death register that is complete (Republic of South Africa, 1992), the need of DoH primarily revolves around providing adequate health services to the population (Department of Health, 2014). The interest of Stats SA is to strengthen the provision of reliable information on the number of people who die and the causes of their deaths on a continuous basis, using best statistical practices.

1.2 Objectives of this statistical release

This statistical release is an annual publication by Stats SA on mortality and causes of death using data collected through the civil registration system. The objectives of the publication are as follows:

- To present statistics on registered deaths by selected socio-demographic and geographic characteristics for deaths that occurred in 2014; and trends in mortality over a 18-year period (1997–2014); and
- To provide information on causes of death for deaths that occurred in 2014 based mainly on the underlying causes of death.

1.3 Scope of this statistical release

This statistical release covers all deaths based on death notification forms from DHA for deaths that occurred in 2014 or earlier and reached Stats SA in time for the 2014/2015 processing phase. Although the main focus is on deaths that occurred in 2014, deaths that occurred from 1997 to 2013 (updated for late registrations or delayed transfer of forms) are also provided to show trends in mortality and causes of death. The number of deaths discussed in this statistical release excludes stillbirths, which are also collected through the civil registration system but are, however, published separately in the annual Stats SA statistical release on Perinatal deaths in South Africa (P0309.4). The definitions of technical terms used in this release are provided in Appendix A (see page 53).

1.4 Organisation and presentation of this statistical release

The remainder of this statistical release is organised as follows:

Section two of the release is the data and methods section and provides a description of the data sources, methods used in data processing, editing and analysis. It also has a subsection discussing data quality assessments methods.

The third section on mortality presents levels, trends and differentials in mortality by selected socio-demographic and geographic characteristics of the deceased.

Section four of the release provides information on the underlying causes of death for all deaths that occurred and that were registered in 2014. Deaths for the years 1997 to 2013 have also been included to show patterns in mortality over the years. It also covers the analysis of natural versus non-natural causes, the global burden of disease as well as comparisons between immediate, contributing and underlying causes of death.

The last section provides the summary of findings and concluding remarks.

2. Data and methods

In this section, focus is placed on the sources of data, the data processing and data editing methodologies as well as data analysis methods applied. This section also provides information on the data quality assessments undertaken.

2.1 Data source

This statistical release is based on administrative records from death notification forms collected from the Department of Home Affairs (DHA). There are two death notification forms currently being used by the DHA in registering deaths: Form BI-1663 (see Appendix B on pages 54–55) and DHA-1663 (see Appendix B1 on pages 56–58). Form BI-1663 is being replaced by form DHA-1663 but continues to be used in areas where it is still in stock. The data elements in these two forms are largely comparable. However, the two forms differ mainly in the perinatal section, with the DHA-1663 form having a separate section for recording causes of death for perinatal deaths whereas BI-1663 collects causes of death for all deaths in one section irrespective of age. The completed death notification forms are obtained by Statistics South Africa (Stats SA) for data processing and analysis of statistics on mortality and causes of death.

In this release, deaths that occurred in 2014 and that were registered at DHA and collected by Stats SA during the 2014/2015 data processing phase are presented, as well as trends in mortality over a 18-year period (1997–2014). A total of 453 360 deaths that occurred in 2014 were registered at the DHA and reached Stats SA in time for the 2014/2015 data processing phase. For 2014 deaths, 91,4% of the data were from the DHA-1663 form while 8,6% was from the BI-1663 form. These results indicate a decrease of 5,1 percentage points in BI-1663 forms used from 13,7% for 2013 deaths. BI-1663 forms continue to decrease annually.

The Births and Deaths Registration Act (Act No. 51 of 1992) states that in the case of a death due to natural causes, a medical practitioner shall complete a prescribed death notification form and certify the cause of death. The medical practitioner is obliged to inform a police officer if he/she is of the opinion that the death may not be due to natural causes. On receipt of this information, it is the duty of the police officer to act in terms of the Inquest Act, 1959 (Act No. 58 of 1959) and investigate the circumstances of the death (Republic of South Africa, 1959). It is after the investigation that a forensic pathologist shall complete the death notification form and prescribe the cause of death. Although all deaths require that a medical practitioner certify the deaths, in instances where a death occurs in remote areas where there is no medical practitioner within reasonable distance to certify the cause of death, a chief or tribal leader completes DHA-1680 to certify the occurrence of the death and to provide a description of the circumstances that led to and caused the death. The form used is then lodged with the nearest home affairs office for registration purposes.

2.2 Data processing

All completed death notification forms are collected from the DHA head office for data processing at the Stats SA Data Processing Centre. There are different stages involved in processing the death notification forms. The forms are sorted by year of death, and labels of unique identifiers are pasted on each form. The socio-demographic variables on the form are then coded, e.g. males = 1, and females = 2.

2.2.1 Classification of the causes of death

In this statistical release, the causes of death were coded using the tenth revision of the International Classification of Diseases (ICD) (WHO, 1992). All member states of the United Nations (UN), including South Africa, agreed to use the ICD standard classification system. The International Classification of Diseases (ICD) is revised from time to time to incorporate changes in medical knowledge and currently, the tenth revision is under review. The ICD-10 is a standard classification system developed by the WHO to promote international comparability in the collection, processing, coding, classification and presentation of mortality statistics (WHO, 2009a). The ICD-10 provides a standardised approach to monitoring and evaluating the prevalence of health problems in a consistent manner. The classification system facilitates the storage, retrieval, analysis and interpretation of data and their comparison within population and between populations over time.

The quality of the causes of death data depends heavily on the completeness and quality in which the death notification form was completed and on the accuracy of coding the causes of death. The ICD-10 provides for

completing the death notification form and for coding and classification of diseases, injuries and a wide range of signs, symptoms and other abnormal findings. It also provides a framework for certifying the causes of death; recommends names and definitions for disease entities and provides regulations on the use of the classification system and other guidelines on collecting internationally standardised mortality statistics. The ICD-10 contains approximately 8 000 categories of causes of death. It provides information on assigning causes of death and coding in terms of disease, injury and a wide variety of symptoms and other abnormal findings. It is organised into chapters covering communicable diseases, other diseases that may affect the whole body, localised diseases by site, developmental diseases, injuries and external causes.

ICD-10 coders at Stats SA follow a 'what you see, is what you code' principle when coding information on causes of death provided by certifying officials. These coders use the ICD-10 for categories of causes of death coded in the ICD-10 manual. For diseases that are not coded in the ICD-10 manuals, Stats SA has outlined specific procedures and guidelines. For example, certifying officials sometimes report the cause of death as *acquired immune suppression* which is not coded in the ICD-10 manual. According to Stats SA coding procedures, this term is interpreted as *HIV disease* and given *HIV code (B20-B24)*. In terms of the Stats SA coding procedures and guidelines, *immunosuppression* is coded as *immunodeficiency*, not as *human immunodeficiency virus (HIV) disease*. Codes U51 (*multidrug-resistant tuberculosis [MDR-TB]*) and U52 (*extensively drug-resistant tuberculosis [XDR-TB]*) which are specific to South Africa are included in the *tuberculosis (A15-A19)* broad group of causes of death prescribed by the ICD-10 manual. The processing of the 2014 data on causes of death used four-character coding where sufficient details were provided. However, analysis on this statistical release is based on three-character categories for underlying causes.

2.2.2 Automated generation of the underlying causes of death

Under international rules for selecting the underlying cause from the reported conditions, every death is attributed to one (and only one) underlying cause. The ICD-10 defines the underlying cause of death as the disease or injury that initiated the train of events leading directly to death or the circumstances of the accident or violence that produced the fatal injury (WHO, 2009: 1195). Stats SA uses a software program called Automated Classification of Medical Entities (ACME 2011) to automatically derive the underlying cause of death once the causes of death given on the death notification forms have been coded. This software was developed by the United States National Center for Health Statistics (NCHS) and applies the WHO rules on the selection of the underlying cause of death. An additional software, namely IRIS, which also automatically derives the underlying cause is used for comparison with results from ACME. Both ACME and IRIS derived the same underlying cause for 95,2% of the death notification forms. The results from one program were used where the other failed to derive the underlying cause. Where both programs failed to derive the underlying cause of death, experienced coders derived the underlying cause of death.

2.3 Data editing

The SAS data editing program has been developed by Stats SA. The program uses mortality and causes of death data editing business rules to check for data accuracy, consistency and quality. Once data processing had been completed, the SAS program was used to identify and correct inconsistencies in the data. The quality of the mortality statistics was further assessed using two electronic tools – version 2.0 of the "Analysing mortality levels and causes-of-death" (ANACoD) and version 1.0 CoDEdit – both developed by the WHO. The tools were developed to enhance the value of mortality statistics in informing health policies and programmes. Both tools automatically checked the accuracy of data in terms of consistency and plausibility by highlighting cases with causes that were unlikely to cause death, by specific ages and by sex, providing a summary of the record within the dataset and alerting about possible misuse of codes (WHO, 2014a; WHO, 2014b). The advantage of using CoDEdit was that it provided unit record analysis, unlike ANACoD, which checked for validity at an aggregate level. Records with errors were manually investigated, which involved validating the cases against the original death notification form for verification, after which corrections were made where necessary. ANACoD was used as it provides additional information not available on CoDEdit, for example, crude death rates and life expectancy at death, amongst others.

2.4 Assessment of the quality of data

The gold standard in mortality and causes of deaths data is to have all deaths registered, medically certified, coded using the International Classification of Diseases (ICD-10) and, ultimately, the data have to be timely in terms of collection, analysis and dissemination (WHO, 2013). An accurate, complete and timely civil registration system provides the foundation for the production of reliable and routine vital statistics. These statistics are essential as they permit evaluation of the current and past state of the health status of the population and this enables proper development and planning. However, the data need to be checked for quality as mortality and causes of death data can suffer from a range of deficiencies.

The quality of death registration data can be affected by the extent of late registrations, timeliness of death registration; completeness of information recorded; ill-defined causes of death, and underreporting of causes – especially in the case of HIV/AIDS. Public health programmes and researchers who rely on this data need to be aware of the level of data quality for statistical reliability. They should be informed of the results of evaluations of the data in order to provide them with a good understanding of strengths and weaknesses of the data.

To assess the quality of death registration, for the purpose of this release in addition to the ANACoD and CoDEdit electronic tools, the framework proposed by Mahapatra et al. (2007) was also used to assess the quality of the 2014 deaths and cause of death statistics. This section presents a summary of the results of this assessment. A detailed discussion of the assessment is provided in Appendix C. In the 2011 statistical release (Stats SA, 2014), an estimated 94% completeness of adult (15 years and older) death registration was reported for the 2007–2011 intercensal period using the 2007 Community Survey and the 2011 Census. For 2014 adult death registrations, the same estimate is maintained, and a revised estimate will be provided after the 2016 Community Survey. Data processing, data analysis and publication of the 2014 statistical release on mortality and causes of death took 11 months from the end of the 2014 year of reporting.

Less than 2% of 2014 registered deaths had missing or unknown information on age of deceased, sex of deceased and province of death occurrence. The results further indicated that variables such as population group, province of birth, marital status, method used to ascertain cause of death, smoking status and education, continue to have high percentages of incomplete information ranging between 12,7% for population group and 48,5% for education. Variables with over 50% missing information included occupation, industry and pregnancy status.

Of the deaths that occurred in 2014, the proportion of deaths that were registered within the 72 hours (3 days) stipulated by the Regulations legislative framework was 78,4%. The proportion of deaths assigned to the ill-defined group was 12,5% – down from 12,7% in 2013.

2.5 Data analysis

The analysis is descriptive and is based on frequency distributions and cross-tabulations on mortality and causes of death. The first section on mortality presents information on selected socio-demographic variables and mortality patterns. The section also covers levels, trends and differentials in mortality (age, sex, population group, marital status, smoking status, province, and district municipalities).

The second section on causes of death was computed by ranking the underlying causes of death and providing the proportions of deaths due to specific causes. The top-ranking causes determine the leading causes of death. The ranking basically indicates the frequency of causes of death among those causes eligible to be ranked, and does not reflect the causes of death in terms of their importance from a public health perspective. Ranking the underlying causes of death is useful for showing the relative burden of cause-specific mortality. Causes of death that had the same number of deaths received the same rank, and a rank was skipped for the next cause. For example, if two causes of death had the same frequency and were the top-ranked causes, they both received rank one, and the next cause received rank three.

In ranking natural underlying causes of death, *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)*, were excluded as the information is not sufficiently detailed to be of use for public health purposes. It is therefore essential through training programmes and other initiatives to raise awareness among certifying practitioners to seek sufficient evidence to assign cause of death to these deaths. A separate

analysis on non-natural causes has been provided since from a public health perspective, it is important to report on non-natural causes of death such as violence and accidents. However, no ranking was done for non-natural causes of death. Information on causes of death is also provided, based on the global burden of disease study that disaggregates the causes of deaths into three broad groups, namely Group I (communicable diseases), Group II (non-communicable diseases) and Group III (injuries) with the *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)* deaths proportionately distributed into the communicable and non-communicable diseases categories.

This release also presents tables on mortality and causes of death for district municipalities in the country in the appendices section. Information on local municipalities is not included in this release, but Stats SA can provide it to users on request. The boundaries for local municipalities, district municipalities and provinces are based on the 2011 municipal demarcations.

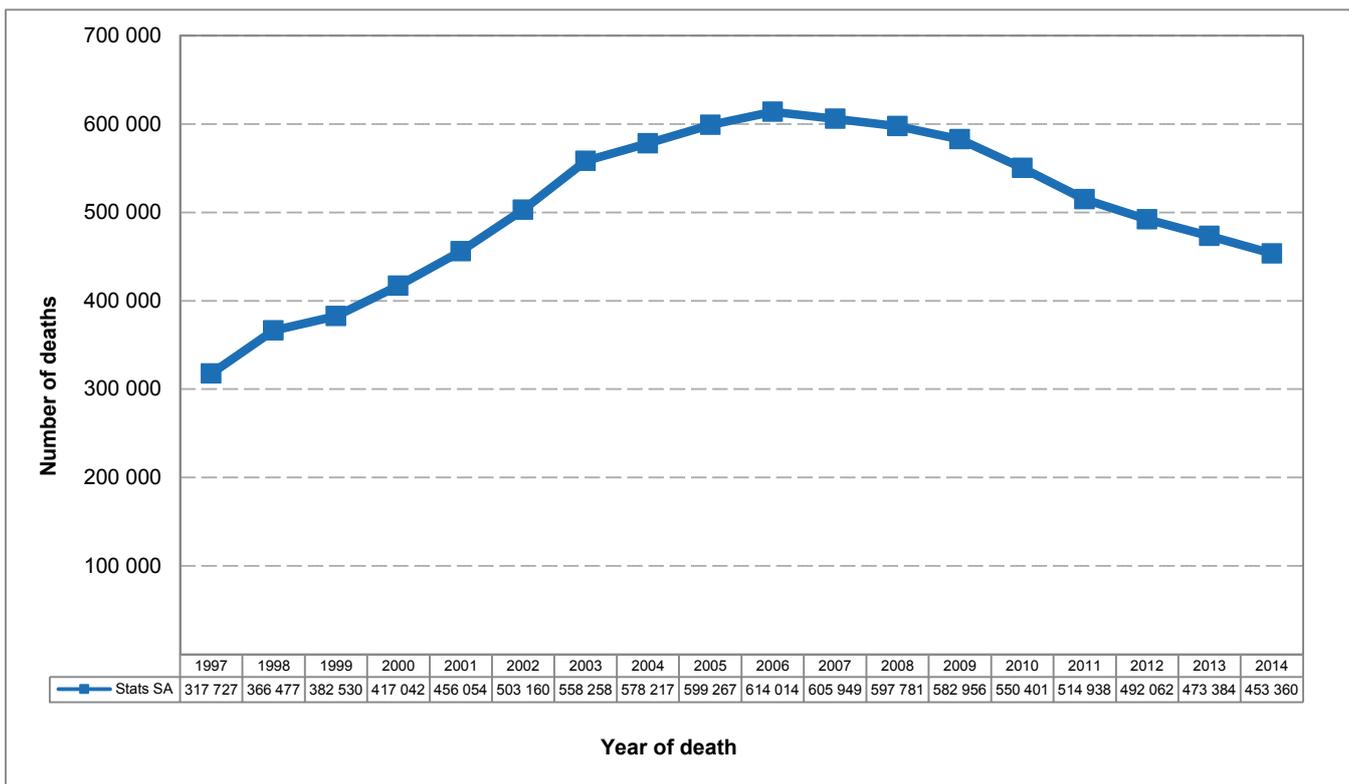
3. Mortality

This section reports on death occurrences for 2014 and earlier that were registered and collated through the Department of Home Affairs (DHA) and that reached Statistics South Africa (Stats SA) during the 2014/2015 processing phase. The section primarily presents the distribution of 2014 death occurrences by selected socio-demographic characteristics of the deceased such as age, sex, place or institution of death, and geographic information (province and district municipalities). Death occurrences from 1997 to 2013 are included to show trends and patterns of registered deaths.

3.1 Levels and trends of mortality

The number of registered deaths processed by Stats SA for the period 1997–2014 is shown in Figure 3.1. The figure shows that the number of registered deaths increased yearly from a low of 317 727 deaths in 1997 and reached a peak of 614 014 deaths in 2006. The results further show that from 2007, a consistent downward trend was observed from 605 949 deaths to 453 360 deaths in 2014. The number of deaths processed for 2014 indicates a decrease of 4,2% from a total of 473 384 deaths that occurred in 2013. These results indicate that the level of mortality is declining in the country. However, the overall number of deaths per year is expected to increase as figures are updated with late registrations or delayed death notification forms. Updated information will be provided in the next statistical release.

Figure 3.1: Number of registered deaths by year of death, 1997–2014*



*Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

3.2 Age differentials

Table 3.1 shows the number and percentage distribution of deaths by age for deaths that occurred in 2014. The results show that the age group with the highest proportion of deaths was age group 60–64 years (7,4%), closely followed by age group 35–39 years, which accounted for 7,0% of all deaths. Age groups 40–44, 50–54, 55–59 and 70–74 years each represented about 6,9% of all deaths. The lowest percentages were amongst those aged 5–9 years and 10–14 years (each comprising 0,7% of all deaths). About 5,7% of all registered deaths in 2014 occurred amongst infants (age 0 years).

Table 3.1: Number and percentage distribution of deaths by age, 2014

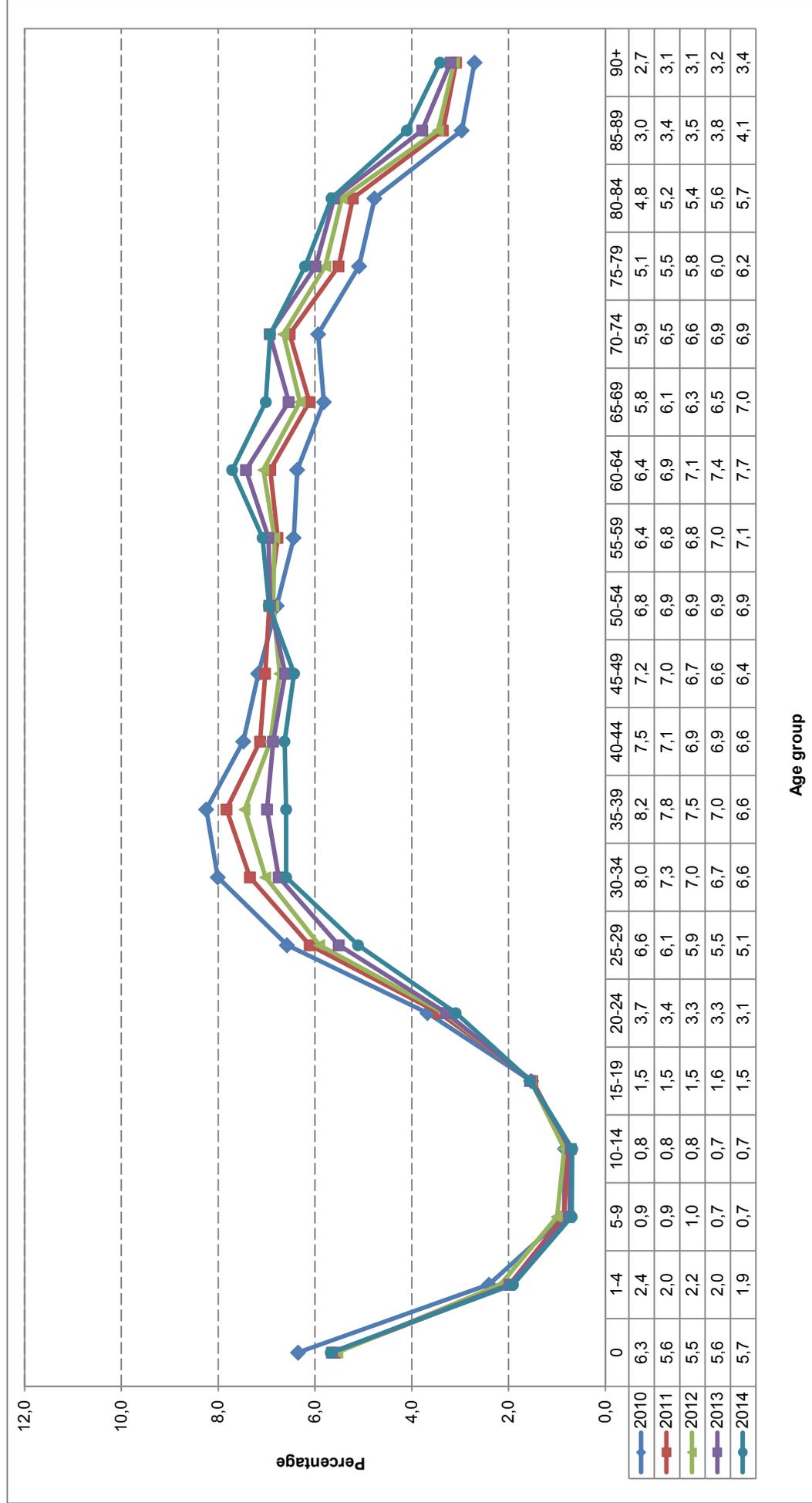
Age group	Number	Percentage
0	25 643	5,7
1–4	8 619	2,0
5–9	3 143	0,7
10–14	3 092	0,7
15–19	7 002	1,5
20–24	13 967	3,2
25–29	23 101	5,5
30–34	29 819	6,7
35–39	29 818	7,0
40–44	29 966	6,9
45–49	29 077	6,6
50–54	31 425	6,9
55–59	32 017	6,9
60–64	34 855	7,4
65–69	31 721	6,5
70–74	31 316	6,9
75–79	28 053	6,0
80–84	25 576	5,6
85–89	18 546	3,8
90+	15 435	3,2
Unspecified	1 169	0,4
Total	453 360	100,0

Figure 3.2 shows the percentage distribution of deaths by age and year of death for the past five years (2010 to 2014). Absolute numbers showing the distribution of deaths by age, sex and year of death from 1997 to 2014 are provided in Appendices D (1997–1999), D.1 (2000–2002), D.2 (2003–2005), D.3 (2006–2008), D.4 (2009–2011) and D.5 (2012–2014) [see pages 68–73].

A general pattern observed in Figure 3.2 is that the age pattern of mortality was uniform over the five years. Furthermore, the proportion of deaths decreased consistently among middle age groups (from age group 25–29 years up to 35–39 years) and age group 45–49 years over the five-year period, and increased consistently for older age groups (from age group 60–64 years up to age group 85–89 years), except age group 70–74 years, which did not change between 2013 and 2014.

For all the years, the lowest proportion of deaths occurred in age groups 5–9 years and 10–14 years. While the proportion of deaths was highest in age group 35–39 years between 2010 and 2012, it shifted to age group 60–64 years in 2013 and 2014.

Figure 3.2: Percentage distribution of deaths by age and year of death, 2010–2014*



* (1) Excluding deaths with unspecified age.

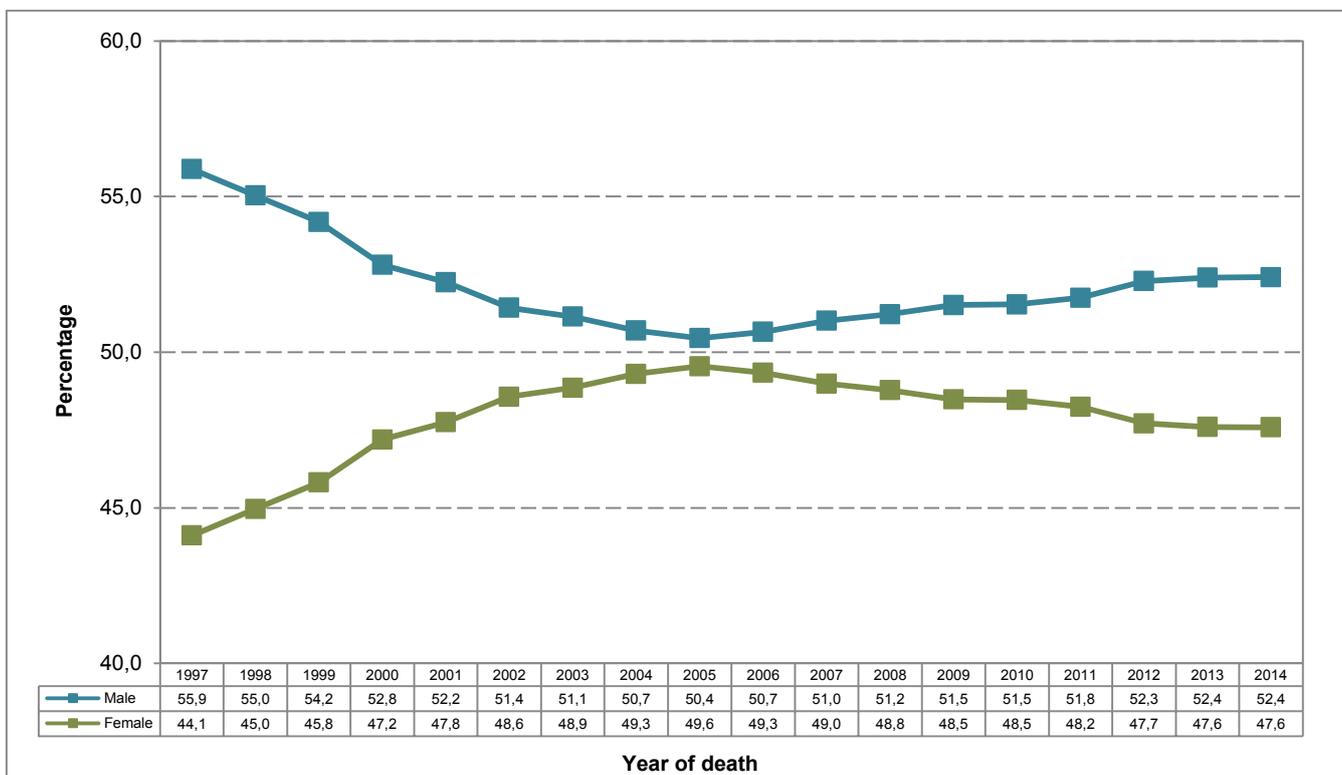
(2) Data for 2010–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

3.3 Sex differentials

The distribution of deaths by sex and year of death from 1997 to 2014 is shown in Figure 3.3. The figure shows that in general, while there were more male deaths than female deaths over the 18-year period (1997–2014), the gap between male and female deaths generally narrowed down over time up to 2005, after which it gradually widened again in the recent years. Two distinct patterns can be observed from the figure:

- i) The first pattern shows declining proportion of male deaths between 1997 and 2005 while that of female deaths increased in the same period. The pattern shows that the percentage of male deaths was highest in 1997 (55,9%) and persistently declined to a low of 50,4% in 2005. During the same period, female deaths increased yearly from 44,1% in 1997 to a high of 49,6% in 2005.
- ii) The second pattern observed shows increasing proportion of male deaths from 2006 to 2014 coupled with a decline in the proportion of female deaths from 2006 to 2014. The pattern shows a reversal of the first pattern from 2006 for both males and females. The proportion of male deaths increased from 50,7% in 2006 to 52,4% in 2014, while female deaths took a downward trend from 49,3% in 2006 and reached 47,6% in 2014.

Figure 3.3: Percentage distribution of deaths by sex and year of death, 1997–2014*



*(1) Excluding deaths with unspecified sex.

*(2) Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

Appendix E (see page 74) presents the annual percentage changes in the number of deaths by sex from 1997–1998 to 2013–2014. Both males and females recorded their highest annual percentage increases in the number of deaths for 1997–1998 and their highest decreases between 2010 and 2011. It is shown that both male and female deaths increased between the years 1997–1998 and 2005–2006 with female deaths increasing at a higher rate from 1997–1998 to 2004–2005, whereas male deaths increased more between 2005 and 2006. Female deaths went on to decline at a higher rate than male deaths from 2006–2007 to 2012–2013. The annual percentage decreases in the number of deaths between 2013 and 2014 were equivalent for males and females.

Age-specific Death Rates (ASDRs) for the total population for the period 2010–2014 are shown in Appendix F (see page 75) to provide an indication of the age pattern of mortality over the five-year period, accounting for the population size at each age. The ASDRs provided should be interpreted with caution as they are based on observed

numbers of deaths that have not been adjusted for incomplete registration and which may vary with age. Overall, the age pattern of mortality was uniform over the five year period, characterised by rates higher for infants amongst children. Lower rates were observed for age groups 5–9 and 10–14 years. For all the years, the death rates decreased from age 0 to age 1–4 years, after which they were somewhat similar and low from age groups 5–9 to 14–19 years, and thereafter increased continuously from age group 20–24 years, reaching their highest levels at ages 80 years and older compared to younger age groups.

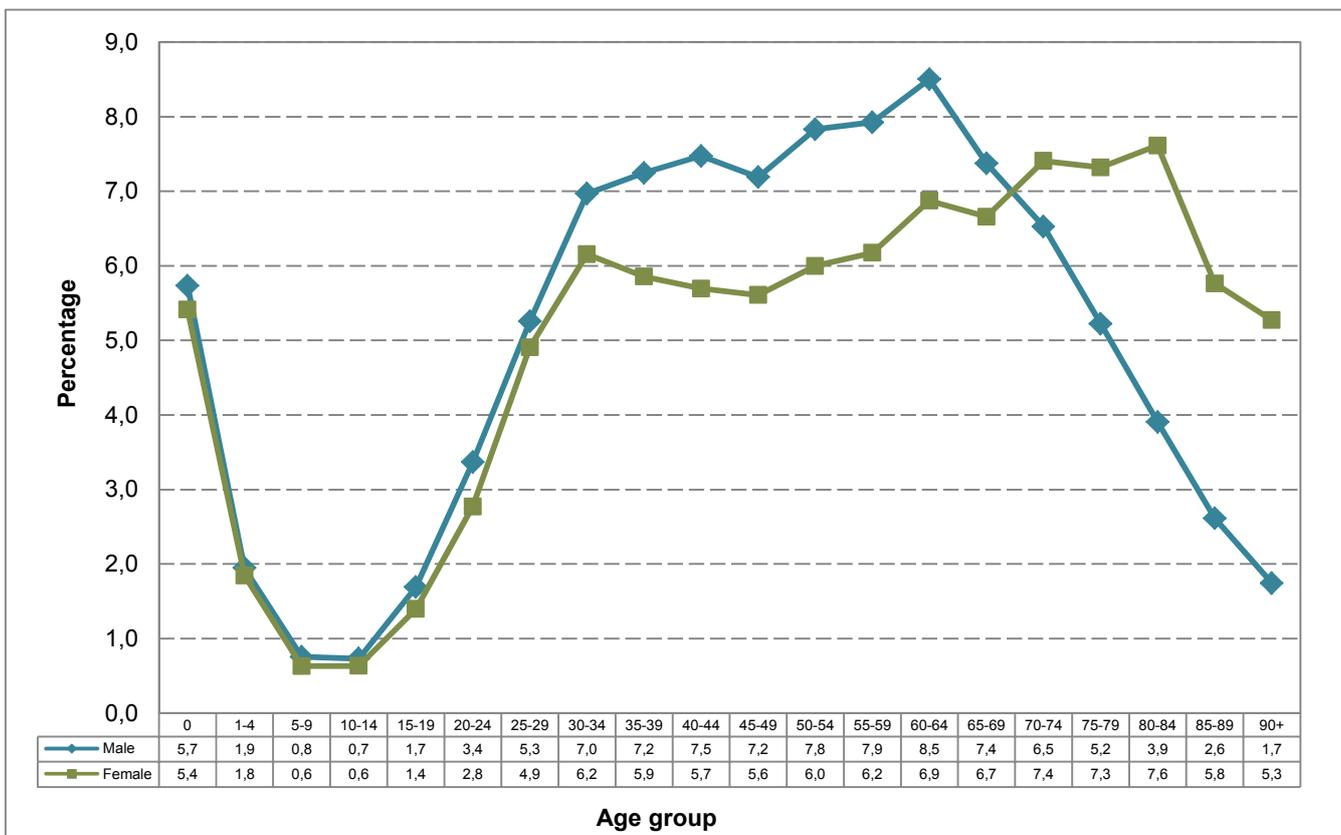
3.4 Age and sex differentials

3.4.1 Distribution of deaths by age and sex

Figure 3.4 shows the age and sex percentage distribution for 2014 registered deaths (absolute numbers are presented in Appendix D.5 [see page 73]). The results show that the proportions of death were lowest and characterised by minimal differences from ages 1–4 years to age group 10–14 years for both males and females. On the one hand, the percentages of male deaths exceeded the percentages of female deaths from age 0 up to age group 65–69 years. On the other hand, the proportions of female deaths were higher than the proportions of male deaths for ages 70 years and above.

Further, age and sex differentials show that in 2014, the highest percentage of male deaths occurred amongst those in the age group 60–64 years (8,5%), followed by age groups 55–59 and 50–54 years (7,9% and 7,8%, respectively). Female deaths peaked at age group 80–84 years (7,6%), followed by age group 70–74 years (7,4%) and then age groups 75–79 years (7,3%). As had been the case with 2013 data, in 2014, both males and females followed the same pattern for ages 50–64 years, contributing higher percentages to the total number male deaths, and female deaths peaking from ages 70 to 84 years.

Figure 3.4: Percentage distribution of deaths by age and sex, 2014*



*Excluding deaths with unspecified age and sex.

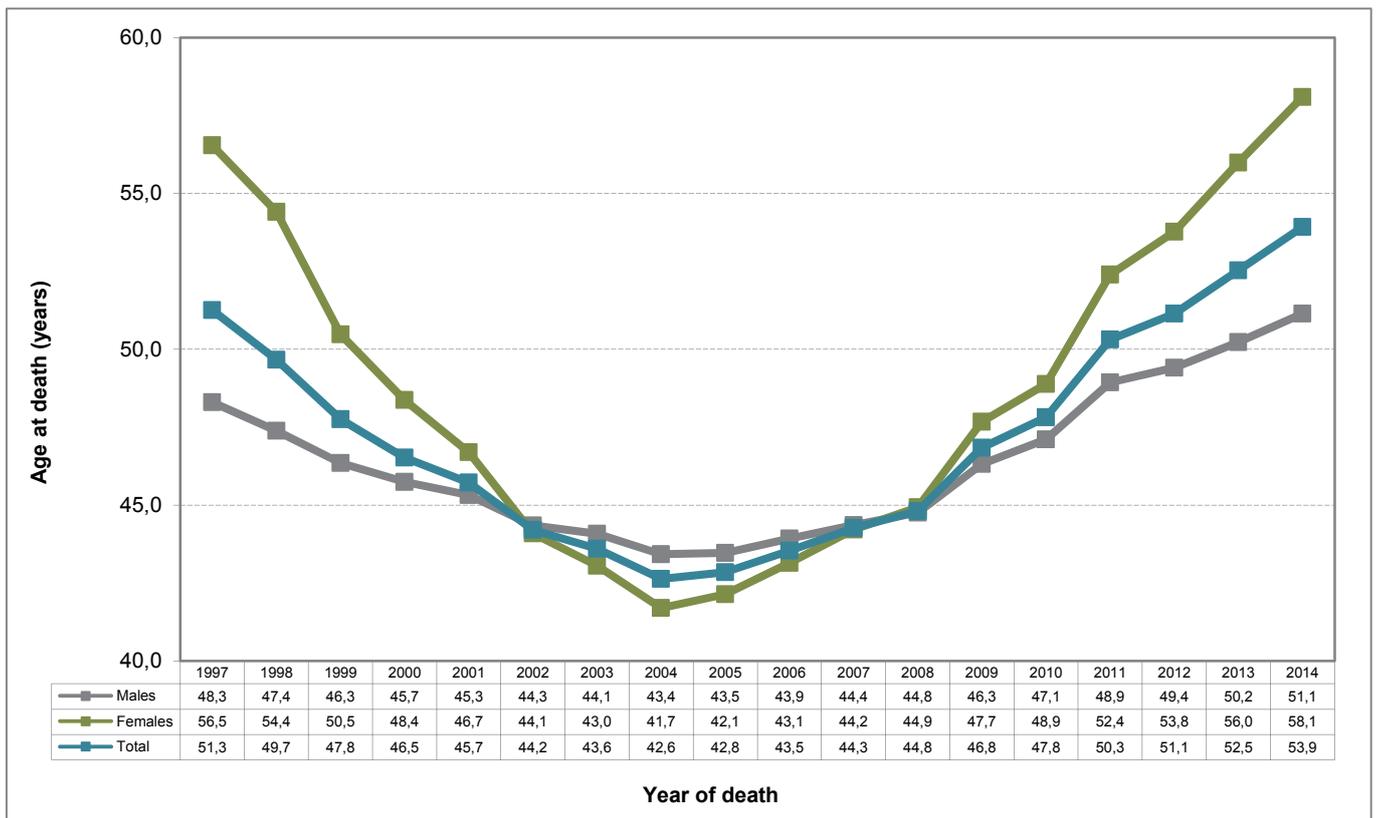
3.4.2 Median ages at death by sex

The median age at death refers to the age at which exactly half of the deceased are younger than this age and half are older. In essence, it specifies how early or late mortality occurs in a population. Trends in median ages at death are important in the analysis of changes in mortality patterns over time, such as an increase in the proportion of deaths occurring at older ages or a decline in the proportion of deaths occurring at younger ages.

Figure 3.5 shows the median ages at death by sex and year of death for deaths that occurred between the years 1997 and 2014. The results for male and female deaths as well as total deaths show that the median ages at death persistently decreased yearly from 1997 and reached their lowest level in 2004. From 2005, the median ages increased for all the years and were highest in 2014. The median ages at death for total deaths decreased from 51,3 years in 1997 to 42,6 years in 2004, while an upward trend was observed between 2005 and 2014 from 42,8 years in 2005 to 53,9 years in 2014, reflecting improvement in mortality.

Sex differentials by median ages at death show three distinct patterns. The first pattern is observed between 1997 and 2002, where males died at younger ages compared to females, with the gap narrowing over time. The second pattern was between 2003 and 2006, which is characterised by female deaths occurring at younger ages compared to male deaths, which were occurring at slightly older ages. The third pattern observed is from 2009 to 2014, where males died at younger ages than females as observed in the first pattern but with the gap widening over time. In 2014, the median age at death for females was 58,1 years, which was higher than the 51,1 years for males.

Figure 3.5: Median ages at death by sex and year of death, 1997–2014*



* Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

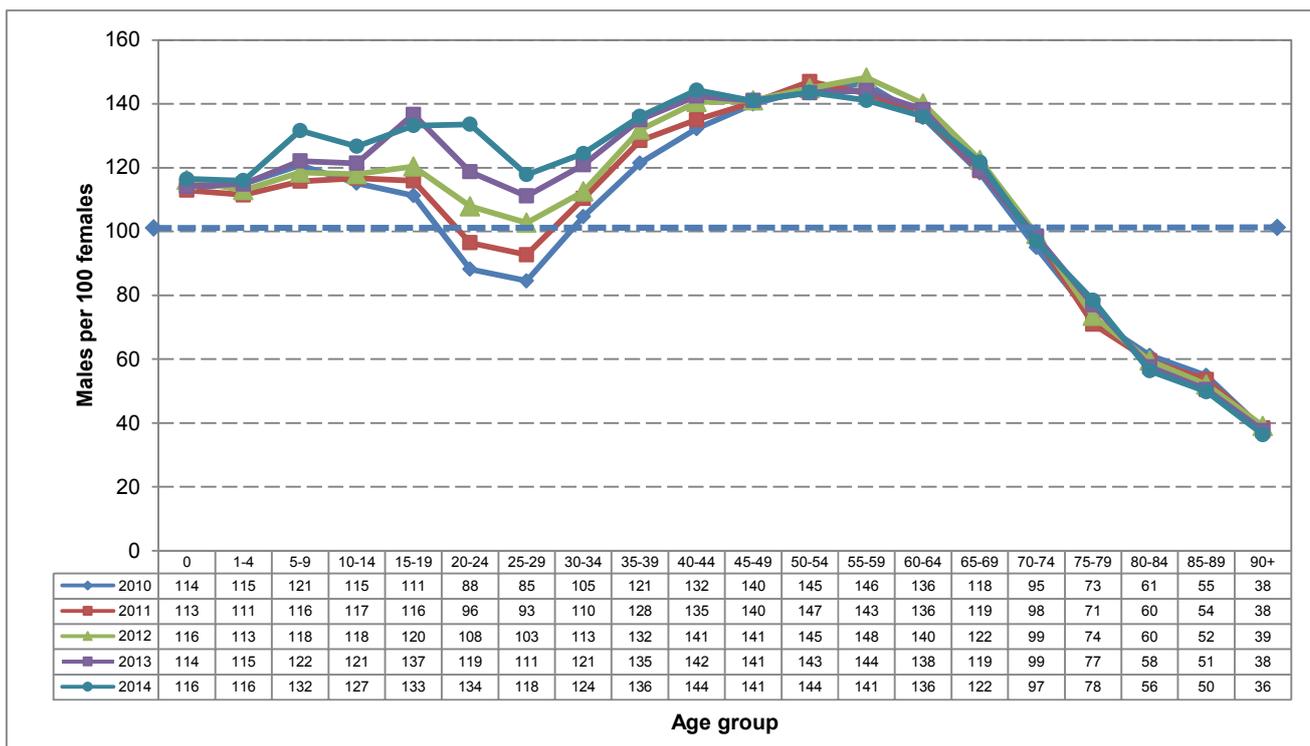
3.4.3 Sex ratios by age

Figure 3.6 presents the sex ratio at death by age and year of death for the period 2010 to 2014. The sex ratio at death is defined as the relative number of male deaths per 100 female deaths. A ratio of 100 indicates an equal number of male and female deaths, a number less than 100 is indicative of more female deaths, and a number above 100 indicates relatively more male deaths than female deaths.

The results show that from 2010 to 2014 there were more male deaths (sex ratios over 100) from age 0 years up to age group 15–19 years and from age group 30–34 years to age group 65–69 years. For the age groups 20–24 years and 25–29 years, female deaths exceeded male deaths (sex ratios less than 100) over the years 2010 to 2011. This pattern reversed from 2012 to 2014, where more male deaths were observed for these age groups as compared to female deaths. This indicates improvements in female mortality in these ages. Female deaths consistently exceeded male deaths throughout the five-year period (2010 to 2014) for age groups 70 years and above.

The overall sex ratios for 1997 to 2014 are shown in Appendix G (see page 76). Over the 18-year period, sex ratios at death were constantly higher for males (above 100) as compared to females. However, in 1997, the overall sex ratio at death was 127 male deaths per 100 female deaths, gradually decreasing to 102 male deaths per 100 female deaths in 2005. Between 2006 and 2014, the sex ratios increased notably from 103 male deaths per 100 female deaths in 2006 to 110 male deaths per 100 female deaths in 2014. The figure further shows that the sex ratio of deaths yielded in 2014 is the same as the sex ratio for the years 2012 and 2013.

Figure 3.6: Sex ratio at death by age and year of death, 2010–2014



* (1) Excluding deaths with unspecified sex and age.
 (2) Data for 2010–2013 have been updated with late registrations/delayed death notification forms processed in 2014/ 2015.

3.5 Population group differences in mortality

Table 3.2 shows the distribution of deaths by population group in 2014. Black Africans accounted for 70,5% of all deaths, followed by the white population group (8,5%) and then the coloured population group (6,8%). The Indian/Asian population group accounted for 1,4% of all registered deaths. The rank order of the proportions is consistent with the previous years. Variations in population size by population groups show that 80,2% of the South African population in 2014 was black Africans followed by coloured population group at 8,8% then whites at 8,4%. However there were more white population group deaths (8,5%) compared to coloured population group deaths (6,8%) as reflected in the table.

The Table also shows that 12,7% of registered deaths in 2014 had population group classified as unknown or unspecified. The proportion of deaths with missing information improved from 15,6% in 2012 to 12,7% in 2014. Although reporting on the population group variable has improved over time, analyses on population group should be treated with caution due to the high proportion of deaths with missing information on population group.

Table 3.2: Number and percentage distribution of deaths by population group, 2014

Population group	Number of deaths	Percentage of deaths	Population group size	Percentage of population group
Black African	319 587	70,5	43 375 988	80,2
White	38 442	8,5	4 556 186	8,4
Indian/Asian	6 241	1,4	1 343 684	2,5
Coloured	31 018	6,8	4 782 788	8,8
Other	625	0,1	0	0,0
Unknown or unspecified	57 447	12,7	0	0,0
Total	453 360	100,0	54 058 647	100,0

3.6 Marital status differences in mortality

The distribution of deaths by marital status in 2014 is shown in Table 3.3. Nearly half (47,7%) of the deaths that occurred in 2014 were among people who were never married, and 24,3% of the deceased were reported as married at the time of death. About 10,5% of the deceased were widowed while the divorced constituted 2,0% of all registered deaths.

The pattern observed in 2014 for the marital status variable is the same as that observed in 2013. The marital status of the deceased at the time of death was unknown or unspecified in 15,5% of the deaths, and therefore needs to be treated with caution.

Table 3.3: Number and percentage distribution of deaths by marital status, 2014

Marital status	Number	Percentage
Never married	216 237	47,7
Married	110 002	24,3
Widowed	47 506	10,5
Divorced	9 187	2,0
Unknown or unspecified	70 428	15,5
Total	453 360	100,0

3.7 Differences in mortality by smoking status

Table 3.4 shows the distribution of 2014 registered deaths by smoking status. Smoking status of the deceased refers to smoking of tobacco in the five years preceding death among those aged 16 and older at the time of death. It is observed that approximately 18,8% of the deceased were registered as smokers while 41,2% were reported as non-smokers.

The Table also shows that 34,4% of registered deaths in 2014 had smoking status classified as unknown or unspecified. The high proportion of deaths with missing information on smoking status shows poor reporting of this information on the death notification forms and should therefore be treated with caution. However, this has declined in comparison to 2012 (38,8%) and 2013 (35,6%).

Table 3.4: Number and percentage distribution of deaths by smoking status among those aged 16 years and older, 2014

Smoking status	Number	Percentage
Yes	77 176	18,8
No	169 367	41,2
Do not know	22 949	5,6
Unknown or unspecified	141 324	34,4
Total	410 816	100,0

3.8 Differences in mortality by place or institution of death occurrence

Table 3.5 shows the number and percentage distribution of registered deaths by place or institution of death occurrence for 2014. The results indicate that a total of about 48% of the deaths took place in a health care facility (43,9% in hospitals; 2,3% in nursing homes and 1,8% emergency room or outpatient deaths). Deaths occurring at home constituted 23,2% of all registered deaths, while 2,2% of all registered deaths were reported as dead upon arrival at a health care facility. Caution should be exercised when interpreting the results, as 23,4% of the death notification forms had unknown or unspecified information on place or institution of death of the deceased.

Table 3.5: Number and percentage distribution of deaths by place or institution of death occurrence, 2014

Place of death	Number	Percentage
Hospital	199 060	43,9
Home	105 396	23,2
Nursing home	10 290	2,3
Dead on arrival	9 780	2,2
Emergency room/Out patient	8 084	1,8
Other	14 546	3,2
Unknown or unspecified	106 204	23,4
Total	453 360	100,0

3.9 Geographic variations in mortality

This subsection provides information on the distribution of deaths by province of death occurrence, province of usual residence of the deceased, and district municipalities of death occurrence for deaths that occurred in 2014. Stats SA derived the information on geography from place names, based on the 2011 municipal boundaries.

The number and percentage distribution of deaths by province of death occurrence and province of usual residence of the deceased are provided in Appendices H and H1 (see page 77), respectively. Appendices I and I1 (see pages 78–81) provide the number and percentage distribution of deaths at provincial and district municipality levels by age, whereas the sex distribution is provided in Appendix J (see pages 82–83).

3.9.1 Differences by province, age and sex

The distribution of deaths by province of death occurrence and province of usual residence of the deceased in 2014 is presented in Table 3.6. The distribution of deaths by province of death occurrence, shows that the highest proportion of deaths (21,3%) occurred in Gauteng, followed by KwaZulu-Natal (17,5%) and then Eastern Cape at 14,7%. The lowest proportion of deaths occurred in Northern Cape (3,1%). The order of province of usual residence of the deceased was the same as that of death occurrence, with Gauteng accounting for the highest proportion of deaths (20,4%), followed by KwaZulu-Natal (16,9%) and Eastern Cape (14,7%). Similarly, Northern Cape (3,1%) accounted for the lowest proportion with regard to deceased registered as usual residents of the province. These percentages are reflective of the population sizes of the provinces of death occurrence or usual residence.

Approximately 0,2% of the deaths occurred in a foreign country and 0,3% of the deceased were usual residents in a foreign country. While province of death occurrence was unknown or unspecified in 0,3% of the registered deaths, province of usual residence of the deceased was unknown or unspecified in 1,2% of the registered deaths.

Further analysis of the province of death occurrence and province of usual residence of the deceased shows that 2014 registered deaths were predominantly characterised by deaths that occurred within the province of usual residence (refer to Appendices H and H1). Over 90% of deaths occurred in the province of usual residence, with Western Cape (95,1%) having the highest proportion and Gauteng (91,0%) having the lowest proportion. As was the case in 2013, the highest proportion of people who died outside South Africa were residing in Gauteng (30,7%).

It must be noted that subsequent analyses on geographic distribution of deaths is based only on place/institution of death occurrence, not place of residence or place of birth of the deceased. However, information on place of residence and place of birth of the deceased is available on request from Stats SA.

Table 3.6: Number and percentage distribution of deaths by province of death occurrence and province of usual residence of the deceased, 2014

Province	Province of death occurrence		Province of usual residence of deceased	
	Number	Percentage	Number	Percentage
Western Cape	44 020	9,7	43 842	9,7
Eastern Cape	66 553	14,7	66 800	14,7
Northern Cape	14 056	3,1	14 026	3,1
Free State	33 045	7,3	32 947	7,3
KwaZulu-Natal	79 138	17,5	76 764	16,9
North West	34 933	7,7	35 793	7,9
Gauteng	96 736	21,3	92 618	20,4
Mpumalanga	35 002	7,7	35 611	7,9
Limpopo	47 849	10,6	48 221	10,6
Foreign	713	0,2	1 342	0,3
Unspecified	1 315	0,3	5 396	1,2
Total	453 360	100,0	453 360	100,0

The number and percentage distribution of deaths by age, province and district municipality of death occurrence for 2014 are presented in Appendices I and I1 (see pages 78–81). It is imperative to note that the distribution of deaths does not account for potential underreporting of deaths at specific ages, which may vary by district of death occurrence.

In six of the nine provinces, most deaths occurred in the age group 65 years and older, while for KwaZulu-Natal and Mpumalanga most deaths occurred in the age group 15–44 years. Northern Cape is the only province where deaths occurred more in age group 45–64 years.

In terms of province of death occurrence, North West (7,3%) and Northern Cape (6,9%) had the highest proportions of infant deaths (0 years). Eastern Cape had the lowest proportion of infant deaths, followed by Western Cape (3,7% and 4,1%, respectively). Limpopo and North West had the highest proportions of children dying between the ages of 1 to 14 years (4,8% and 4,0%, respectively), while Western Cape had the lowest percentage (1,8%). Mpumalanga (34,1%) had the highest percentage of deaths for age groups 15–44 years, followed by KwaZulu-Natal (32,5%). Northern Cape had the highest proportion of deaths occurring at age groups 45–64 years (31,5%), while Western Cape had the highest proportion of deaths occurring amongst the elderly [ages 65 and older (38,5%)].

Appendix J presents the sex distribution of the deceased by province and district municipality of death occurrence. It is observed that Limpopo was the only province where female deaths outnumbered male deaths (98 male deaths per 100 female deaths). Western Cape had the highest sex ratio at death with 123 male deaths per 100 female deaths, followed by North West (117 male deaths per 100 female deaths). In the rest of the provinces, there were more male deaths than female deaths with sex ratios ranging from 105 male deaths per 100 female deaths in KwaZulu-Natal to 114 male deaths per 100 female deaths in Gauteng.

3.9.2 Differences by district municipality, age and sex

The absolute number of deaths by age and district municipality of death occurrence as shown in Appendix I indicates that out of the 52 district municipalities, the top four district municipalities were metropolitan municipalities. These were the City of Johannesburg (29 645), the City of Cape Town (27 127), Ekurhuleni (23 558) and the City of Tshwane (23 221).

Percentage variations in 2014 deaths by age and district municipality are presented in Appendix I1. John Taolo Gaetsewe in Northern Cape had the highest proportion of deaths occurring during infancy, accounting for 11,3% deaths in this district, followed by Dr Ruth Segomotsi in North West (9,8%) and Amajuba in KwaZulu-Natal (9,4%). The lowest proportions of deaths occurring during infancy were reported in Amathole in Eastern Cape and West

Coast in Western Cape, representing 2,7% and 3,0% of the deaths respectively. Dr Ruth Segomotsi in North West (5,3%) had the highest proportion of deaths occurring among children aged 1–14 years, followed by O.R Tambo in Eastern Cape accounting for 5,1% of the deaths in the district. Deaths for the age group 15–44 years were mostly found in Ehlanzeni (36,3%) in Mpumalanga and O.R. Tambo (36,1%) in Eastern Cape. Central Karoo in Western Cape had the highest percentage of deaths (36,0%) occurring among ages 45–64 years, while Namakwa in Northern Cape had the second highest (34,2%). Among the elderly (65 years and above), Overberg in Western Cape and Namakwa in Northern Cape had the highest proportions (47,2% and 43,5% respectively).

The sex distribution by district municipality of death occurrence is presented in Appendix J. The 2014 registered deaths were mostly characterised by more male deaths than female deaths. Out of the 52 districts, 44 districts had more male deaths and seven districts had more female deaths. The districts with higher male deaths relative to female deaths ranged from 101 male deaths per 100 female deaths in Sisonke in KwaZulu-Natal to as high as 135 male deaths per 100 female deaths in Namakwa – a district municipality in Northern Cape.

The seven districts where female deaths exceeded male deaths were Vhembe (91 male deaths per 100 female deaths), Greater Sekhukhune (95 male deaths per 100 female deaths) and Mopani (97 male deaths per 100 female deaths) in Limpopo; Zululand (99 male deaths per 100 female deaths) in KwaZulu-Natal; Alfred Nzo (96 male deaths per 100 female deaths) and O.R Tambo (99 male deaths per 100 female deaths) in Eastern Cape; and Central Karoo (96 male deaths per 100 female deaths) in Western Cape. Male deaths also exceeded female deaths for deaths occurring outside South Africa with a sex ratio of 169 male deaths per 100 female deaths.

4. Causes of death

4.1 Introduction

This section presents information on causes of death for deaths that occurred in 2014 and that were registered at the Department of Home Affairs (DHA) using either form BI-1663 or form DHA-1663. The DHA used form BI-1663 prior to 2009 and a new death notification form (DHA-1663) was introduced in 2009. Since 2009, both the old and the new forms are used to register a death in South Africa. The old form (BI-1663) will continue to be used at various DHA offices until their stock is depleted.

The Births and Deaths Registration Act (Act No. 51 of 1992) places a legal obligation on medical practitioners to state the cause of death on the death notification form. The information on causes of death provided in this statistical release is as recorded on death notification forms completed by medical practitioners.

In view of the concern in South Africa around the levels of violence and deaths due to accidents, non-natural underlying causes of death are treated as a separate group. Non-natural causes of death comprise all deaths that were not attributable, or may not have been attributable to natural causes. In terms of the Inquests Act (Act No. 58 of 1959), these deaths are subject to medico-legal investigation. An autopsy must be performed to establish the cause of death, and an inquest is compulsory. The results of the inquest are then sent to the DHA, which issues the final death certificate.

Underlying causes of death in this section are classified by the main groups, broad groups and Global Burden of Disease. Global Burden of Disease is a critical resource for informed policymaking, as it provides a tool to quantify and compare the effects of different diseases in a population.

Deaths are further categorised by age, sex and province of death occurrence. Trend analysis covering the period 1997 to 2013 was undertaken using data that have been updated with late registrations processed during the processing of 2014 deaths, in order to establish prevailing patterns between the natural and non-natural causes of death.

The last subsection provides a comparison between underlying, immediate and contributing causes of death. This analysis gives an overview of the recorded instances of multiple causes of death and utilises information on all causes of death recorded on each death notification form, as death notification forms allow for reporting one or more causes of death on each form.

4.2 Reported causes of death

Both the BI-1663 and DHA-1663 death notification forms make provision for one or more causes to be recorded on the forms. These are Part 1 and Part 2 under "Medical Certificate of Cause of Death" on both death notification forms or under "Causes of Death" for perinatal deaths on the new form (DHA-1663). Part 1 is for reporting the chain of events leading directly to death on the first line and the underlying cause of death on the lowest line. Part 2 is for reporting other conditions that contributed to death, but did not cause any of the causes of death mentioned in Part 1.

Table 4.1 provides information on the number of causes of death reported on each death notification form for deaths that occurred in 2014. A total of 2 880 (0,6%) forms had no information provided for the cause of death. Out of the 2 880 forms with missing cause of death information, 1 969 (68,4%) had a doctor's tick to show that it was a natural cause of death while for 911 (31,6%) forms, the doctors stated that they were "not in a position to certify" or that the "death was under investigation". These causes were subsequently coded to *other ill-defined and unspecified causes of mortality (R99)* or *other conditions originating in the perinatal period (P96)*, depending on the age of the deceased. The majority of death notification forms (53,7%) had only one cause recorded, followed by 26,6% death notification forms that had two causes recorded and 13,4% with three causes recorded. The Table further shows that 5,6% of the death notification forms had four or more causes recorded. The pattern of recording causes on the death notification forms has generally remained the same since 1997.

Table 4.1: Number and percentage distribution of death notification forms by the number of causes entered on the notification form, 2014

Number of the reported causes of death	Number of death notification forms	Percentage
No cause	2 880	0,6
One cause	243 269	53,7
Two causes	120 618	26,6
Three causes	60 887	13,4
Four causes	20 055	4,4
Five causes	5 614	1,2
Six causes	37	0,0
Total	453 360	100,0

4.3 Method of ascertaining cause of death

The BI-1663 and DHA-1663 death notification forms make provision for a certifying official to indicate the method that was used to ascertain the cause of death. There are differences in the options available between the two forms:

- Form BI-1663 has six options, namely autopsy, opinion of attending medical practitioner, opinion of attending medical practitioner on duty, opinion of professional nurse, interview of family member, and other (refer to Appendix B section G).

There are two sections for the method of ascertaining the cause of death for form DHA-1663, depending on the age of the deceased:

- For deaths occurring after one week of birth, DHA-1663 has the same six options as BI-1663 plus an additional option of “post-mortem examination” (refer to Appendix B1 section G.1).
- For stillbirths and deaths occurring within one week of birth, form DHA-1663 has three options, namely autopsy, autopsy results may be available later, and autopsy not performed (refer to Appendix B1 section G.2).

The resulting categories after combining comparable information in BI-1663 and DHA-1663 are provided in Table 4.2. The most common method of ascertaining the cause of death in 2014 was post-mortem examination with 24,1% deaths ascertained using this method, followed by 18,0% deaths ascertained through opinion of attending medical practitioner. About 11,5% of the deaths were ascertained through the opinion of a registered professional nurse. There were 2,2% causes of death that were ascertained by conducting an interview with a family member of the deceased to establish the cause of death.

Table 4.2: Number and percentage distribution of deaths by method used to ascertain the cause of death, 2014

Method of ascertaining the cause of death	Number	Percentage
Autopsy	39 528	8,7
Post-mortem examination	109 329	24,1
Opinion of attending medical practitioner	81 382	18,0
Opinion of attending medical practitioner on duty	11 616	2,6
Opinion of registered professional nurse	51 975	11,5
Interview of family member	9 826	2,2
Other	6 592	1,5
Autopsy results may be available later*	55	0,0
Autopsy not performed*	1 360	0,3
Unknown	3 524	0,8
Unspecified	138 173	30,5
Total	453 360	100,0

4.4 Main groups of the underlying causes of death

This subsection gives an overview of the underlying causes of death for main groups (chapters) of classification of causes of death. The ICD-10 classifies diseases and related health problems into 22 chapters, of which 19 are used in the reporting of information on underlying causes of death (see Table 4.3). The chapters excluded in this report are chapters 19, 21 and 22. These are discussed briefly below:

1. Chapter 19: *Injury, poisoning and certain other consequences of external causes (S00-T98)*. These codes are used to classify causes of death in other causes but not in the underlying causes.
2. Chapter 21: *Factors influencing health status and contact with health services (Z00-Z99)*. These are only used in morbidity coding.
3. Chapter 22: Codes for special purposes. These codes are used by the WHO for the provisional assignment of new diseases of uncertain aetiology. U51 and U52 were used for coding *multidrug-resistant tuberculosis (MDR-TB)* and *extensively drug-resistant tuberculosis (XDR-TB)* in this release for individual causes of death, but were both recoded to the broad group of *tuberculosis (A15-A19)* in the analyses.

The number and percentage distribution of deaths by the 19 main groups (chapters) of the classification of causes of death is shown in Table 4.3. *Infections and parasitic diseases* as has generally been the case in the previous years, was the most common main group of causes of death in 2014 comprising 21,8% of all deaths. This group also includes 779 deaths due to *multidrug-resistant tuberculosis (MDR-TB)* and 77 deaths due to *extensively drug-resistant tuberculosis (XDR-TB)*. The reported number of deaths due to *MDR-TB* increased by 16,6% between 2013 and 2014, while *XDR-TB* increased by 1,3% for the same years.

The second most common main group of causes of death was *diseases of the circulatory system* (17,3%), followed by *symptoms and signs not elsewhere classified* (12,5%), and *external causes of morbidity and mortality* (10,5%). *Diseases of the respiratory system* accounted for 10,0% deaths. The rest of the other main groups each contributed less than 10%. *Neoplasms* comprised 8,6% of all deaths; *endocrine, nutritional and metabolic diseases* contributed 6,5%; *certain conditions originating in the perinatal period* contributed 2,1% of all deaths, while *pregnancy, childbirth and puerperium* contributed 0,2% of all deaths.

Table 4.3: Number and percentage distribution of deaths by main groups of causes of death, 2014*

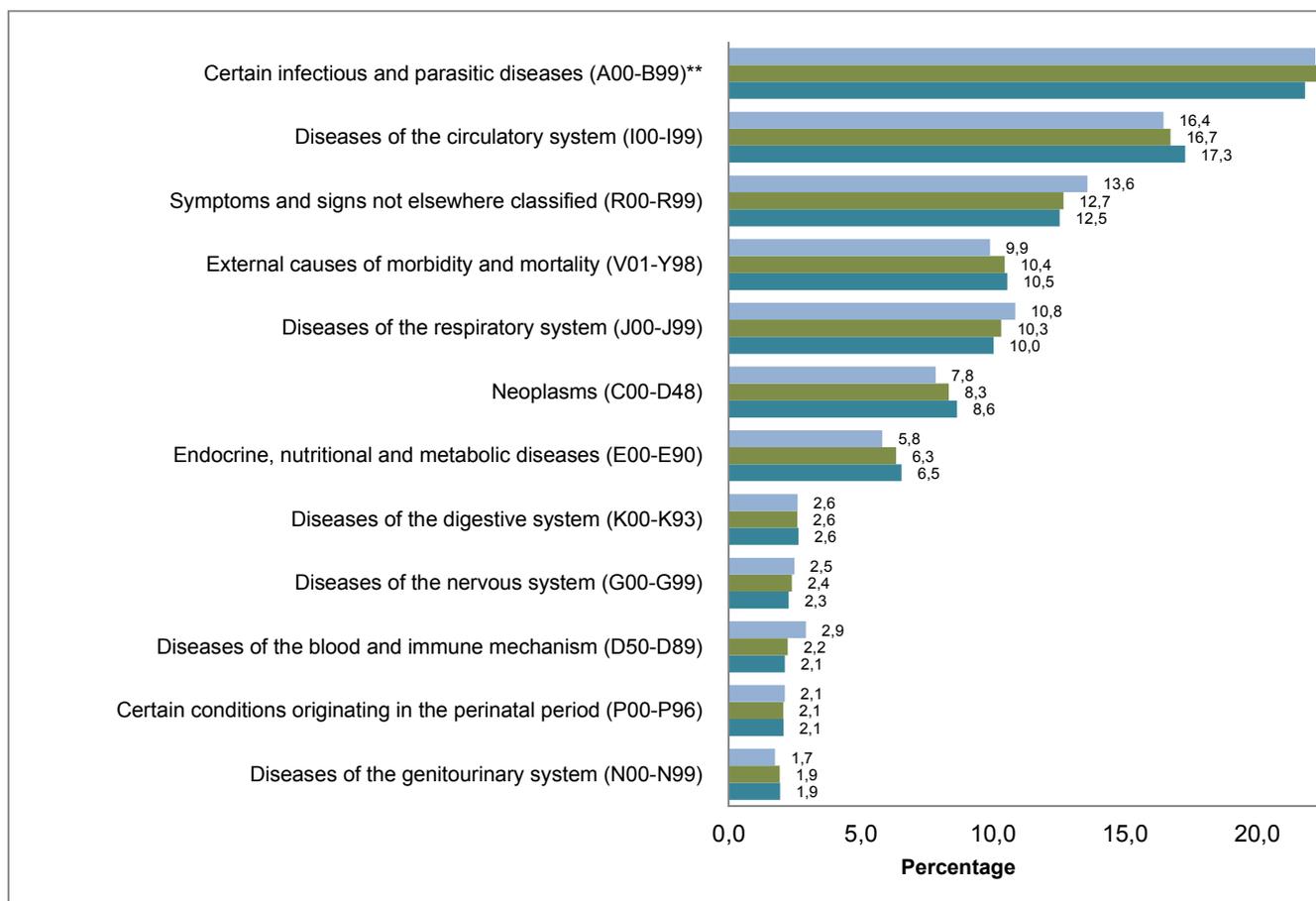
No.	Main groups of underlying causes of death (based on ICD-10)	Number	Percentage
1	Certain infectious and parasitic diseases (A00-B99)*	98 817	21,8
2	Neoplasms (C00-D48)	39 143	8,6
3	Diseases of the blood and immune mechanism (D50-D89)	9 594	2,1
4	Endocrine, nutritional and metabolic diseases (E00-E90)	29 642	6,5
5	Mental and behavioural disorders (F00-F99)	1 996	0,4
6	Diseases of the nervous system (G00-G99)	10 274	2,3
7	Diseases of the eye and adnexa (H00-H59)	16	0,0
8	Diseases of the ear and mastoid process (H60-H95)	54	0,0
9	Diseases of the circulatory system (I00-I99)	78 258	17,3
10	Diseases of the respiratory system (J00-J99)	45 381	10,0
11	Diseases of the digestive system (K00-K93)	11 928	2,6
12	Diseases of the skin and subcutaneous tissue (L00-L99)	793	0,2
13	Diseases of the musculoskeletal system etc. (M00-M99)	1 619	0,4
14	Diseases of the genitourinary system (N00-N99)	8 772	1,9
15	Pregnancy, childbirth and puerperium (O00-O99)	1 027	0,2
16	Certain conditions originating in the perinatal period (P00-P96)	9 363	2,1
17	Congenital malformations (Q00-Q99)	2 138	0,5
18	Symptoms and signs not elsewhere classified (R00-R99)	56 784	12,5
19	External causes of morbidity and mortality (V01-Y98)	47 761	10,5
Total		453 360	100

* Including deaths due to MDR-TB and XDR-TB.

The number of deaths by selected main groups of causes of death for 2012–2014 is shown in Figure 4.1. Over the three-year period, consistent increases in the number of deaths were observed for *diseases of the circulatory system, external causes of morbidity and mortality, neoplasms, and endocrine, nutritional and metabolic diseases.*

Consistent decreases were observed for *diseases of the respiratory system, diseases of the blood and immune mechanism, diseases of the nervous system, and symptoms and signs not elsewhere classified. Diseases of the digestive system, diseases of the genitourinary system and certain conditions originating in the perinatal period* remained constant. For *certain infectious and parasitic diseases*, the proportions were inconsistent over time, thus showing no evident pattern.

Figure 4.1: Percentage distribution of deaths by selected main groups of causes of death, 2012–2014*



*(1) Data for 2012–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

(2) Excluding main groups with less than 1% of deaths.

** Including deaths due to *MDR-TB* and *XDR-TB*.

4.5 Natural and non-natural causes of death

According to the ICD-10 codebook, all causes of death from chapters 1 to 18 of ICD-10 are classified as natural causes and chapter 20 (V01-Y98) as non-natural causes. Table 4.4 shows the actual number of natural and non-natural deaths by year of death from 1997 to 2014. Throughout all the years, the number of deaths due to natural causes was always higher than the number of deaths due to non-natural causes. Between 1997 and 2006, there was a steady increase in the number of natural deaths, after which there was a decline. The results show that there has been an inconsistent pattern in the number of deaths due to non-natural causes from 1997 to 1999, followed by a steady and consistent rise in non-natural deaths from 2000 until 2005.

The number of deaths due to natural causes has been declining since 2008, whereas there is no noticeable pattern in the number of non-natural deaths from 2006 to 2014 except for the period of 2009 to 2011, where the number of non-natural deaths was decreasing.

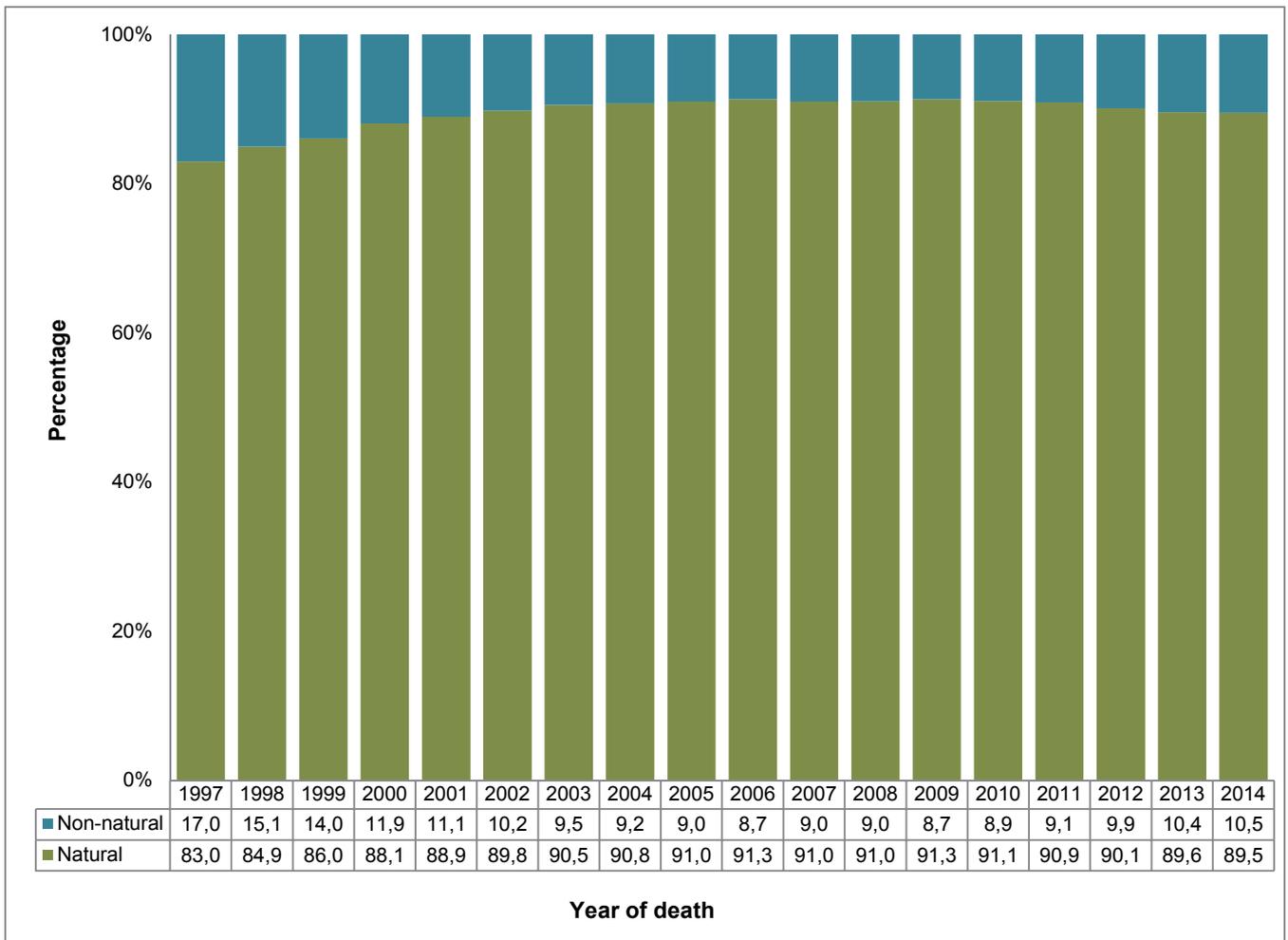
Table 4.4: Number of natural and non-natural deaths by year of death, 1997–2014*

Year of death	Number of natural deaths	Number of non-natural deaths	Total
1997	263 592	54 135	317 727
1998	311 322	55 155	366 477
1999	329 147	53 383	382 530
2000	367 223	49 819	417 042
2001	405 644	50 410	456 054
2002	451 623	51 537	503 160
2003	505 321	52 937	558 258
2004	524 775	53 442	578 217
2005	545 225	54 042	599 267
2006	560 721	53 293	614 014
2007	551 331	54 618	605 949
2008	544 189	53 592	597 781
2009	532 232	50 724	582 956
2010	501 180	49 221	550 401
2011	467 919	47 019	514 938
2012	443 406	48 656	492 062
2013	423 991	49 393	473 384
2014	405 599	47 761	453 360

*Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

Figure 4.2 shows the percentage of deaths due to natural and non-natural causes between 1997 and 2014. The majority (over 80%) of deaths were due to natural causes throughout this period, although with declining proportions from 2010. Conversely, the proportion of deaths due to non-natural underlying causes of death has been on the increase since 2010 (from 8,9% in 2010 to 10,5% in 2014).

Figure 4.2: Percentage distribution of natural and non-natural causes of death by year of death, 1997–2014*

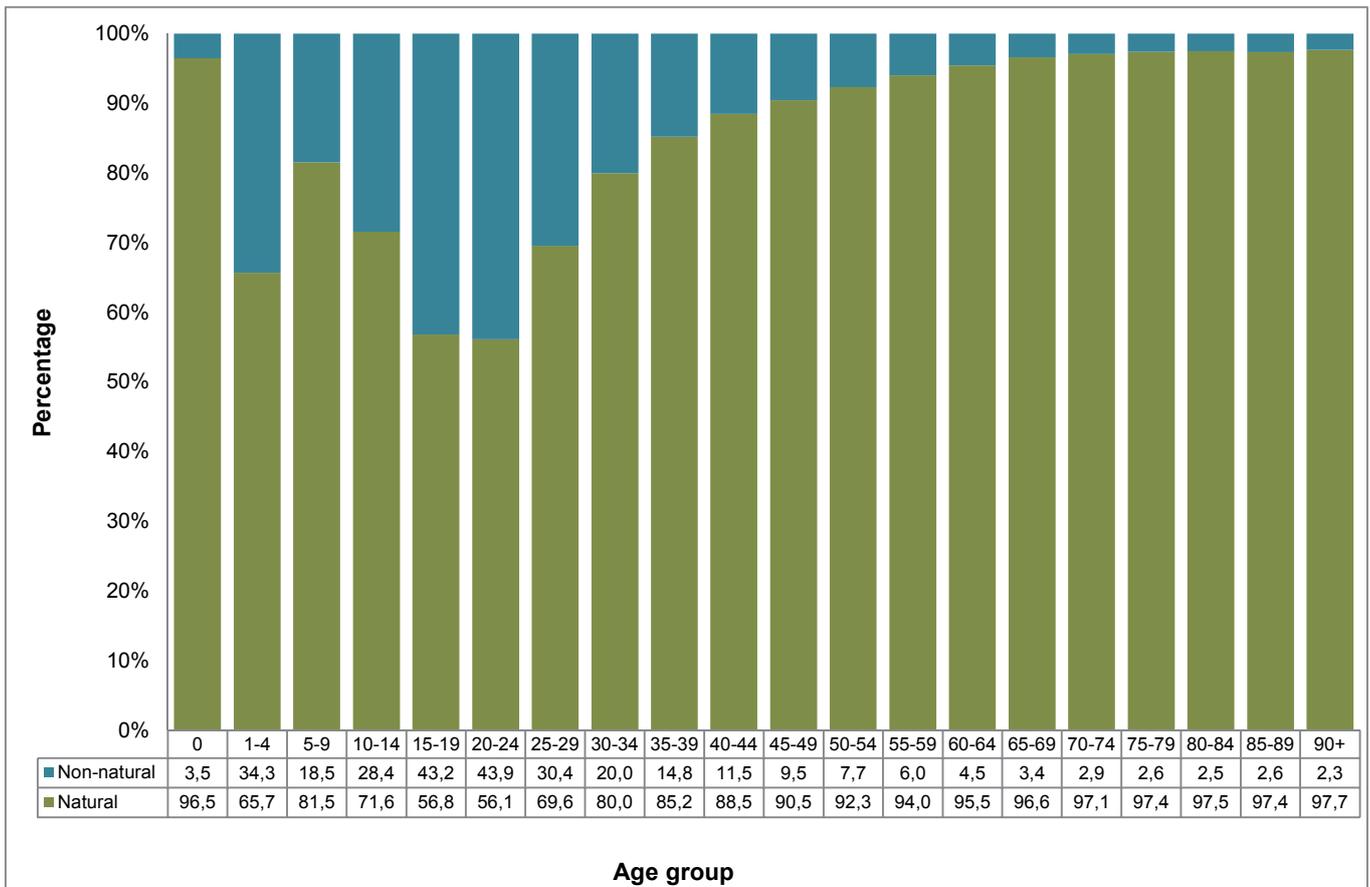


*Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

Natural and non-natural causes of death by age

The percentage distribution of deaths due to natural and non-natural causes classified into age groups for deaths that occurred in 2014 is provided in Figure 4.3. The general pattern observed shows that age groups 15–19 and 20–24 were the ages mostly affected by non-natural causes. Other ages with higher proportions (over 20%) of deaths due to non-natural causes were age groups 1–4 years (34,3%), 5–9 years (18,5%) and 10–14 years (28,4%). Ages least affected by non-natural deaths were infancy (age 0) and older ages (60 years and older) where less than 5% of the deaths in each of these age groups were due to non-natural causes of death.

Figure 4.3: Percentage distribution of natural and non-natural causes of death by age, 2014*



* Excluding deaths with unspecified age.

4.6 Major groups of causes of death as per Global Burden of Disease

The Global Burden of Diseases is the main and most complete effort to measure epidemiological levels and trends of health within different populations. The 19 ICD-10 chapters used in the reporting of information on underlying causes of death can be further condensed into three groups of causes of death as per the Global Burden of Disease cause list:

Group I:

- Communicable diseases (e.g. *Tuberculosis, pneumonia, diarrhoea, malaria, measles*);
- Maternal and perinatal causes (e.g. *maternal hemorrhage, birth trauma*); and
- Nutritional conditions (e.g. *protein-energy malnutrition*)

Group II: Non-communicable diseases (e.g. *cancer, diabetes, heart disease and asthma*)

Group III: External causes of mortality (e.g. *accidents, homicide and suicide*)

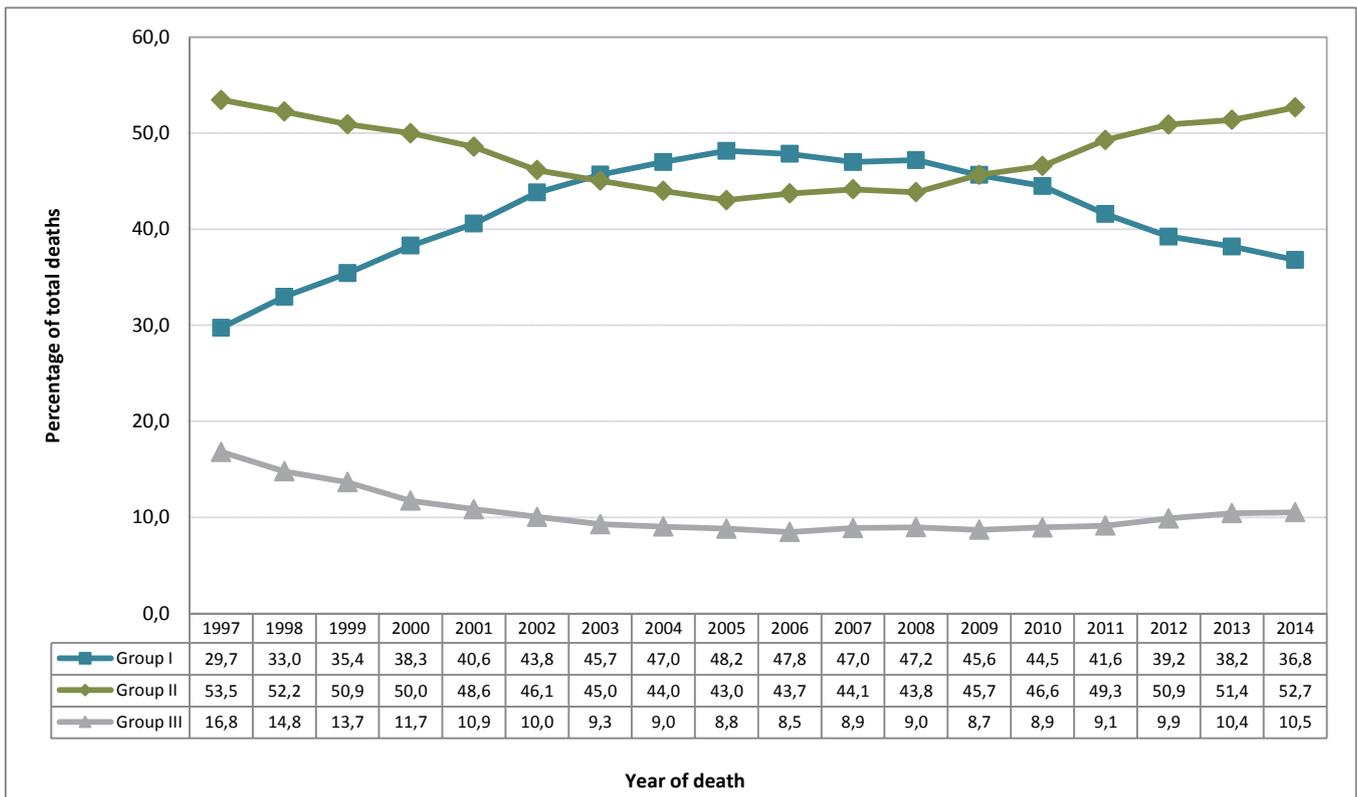
Communicable diseases are diseases caused by pathogenic microorganisms, such as bacteria, viruses, parasites or fungi and can be spread, directly or indirectly, from one person to another. These include, amongst other diseases, *diarrhoea, tuberculosis and pneumonia*. Non-communicable diseases are medical conditions or diseases that are non-infectious or non-transmissible among people. These last for longer periods of time and progress slowly and include, amongst others, *cancer, asthma and heart diseases*. External causes of mortality are the non-natural causes of death.

Figure 4.4 shows the percentage distribution of deaths by group type and year of death. The pattern observed shows that in South Africa prior to 2003, there were more deaths from non-communicable diseases relative to communicable diseases, although the gap was narrowing over time. However, from 2004 until 2008, deaths due to communicable diseases exceeded non-communicable deaths. Over the years 2010 to 2014, the gap between the

communicable and non-communicable diseases widened with more deaths resulting from non-communicable diseases. Overall, the pattern shows an epidemiological shift in the main causes of death and disease, away from communicable diseases towards non-communicable diseases.

Deaths due to injuries took a downward trend from 16,8% in 1997 to 8,5% in 2006, and thereafter there remained more or less constant from 2007 up to 2009. Between 2010 and 2014, a consistent increase in the proportions of deaths due to injuries was noted from 8,9% in 2010 to 10,5% in 2014.

Figure 4.4: Percentage of deaths due to communicable diseases (Group I), non-communicable diseases (Group II) and injuries (Group III) by year of death, 1997–2014*



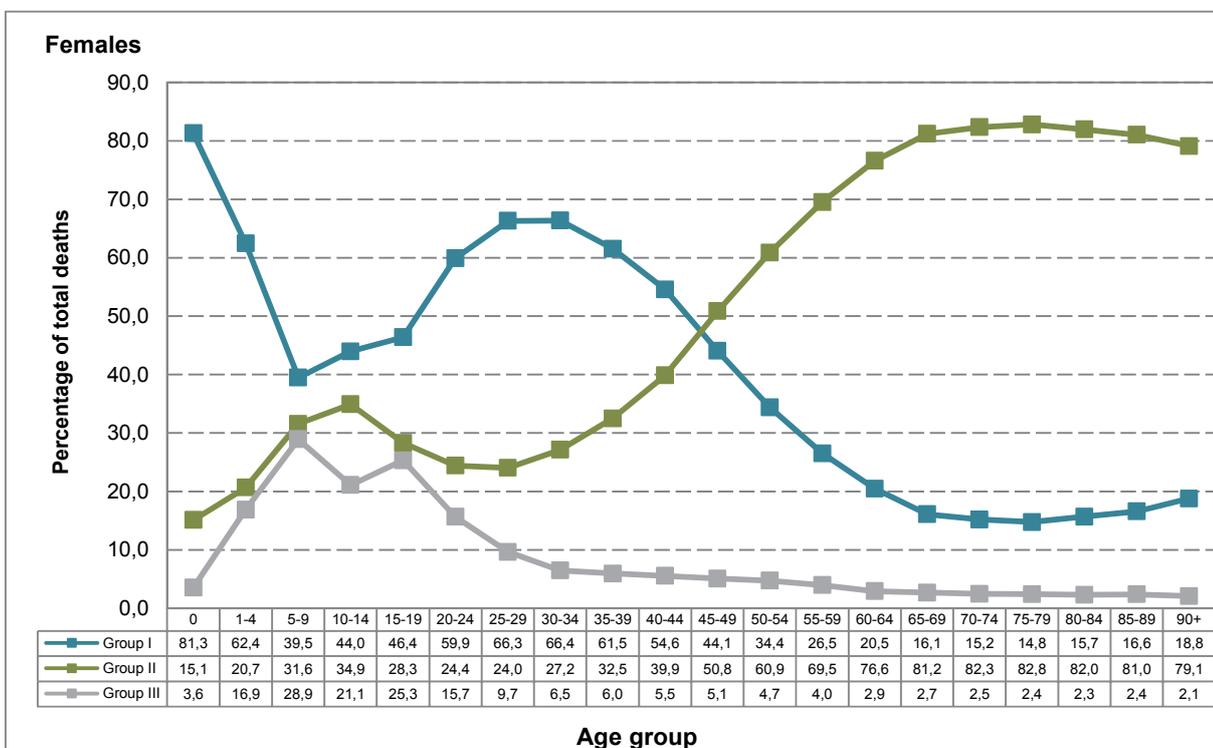
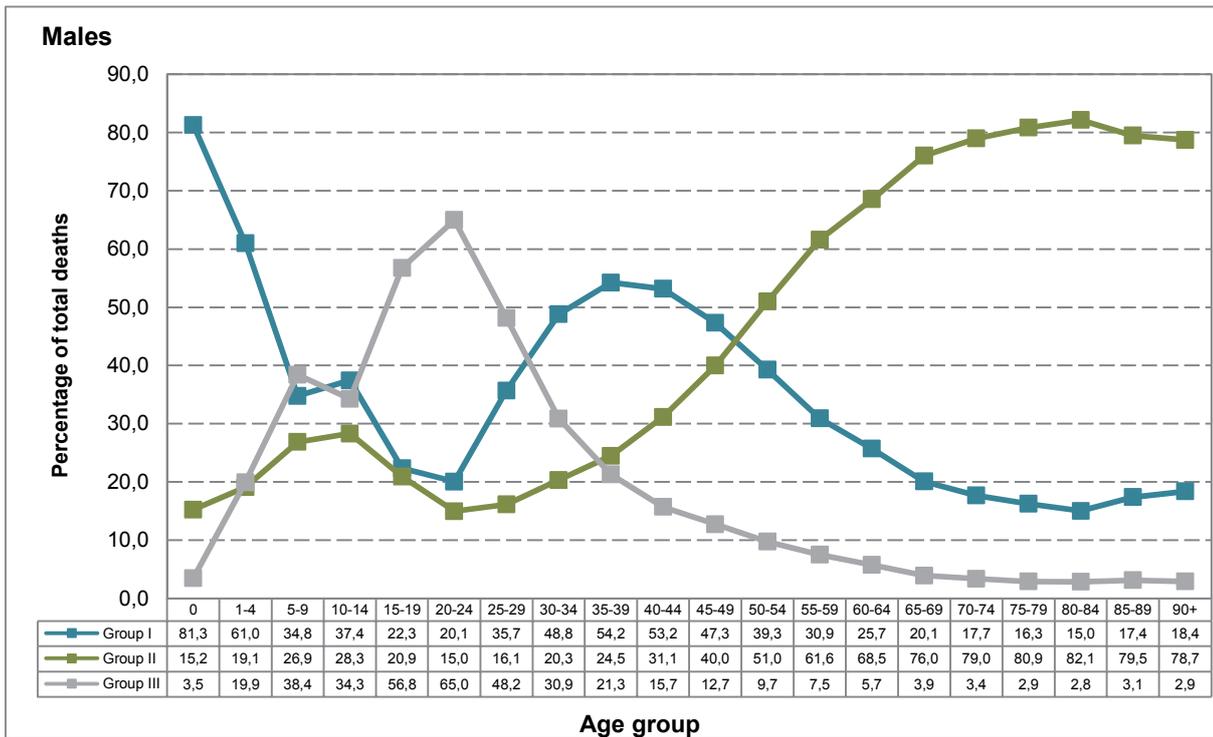
* (1) Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.
 (2) Redistributed unknown age and ill-defined diseases R00-R99 proportionately to causes in Group I and Group II.

The percentage distribution of group type by sex and age group is shown in Figure 4.5. For 2014 deaths, the proportion of deaths due to **Group I** causes (*communicable diseases, maternal, perinatal and nutritional conditions*) was high amongst children for both males and females. For both sexes, deaths due to **Group I** causes were low amongst the elderly (65 years and older) as compared to the other age groups. [For males, deaths due to non-communicable diseases peaked at age groups 35–39 years and 40–44 years, while for females, deaths attributed to non-communicable diseases peaked at groups 25–29 years and 30–34 years].

The proportion of deaths due to **Group II** causes increased with age. It was relatively low for infants (aged 0) for both sexes and increased remarkably until age group 10–14 years and decreased thereafter up until age group 20–24 years amongst males, and 25–29 years amongst females. It rose notably at older ages for both sexes due to the increasing incidence of cancers and cardiovascular diseases.

The proportion of deaths due to **Group III** causes, i.e. external causes of death including accidents and violence, was generally highest among the youth. This pattern was especially marked among males.

Figure 4.5: Percentage distribution of deaths due to communicable diseases (Group I), non-communicable diseases (Group II) and injuries (Group III) by sex and age group, 2014*



*Redistributed unknown age and ill-defined diseases (R00-R99) proportionately to causes in Group I and Group II.

4.7 Broad groups of natural causes of death

This subsection presents information on the leading underlying natural causes of death. The ten leading causes were identified by ranking the causes of death by frequency among those eligible for ranking as described in Section 2. The top-ranking causes determined the leading underlying natural causes of death.

The ranking of the leading causes of death in this section excludes *symptoms, signs and abnormal findings, not elsewhere classified* as well as all non-natural deaths (*external causes of morbidity and mortality*). Non-natural causes will be discussed in the next subsection.

4.7.1 Overall pattern of the leading underlying natural causes of death

The ten leading underlying causes of death in South Africa in 2012–2014 are shown in Table 4.5. The years 2012 and 2013 have been included to show recent trends in natural causes of death. In essence, the Table provides changes in the ten leading underlying causes of death by absolute numbers and percentages over the three-year period. The distribution of deaths by all broad groups of causes of death ranked by frequency (including non-natural causes) for 2014 is shown in Appendix K (see pages 84–87) while the breakdown of individual causes for the broad groups that were among the ten leading causes in 2014 is provided in Appendix L (see pages 88–90).

Table 4.5 shows that the ten leading natural underlying causes of death were the same for the three years, with *tuberculosis, hypertensive disease and chronic lower respiratory diseases* maintaining the same rank in the three-year period. Only four of the ten leading underlying causes of death remained in the top five leading causes of death for the three-year period, with the exception of *other forms of heart diseases* which was ranked fourth in 2012 but moved to sixth place in 2013 and maintained the same rank in 2014. *HIV disease* was not in the top five in 2012, but was in the top five in 2013 and 2014. *Cerebrovascular diseases* and *influenza and pneumonia* remained in the top five leading causes but exchanged positions between 2013 and 2014.

Tuberculosis was the leading cause of death during the three years, accounting for 8,4% in 2014; 8,8% in 2013; and 9,9% in 2012. In 2014, *cerebrovascular diseases* was the second leading underlying cause of death comprising 5,1% deaths; followed by *diabetes mellitus* with 5,0% deaths. *Influenza and pneumonia* (4,9%) occupied the fourth position while *human immunodeficiency virus [HIV] disease* ranked fifth with 4,8% deaths attributed to it. For the years 2012 and 2013, *influenza and pneumonia* and *diabetes mellitus* maintained their positions as the second and fifth leading cause of death respectively. *Human immunodeficiency virus [HIV] disease* was the third leading cause of death in 2013 and moved to fifth in 2014.

Table 4.5: The ten leading underlying natural causes of death, 2012–2014*

Causes of death (based on ICD-10)	2012			2013			2014		
	Rank	Number	%	Rank	Number	%	Rank	Number	%
Tuberculosis (A15-A19)**	1	48 506	9,9	1	41 751	8,8	1	37 878	8,4
Cerebrovascular diseases (I60-I69)	3	24 498	5,0	4	23 089	4,9	2	23 088	5,1
Diabetes mellitus (E10-E14)	5	21 840	4,4	5	23 070	4,9	3	22 747	5,0
Influenza and pneumonia (J09-J18)	2	26 940	5,5	2	24 250	5,1	4	22 036	4,9
Human immunodeficiency virus [HIV] disease (B20-B24)	6	19 173	3,9	3	23 753	5,0	5	21 938	4,8
Other forms of heart disease (I30-I52)	4	22 383	4,5	6	22 125	4,7	6	21 339	4,7
Hypertensive diseases (I10-I15)	7	16 522	3,4	7	17 071	3,6	7	17 770	3,9
Intestinal infectious diseases (A00-A09)	9	15 260	3,1	8	16 114	3,4	8	14 471	3,2
Other viral diseases (B25-B34)	8	15 343	3,1	9	14 020	3,0	9	13 996	3,1
Chronic lower respiratory diseases (J40-J47)	10	12 492	2,5	10	12 343	2,6	10	12 096	2,7
Other natural causes		220 449	44,8		206 405	43,6		198 240	43,7
Non-natural causes		48 656	9,9		49 393	10,4		47 761	10,5
All causes		492 062	100,0		473 384	100,0		453 360	100,0

*Data for 2012–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

** Including deaths due to *MDR-TB* and *XDR-TB*.

4.7.2 Leading underlying natural causes of death by sex

The distribution of the ten leading underlying natural causes of death in 2014 by sex is shown in Table 4.6. Overall, nine of the ten leading causes were the same for both sexes, although with different ranks. *Chronic lower respiratory diseases* was among the ten leading causes of death for males, but not for females, whereas *malignant neoplasms of female genital organs* was among the top ten underlying causes of death for females. *Malignant neoplasms of female genital organs* were coming up among the ten leading underlying causes of death for females for the first time since 1997.

Being the leading cause of death in South Africa overall, *tuberculosis* was also the leading cause of death for both sexes. *Influenza and pneumonia* was the second leading cause of death amongst males, and was responsible for 4,7% of male deaths while it ranked sixth amongst females and was responsible for 5,0% deaths. Similar to the previous years, *human immunodeficiency virus (HIV) disease* ranked higher amongst males compared to females. *Human immunodeficiency virus (HIV) disease* was the third leading cause of death for males, accounting for 4,7% of male deaths, but was the seventh leading cause of death among females, accounting for 5,0% of female deaths.

Three of the top five leading underlying causes of death amongst males were communicable diseases, while the top five leading underlying causes of death amongst females were dominated by non-communicable diseases, with only *tuberculosis* as a communicable disease.

The second leading cause of death amongst females was *diabetes mellitus*, which was responsible for 6,4% female deaths. The third leading cause amongst females was *cerebrovascular diseases*, comprising 6,1% female deaths. *Hypertensive diseases* had the highest difference in ranking between the two sexes, ranking fifth for females and tenth for males.

Table 4.6: The ten leading underlying natural causes of death for males and females, 2014*

Causes of death (based on ICD-10)	Male			Female		
	Rank	Number	%	Rank	Number	%
Tuberculosis (A15-A19)**	1	22 545	9,5	1	15 174	7,1
Influenza and pneumonia (J09-J18)	2	11 203	4,7	6	10 739	5,0
Human immunodeficiency virus [HIV] disease (B20-B24)	3	11 160	4,7	7	10 685	5,0
Cerebrovascular diseases (I60-I69)	4	9 908	4,2	3	13 149	6,1
Other forms of heart disease (I30-I52)	5	9 872	4,2	4	11 418	5,3
Diabetes mellitus (E10-E14)	6	8 914	3,8	2	13 819	6,4
Chronic lower respiratory diseases (J40-J47)	7	7 300	3,1	...	...	...
Other viral diseases (B25-B34)	8	6 913	2,9	9	7 019	3,3
Intestinal infectious diseases (A00-A09)	9	6 795	2,9	8	7 607	3,5
Hypertensive diseases (I10-I15)	10	6 670	2,8	5	11 081	5,2
Malignant neoplasms of female genital organs (C51-C58)	...	...	...	10	4 913	2,3
Other natural causes		99 026	41,9		98 205	45,7
Non-natural causes		36 307	15,3		11 017	5,1
All causes		236 613	100,0		214 826	100,0

*Excluding deaths with unspecified sex.

**Including deaths due to *MDR-TB* and *XDR-TB*.

...category not in the top 10

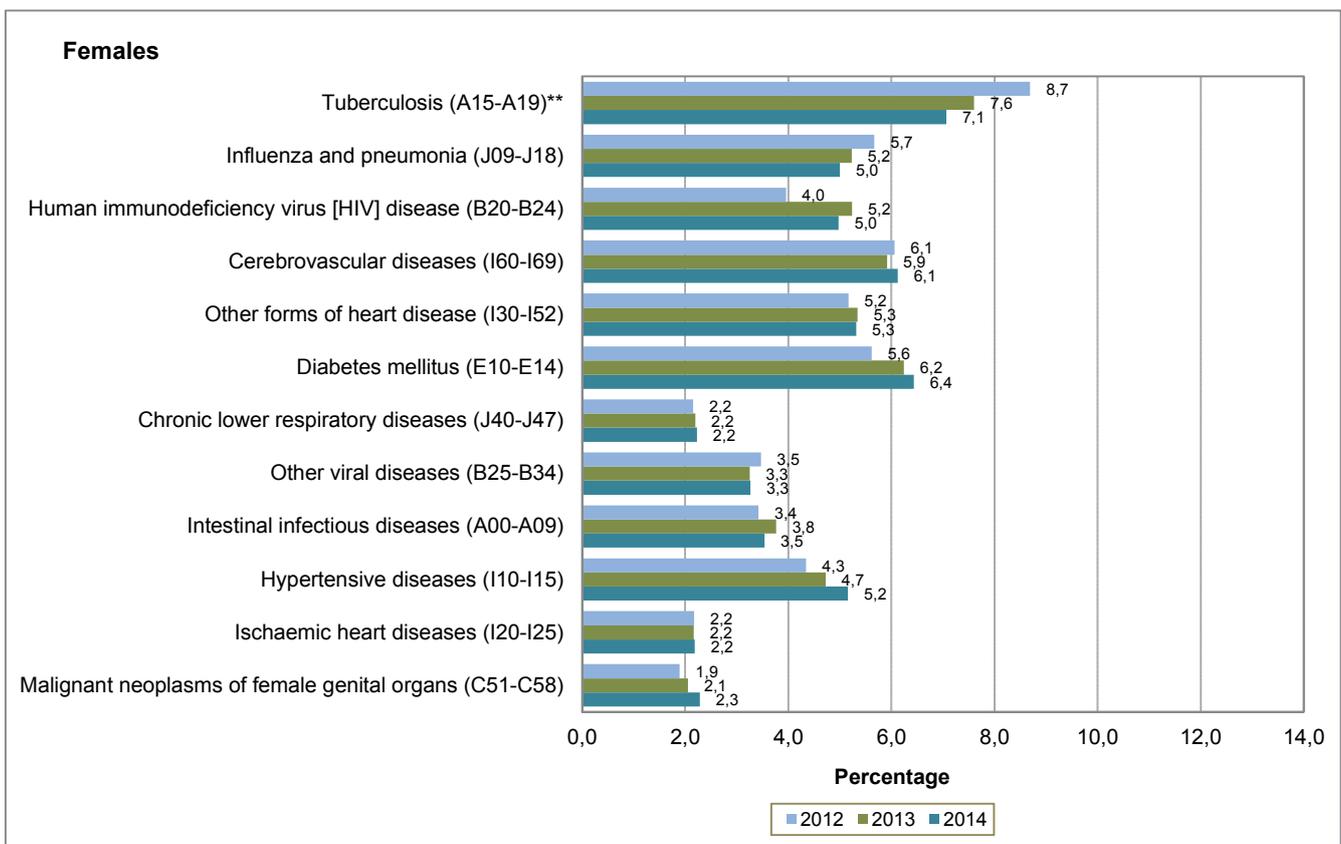
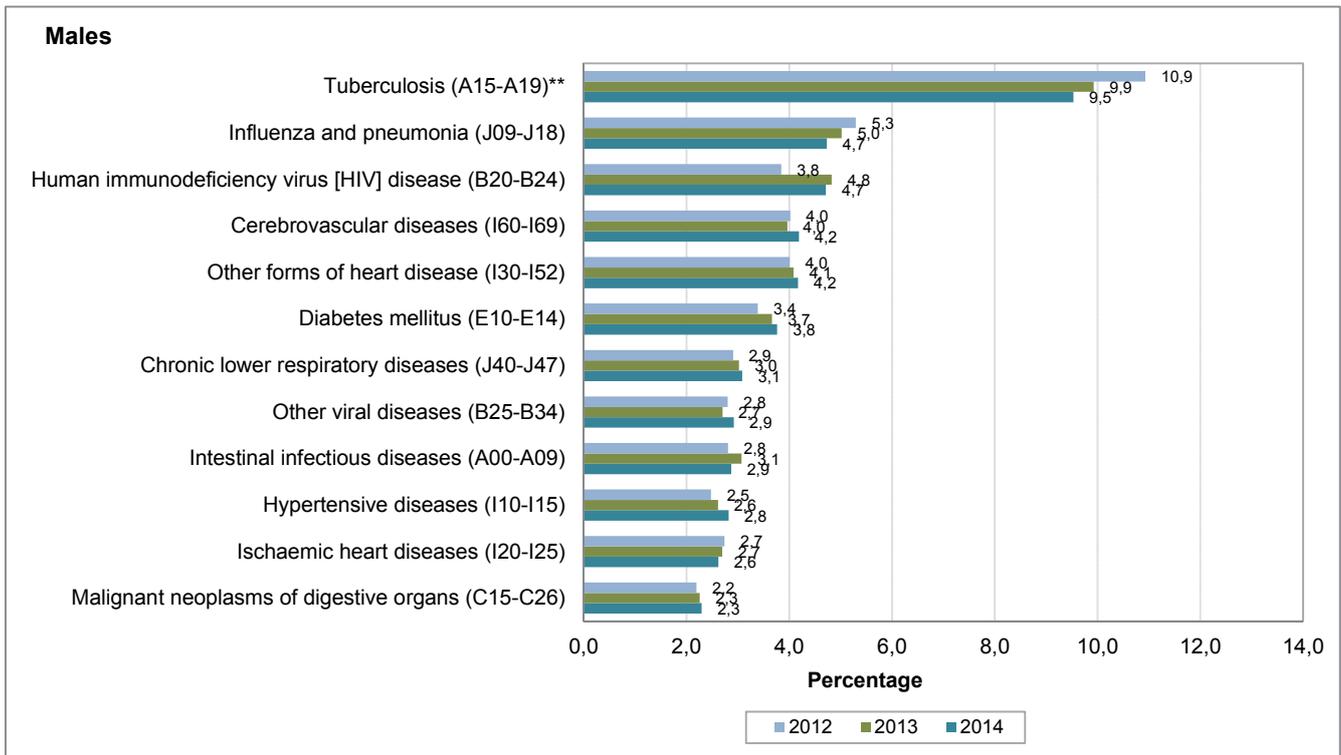
The proportion of deaths associated with the ten leading underlying causes of death classified by sex for the period 2012–2014 is shown in Figure 4.6. Over the three-year period, only *tuberculosis* remained the first leading underlying cause of death for both males and females, although the proportions reduced over time. In addition, *tuberculosis*, *influenza and pneumonia*, *HIV*, *cerebrovascular diseases* and *other forms of heart disease* were the five main contributors of male deaths for the three-year period; however, they differed in proportions each year. For females, only *tuberculosis* and *cerebrovascular diseases* were leading causes throughout the three-year period.

The main similarity between males and females is that there were year-by-year increases in the number of deaths due to *hypertensive disease* and *diabetes mellitus* and decreases in the number of deaths due to *influenza and pneumonia* and *tuberculosis* for both sexes. Accordingly, this shows an increase in non-communicable diseases and a decline in communicable diseases.

With the exception of *tuberculosis*, which showed notable declines for both sexes, the main change in the causes of death for females was the increase in the proportion of female deaths due to *diabetes mellitus* (from 5,6% in 2012 to 6,2% in 2013, then to 6,4% in 2014). There was also an evident increase in the proportion of female deaths due to *malignant neoplasms of genital organs* (from 1,9% in 2012 to 2,3% in 2014). As previously stated, it was for the first time that this cancer type was amongst the top ten leading underlying causes of death since 1997 amongst females. The most observable decrease in the proportion of female deaths was recorded for deaths caused by *influenza and pneumonia* (from 5,7% in 2012 to 5,0% female deaths in 2014).

For males, there were noticeable increases in the proportion of deaths due to *diabetes mellitus*, *other forms of heart diseases*, *chronic lower respiratory diseases*, *hypertensive diseases* and *malignant neoplasms of the digestive system*, and declines in the proportion of deaths due to *tuberculosis*, *influenza and pneumonia* and *ischaemic heart disease*. There was no clear pattern in the proportion of deaths due to *cerebrovascular diseases*, *intestinal infectious diseases* and *HIV diseases* over the three-year period for both sexes.

Figure 4.6: Percentage distribution of deaths for the leading causes of death by year of death and sex, 2012–2014*



*Data for 2012–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

** Including deaths due to *MDR-TB* and *XDR-TB*.

4.7.3 Leading underlying natural causes of death by age

Table 4.7 shows the ten leading underlying causes of death for broad age groups (0, 1–14, 15–44, 45–64, and 65 years and older) for 2014. This age grouping is in line with the World Health Organization's recommendations for classifying age for international comparison (WHO, 2009). For each of the age groups, *influenza and pneumonia* was ranked in the top ten with differing ranks. It ranked third for infants (9,0%); second for age group 1–14 years (7,5%); fourth for age group 15–44 years (4,7%); sixth for age group 45–64 years (4,4%) and fifth for age group 65 years and older, accounting for 4,5% deaths in this age group. *Tuberculosis* and *other forms of heart diseases* were causes of death in all age groups except infants, and *intestinal infectious diseases* were causes of death in all age groups save age group 45–64 years.

For infant deaths (age 0), *respiratory and cardiovascular disorders specific to the perinatal period* was the leading underlying cause of death responsible for 14,5% deaths in this age. *Intestinal infectious diseases* was the second leading cause of death, accounting for 12,9% deaths, followed by *influenza and pneumonia*, which constituted 9,0% deaths in this age group.

For age group 1–14 years, *intestinal infectious diseases* was the leading cause of death, accounting for 12,2% deaths in this age group, followed by 7,5% deaths attributed to *influenza and pneumonia*. *Malnutrition* was the third leading cause of death (5,3%), followed by *tuberculosis* (4,6%). *Cerebral palsy and other paralytic syndromes* was among the top ten leading underlying causes of death only for age group 1–14, and responsible for 1,7% deaths in this age group.

The leading underlying cause of death for age group 15–44 years was *tuberculosis*, constituting 14,6% deaths, followed by *human immunodeficiency virus [HIV] diseases*, accounting for 10,6% deaths. *Other viral diseases* was ranked third, accounting for 6,3% deaths, followed by *influenza and pneumonia* that ranked fourth with 4,7% deaths. *Certain disorders involving the immune mechanism* and *intestinal infectious diseases* ranked fifth and seventh, respectively. *Certain disorders involving the immune mechanism* were amongst the ten leading causes of death for this age group only.

Malnutrition and *other acute lower respiratory infections* were amongst the ten leading causes of death for only infants and age group 1–14 years, but differed in rankings. *Inflammatory diseases of the central nervous system* were amongst the top ten leading causes of death only for age groups 1–14 years and 15–44 years; however, their rankings in these age groups were different.

For age groups 45–64 and 65 years and older, eight of the ten leading underlying causes of death were the same with the difference being in the rankings only. Amongst these eight common underlying causes, *tuberculosis* had the largest difference in terms of ranks. It was the leading cause of death amongst age group 45–64 years while it ranked ninth amongst the elderly (65+). *Diabetes mellitus* was the only underlying cause of death that had the same ranking amongst the two age groups. *Cerebrovascular diseases* was the leading cause of death for age group 65 years and older, accounting for 9,6% deaths, followed by *diabetes mellitus*, which was responsible for 8,6% deaths.

The two underlying causes which were different for the two age groups were *intestinal infectious diseases* and *ischaemic heart diseases* which were amongst the ten leading underlying causes of death for age groups 65 years and older, but not for age group 45–64, while *human immunodeficiency virus [HIV] diseases* and *other viral disease* were amongst the ten leading causes of death for age group 45–64 years, but not in the top ten for those aged 65 years and older.

Table 4.7: The ten leading underlying natural causes of death for broad age groups, 2014

Causes of death (based on ICD-10)	0			1-14			15-44			45-64			65+		
	Rank	Number	%	Rank	Number	%	Rank	Number	%	Rank	Number	%	Rank	Number	%
Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)	1	3 707	14,5	...	...	...	...	...	...	...	...	...	...	...	...
Intestinal infectious diseases (A00-A09)	2	3 316	12,9	1	1 817	12,2	7	3 256	2,4	...	...	...	10	3 375	2,2
Influenza and pneumonia (J09-J18)	3	2 301	9,0	2	1 118	7,5	4	6 267	4,7	6	5 568	4,4	5	6 732	4,5
Other disorders originating in the perinatal period (P90-P96)	4	1 345	5,2	...	...	...	...	...	...	...	...	...	...	...	...
Infectious specific to the perinatal period (P35-P39)	5	1 211	4,7	...	...	...	...	...	...	...	...	...	...	...	...
Disorders related to length of gestation and fetal growth (P05-P08)	6	1 210	4,7	...	...	...	...	...	...	...	...	...	...	...	...
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)	7	938	3,7	...	...	...	...	...	...	...	...	...	...	...	...
Malnutrition (E40-E46)	8	866	3,4	3	785	5,3	...	...	...	...	...	...	...	...	...
Other acute lower respiratory infections (J20-J22)	9	480	1,9	10	212	1,4	...	...	...	...	...	...	...	...	...
Haemorrhagic and haematological disorders of fetus and newborn (P50-P61)	10	470	1,8	...	...	...	...	...	...	...	...	...	...	...	...
Tuberculosis (A15-A19)*	...	...	...	4	686	4,6	1	19 506	14,6	1	12 860	10,1	9	4 509	3,0
Human immunodeficiency virus [HIV] disease (B20-B24)	...	...	...	5	412	2,8	2	14 106	10,6	4	6 427	5,0	...	...	...
Other viral diseases (B25-B34)	...	...	...	6	341	2,3	3	8 480	6,3	9	4 205	3,3	...	...	...
Inflammatory diseases of the central nervous system (G00-G09)	...	...	...	7	289	1,9	9	1 987	1,5	...	...	...	...	...	...
Other forms of heart disease (I30-I52)	...	...	...	8	268	1,8	8	3 073	2,3	5	5 898	4,6	3	11 852	7,9
Cerebral palsy and other paralytic syndromes (G80-G83)	...	...	...	9	251	1,7	...	...	...	...	...	...	...	...	...
Certain disorders involving the immune mechanism (D80-D89)	...	...	...	...	...	...	5	4 132	3,1	...	...	...	...	...	...
Cerebrovascular diseases (I60-I69)	...	...	...	...	...	...	10	1 808	1,4	3	6 790	5,3	1	14 399	9,6
Protozoal diseases (B50-B64)	...	...	...	...	...	...	...	...	...	...	...	...	...	...	...
Diabetes mellitus (E10-E14)	...	...	...	...	...	...	...	...	...	2	8 377	6,6	2	12 938	8,6
Hypertensive diseases (I10-I15)	...	...	...	...	...	...	...	...	...	7	5 013	3,9	4	11 781	7,8
Chronic lower respiratory diseases (J40-J47)	...	...	...	...	...	...	...	...	...	8	4 330	3,4	6	6 607	4,4
Malignant neoplasms of digestive organs (C15-C26)	...	...	...	...	...	...	...	...	...	10	3 957	3,1	8	4 790	3,2
Ischaemic heart diseases (I20-I25)	...	...	...	...	...	...	...	...	...	...	...	...	7	6 596	4,4
Other natural causes	...	8 894	34,7	...	5 127	34,5	...	39 343	29,4	...	55 276	43,4	...	62 877	41,7
Non-natural causes	...	905	3,5	...	3 548	23,9	...	30 000	22,4	...	8 683	6,8	...	4 191	2,8
All causes	...	25 643	100,0	...	14 854	100,0	...	133 673	100,0	...	127 374	100,0	...	150 647	100,0

4.7.4 Leading underlying natural causes of death for children aged below five years by age groups

Table 4.8 shows the ten leading causes of death for neonatal deaths (babies that died within the first 28 days of life), post-neonatal deaths (29 days to 11 months), all infant deaths (aged less than one year), deaths among children aged 1–4 years, and under-5 deaths. Infant deaths are composed of both neonatal and post-neonatal deaths.

Neonatal deaths mainly resulted from *respiratory and cardiovascular disorders specific to the perinatal period* which was the leading underlying cause of death among neonates, and responsible for 35,0% deaths. The second leading underlying cause of death for neonatal deaths was *other disorders originating in the perinatal period*, accounting for 12,8% of all neonatal deaths. The ten leading underlying causes of death during the neonatal period constituted 91,4% of deaths in this age group.

The leading cause of death for those who died during the post-neonatal period was *intestinal infectious diseases* (20,7%), followed by *influenza and pneumonia* (15,2%). *Malnutrition* (5,7%) was the third leading cause of death. Taken together, these top three underlying causes of death contributed 41,6% of the total deaths that occurred during the post-neonatal period. *Human immunodeficiency virus [HIV] disease* was ranked eighth, accounting for 1,7% deaths. The overlapping leading underlying cause of death for those who died during the neonatal and post-neonatal period was *congenital malformations of the circulatory system* which ranked ninth for both groups.

For overall infant deaths, the leading cause of death was *respiratory and cardiovascular disorders specific to the perinatal period* (14,5%), followed by *intestinal infectious diseases* (12,9%) and *influenza and pneumonia* (9,0%). Even though *malnutrition* was the third leading underlying cause for post-neonatal deaths, it was the eighth underlying cause of death amongst infants.

The three leading causes of death for those aged 1–4 years were *intestinal infectious diseases* (17,2%), *influenza and pneumonia* (9,1%) and *malnutrition* (8,6%) respectively. *Tuberculosis* (3,1%) was the fourth leading cause of death while *human immunodeficiency virus [HIV] disease* (2,2%) was the fifth and *other viral diseases* (2,0%) were the sixth. *Tuberculosis* and *inflammatory diseases of the central nervous system* were amongst the ten leading causes of death only for children aged 1–4 years.

Intestinal infectious diseases was the leading cause of death for children under five years, accounting for 14,0% deaths, followed by *respiratory and cardiovascular disorders specific to the perinatal period*, which was responsible for 10,8% deaths. *Influenza and pneumonia* (9,0%) was ranked third and *malnutrition* (4,7%) was ranked fourth. *Other disorders originating in the perinatal period* ranked fifth and was responsible for 3,9% of all deaths.

Intestinal infectious diseases was amongst the ten leading underlying causes of death for infant deaths as well as age group 1–4 years and children aged below five years. *Malnutrition*, *influenza and pneumonia* and *other acute lower respiratory infections* were common in all ages except among neonatal deaths. *Digestive system disorders of fetus and newborn* and *other congenital malformations* appeared only among neonatal deaths. *Other diseases of the respiratory system* featured only among post-neonatal deaths.

Table 4.8: The ten leading underlying natural causes of death for infants and children aged below five years, 2014

Causes of death (based on ICD-10)	Neonatal (0-28 days)			Post-neonatal (29 days to 11 months)			Less than 1 year			1-4 years			Under 5 years		
	Rank	Number	%	Rank	Number	%	Rank	Number	%	Rank	Number	%	Rank	Number	%
	Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)	1	3 674	35,0	1	3 707	14,5	2	3 707	10,8
Other disorders originating in the perinatal period (P90-P96)	2	1 345	12,8	...	...	...	4	1 345	5,2	...	...	...	5	1 345	3,9
Infections specific to the perinatal period (P35-P39)	3	1 144	10,9	...	...	...	5	1 211	4,7	...	...	...	7	1 211	3,5
Disorders related to length of gestation and fetal growth (P05-P08)	4	1 074	10,2	...	...	...	6	1 210	4,7	...	...	...	6	1 212	3,5
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)	5	934	8,9	...	...	...	7	938	3,7	...	...	...	8	938	2,7
Haemorrhagic and haematological disorders of fetus and newborn (P50-P61)	6	460	4,4	...	...	...	10	470	1,8	...	...	...	...	...	...
Digestive system disorders of fetus and newborn (P75-P78)	7	297	2,8	...	...	...	...	...	...	...	...	...	...	...	...
Other congenital malformations (Q80-Q89)	8	282	2,7	...	...	...	...	...	...	...	...	...	...	...	...
Congenital malformations of the circulatory system (Q20-Q28)	9	213	2,0	9	250	1,7	...	...	...	...	...	...	...	...	...
Intestinal infectious diseases (A00-A09)	10	179	1,7	1	3 137	20,7	2	3 316	12,9	1	1 486	17,2	1	4 802	14,0
Influenza and pneumonia (J09-J18)	...	...	...	2	2 300	15,2	3	2 301	9,0	2	785	9,1	3	3 086	9,0
Malnutrition (E40-E46)	...	...	...	3	866	5,7	8	866	3,4	3	745	8,6	4	1 611	4,7
Other acute lower respiratory infections (J20-J22)	...	...	...	4	468	3,1	9	480	1,9	7	152	1,8	9	632	1,8
Other bacterial diseases (A30-A49)	..	...	...	5	459	3,0	...	...	...	9	128	1,5	10	587	1,7
Other viral diseases (B25-B34)	...	...	...	6	352	2,3	...	...	...	6	169	2,0	...	...	...
Other diseases of the respiratory system (J95-J99)	...	...	...	7	349	2,3	...	...	...	...	...	...	...	...	...
Human immunodeficiency virus [HIV] disease (B20-B24)	...	...	...	8	253	1,7	...	...	...	5	191	2,2	...	...	...
Other forms of heart disease (I30-I52)	...	...	...	10	225	1,5	...	...	...	8	142	1,6	...	...	...
Tuberculosis (A15-A19)*	...	...	...	...	...	...	...	...	...	4	266	3,1	...	...	...
Inflammatory diseases of the central nervous system (G00-G09)	..	...	...	...	...	...	...	...	...	10	121	1,4	...	...	...
Other natural causes		775	7,4		5 702	37,7		8 894	34,7		2 843	33,0		12 635	36,9
Non-natural causes		126	1,2		779	5,1		905	3,5		1 591	18,5		2 496	7,3
All causes		10 503	100,0		15 140	100,0		25 643	100,0		8 619	100,0		34 262	100,0

4.7.5 Leading underlying natural causes of death for the population aged 15–24 years

Table 4.9 shows the ten leading causes of death for age group 15–24 years. The World Health Organization in the ICD-10 recommends that age group 15–24 years be included in the analysis for international comparison (WHO, 1992). *Tuberculosis* was the leading cause of death, accounting for 9,2% of deaths in this age group, followed by *human immunodeficiency virus [HIV] disease* (5,8%) and then *other viral diseases* (3,4%). *Influenza and pneumonia, intestinal infectious diseases and other forms of heart disease* were the fourth, fifth and sixth leading causes of death, respectively. *Episodic and paroxysmal disorders* was ranked ninth, and was responsible for 1,3% deaths in this age group.

Table 4.9: The ten leading underlying natural causes of death for the population aged 15–24 years, 2014

Causes of death (based on ICD-10)	15–24		
	Rank	Number	Percentage
Tuberculosis (A15-A19)*	1	1 920	9,2
Human immunodeficiency virus [HIV] disease (B20-B24)	2	1 220	5,8
Other viral diseases (B25-B34)	3	720	3,4
Influenza and pneumonia (J09-J18)	4	709	3,4
Intestinal infectious diseases (A00-A09)	5	421	2,0
Other forms of heart disease (I30-I52)	6	410	2,0
Certain disorders involving the immune mechanism (D80-D89)	7	354	1,7
Inflammatory diseases of the central nervous system (G00-G09)	8	335	1,6
Episodic and paroxysmal disorders (G40-G47)	9	280	1,3
Protozoal diseases (B50-B64)	10	183	0,9
Other natural causes		5 268	25,1
Non-natural causes		9 149	43,6
All causes		20 969	100,0

*Including deaths due to *MDR-TB* and *XDR-TB*.

4.7.6 Leading underlying natural causes of death by province of death occurrence

The top ten leading underlying natural causes of death by province of death occurrence are shown in Table 4.10. Deaths that occurred outside South Africa and those where province of death occurrence was not specified in the death notification form are not included in the table.

Tuberculosis was the leading cause of death in six of the nine provinces. The exceptions were Western Cape, Northern Cape and Limpopo. *Diabetes mellitus* was the leading cause of death (accounting for 6,8% deaths) in Western Cape; in Northern Cape it was *human immunodeficiency virus [HIV] disease* (accounting for 8,5% deaths), while *influenza and pneumonia* was the leading cause of death in Limpopo (accounting for 8,2% deaths).

The highest proportion of deaths due to *tuberculosis* was recorded in KwaZulu-Natal with 11,2% deaths in the province, followed by Mpumalanga with 9,8% deaths. Western Cape (5,6%) had the lowest proportion of deaths due to *tuberculosis*. For Northern Cape and Limpopo, the second leading underlying cause of death was *tuberculosis*, accounting for 7,4% deaths in each province. *Human immunodeficiency virus [HIV] disease* was the second leading underlying cause of death in Western Cape (5,8%), Eastern Cape (5,8%) and Mpumalanga (6,0%), while it was the third leading underlying cause of death in KwaZulu-Natal (6,2%). *Malignant neoplasms of respiratory and intrathoracic organs* was in the top ten leading underlying causes of death for only Western Cape, *certain disorders involving the immune mechanism* for only Mpumalanga, while *renal failure* was in the top ten leading causes for only Limpopo.

There were six underlying causes of death that were common for all nine provinces. These were *diabetes mellitus, human immunodeficiency virus [HIV] disease, cerebrovascular diseases, tuberculosis, hypertensive disease, and other forms of heart disease*. However, the ranks of these causes differed widely across the provinces. For example, while *human immunodeficiency virus [HIV] disease* was the leading cause of death in

Northern Cape (contributing 8,5% of all deaths in this province), it was the second leading cause in Western Cape (contributing 5,8% of all deaths in the province) and the ninth leading cause of death in Limpopo (contributing 2,9% of all deaths in the province).

Western Cape was also the only province where *influenza and pneumonia* was not in the ten leading causes of death. *Ischaemic heart diseases* featured in four provinces, namely Western Cape, Northern Cape, KwaZulu-Natal and Gauteng. *Malignant neoplasms of digestive organs* were in the top ten only in two provinces (Western Cape and Eastern Cape), while *intestinal infectious diseases* were not among the leading causes of death only in Western Cape, Eastern Cape and Gauteng.

According to the Global Burden of Disease, six of the nine provinces had five communicable diseases among the ten underlying causes of death in each province. For Mpumalanga and North West, six of the ten leading causes of death were communicable diseases, while for Western Cape; seven of the ten underlying causes of death were non-communicable diseases. Detailed information on the distribution of the ten leading underlying causes by provinces, sex and age is provided in Appendices M to M9 (see pages 91–110).

Table 4.10: The ten leading underlying natural causes of death in each province of death occurrence, 2014*

Causes of death (based on ICD-10)	Western Cape			Eastern Cape			Northern Cape			Free State			KwaZulu-Natal			North West			Gauteng			Mpumalanga			Limpopo			
	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	
Diabetes mellitus (E10-E14)	1	3 006	6,8	5	2 971	4,5	7	582	4,1	5	1 516	4,6	4	4 868	6,2	8	1 367	3,9	5	4 034	4,2	5	1 660	4,7	4	2 684	5,6	
Human immunodeficiency virus (HIV) disease (B20-B24)	2	2 567	5,8	2	3 857	5,8	1	1 188	8,5	7	1 349	4,1	3	4 927	6,2	6	1 527	4,4	7	2 980	3,1	2	2 098	6,0	9	1 407	2,9	
Cerebrovascular diseases (I60-I69)	3	2 531	5,7	3	3 281	4,9	3	721	5,1	3	1 749	5,3	2	4 940	6,2	5	1 669	4,8	4	4 073	4,2	4	1 822	5,2	5	2 237	4,7	
Tuberculosis (A15-A19)**	4	2 473	5,6	1	5 985	9,0	2	1 046	7,4	1	2 785	8,4	1	8 863	11,2	1	3 112	8,9	1	6 517	6,7	1	3 445	9,8	2	3 545	7,4	
Ischaemic heart diseases (I20-I25)	5	2 447	5,6	...	...	...	8	490	3,5	...	...	...	10	1 749	2,2	...	...	...	8	2 753	2,8	...	...	...	...	...	...
Chronic lower respiratory diseases (J40-J47)	6	2 045	4,6	6	2 569	3,9	6	595	4,2	10	775	2,3	...	...	...	10	824	2,4	10	2 266	2,3	...	...	...	...	...	...
Malignant neoplasms of digestive organs (C15-C26)	7	1 982	4,5	10	1 598	2,4
Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	8	1 930	4,4
Hypertensive diseases (I10-I15)	9	1 673	3,8	7	2 353	3,5	4	698	5,0	6	1 423	4,3	9	2 805	3,5	4	1 890	5,4	6	3 269	3,4	6	1 563	4,5	6	2 024	4,2	
Other forms of heart disease (I30-I52)	10	1 361	3,1	4	3 043	4,6	9	453	3,2	4	1 653	5,0	5	3 812	4,8	2	2 098	6,0	3	5 323	5,5	9	1 508	4,3	7	1 982	4,1	
Influenza and pneumonia (J09-J18)	...	...	...	8	2 057	3,1	5	630	4,5	2	2 262	6,8	7	2 914	3,7	3	1 950	5,6	2	5 358	5,5	3	1 958	5,6	1	3 911	8,2
Other viral diseases (B25-B34)	...	...	...	9	1 699	2,6	...	...	...	9	1 169	3,5	6	3 101	3,9	9	1 227	3,5	9	2 488	2,6	7	1 547	4,4	8	1 936	4,0
Intestinal infectious diseases (A00-A09)	...	...	...	...	...	...	10	422	3,0	8	1 249	3,8	8	2 815	3,6	7	1 466	4,2	...	...	...	8	1 531	4,4	3	2 764	5,8
Certain disorders involving the immune mechanism (D80-D89)
Renal failure (N17-N19)
Other natural causes	...	15 974	36,3	...	29 897	44,9	...	5 669	40,3	...	13 950	42,2	...	29 997	37,9	...	14 931	42,7	...	47 250	48,8	...	13 311	38,0	10	1 085	2,3	
Non-natural causes	...	6 031	13,7	...	7 243	10,9	...	1 562	11,1	...	3 165	9,6	...	8 347	10,5	...	2 872	8,2	...	10 425	10,8	...	3 708	10,6	...	3 952	8,3	
All causes		44 020	100,0		66 553	100,0		14 056	100,0		33 045	100,0		79 138	100,0		34 933	100,0		96 736	100,0		35 002	100,0		47 849	100,0	

*Excluding deaths that occurred outside South Africa and deaths with unspecified province of death.

**Including deaths due to MDR-TB and XDR-TB.

... Category not in top ten.

4.7.7 Underlying causes of death by district/metropolitan municipality of death occurrence

Main group

The number and percentage distribution of deaths by main groups of underlying causes of death and district/metropolitan municipalities for 2014 are provided in Appendices N to N2 and Appendices O to O2 respectively. The main groups have been re-grouped into 11 groups with the main groups *mental and behavioural disorders, diseases of the eye and adnexa, diseases of the ear and mastoid process, disease of the skin and subcutaneous tissue, disease of musculoskeletal system, diseases of the genitourinary system, congenital malformations, symptoms and signs not elsewhere classified* and *pregnancy, childbirth and puerperium* grouped into other natural causes to facilitate analysis at this level of geography.

Appendices N to N.2 (see pages 111–113) provide the number of deaths by main groups for each district/metropolitan municipality of death occurrence, while Appendices O to O.2 (see pages 114–116) show their percentage distribution. Of the 52 districts, *certain infectious and parasitic diseases* was the major underlying main group in 39 of the 52 districts, while *diseases of the circulatory system* was prominent for the remaining 13 districts. *Diseases of the circulatory system* were the leading underlying main group of causes of death for all the districts in the Western Cape, three districts in Gauteng (City of Tshwane, Sedibeng and West Rand), two districts in Free State (Fezile Dabi and Xhariep) and one district in KwaZulu-Natal (Amajuba).

KwaZulu-Natal (27,2%) had the highest proportion of deaths due to *certain infectious and parasitic diseases* and Western Cape (15,7%) had the lowest. Deaths due to *certain infectious and parasitic diseases* in KwaZulu-Natal were more than a quarter (25%) in eight of the eleven districts, with uMkhanyakude (34,3%) having the highest proportion of deaths due to this cause. Overberg (10,0%) in Western Cape had the lowest proportion of deaths caused by *certain infectious and parasitic diseases*. All the districts in North West and Mpumalanga had *certain infectious and parasitic diseases* as the most common main group of cause of death.

For districts where *certain infectious and parasitic diseases* appeared as the most common underlying main group of causes, *diseases of the circulatory system* was the second most common underlying main group of causes and vice versa. The exceptions were City of Cape Town, Eden, and Overberg all in the Western Cape; Namakwa in the Northern Cape and Greater Sekhukhune in Limpopo. For City of Cape Town, Eden, Overberg and Namakwa, *neoplasms* were the second common main group of diseases, while *diseases of the respiratory system* and *diseases of the circulatory system* were the second most common groups of diseases.

Broad groups

Appendices P to P8 (see pages 117–127) present the ranking of the ten leading natural causes of death by district/metropolitan municipality of death occurrence. *Tuberculosis* was the leading underlying cause of death in 40 of the 52 district/metropolitan municipalities in South Africa. It was the leading cause of death for all districts in Eastern Cape, KwaZulu-Natal and Mpumalanga provinces. For Western Cape, *tuberculosis* was the leading cause of death for only Central Karoo and West Coast, whereas for Northern Cape it was the leading cause of death for Pixley ka Seme and Siyanda district municipalities. In Limpopo, *tuberculosis* was the leading underlying cause of death for three districts, namely Mopani, Vhembe and Waterberg. With regard to Free State, North West and Gauteng, *tuberculosis* was the leading cause in all the districts of the respective provinces except Lejweleputswa in Free State, Ngaka Modiri Molema in North West and West Rand in Gauteng.

For the other districts where *tuberculosis* was not the leading underlying cause of death, *HIV disease* was the leading underlying cause of death in three districts, namely Cape Winelands in Western Cape, and Francis Baard and John Taolo Gaetsewe, both in Northern Cape. *Influenza and pneumonia* was the leading underlying cause of death in four districts, namely Lejweleputswa in Free State, West Rand in Gauteng, and Capricorn and Greater Sekhukhune, both in Limpopo. *Diabetes mellitus* was the leading underlying cause of death for Nelson Mandela Bay in Eastern Cape and the City of Cape Town in Western Cape. *Ischaemic heart diseases* and *chronic lower respiratory diseases* were jointly the leading underlying causes of death, accounting for 9,4% deaths each. *Cerebrovascular diseases* was the leading underlying cause of death for Eden (Western Cape). *Ischaemic heart diseases* was the leading underlying cause of death in Overberg in Cape Town and in Namakwa in Northern

Cape. *Other forms of heart disease* were the leading cause of death in only one district-Ngaka Modiri Molemo in North West.

HIV disease was part of the ten leading causes of death for all districts in Eastern Cape, KwaZulu-Natal, North West and Mpumalanga. The only districts where *HIV disease* was not among the ten leading underlying causes of death were Central Karoo and Overberg (both in Western Cape), Ekurhuleni and West Rand in Gauteng, Namakwa in Northern Cape, Greater Sekhukhune, Mopani and Vhembe in Limpopo, and Fezile Dabi in Free State. The district with the highest percentage of deaths (over 10%) due to *HIV disease* was John Taolo Gaetsewe in Northern Cape (17,5%).

4.7.8 Underlying natural causes of death by population group

Due to a large proportion of unknown or unspecified cases, the ten leading underlying natural causes of death by population group are not discussed in this section. The discussion and distribution of underlying causes of death by population group are provided in Appendices Q and Q.1 (see pages 128–129), respectively.

4.8 Non-natural causes of death

This subsection discusses non-natural causes of death based on all external causes of morbidity and mortality derived from the causes of death specified on the death notification forms. Non-natural causes of death are chapter 20 (V01-Y98) of ICD-10 and number 19 in Table 4.3. *External causes of morbidity and mortality* are treated as non-natural causes.

More than a tenth (10,5%) of all deaths that occurred in 2014 were due to *external causes of morbidity and mortality* (refer to Table 4.3). Table 4.11 shows the broad groups of non-natural causes as a proportion of non-natural deaths as well as all 2014 deaths. The majority of non-natural causes of death resulted from other external causes of accidental injury (54,6% of non-natural causes and 5,7% of all causes). Event of undetermined intent (an ill-defined group of non-natural causes of death) was the second most common non-natural cause of death and accounted for 17,1% of non-natural causes and 1,8% of all causes of death. Essentially, nearly three quarters of non-natural causes of deaths were not adequately stated to allocate them as *transport accidents*, *assault*, *complications of medical and surgical care*, *intentional self-harm* or *sequelae of external causes of morbidity and mortality*. This clearly indicates that the interpretation of results of non-natural causes must be treated with caution given this high percentage of misclassified causes of death.

The quality of information on causes of death depends heavily on the diligence of certifying officials, who also depend on availability of information to assist them in completing death notification forms accurately. In the absence of medical records at the time of death; dead on arrival cases; and lack of sufficient details to indicate the manner of death at the time of registration (i.e. accident, suicide and homicide), it may be difficult for certifying officials to assign causes of death. Furthermore, certifying officials may ignorantly fail to provide sufficient details required to code the causes of death appropriately. For example, there are a number of cases where a cause of death is specified as multiple injuries, without indication of what causes such injuries, be it transport accident, suicide or homicide.

Where insufficient details are provided to code the non-natural cause of death accurately, Stats SA codes such deaths as *other external causes of accidental injury* or *event of undetermined intent* in line with the recommendations of WHO in classifying unknown non-natural causes of death (WHO, 2009b). As such, the unexpected lower number of deaths due to *transport accidents*, *assault*, *complications of medical and surgical care*, *intentional self-harm* or *sequelae of external causes of morbidity and mortality* are as a result of causes misclassified as *other external causes of accidental injury* or *event of undetermined intent*.

Of the properly defined non-natural causes of death, the most common was *transport accidents* (12,4%), followed by *assault* (11,1%). *Complications of medical and surgical care*, *intentional self-harm* and *sequelae of external causes of morbidity and mortality* each accounted for less than 5% of non-natural causes of death.

Table 4.11: Distribution of non-natural causes of death by broad groups, 2014

Causes of death (based on ICD-10, 1992)	Number	Percentage of non-natural causes	Percentage of all causes (N = 453 360)
Other external causes of accidental injury (W00-X59)	26 056	54,6	5,7
Event of undetermined intent (Y10-Y34)	8 176	17,1	1,8
Transport accidents (V01-V99)	5 926	12,4	1,3
Assault (X85-Y09)	5 314	11,1	1,2
Complications of medical and surgical care (Y40-Y84)	1 660	3,5	0,4
Intentional self-harm (X60-X84)	585	1,2	0,1
Sequelae of external causes of morbidity and mortality (Y85-Y89)	44	0,1	0,0
Total	47 761	100,0	

Since the broad group, *other external causes of accidental injury*, comprised more than half of all non-natural deaths, breaking down deaths due to *external causes of accidental injury* was considered necessary in order to provide information that can be used to better understand deaths due to this cause.

The breakdown of deaths due to *external causes of accidental injury* is presented in Table 4.12. More than forty per cent of the deaths (41,4%) were due to *accidental exposure to other and unspecified factors*. This includes *exposure to other specified factors* as well as *exposure to unspecified factors causing fracture or injury*. *Exposure to inanimate mechanical forces* was the second most common cause of death, accounting for 19,2% of deaths in this group. *Exposure to inanimate mechanical forces* includes, among others, *handgun discharge*. Deaths due to *other accidental threats to breathing* came third, comprising 17,9% of deaths.

Table 4.12: Distribution of deaths due to other external causes of accidental injury, 2014

Cause of death (based on ICD-10)	Number	Percentage
Accidental exposure to other and unspecified factors (X58-X59)	10 778	41,4
Exposure to inanimate mechanical forces (W20-W49)	4 990	19,2
Other accidental threats to breathing (W75-W84)	4 676	17,9
Exposure to smoke, fire and flames (X00-X09)	2 299	8,8
Accidental drowning and submersion (W65-W74)	1 579	6,1
Accidental poisoning by and exposure to noxious substances (X40-X49)	864	3,3
Exposure to electric current, radiation and extreme ambient air temperature and pressure (W85-W99)	325	1,2
Exposure to forces of nature (X30-X39)	261	1,0
Falls (W00-W19)	183	0,7
Contact with venomous animals and plants (X20-X29)	49	0,2
Exposure to animate mechanical forces (W50-W64)	32	0,1
Overexertion, travel and privation (X50-X57)	11	0,0
Contact with heat and hot substances (X10-X19)	9	0,0
Total	26 056	100,0

4.8.1 Non-natural causes of death by age and sex

This subsection looks at the distribution of non-natural causes of death by sex and broad age groups (0, 1–14, 15–29, 30–44, 45–64 and 65+). Age group 15–44 has been divided into two age groups (15–29 and 30–44) as recommended by the WHO (1992).

Table 4.13 shows the distribution of non-natural causes of death by sex and broad age groups for deaths that occurred in 2014. The age group mostly affected by non-natural causes of death was age group 15–29 years for both sexes, accounting for 36,7% of all non-natural deaths.

Differences by sex show that males had three times higher the proportion of deaths due to non-natural causes (15,3%) as compared to females (5,1%). Furthermore, for each of the age groups (with the exception of infants [age 0]), males had higher proportions of deaths due to non-natural causes than females, with the gap much wider at age group 15–29 years where as much as 55,0% of male deaths resulted from non-natural causes compared to 13,9% of female deaths in the same age group.

For both sexes, males and females, *other external causes of accidental injury* was the leading non-natural cause of death for all age groups. The second most common non-natural cause of death amongst males was *event of undetermined intent* for all age groups, except for those aged 1–14 years. The same was true for females with the exception of age group 45–64 years. *Transport accidents* was the second most common non-natural cause of death for males aged 1–14 years and females aged 45–64 years. The third most common non-natural cause was *assault* for males but was the fifth most common non-natural cause of death amongst females.

Assault was more common for males aged 15–29 years, affecting 19,7% of non-natural deaths in this age group. Excluding deaths due to *other external causes of accidental injury* and *event of undetermined intent*, female deaths were mostly linked to *transport accidents* and *complications of medical and surgical care*. These causes accounted for 13,7% and 7,9% of deaths respectively. For males, the most common non-natural cause of death was *assault* (12,9%), followed by *transport accidents* (12,1%). For each of the sexes, *intentional self-harm* and *sequelae of external causes of morbidity and mortality* were very rare.

Table 4.13: Underlying non-natural causes of death by age group and sex, 2014

Causes of death based on ICD-10	Number						Percentage							
	0	1-14	15-29	30-44	45-64	65+	Total	0	1-14	15-29	30-44	45-64	65+	Total
Both sexes*														
Transport accidents (V01-V99)	34	552	1 852	1 857	1 257	318	5 870	3,9	15,6	11,5	13,5	14,5	7,6	12,5
Other external causes of accidental injury (W00-X59)	740	2 361	7 884	7 315	4 800	2 591	25 691	84,2	66,9	49,0	53,3	55,4	61,9	54,6
Intentional self-harm (X60-X84)	0	8	281	175	96	21	581	0,0	0,2	1,7	1,3	1,1	0,5	1,2
Assault (X85-Y09)	14	58	2 879	1 613	553	132	5 249	1,6	1,6	17,9	11,7	6,4	3,2	11,2
Event of undetermined intent (Y10-Y34)	49	503	3 038	2 552	1 409	426	7 977	5,6	14,2	18,9	18,6	16,3	10,2	16,9
Complications of medical and surgical care (Y40-Y84)	42	48	141	210	524	686	1 651	4,8	1,4	0,9	1,5	6,1	16,4	3,5
Sequelae of external causes of morbidity and mortality (Y85-Y89)	0	1	4	8	19	12	44	0,0	0,0	0,0	0,1	0,2	0,3	0,1
Subtotal	879	3 531	16 079	13 730	8 658	4 186	47 063	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Non-natural causes	879	3 531	16 079	13 730	8 658	4 186	47 063	3,5	23,9	36,7	15,4	6,8	2,8	10,4
Natural causes	24 268	11 246	27 730	75 457	118 478	146 373	403 552	96,5	76,1	63,3	84,6	93,2	97,2	89,6
All causes	25 147	14 777	43 809	89 187	127 136	150 559	450 615	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Males*														
Transport accidents (V01-V99)	16	345	1 436	1 479	908	184	4 368	3,4	15,8	10,7	12,9	14,0	8,7	12,1
Other external causes of accidental injury (W00-X59)	396	1 488	6 544	6 121	3 665	1 266	19 480	85,0	68,1	48,9	53,5	56,6	59,7	54,0
Intentional self-harm (X60-X84)	0	4	210	152	77	16	459	0,0	0,2	1,6	1,3	1,2	0,8	1,3
Assault (X85-Y09)	7	38	2 641	1 434	462	68	4 650	1,5	1,7	19,7	12,5	7,1	3,2	12,9
Event of undetermined intent (Y10-Y34)	23	280	2 473	2 154	1 099	270	6 299	4,9	12,8	18,5	18,8	17,0	12,7	17,5
Complications of medical and surgical care (Y40-Y84)	24	28	68	105	250	313	788	5,2	1,3	0,5	0,9	3,9	14,8	2,2
Sequelae of external causes of morbidity and mortality (Y85-Y89)	0	1	4	5	17	4	31	0,0	0,0	0,0	0,0	0,3	0,2	0,1
Subtotal	466	2 184	13 376	11 450	6 478	2 121	36 075	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Non-natural causes	466	2 184	13 376	11 450	6 478	2 121	36 075	3,4	27,0	55,0	22,4	8,7	3,3	15,3
Natural causes	13 063	5 915	10 960	39 730	67 736	62 507	199 911	96,6	73,0	45,0	77,6	91,3	96,7	84,7
All causes	13 529	8 099	24 336	51 180	74 214	64 628	235 986	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Females*														
Transport accidents (V01-V99)	18	207	416	378	349	134	1 502	4,4	15,4	15,4	16,6	16,0	6,5	13,7
Other external causes of accidental injury (W00-X59)	344	873	1 340	1 194	1 135	1 325	6 211	83,3	64,8	49,6	52,4	52,1	64,2	56,5
Intentional self-harm (X60-X84)	0	4	71	23	19	5	122	0,0	0,3	2,6	1,0	0,9	0,2	1,1
Assault (X85-Y09)	7	20	238	179	91	64	599	1,7	1,5	8,8	7,9	4,2	3,1	5,5
Event of undetermined intent (Y10-Y34)	26	223	565	398	310	156	1 678	6,3	16,6	20,9	17,5	14,2	7,6	15,3
Complications of medical and surgical care (Y40-Y84)	18	20	73	105	274	373	863	4,4	1,5	2,7	4,6	12,6	18,1	7,9
Sequelae of external causes of morbidity and mortality (Y85-Y89)	0	0	0	3	2	8	13	0,0	0,0	0,0	0,1	0,1	0,4	0,1
Subtotal	413	1 347	2 703	2 260	2 180	2 065	10 988	100,0	100,0	100,0	100,0	100,0	100,0	100,0
Non-natural causes	413	1 347	2 703	2 260	2 180	2 065	10 988	3,6	20,2	13,9	6,0	4,1	2,4	5,1
Natural causes	11 205	5 331	16 770	35 727	50 742	83 866	203 641	96,4	79,8	86,1	94,0	95,9	97,6	94,9
All causes	11 618	6 678	19 473	38 007	52 922	85 931	214 629	100,0	100,0	100,0	100,0	100,0	100,0	100,0

*Excluding cases with unspecified age; ** Excluding cases with unspecified age; *** Excluding cases with unspecified age.

4.8.2 Non-natural causes of death by province of death occurrence

The distribution of the underlying non-natural causes of death by province for 2014 is shown in Table 4.14. Western Cape had the highest proportion of deaths due to non-natural causes (13,7%), followed by Northern Cape (11,1%). The lowest proportions of deaths due to non-natural causes were observed in North West (8,2%) and Limpopo (8,3%). In other provinces (i.e. Eastern Cape, KwaZulu-Natal, Gauteng and Mpumalanga) non-natural causes of death ranged from 10,5% to 10,9%.

The most common causes of non-natural deaths in all provinces were *other external causes of accidental injury*, although their proportions varied by province. Mpumalanga (70,4%) had the highest proportion of deaths due to *external and other causes of accidental injury* and North West (45,6%) had the lowest proportion of non-natural deaths due to this cause. The second leading non-natural causes of deaths differed by province. *Assault* was the second most common cause only in Western Cape where 19,5% of deaths were due to this cause. *Event of undetermined intent* was the second leading cause of death in Eastern Cape, KwaZulu-Natal, North West and Gauteng, while *transport accidents* was the second leading cause of death in Northern Cape, Free State, Mpumalanga and Limpopo. The proportion of deaths due to *transport accidents* was highest in Northern Cape, and responsible for 30,3% deaths in the province, followed by Limpopo (29,5%). However, Limpopo had the highest number of *transport accident* deaths, with 1 164 deaths as compared to 474 for Northern Cape.

Complications of medical and surgical care, intentional self-harm and sequelae of external causes of morbidity and mortality were least common, each affecting about 5% or less of non-natural deaths in each province except for Northern Cape and Gauteng, where 5,4% of non-natural deaths were due to *intentional self-harm* in Northern Cape and 5,3% of non-natural deaths were due to *complications of medical and surgical care* in Gauteng.

4.8.3 Non-natural causes of death by district municipalities

The information provided in Appendices O to O2 also shows the proportion of deaths due to non-natural causes for each of the district municipalities. Non-natural causes of death are on the column labelled external causes of morbidity and mortality (V01-Y98).

The highest proportion of deaths due to non-natural causes was observed in the City of Cape Town (14,9%) and Central Karoo (14,0%), both in Western Cape. The lowest percentage of deaths due to non-natural causes was observed in Dr Ruth Segomotsi Mompati in North West (6,1%) and Ngaka Modiri Molema in North West (6,7%). Non-natural causes of death were less than 10% in all districts for only North West and Limpopo.

Table 4.14: Underlying non-natural causes of death by province, 2014

Causes of death (based on ICD-10)	Western Cape		Eastern Cape		Northern Cape		Free State		KwaZulu-Natal		North West		Gauteng		Mpumalanga		Limpopo	
	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%	Number	%
Transport accidents (V01-Y99)	522	8,7	920	12,7	474	30,3	574	18,1	1 013	12,1	407	14,2	364	3,5	421	11,4	1 164	29,5
Other external causes of accidental injury (W00-X59)	3 231	53,6	3 526	48,7	547	35,0	1 723	54,4	4 672	56,0	1 309	45,6	6 142	58,9	2 610	70,4	2 003	50,7
Intentional self-harm (X60-X84)	66	1,1	44	0,6	84	5,4	20	0,6	227	2,7	51	1,8	26	0,2	45	1,2	19	0,5
Assault (X85-Y09)	1 177	19,5	1 256	17,3	341	21,8	487	15,4	869	10,4	262	9,1	536	5,1	160	4,3	200	5,1
Event of undetermined intent (Y10-Y34)	752	12,5	1 303	18,0	70	4,5	254	8,0	1 280	15,3	785	27,3	2 789	26,8	394	10,6	486	12,3
Complications of medical and surgical care (Y40-Y84)	270	4,5	187	2,6	46	2,9	107	3,4	283	3,4	057	2,0	552	5,3	076	2,0	078	2,0
Sequelae of external causes of morbidity and mortality (Y85-Y89)	13	0,2	7	0,1	0	0,0	0	0,0	3	0,0	1	0,0	16	0,2	2	0,1	2	0,1
Subtotal	6 031	100,0	7 243	100,0	1 562	100,0	3 165	100,0	8 347	100,0	2 872	100,0	10 425	100,0	3 708	100,0	3 952	100,0
Non-natural	6 031	13,7	7 243	10,9	1 562	11,1	3 165	9,6	8 347	10,5	2 872	8,2	10 425	10,8	3 708	10,6	3 952	8,3
Natural causes	37 989	86,3	59 310	89,1	12 494	88,9	29 880	90,4	70 791	89,5	32 061	91,8	86 311	89,2	31 294	89,4	43 897	91,7
Total	44 020	100,0	66 553	100,0	14 056	100,0	33 045	100,0	79 138	100,0	34 933	100,0	96 736	100,0	35 002	100,0	47 849	100,0

*Excluding deaths that occurred outside South Africa and deaths with unspecified province of death

4.9 Comparison between immediate, contributing and underlying causes of death

This section provides information on the total number of causes of death reported on each form. Section G of both death notification forms (BI-1663 and DHA-1663) makes provision for several causes to be reported on the form (see Appendix B and Appendix B1). A maximum number of six causes can be recorded on the death notification form. These causes are recorded as immediate, contributing or underlying causes of death. As noted in Table 4.1, most of the death notification forms for 2014 deaths (53,7%) had just one cause of death indicated. This was followed by 26,6% of forms which recorded two causes of death.

Table 4.15 shows the total number of times a specific cause of death was recorded on the 2014 death notification forms, be it an immediate, contributing or underlying cause for the 20 most commonly reported causes of death. The underlying causes of death were grouped according to the different broad groups. These 20 causes of death include natural and non-natural causes, as well as deaths due to *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified*.

Tuberculosis was the most frequently recorded cause of death in 2014, mentioned in a total of 54 644 death notification forms. This means that 12,1% of all death notification forms had *tuberculosis* recorded as either immediate, contributing or underlying cause of death. The second and third most mentioned causes were *other forms of heart diseases* and *ill-defined and unknown causes of mortality*, representing 11,4% and 11,3% of deaths, respectively. *Hypertensive diseases* was the fourth most frequently cited cause of death in 2014 and was mentioned in 10,6% of the forms. *Other external causes of accidental injury* was the seventh most frequently stated cause (6,0%) and the only non-natural cause appearing among the twenty most commonly stated causes of death.

Table 4.15: Distribution of the 20 most commonly reported causes of death, 2014

Rank	Causes of death (based on ICD-10)	Number of deaths in which the causes was reported	Percentage of all deaths
1	Tuberculosis (A15-A19)*	54 644	12,1
2	Other forms of heart disease (I30-I52)	51 577	11,4
3	Ill-defined and unknown causes of mortality (R95-R99)	51 352	11,3
4	Hypertensive diseases (I10-I15)	48 138	10,6
5	Influenza and pneumonia (J09-J18)	44 996	9,9
6	Cerebrovascular diseases (I60-I69)	33 481	7,4
7	Other external causes of accidental injury (W00-X59)	27 374	6,0
8	Diabetes mellitus (E10-E14)	26 289	5,8
9	Other viral diseases (B25-B34)	25 921	5,7
10	Renal failure (N17-N19)	24 606	5,4
11	Other bacterial diseases (A30-A49)	24 057	5,3
12	Human immunodeficiency virus [HIV] disease (B20-B24)	22 866	5,0
13	Intestinal infectious diseases (A00-A09)	20 469	4,5
14	Chronic lower respiratory diseases (J40-J47)	17 998	4,0
15	Metabolic disorders (E70-E90)	17 863	3,9
16	Ischaemic heart diseases (I20-I25)	17 438	3,8
17	Other diseases of the respiratory system (J95-J99)	16 754	3,7
18	Certain disorders involving the immune mechanism (D80-D89)	14 347	3,2
19	Malignant neoplasm of ill-defined, secondary and unspecified sites (C76-C80)	12 426	2,7
20	Other acute lower respiratory infections (J20-J22)	11 338	2,5

All the natural underlying causes of death that appeared among the ten leading causes of death also appeared among the 20 most commonly mentioned causes. The ten leading underlying natural causes of death shown in Table 4.5 for 2014 deaths are presented in Table 4.16 to show the breakdown of the number of deaths by whether the death was selected as the underlying cause or whether it was reported as the immediate or contributing cause.

Within each category, the counts of underlying causes and immediate or contributing causes are not duplicated, so that they can be summed up to equal the total number of times a specific cause of death was recorded on a death notification form. For example, 12 096 death notification forms had *chronic lower respiratory diseases* as the underlying cause and another 5 902 deaths had it as an immediate or contributing cause. These give a total of 17 998 death notification forms that had *chronic lower respiratory diseases* mentioned on them. According to ICD-10 coding practices, a cause of death cannot be entered more than once in one death notification form.

The percentage column in Table 4.16 shows the percentage distribution of whether a specific cause was stated as an underlying, immediate or contributing cause. Where *human immunodeficiency virus [HIV] disease* was reported on the form, it was selected as an underlying cause in 95,9% of the forms; *diabetes mellitus* was selected as the underlying cause in 86,5% of the forms. *Tuberculosis* was attributed as an underlying cause in 69,3% of the forms while *cerebrovascular diseases* was selected as an underlying cause in 69,0% of the forms in which it appeared. The causes of death which, when mentioned, were least selected as the underlying causes, were *other forms of heart diseases* (41,4%) and *hypertensive diseases* (36,9%).

Table 4.16: Number and percentage of deaths selected as underlying or reported as immediate or contributing causes of death, 2014

Causes of death (ICD-10)	Underlying rank	Number of deaths			Percentage of any mention		
		Underlying	Immediate or contributing	Total recorded	Underlying	Immediate or contributing	Total recorded
Tuberculosis (A15-A19)**	1	37 878	16 766	54 644	69,3	30,7	100,0
Cerebrovascular diseases (I60-I69)	2	23 088	10 393	33 481	69,0	31,0	100,0
Diabetes mellitus (E10-E14)	3	22 747	3 542	26 289	86,5	13,5	100,0
Influenza and pneumonia (J09-J18)	4	22 035	22 961	44 996	49,0	51,0	100,0
Human immunodeficiency virus [HIV] disease (B20-B24)	5	21 938	928	22 866	95,9	4,1	100,0
Other forms of heart disease (I30-I52)	6	21 339	30 238	51 577	41,4	58,6	100,0
Hypertensive diseases (I10-I15)	7	17 770	30 368	48 138	36,9	63,1	100,0
Intestinal infectious diseases (A00-A09)	8	14 472	5 997	20 469	70,7	29,3	100,0
Other viral diseases (B25-B34)	9	13 996	11 925	25 921	54,0	46,0	100,0
Chronic lower respiratory diseases (J40-J47)	10	12 096	5 902	17 998	67,2	32,8	100,0

5. Summary and concluding remarks

The South African government, through the National Development Plan (NDP), identified the need to ensure a long and healthy life for its population by 2030 (National Planning Commission, 2011). The NDP highlights the importance of credible data in informing decentralised prevention and curative measures for communicable diseases, especially tuberculosis and HIV/AIDs, and for the emerging tide of non-communicable diseases as well as injuries and accidents. This statistical release provides information on mortality and causes of death for deaths that occurred in 2014, with some information drawn from death occurrences for the period 1997–2013 to show trends in mortality and causes of death. The information provided equips policymakers with the opportunity to make evidence-based decisions and evaluate progress towards an improved health status of the nation – “leaving no one behind in better health outcomes”.

The results generally show that mortality continues to decline in the country as observed since 2007. In total, 453 360 deaths that occurred in 2014 were registered at the Department of Home Affairs (DHA) and processed by Statistics South Africa (Stats SA). This was a decline of 3,2% from the 473 384 registered deaths for 2013. In terms of registration timeliness, in 2014, the majority of the deaths (78,4%) were registered within the three days stipulated by the legislative framework.

Median ages at death showed that mortality now occurs later in life, which is an indication of declining premature mortality. The median ages at death for total deaths increased from 42,8 years in 2005 (in which it was the lowest since 1997) to 53,9 years in 2014, reflecting improvement in mortality. In 2014, the median age at death for females was 58,1 years and 51,4 years for males. Further, age and sex differentials indicated that the highest percentage of male deaths occurred amongst those aged 60–64 years, whereas female deaths peaked at age group 80–84 years. In general, there were relatively more male deaths from age zero up to age group 65–69 years, with female deaths exceeding male deaths at older age groups (70 years and above). In 2014, the overall sex ratio at death was 110 male deaths per 100 female deaths.

The distribution of deaths by province of death occurrence showed that the highest proportion of deaths (21,3%) occurred in Gauteng province, followed by KwaZulu-Natal (17,0%) and then Eastern Cape (14,8%). The lowest proportion of deaths occurred in Northern Cape (2,9%).

Information on causes of death showed that in 2014, the majority of deaths (52,7%) were attributed to non-communicable diseases. Communicable diseases accounted for 36,8% of deaths, while injuries were responsible for 10,5% of deaths. The analysis of the ten leading causes of death, across all age groups, showed that five of the causes were non-communicable diseases, while the other five were communicable diseases. The distribution of the causes of death further showed that the proportion of deaths attributed to communicable diseases ranged from 21,8% in Western Cape to 44,4% in Limpopo. Deaths in Western Cape were mostly characterised by high non-communicable diseases (64,4%), followed by Gauteng (55,8%) and Eastern Cape (54,0%). Mpumalanga had the lowest proportion of deaths attributed to non-communicable diseases (45,3%), whereas Limpopo had the second lowest (47,3%). With regard to injuries, North West and Limpopo had the lowest proportion of deaths due to injuries, each representing 8,3% of deaths. The other provinces had more than 10% deaths due to injuries, with the maximum observed in Western Cape (13,7%) and Northern Cape (11,2%).

When considering the specific causes of death, the first three leading causes of natural deaths in 2014 were *tuberculosis*, *cerebrovascular diseases* and *diabetes mellitus*. *Tuberculosis* maintained its rank as the number one leading cause of death in South Africa with 8,4% deaths, although deaths due to *tuberculosis* decreased annually in the recent years. *Cerebrovascular diseases* was ranked fourth in 2013 and moved two positions up in 2014, while *diabetes mellitus* moved from fifth rank in 2013 to third in 2014. *Influenza and pneumonia* moved two positions down from second rank in 2013 to fourth rank in 2014, and *HIV diseases* moved two ranks down to fifth position from third in 2013. The proportion of deaths due to *HIV diseases* and *influenza and pneumonia* in 2014 was 4,8% and 4,9%, respectively.

With regard to sex differentials, *tuberculosis* (9,5%) and *influenza and pneumonia* (4,7%) were ranked first and second respectively amongst the ten leading causes of death for males, while for females, *tuberculosis* (7,1%) was the leading underlying cause of death, followed by *diabetes mellitus* (6,4%). The third leading underlying cause of death for females was *cerebrovascular diseases* (6,1%), while for males, *HIV diseases* (4,7%) was

ranked third. It was the first time that *malignant neoplasms of female genital organs* was amongst the top ten leading causes of death for females and was ranked tenth, responsible for 2,5% of female deaths. It was also for the first time that *cerebrovascular diseases* was the second leading underlying cause of death in South Africa.

Age differentials show that *respiratory and cardiovascular disorders specific to the perinatal period* was the leading cause of death amongst infants, and was responsible for 14,5% infant deaths, followed by *intestinal infectious diseases* as the second leading underlying cause of death and responsible for 12,9% infant deaths. *Intestinal infectious diseases* was ranked as the first leading cause of death amongst those aged 1–14 years, responsible for 12,2% of deaths in this age group. *Tuberculosis* was ranked the first leading cause of death for adults (both age groups 15–44 and 45–64 years) whilst for those aged 65 years and older, *cerebrovascular diseases* was the leading cause of death.

Diabetes mellitus, HIV diseases, cerebrovascular diseases, tuberculosis, hypertensive diseases and other forms of heart disease were common leading causes of death in all the provinces, although the proportion of deaths and rankings differed greatly by province. *Tuberculosis* was the leading cause of death in six of the nine provinces. KwaZulu-Natal had the highest proportion of deaths due to *tuberculosis* and Western Cape had the lowest proportion of deaths due to this cause. The leading cause of death in Western Cape was *diabetes mellitus*, and *influenza and pneumonia* was the leading cause in Limpopo.

The 2014 data showed that over 10% of deaths were due to non-natural causes, mainly affecting age group 15–29 years. Furthermore, the number of male deaths due to non-natural causes was more than three times the number of female deaths due to non-natural causes. Most non-natural causes resulted from *other external causes of accidental injury*. *Transport accidents* and *assault* contributed 12,5% and 11,2% of all non-natural causes of death respectively. The distribution of the underlying non-natural causes of death by province for 2014 showed that Western Cape had the highest proportion of deaths due to non-natural causes, followed by Northern Cape and Gauteng. The lowest proportions of deaths due to non-natural causes were observed in Free State, North West and Limpopo.

Data on causes of death rely heavily on the quality of the input data, thus efforts in improving the quality of completing section G of the death notification form cannot be emphasised enough. There has been a slight improvement in recording the cause of death, and this is evident from the constant decline in the proportion of causes of death assigned to *symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified*. There were 12,5% deaths assigned to this main group in 2014.

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Appendices

Appendix A: Definitions

Causes of death are all those diseases, morbid conditions, or injuries that either resulted in or contributed to death, and the circumstances of the accident or violence which produced any such injuries.

Contributing causes of death are morbid conditions, if any, giving rise to the immediate cause of death.

Death is a permanent disappearance of all evidence of life at any time after a *live birth* has taken place.

Human immunodeficiency virus (HIV) is the pathogenic organism responsible for the acquired immunodeficiency syndrome (AIDS), also known as the lymphadenopathy virus (LAV).

Immediate cause of death is the disease or condition directly leading to death.

Leading underlying causes of death are the most frequent underlying causes of death in any given population. In this release, the underlying causes of death are ranked according to frequency.

Live birth in relation to a child, means the birth of a child born alive.

Multiple causes of death are all morbid conditions, diseases and injuries entered on the death certificate. These include those involved in the morbid train of events leading to the death which were classified as either the underlying cause, the intermediate cause, or any intervening cause and those conditions which contributed to death but were not related to the disease or condition causing death.

Neonatal death is the death of a live-born child during the first 28 completed days of life.

Perinatal deaths are a combination of stillbirths and infants who die in the first week after birth (early neonatal deaths)

Post-neonatal death is a live-born infant dying after 28 completed days of birth but before the first year of life is completed.

Population group: According to the Population Registration Act Repeal Act (No. 114 of 1991), the South African Population Register no longer stores information regarding the population group of individuals whose details are on the register. This Repeal Act is still in place; therefore, the population group used in this report refers to the population group as identified by the certifying physician/professional nurse on the death notification form and is only used for statistical purposes.

Stillbirth is the intra-uterine death of a foetus of at least 26 weeks of gestation that showed no sign of life after complete birth.

Underlying cause of death (previously known as primary cause) is the disease or injury that initiated the sequence of events leading directly to death; or the circumstances of the accident or violence which produced the fatal injury.

Appendix B1: Death notification form (DHA-1663A) – page 3 of 3

G.P.-S. 09/09



REPUBLIC OF SOUTH AFRICA
DEPARTMENT OF HOME AFFAIRS

NOTICE OF DEATH / STILL BIRTH

[Births and Deaths Registration Act 51 of 1992]
[Regulations 11 and 14]

DHA-1663 A
Page 3 of 3

BARCODE

To be completed in full and submitted at the Department of Home Affairs' office by the informant or authorised funeral undertaker. The form to be completed in black ink with BLOCK LETTERS. Please mark with the CORRECT box, where required. All fields are COMPULSORY. Incomplete applications and applications that are not legible may be considered invalid. (Note: The fingerprints of the deceased, the informant and the undertaker must be taken by the undertaker)

Serial number

E. PARTICULARS OF FUNERAL UNDERTAKER

Instructions: Section E to be completed by Funeral Undertaker. The undertaker must take his or her finger print, the finger print of the deceased and the informant. **Authorised Funeral Undertaker or Informant** may submit the completed form to the nearest Home Affairs office.

47. Name of Funeral Parlour

48. DHA Designation No. 49. Company Reg. No.

50. SARS Reg. No. (Income tax reference no.)

Details of Funeral Undertaker or Authorised Representative

51. Identity No. (Passport No. if foreigner)

52. Surname

53. Forenames

54. Business Address

Street

Town

Province Postal Code

Telephone No. (Office) Cellphone No.

55. Date of collection of corpse Y Y Y Y M M D D 56. Date of Cremation (if applicable) Y Y Y Y M M D D

57. Place of Burial (City / Town / Village) Province

58. Date of Burial Y Y Y Y M M D D 59. Grave No. (if available)

Name of person who collected the deceased:

60. Identity No. (Passport No. if foreigner)

61. Surname

62. Forenames

Place signed _____

Date signed Y Y Y Y M M D D Signature _____

Office stamp of funeral undertaker

F. FOR OFFICIAL USE ONLY

Registration of death approved, DHA-1663 received by (particulars of DHA official):

63. Identity No.

64. Surname

65. Forenames

66. Persal No.

Documents included with this notice:

Copy of the deceased's ID Copy of ID document of the informant

DHA - 8 (if applicable) DHA - 1680 (if applicable)

DHA-1663 was submitted by:

Informant Funeral Undertaker

Office stamp of DHA

Left thumbprint of funeral undertaker

Appendix B2: Death notification form (DHA-1663B)

NOTICE OF DEATH / STILL BIRTH
 Confirmation for Medical and Health use Only
 (After completion seal to ensure confidentiality)

DHA-1663 B
 Page 1 of 1

To be completed in full and submitted at the Department of Home Affairs' office by the informant or authorised party. The form to be completed in black ink with **BLOCK LETTERS**. Please mark with the CORRECT box, where required.
All fields are COMPULSORY. Incomplete applications and applications that are not legible may be considered invalid.

File no _____ Date _____

G. MEDICAL CERTIFICATE OF CAUSE OF DEATH
 Instructions: Section G is to be filled out by Medical Practitioner / Professional Nurse / Forensic Pathologist, who has determined the cause of death

PARTICULARS OF DECEASED

67. Identity No. (Passport No. if foreigner) _____

68. Gender 68.1 Male 68.2 Female 68.3 Indeterminable

69. Surname _____

70. Forenames _____

71. Population Group 71.1 African 71.2 White 71.3 Indian/Asian 71.4 Coloured 71.5 Other (specify) _____

72. Place of Death 72.1 Hospital/Inpatient 72.2 ER/Outpatient 72.3 DOA 72.4 Nursing Home 72.5 At Home 72.6 Other (specify) _____

73. Name of Health Facility/Practice _____

74. Facility Contact Telephone No. incl. Area Code _____

75. Patient File No. _____

76. Contact Person at Facility: Surname _____
 Forenames _____
 Role/Rank _____

G.1 FOR DEATHS OCCURRING AFTER ONE WEEK OF BIRTH
 Instructions: Section G.1 is to be completed for all deaths that occurred after one week of birth

77. CAUSES OF DEATH

Part 1	Approximate interval between onset and death (Days / Months / Years)	For office use only
Enter the disease, injuries or complications that caused the death. Do not enter the mode of dying, such as cardiac or respiratory arrest, shock or heart failure. List only one cause on each line		ICD-10
IMMEDIATE CAUSE (final disease or condition resulting in death)	a) _____	
Due to (or as a consequence of)	_____	
Sequentially list conditions, if any, leading to immediate cause.	b) _____	
Due to (or as a consequence of)	_____	
Enter UNDERLYING CAUSE last (Disease or injury that initiated events resulting in death)	c) _____	
Due to (or as a consequence of)	_____	
	d) _____	

Part 2 Other significant conditions contributing to death but not resulting in underlying cause given in Part 1	_____	
_____	_____	

78. If a female, was she pregnant at the time of death or up to 42 days prior to death? () 82.1 Yes 82.2 No

79. Method used to ascertain the cause of death (tick all that apply):
 79.1 Autopsy 79.2 Post mortem examination 79.3 Opinion of attending medical practitioner 79.4 Opinion of attending medical practitioner on duty
 79.5 Opinion of registered professional nurse 79.6 Interview of family member 79.7 Other (specify) _____

G.2 FOR STILL BIRTHS AND DEATHS OCCURRING WITHIN ONE WEEK OF BIRTH (PERINATAL DEATHS)
 Instructions: Section G.2 is to be completed for all still births and deaths that occurred within one week of birth (perinatal deaths)

Mother	Child
80. Identity Number _____	89. Type of death: <input type="checkbox"/> 89.1 Still birth <input type="checkbox"/> 89.2 Live birth
81. Date Of Birth Y Y Y Y M M D D _____	90. Birth weight (in grams) _____
82. Age of last birthday/ DoB unknown _____	91. This birth was: <input type="checkbox"/> 91.1 Single birth <input type="checkbox"/> 91.2 First twin <input type="checkbox"/> 91.3 Second twin <input type="checkbox"/> 91.4 Other multiple
83. Number of previous pregnancies resulting in: <input type="checkbox"/> 83.1 Live births <input type="checkbox"/> 83.2 Still births <input type="checkbox"/> 83.3 Abortions	92. If still born, heartbeat ceased: <input type="checkbox"/> 92.1 Before labour <input type="checkbox"/> 92.2 During labour but before delivery <input type="checkbox"/> 92.3 Before delivery but not known whether before or during labour
84. Outcome of last previous pregnancy (tick one): <input type="checkbox"/> 84.1 Live birth <input type="checkbox"/> 84.2 Still birth <input type="checkbox"/> 84.3 Abortion	93. If death occurred within 24 hours after birth, number of hours alive _____
85. Date of last previous delivery Y Y Y Y M M D D _____	94. Attendant at birth: <input type="checkbox"/> 94.1 Physician <input type="checkbox"/> 94.2 Trained midwife <input type="checkbox"/> 94.3 Other trained person (specify) _____ <input type="checkbox"/> 94.4 Other (specify) _____
86. First day of last menstrual period Y Y Y Y M M D D _____	
Or, if unknown, estimated duration of pregnancy (in completed weeks) _____	
87. Method of delivery: <input type="checkbox"/> 87.1 Spontaneous <input type="checkbox"/> 87.4 Vacuum extractor <input type="checkbox"/> 87.2 Forceps delivery <input type="checkbox"/> 87.5 Caesarean section <input type="checkbox"/> 87.3 Forceps and rotation <input type="checkbox"/> 87.6 Other (specify) _____	
88. Antenatal care two or more visits: <input type="checkbox"/> 88.1 Yes <input type="checkbox"/> 88.2 No <input type="checkbox"/> 88.3 Unknown	

95. CAUSES OF DEATH

a. Main disease or conditions in foetus or infant _____

b. Other diseases or conditions in foetus or infant _____

c. Main maternal disease or condition affecting foetus or infant _____

d. Other maternal diseases or conditions affecting foetus or infant _____

e. Other relevant circumstances _____

96. Autopsy information ()
 96.1 Certified causes of death has been confirmed by autopsy 96.2 Autopsy information may be available later 96.3 Autopsy not performed

Appendix C: Assessment of the quality of data

The gold standard in mortality statistics is to have real-time data on the number of deaths and corresponding medically certified causes of death (WHO, 2013). However, the information needs to be of the highest quality in terms of completeness of death registration, timeliness of death registration and publication of death statistics, and accurateness of information provided embedded in deaths with correct information on characteristics of deceased, accurate causes of deaths and lower proportions of deaths with ill-defined or unspecified causes of deaths. In this regard, data quality confrontation has to be undertaken for improvements in mortality statistics to be realised. Improvements in quality of mortality data are essential in more effective policies and programmes concerning people's health and quality of life with the aim of leaving no one behind.

Completeness of death registration

The proportion of all deaths that occurred in a specific period and were covered by the civil registration of a country (referred to as completeness) was estimated at 94% for adults deaths (15 years and older) for the intercensal period 2007–2011. This had improved slightly from the 93% completeness estimated during the 2001–2007 intercensal period. For 2014 adult death registration, the recent 94% completeness level is adopted. Revised estimates will be provided after the 2016 Community Survey. The methods used to derive the level of completeness for the intercensal period 2001–2007 and 2007–2011 were the Generalised Growth Balance (GGB) as proposed by Hill (1987), and the Synthetic Extinct Generation method (SEG) by Bennett and Horiuchi (1981, 1984) deaths. For the underlying assumptions and method followed on deriving completeness for the intercensal period 2007–2011, refer to Stats SA (2014). The extent of completeness of child deaths registration (0–14 years), however, is less certain, given the lack of completeness level estimates.

Timeliness of death registration

In South Africa, the Regulations for the Registration of Births and Deaths published in 2014 mandate that a death must be registered within 72 hours (3 days) of occurrence (Republic of South Africa, 2014). Timeliness in death registration indicates that all deaths are registered within the legally stipulated time allowance (UN, 2014). In general, timeliness of death registration refers to the interval between the date of death occurrence and the date it was registered with the Department of Home Affairs (DHA).

The number of days it took for deaths to be registered at DHA offices in 2014 is shown in Table C.1. For deaths that occurred in 2014, 15,6% were registered within a day of occurrence, 30,6% a day after the death had occurred, 19,3% on the second day after death occurrence and 13,0% on the third day. The proportion of deaths which were registered within the 72 hours (3 days) stipulated by the Regulations legislative framework was 78,4%. It is worth noting that although 21,6% of the deaths were not registered within the legislative framework's stipulated time period, they were registered within a year of death occurrence and reached Stats SA in time for the production of the statistical release. Strategies are needed to improve adherence to the legislative framework especially for the delayed deaths that did not reach Stats SA in time for the 2014 deaths processing phase.

Table C1: Distribution of deaths by the number of days it took to register the death, 2014

Number of days	Number of deaths	Percentage	Cumulative percentage
Within a day of death	70 709	15,6	15,6
1 day	138 627	30,6	46,2
2 days	87 295	19,3	65,4
3 days	58 984	13,0	78,4
4 days	35 012	7,7	86,2
5 days	20 220	4,5	90,6
6 days	11 456	2,5	93,1
7-13 days	19 080	4,2	97,4
14-20 days	3 107	0,7	98,0
21-30 days	1 862	0,4	98,5
31-364 days	6 822	1,5	100,0
1 year+	186	0,0	100,0
Total	453 360	100,0	

Timeliness of publication of statistics

Timeliness of publication refers to the mean time from end of reference period to publication. This statistical release took 11 months from the end of the reference period (2014) to publication. The primary focus of this publication is to present information on deaths that occurred in 2014. However, deaths from previous years are also presented to examine the timeliness of reporting of deaths, that is, the extent to which the data from previous years were registered late or not processed in time as indicated by the number of deaths processed after the end of the reference year.

Table C.2 provides information on the number of deaths published in December 2014 for the years 1997–2013, the number of additional forms received during the 2014/2015 processing phase as well as the total number of deaths for each of the years as of December 2015. A total of 22 185 death notification forms were received in the 2014/2015 processing phase for deaths which occurred during the years 1997 and 2013 but were only registered or processed in 2014. Generally, most of the additional forms totalling 14 451 (65,1%) were for deaths that occurred in 2013. This high number of forms from 2013 deaths is attributed to the shortening of the processing time. A shorter processing time, impacts on the number of forms that reach Stats SA in time for the processing phase cut-off. The age and sex distribution of deaths from 1997 to 2014 updated for late registrations or delayed transfer of forms is provided in Appendices D (1997–1999), D.1 (2000–2002), D.2 (2003–2005), D.3 (2006–2008), D.4 (2009–2011) and D.5 (2012–2014) [see pages 68–73].

Table C2: Number of deaths published in December 2014 and late registrations processed during the 2014/2015 processing phase by year of death, 1997–2013

Year of death	Number of deaths published in December 2014	Additional forms received in the 2014 processing phase	Total number of deaths published in December 2015
1997	317 412	315	317 727
1998	366 124	353	366 477
1999	382 121	409	382 530
2000	416 818	224	417 042
2001	455 656	398	456 054
2002	502 797	363	503 160
2003	557 792	466	558 258
2004	577 823	394	578 217
2005	598 866	401	599 267
2006	613 691	323	614 014
2007	605 448	501	605 949
2008	597 016	765	597 781
2009	582 024	932	582 956
2010	549 925	476	550 401
2011	514 486	452	514 938
2012	491 100	962	492 062
2013	458 933	14 451	473 384
Total	8 588 032	22 185	8 610 217

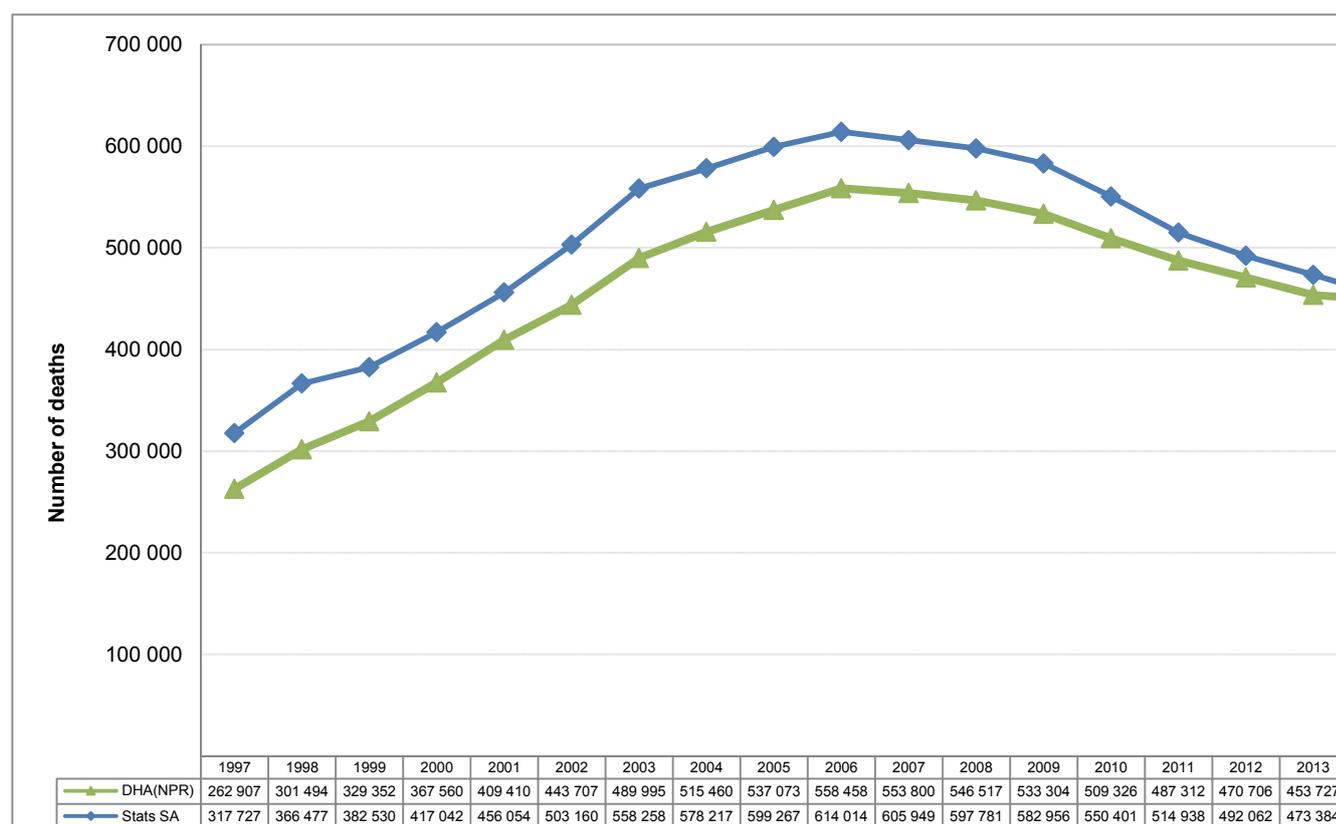
Data confrontation

Figure C.1 shows the comparison of the civil registration system number of deaths processed by Stats SA and those recorded on the National Population Register (NPR) maintained by the DHA. This comparison aims to evaluate the quality of the data based on cohesiveness of the data from the two systems. The key is to ensure that based on the known differences and disparities the two systems do not overlap and create disconnected statistical information. While the two systems show similar trends, the number of deaths processed by Stats SA is always higher than the number of deaths recorded on the NPR and this difference can be explained by the following:

- Stats SA reports on all deaths registered at the DHA regardless of citizenship status and birth registration (South African citizens in the NPR, South African citizens not in the NPR, permanent residents and non-citizens). Although Stats SA reports on all deaths registered at DHA, some of the registered deaths are excluded from the report, as the forms were not transmitted from DHA to Stats SA in time for the processing phase cut-off.
- The NPR only includes deaths of South African citizens and permanent residents whose particulars were already on the NPR at the time of death occurrence.

The general pattern shows that the two sources have followed a similar pattern over time; consistent increases between years 1997 to 2006 and declining deaths thereafter. However, deaths processed by Stats SA remained higher than those on the NPR. The magnitude of the difference between the two sources may be affected by delayed death notification forms that did not make it in time for the processing phase cut-off. For example, in the 2013 mortality and causes of death statistical release, 458 933 deaths were processed and published by Stats SA, while for the same year 453 483 death records were found on the NPR (Stats SA, 2015). In the current release, the 2013 deaths increased to 473 384 with the processing of additional forms while the NPR deaths increased to 453 727, indicating an increase of 3,2% for deaths processed by Stats SA and an increase of 0,05% for deaths in the NPR. This implies that additional forms were higher for Stats SA, indicating that the death records were missed due to delays in transfer from DHA to Stats SA and late registrations.

Figure C1: Number of deaths registered by source of data and year of death, 1997–2014



*Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

Quality of causes of death information

Quality information on underlying causes of death is critical to guide decision-making in public health. As such, it is important that this information is assessed from data processing through to the data analysis phase in order to measure the extent to which the data may be used for health policies and programmes. Table C.3 provides the assessment of the quality of causes of death data based on the number and percentage distribution of ill-defined causes by sex of the deceased. The ill-defined causes refer to diagnoses that are vague, non-specific and have insufficient details to be of value in promoting preventive and curative health interventions. Although ill-defined causes still help to provide the overall mortality due to broad diseases, they fail to provide a concise picture as they poorly attribute the underlying cause.

The results show that for both sexes the highest proportions of ill-defined causes were *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* (50,7%) followed by *heart failure* (11,0%) and then *essential (primary) hypertension* (7,8%). About 7,2% of ill-defined causes were due to *event of undetermined intent* for both sexes, with much higher proportions for males (11,5%) than for females (3,0%).

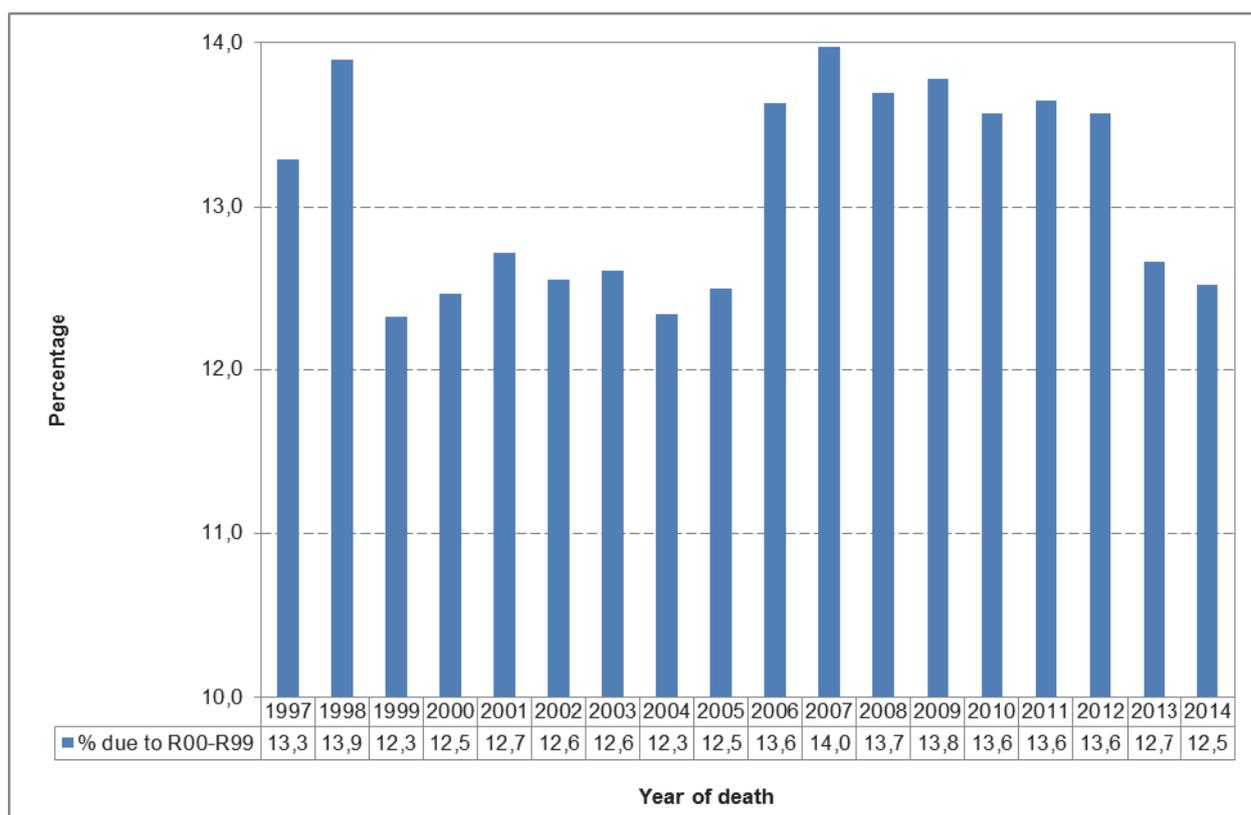
Table C3: Number and percentage distribution of ill-defined causes of death by sex of the deceased, 2014*

Underlying cause of death (based in ICD-10)	Number			Percentage		
	Male	Female	Both sexes	Male	Female	Both sexes
Streptococcal septicaemia (A40)	1	2	3	0,0	0,0	0,0
Other septicaemia (A41)	2 451	3 064	5 515	4,4	5,5	4,9
Malignant neoplasm of other and ill-defined sites (C76)	179	259	438	0,3	0,5	0,4
Malignant neoplasm without specification of site (C80)	1 499	1 445	2 944	2,7	2,6	2,6
Malignant neoplasm of independent (primary) multiple sites (C97)	267	219	486	0,5	0,4	0,4
Disseminated intravascular coagulation [defibrination syndrome] (D65)	48	68	116	0,1	0,1	0,1
Volume depletion (E86)	665	678	1 343	1,2	1,2	1,2
Essential (primary) hypertension (I10)	3 237	5 404	8 641	5,8	9,7	7,8
Cardiac arrest (I46)	1 745	1 918	3 663	3,1	3,4	3,3
Heart failure (I50)	5 502	6 767	12 269	9,9	12,1	11,0
Complications and ill-defined descriptions of heart disease (I51)	494	509	1 003	0,9	0,9	0,9
Other and unspecified disorders of circulatory system (I99)	18	17	35	0,0	0,0	0,0
Pulmonary oedema (J81)	175	194	369	0,3	0,3	0,3
Respiratory failure, not elsewhere classified (J96)	952	857	1 809	1,7	1,5	1,6
Hepatic failure, not elsewhere classified (K72)	729	661	1 390	1,3	1,2	1,2
Acute renal failure (N17)	468	407	875	0,8	0,7	0,8
Chronic renal failure (N18)	790	775	1 565	1,4	1,4	1,4
Unspecified renal failure (N19)	2 275	2 117	4 392	4,1	3,8	3,9
Symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified (R00-R99)	27 614	28 937	56 551	49,8	51,7	50,7
Event of undetermined intent (Y10-Y34)	6 358	1 682	8 040	11,5	3,0	7,2
Total of ill-defined	55 467	55 980	111 447	100,0	100,0	100,0

*Excluding deaths with unspecified sex.

The high proportion of deaths classified under *symptoms, signs and abnormal clinical and laboratory findings, not elsewhere classified* (over 50%) is further analysed to review trends (1997–2014) in reporting this group. Figure C.2 shows that over the years 1997 to 2014, the percentage of deaths classified as ill-defined causes ranged between 12% and 14%. The lowest proportion of 12,3% was recorded in 1999 and the highest proportion of 13,9% was recorded in 2007. The proportion fluctuated between 2008 and 2009, after which it remained around 13,6% from 2010 to 2012. In 2013, the proportion of deaths assigned to the ill-defined group decreased to 12,7%, and then further decreased to 12,5% for 2014 registered deaths.

Figure C2: Percentage distribution of deaths assigned to symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified and year of death 1997–2014*



*Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

Assessment framework for death registration data

This statistical release adopts the assessment framework proposed by Mahapatra et al. (2007) to assess the quality of the 2014 death registration data received from the civil registration system. The framework proposed two categories, namely general vital statistics and causes-of-death statistics. Both categories measure quality in terms of level of accuracy, relevance, comparability, timeliness and accessibility.

The results of the Mahapatra et al. 2007 assessment framework for the 2014 mortality and causes of death data from the South African civil registration system are shown in Table C.4 and Table C.5. Table C.4 shows the percentage of key variables with unknown or unspecified information and forms part of the accuracy criteria in the assessment framework for the years 2013 and 2014. The unknown cases refer to cases where more than one option was selected on the form or where the information could not be classified according to specified categories while unspecified cases refer to missing data for that variable.

For the selected variables shown in table C.4, there has been no major improvements with the exception of population group which improved from 17,3% in 2013 to 12,7% in 2014. For the variables that have been well reported over time, in 2014, less than 1% of deaths had unknown or unspecified information for age of deceased (0,3%), sex of deceased (0,4%) and province of death occurrence (0,3%). A notable decrease in missing information was observed for province of usual residence from 1,8% in 2013 to 1,2% in 2014. The information on province of birth occurrence was not well reported as 18,0 of the variable had missing information. Missing information for marital status was 15,5% in 2014. The 2014 results further indicate that 12,7% of the deaths had unknown or unspecified information on population group, down from 13,5% in 2013. This variable has been improving in the recent years considering that over the period 1997 to 2010 missing information on this variable was constant at around 25%.

In this release, no analyses were undertaken for all variables where more than half of the deaths had unknown or unspecified information. In 2014, occupation (70,8%), industry (52,5%) and pregnancy status (79,5%) remained the three variables with over half of the information classified as unknown or unspecified. However, a dataset containing unit records on mortality and causes of death 2014, which include variables not covered in this release due to poor reporting, is available on request from Stats SA. In addition, for the accuracy dimension Table C.5 indicates that 94% of adult (15 years and older) death registrations were reported for the 2007–2011 intercensal period. The table also shows that the relevance and comparability of general vital statistics is regarded as complete.

The table further shows that for causes-of-death-statistics about half (48,0%) of the 2014 deaths occurred within a health care facility. This approximates the percentage of deaths whose causes are more likely to be detailed enough for the underlying cause to be derived. Cause-of-death-statistics are regarded as completely relevant as they are based on routine tabulations by sex and five year age groups as well as the fact that tabulation of cause-of-death information is provided for the nine provinces and 52 district municipalities in the country. The tools used in coding causes of death (International Classification of Diseases 10th revision) for 2014 and the variables analysed were similar to those in previous years. Therefore, comparability over time and with other countries is also regarded as complete.

The 2014 deaths show that 12,5% of all deaths were assigned to ill-defined causes. Mahapatra et al. (2007) propose that at most 10% of cause-of-death statistics should be assigned to *symptoms, signs and abnormal clinical and laboratory findings not elsewhere classified* categories. Despite not meeting this threshold, the ill-defined causes slightly improved from 12,7% in 2013.

The table further shows that processing 2014 data on causes of death took 9 months and the mean time from end of reference period to publication was 11 months. Shorter processing time ensures that the mean time from end of reference period to publication is reduced which in turn improves timeliness. In terms of meeting user needs there is wide accessibility to the statistical release and datasets published on mortality and causes of death. The data published on this release are available in a wide range of formats and can be accessed through Stats SA website and also by making use of Stats SA User Information Services.

Table C4: Percentage of deaths classified as unknown/unspecified for selected variables, 2013–2014

Variables	Applicable group	Percentage unknown or Unspecified (2013)	Percentage unknown or Unspecified (2014)
Sex	All	0,4	0,4
Age	All	0,4	0,3
Province of death occurrence	All	0,2	0,3
Province of usual residence of deceased	All	1,8	1,2
Province of birth	All	13,5	18,0
Population group	All	17,3	12,7
Place or institution of death occurrence	All	22,9	23,4
Method used to ascertain cause of death	All	29,6	31,3
Marital Status	All	15,9	15,5
Smoking status	Aged 16 and older	35,5	34,4
Education	Aged 6 and older	44,9	48,5
Occupation	Aged 15 and older	70,9	70,8
Industry	Aged 15 and older (economically active)	53,5	52,5
Pregnancy status	Females aged 10–55	78,3	79,5

Table C5: Assessment of the 2014 South African death statistics from civil registration system using the framework proposed by Mahapatra et al. (2007)

General vital statistics		Cause-of-death statistics	
Criteria and indicators	Measure	Criteria and indicators	Measure
Accuracy Completeness of death registration for adults (2007–2011)	94%	Accuracy Proportion of deaths that occurred in healthcare facilities	48,0%
Missing data See Table 2.4		Proportion of deaths assigned to symptoms and signs of disease not elsewhere classified (R00-R99)	12,5%
Relevance Routine tabulations by sex and five year age groups	100%	Relevance Routine tabulation by sex and five year age groups	100%
Deaths in children under five years tabulated by 0 and 1–4-year age group	100%	Number of cause-of-death tabulation areas	9 provinces and 52 district/metropolitan municipalities
Comparability Stability of key definitions over time	100%	Comparability Consistency of cause-specific mortality proportions over consecutive years	100%
Uniformity of definitions across areas	100%	ICD coding for certification and coding of causes of deaths, revision used and code level to which tabulations are published	Coding causes of death using the tenth revision at 4/5-digit level
Timeliness Processing time	9 months		
Mean time from end of reference period to publication	11 months		
Accessibility Media - number of formats in which data are released	Two: website and compact discs		
Metadata	Published on the web and with compact disc, and available on request		
Availability of user service	Email: info@statssa.gov.za / Tel: 012 310 8600 / Fax 012 310 8500 and 012 310 8495		

*Based on the framework proposed by Mahapatra et al. (2007)

Appendix D: Number of deaths by age, sex and year of death, 1997–1999*

Age group	1997				1998				1999			
	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total
0	12 989	11 546	203	24 738	14 929	13 260	314	28 503	14 735	13 458	438	28 631
1–4	4 052	3 651	52	7 755	4 861	4 489	96	9 446	5 070	4 639	98	9 807
5–9	1 706	1 254	17	2 977	1 780	1 435	36	3 251	1 897	1 509	34	3 440
10–14	1 547	1 195	20	2 762	1 695	1 288	23	3 006	1 650	1 306	23	2 979
15–19	3 777	2 479	23	6 279	4 110	2 909	63	7 082	4 356	3 335	89	7 780
20–24	8 181	5 467	53	13 701	8 799	6 927	112	15 838	8 651	8 308	107	17 066
25–29	10 938	7 460	44	18 442	13 091	9 890	112	23 093	13 904	12 669	141	26 714
30–34	11 854	7 211	51	19 116	14 389	9 742	130	24 261	16 314	12 302	121	28 737
35–39	11 998	6 884	52	18 934	14 627	8 950	98	23 675	16 474	10 840	111	27 425
40–44	11 801	6 425	37	18 263	13 962	7 944	95	22 001	15 239	8 943	91	24 273
45–49	12 245	6 383	52	18 680	14 208	7 695	89	21 992	15 002	8 535	102	23 639
50–54	11 324	6 254	30	17 608	13 025	7 220	79	20 324	13 896	7 773	81	21 750
55–59	12 672	7 937	46	20 655	13 945	8 890	108	22 943	14 089	8 687	84	22 860
60–64	11 201	9 298	50	20 549	12 441	10 002	60	22 503	12 701	10 053	85	22 839
65–69	12 485	11 049	49	23 583	13 259	12 461	84	25 804	12 843	12 324	91	25 258
70–74	11 296	10 065	49	21 410	12 747	11 800	53	24 600	12 863	12 256	71	25 190
75–79	11 209	12 343	45	23 597	11 430	12 485	87	24 002	10 704	11 588	63	22 355
80–84	6 605	8 784	32	15 421	7 883	11 045	49	18 977	7 604	11 324	73	19 001
85–89	3 954	6 919	25	10 898	4 261	7 807	35	12 103	4 451	7 946	51	12 448
90+	2 029	4 732	13	6 774	2 363	5 564	29	7 956	2 211	5 382	30	7 623
Unspecified	3 113	2 366	106	5 585	2 822	2 099	196	5 117	1 491	1 112	112	2 715
Total	176 976	139 702	1 049	317 727	200 627	163 902	1 948	366 477	206 145	174 289	2 096	382 530

*Data for 1997–1999 have been updated with late registrations/delayed death notification forms processed in 2014/2015

Appendix D1: Number of deaths by age, sex and year of death, 2000–2002*

Age group	2000			2001			2002					
	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total
0	15 007	13 530	352	28 889	15 481	14 075	307	29 863	17 885	16 204	340	34 429
1–4	5 387	4 930	86	10 403	5 890	5 308	78	11 276	6 325	5 693	87	12 105
5–9	1 999	1 597	29	3 625	2 126	1 708	29	3 863	2 404	1 964	17	4 385
10–14	1 723	1 338	36	3 097	1 750	1 467	22	3 239	1 868	1 488	24	3 380
15–19	4 321	3 491	72	7 884	4 482	3 916	63	8 461	4 740	4 294	60	9 094
20–24	8 881	9 910	88	18 879	8 946	10 965	86	19 997	9 583	12 518	112	22 213
25–29	15 088	15 761	106	30 955	16 877	19 348	110	36 335	18 659	23 386	136	42 181
30–34	18 512	15 842	110	34 464	20 942	18 783	112	39 837	23 932	23 585	153	47 670
35–39	18 567	13 641	97	32 305	21 132	15 896	101	37 129	24 111	19 490	129	43 730
40–44	17 164	11 046	82	28 292	19 383	12 905	95	32 383	21 622	15 535	117	37 274
45–49	16 136	9 583	80	25 799	17 944	10 962	62	28 968	19 316	12 687	112	32 115
50–54	15 307	9 114	67	24 488	16 941	10 161	74	27 176	18 642	11 259	103	30 004
55–59	13 959	8 880	75	22 914	14 599	9 137	66	23 802	15 429	10 016	71	25 516
60–64	14 262	11 263	69	25 594	15 133	12 079	67	27 279	16 197	12 713	82	28 992
65–69	12 605	12 076	53	24 734	13 030	12 822	65	25 917	13 758	13 295	65	27 118
70–74	13 126	14 148	67	27 341	14 058	15 136	60	29 254	13 802	15 481	62	29 345
75–79	10 358	11 541	48	21 947	10 861	12 057	61	22 979	11 111	12 841	71	24 023
80–84	8 492	12 648	32	21 172	9 170	13 929	47	23 146	9 551	14 205	60	23 816
85–89	4 683	8 230	27	12 940	4 584	8 372	31	12 987	4 379	8 318	34	12 731
90+	2 531	6 530	31	9 092	3 027	7 165	28	10 220	3 295	7 667	33	10 995
Unspecified	1 189	894	145	2 228	1 054	788	101	1 943	1 139	791	114	2 044
Total	219 297	195 993	1 752	417 042	237 410	216 979	1 665	456 054	257 748	243 430	1 982	503 160

*Data for 2000–2002 have been updated with late registrations/delayed death notification forms processed in 2014/2015

Appendix D2: Number of deaths by age, sex and year of death, 2003–2005*

Age group	2003			2004			2005			
	Male	Female	Unsp.	Male	Female	Unsp.	Male	Female	Unsp.	Total
0	19 970	18 051	435	21 790	19 209	533	24 079	21 954	475	46 508
1–4	7 144	6 290	79	8 272	7 638	71	8 232	7 323	80	15 635
5–9	2 779	2 204	28	3 191	2 803	13	3 367	2 804	21	6 192
10–14	2 003	1 643	25	2 142	1 780	13	2 149	1 858	17	4 024
15–19	4 840	4 562	70	4 689	4 624	42	4 776	4 548	53	9 377
20–24	10 355	14 211	105	10 379	15 108	78	10 495	14 891	90	25 476
25–29	20 052	26 292	153	19 834	27 614	112	19 335	27 300	108	46 743
30–34	27 540	28 186	145	28 484	30 689	79	28 830	31 313	107	60 250
35–39	26 471	22 698	114	28 258	25 201	88	29 443	26 294	101	55 838
40–44	24 786	18 471	122	26 510	20 599	70	27 501	21 497	86	49 084
45–49	22 083	14 493	90	23 119	16 273	67	24 470	17 405	79	41 954
50–54	20 622	12 897	68	21 136	14 117	47	21 532	14 968	57	36 557
55–59	17 226	10 999	49	18 086	12 036	33	19 719	13 318	47	33 084
60–64	17 409	13 318	58	16 987	13 407	31	16 850	13 250	34	30 134
65–69	14 680	13 894	53	15 223	13 810	26	16 376	15 191	37	31 604
70–74	14 486	16 397	57	13 451	15 431	26	12 916	15 088	35	28 039
75–79	12 080	14 131	56	11 820	14 089	15	12 223	15 920	35	28 178
80–84	9 453	13 708	39	8 652	11 965	21	8 438	11 840	21	20 299
85–89	5 438	10 204	37	5 040	9 478	19	5 454	10 346	17	15 817
90+	3 382	8 157	18	3 292	7 481	14	3 290	7 887	15	11 192
Unspecified	1 680	957	215	1 935	931	246	1 977	1 082	223	3 282
Total	284 479	271 763	2 016	292 290	284 283	1 644	301 452	296 077	1 738	599 267

Data for 2003-2005 have been updated with late registrations/delayed death notification forms processed in 2014/2015

Appendix D3: Number of deaths by age, sex and year of death, 2006–2008*

Age group	2006			2007			2008					
	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total
0	25 518	22 118	725	48 361	24 881	21 716	414	47 011	24 145	21 451	299	45 895
1–4	8 404	7 591	117	16 112	7 843	7 056	47	14 946	8 233	7 222	31	15 486
5–9	3 031	2 554	17	5 602	2 882	2 506	4	5 392	2 740	2 310	7	5 057
10–14	2 387	1 920	15	4 322	2 250	1 911	2	4 163	2 234	1 893	2	4 129
15–19	4 852	4 606	39	9 497	4 894	4 217	15	9 126	4 868	4 140	26	9 034
20–24	10 878	14 834	98	25 810	10 944	13 795	52	24 791	10 748	12 945	43	23 736
25–29	19 030	26 225	86	45 341	18 556	24 676	71	43 303	18 514	23 629	48	42 191
30–34	28 917	31 084	96	60 097	28 462	29 230	69	57 761	26 903	27 365	56	54 324
35–39	29 529	26 151	80	55 760	29 491	24 960	50	54 501	29 220	24 470	48	53 738
40–44	28 156	21 899	79	50 134	27 175	21 272	49	48 496	26 174	20 303	31	46 508
45–49	25 188	17 980	45	43 213	24 950	17 961	43	42 954	24 892	17 626	31	42 549
50–54	22 829	15 640	42	38 511	22 963	15 688	17	38 668	22 843	15 619	21	38 483
55–59	20 675	14 200	42	34 917	21 483	14 658	23	36 164	21 677	15 003	22	36 702
60–64	17 086	13 357	26	30 469	17 532	13 512	11	31 055	17 804	13 951	17	31 772
65–69	17 769	15 826	25	33 620	18 003	15 879	9	33 891	18 117	15 663	12	33 792
70–74	13 607	15 616	27	29 250	13 856	15 874	8	29 738	14 194	15 364	2	29 560
75–79	12 741	17 029	25	29 795	12 615	17 107	4	29 726	12 624	17 247	4	29 875
80–84	8 957	12 354	21	21 332	8 928	12 950	4	21 882	9 063	13 894	2	22 959
85–89	6 155	12 036	12	18 203	6 374	12 228	2	18 604	6 005	11 229	1	17 235
90+	3 567	8 720	9	12 296	3 687	8 801	12	12 500	3 996	9 576	27	13 599
Unspecified	869	357	146	1 372	821	344	112	1 277	742	262	153	1 157
Total	310 145	302 097	1 772	614 014	308 590	296 341	1 018	605 949	305 736	291 162	883	597 781

Data for 2006–2008 have been updated with late registrations/delayed death notification forms processed in 2014/2015

Appendix D4: Number of deaths by age, sex and year of death, 2009–2011*

Age group	2009				2010				2011			
	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total	Male	Female	Unsp.	Total
0	21 038	17 764	462	39 264	18 331	16 125	381	34 837	14 903	13 199	499	28 601
1–4	6 678	6 098	31	12 807	7 036	6 127	44	13 207	5 332	4 783	46	10 161
5–9	2 368	2 041	6	4 415	2 557	2 118	5	4 680	2 358	2 038	9	4 405
10–14	2 383	2 072	4	4 459	2 444	2 123	3	4 570	2 101	1 800	5	3 906
15–19	4 678	4 149	25	8 852	4 425	3 977	18	8 420	4 127	3 562	25	7 714
20–24	10 000	11 841	55	21 896	9 434	10 701	35	20 170	8 594	8 909	83	17 586
25–29	17 771	21 715	68	39 554	16 508	19 525	63	36 096	14 985	16 162	145	31 292
30–34	25 024	24 241	81	49 346	22 439	21 441	71	43 951	19 659	17 819	143	37 621
35–39	27 701	22 418	57	50 176	24 790	20 415	52	45 257	22 486	17 504	114	40 104
40–44	25 186	19 208	53	44 447	23 348	17 661	47	41 056	20 934	15 509	100	36 543
45–49	24 382	17 375	44	41 801	22 923	16 380	57	39 360	20 987	14 942	68	35 997
50–54	22 851	15 601	39	38 491	22 013	15 221	31	37 265	21 123	14 370	74	35 567
55–59	21 807	15 147	29	36 983	20 965	14 331	33	35 329	20 396	14 240	54	34 690
60–64	19 237	14 414	20	33 671	20 095	14 815	29	34 939	20 432	14 970	59	35 461
65–69	18 234	15 747	16	33 997	17 291	14 608	21	31 920	17 002	14 285	26	31 313
70–74	15 187	15 965	17	31 169	15 852	16 694	15	32 561	16 547	16 845	21	33 413
75–79	12 750	17 810	9	30 569	11 773	16 143	8	27 924	11 717	16 504	18	28 239
80–84	9 798	15 145	9	24 952	9 935	16 231	11	26 177	9 966	16 748	14	26 728
85–89	6 160	11 242	2	17 404	5 767	10 510	5	16 282	5 995	11 178	13	17 186
90+	5 252	11 677	1	16 930	4 087	10 737	9	14 833	4 386	11 413	7	15 806
Unspecified	1 202	373	198	1 773	989	257	321	1 567	1 368	644	593	2 605
Total	299 687	282 043	1 226	582 956	283 002	266 140	1 259	550 401	265 398	247 424	2 116	514 938

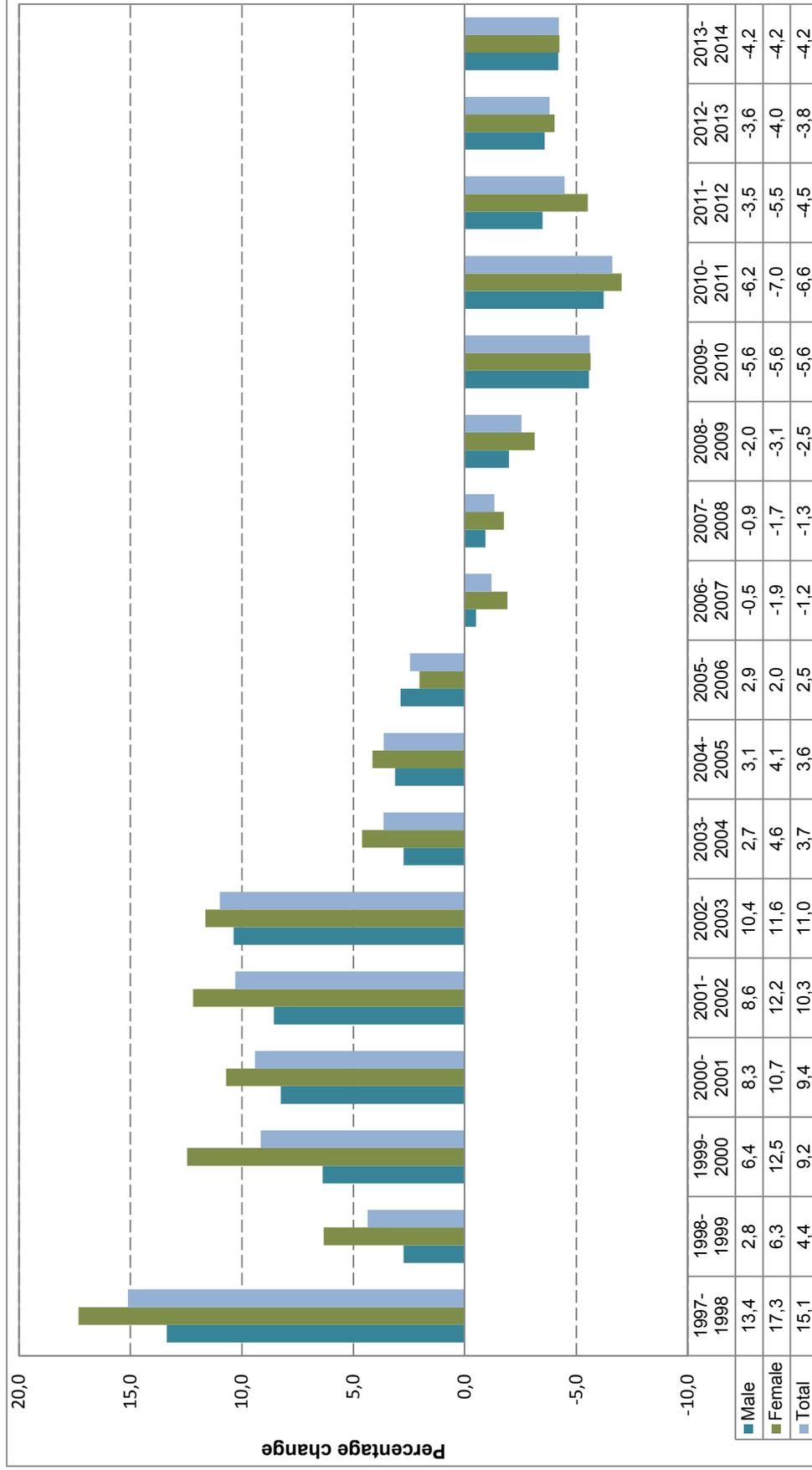
*Data for 2009–2011 have been updated with late registrations/delayed death notification forms processed in 2014/2015

Appendix D5: Number of deaths by age, sex and year of death, 2012–2014*

Age group	2012			2013			2014			
	Male	Female	Unsp.	Male	Female	Unsp.	Male	Female	Unsp.	Total
0	14 281	12 298	525	13 925	12 199	506	13 529	11 618	496	25 643
1–4	5 591	4 952	48	4 957	4 315	66	4 594	3 964	61	8 619
5–9	2 646	2 234	6	1 918	1 571	12	1 781	1 353	9	3 143
10–14	2 246	1 904	4	1 845	1 520	6	1 724	1 361	7	3 092
15–19	4 108	3 414	19	4 217	3 085	30	3 988	2 995	19	7 002
20–24	8 414	7 800	84	8 375	7 056	69	7 943	5 948	76	13 967
25–29	14 591	14 199	125	13 597	12 239	139	12 405	10 530	166	23 101
30–34	18 106	16 093	153	17 331	14 338	152	16 442	13 213	164	29 819
35–39	20 670	15 673	117	18 851	13 965	132	17 103	12 569	146	29 818
40–44	19 725	14 034	96	18 942	13 300	116	17 635	12 225	106	29 966
45–49	19 218	13 622	86	18 200	12 906	78	16 965	12 039	73	29 077
50–54	19 815	13 677	70	19 195	13 378	75	18 482	12 873	70	31 425
55–59	19 942	13 459	51	19 347	13 424	52	18 702	13 256	59	32 017
60–64	20 145	14 385	30	20 280	14 673	49	20 065	14 754	36	34 855
65–69	16 980	13 867	23	16 754	14 054	33	17 405	14 294	22	31 721
70–74	16 189	16 327	14	16 214	16 449	19	15 402	15 897	17	31 316
75–79	11 985	16 304	18	12 271	15 938	23	12 325	15 710	18	28 053
80–84	9 938	16 692	11	9 653	16 747	16	9 215	16 344	17	25 576
85–89	5 782	11 109	10	5 983	11 836	13	6 166	12 370	10	18 546
90+	4 290	10 986	7	4 123	10 941	11	4 115	11 316	4	15 435
Unspecified	1 486	733	655	989	417	469	627	197	345	1 169
Total	256 148	233 762	2 152	246 967	224 351	2 066	236 613	214 826	1 921	453 360

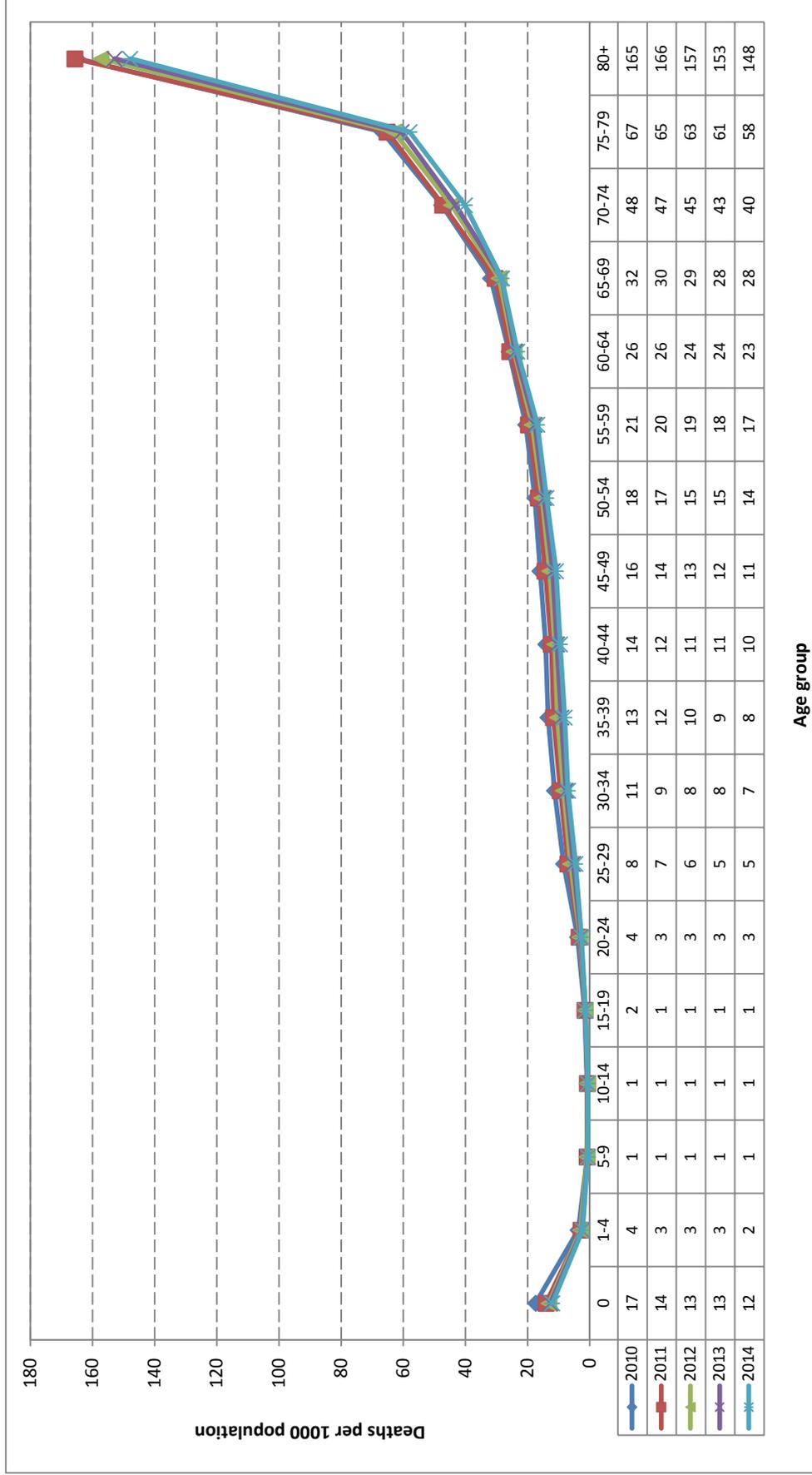
*Data for 2012-2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015

Appendix E: Year-to-year percentage changes in number of deaths by sex, 1997–2014*



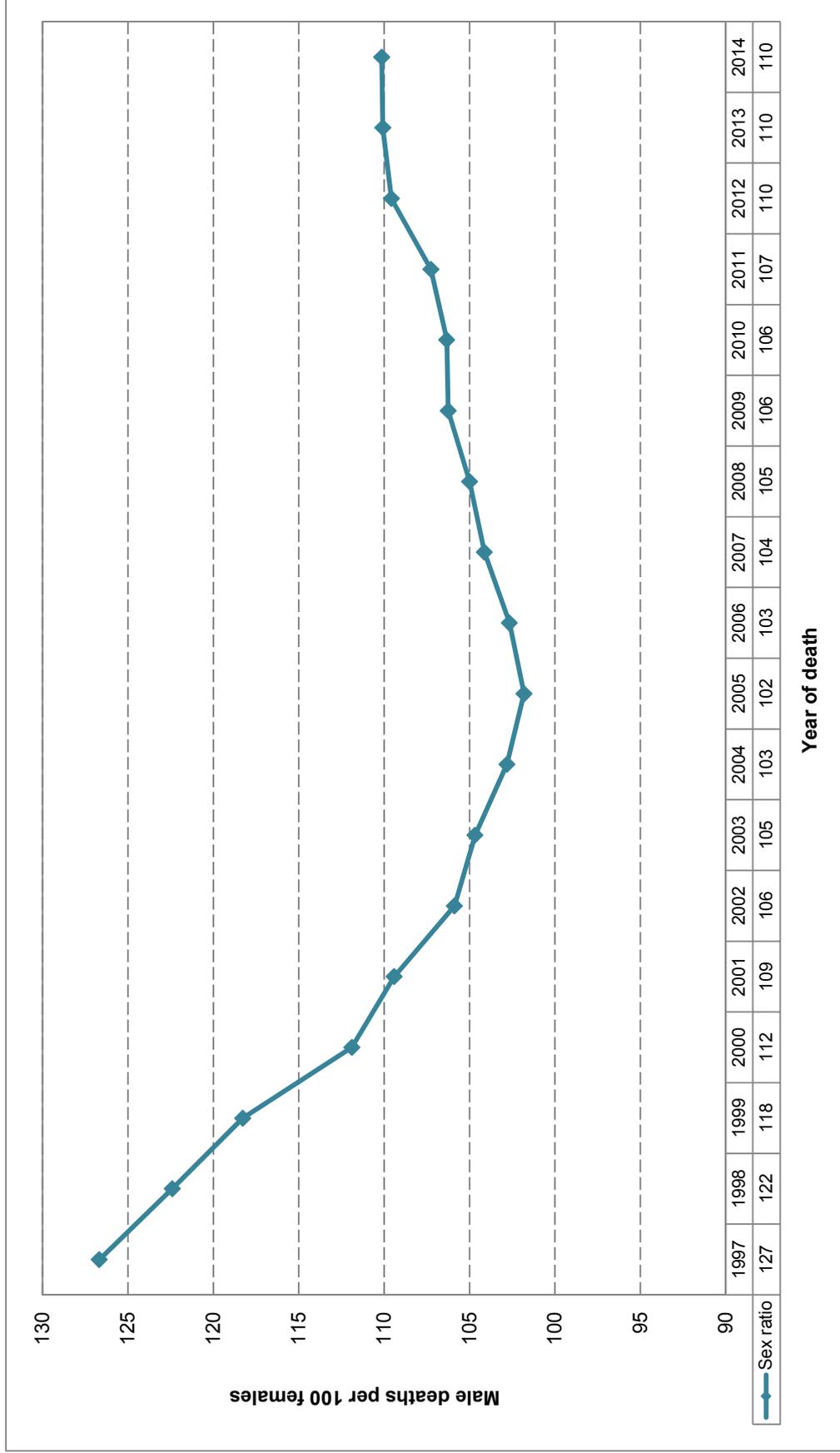
*Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

Appendix F: Age-specific death rates (ASDR) by year of death, 2010–2014*



*Data for 2010–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015.

Appendix G: Sex ratios at death by year of death, 1997–2014*



*Data for 1997–2013 have been updated with late registrations/delayed death notification forms processed in 2014/2015

Appendix H: Number of deaths by province of death occurrence and province of usual residence of the deceased, 2014

Province of death occurrence	Province of usual residence of deceased											Total
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo	Foreign	Unspecified	
Western Cape	41 875	324	151	55	316	82	339	64	99	43	672	44 020
Eastern Cape	820	63 410	42	130	652	90	354	180	82	72	721	66 553
Northern Cape	166	46	13 075	102	17	296	63	19	40	16	216	14 056
Free State	64	241	232	31 294	97	216	358	90	54	180	219	33 045
KwaZulu-Natal	388	1 914	28	114	74 391	131	1 106	356	106	88	516	79 138
North West	44	75	264	330	47	32 472	849	57	188	54	553	34 933
Gauteng	346	482	87	702	631	2 036	88 039	1 472	1 296	275	1 370	96 736
Mpumalanga	20	170	15	64	294	73	750	32 307	851	156	302	35 002
Limpopo	32	52	35	42	103	265	361	852	45 339	274	494	47 849
Foreign	22	13	5	70	30	13	219	41	23	172	105	713
Unspecified	65	73	92	44	186	119	180	173	143	12	228	1 315
Total	43 842	66 800	14 026	32 947	76 764	35 793	92 618	35 611	48 221	1 342	5 396	453 360

Appendix H1: Percentage distribution of deaths by province of death occurrence and province of usual residence of the deceased, 2014

Province of death occurrence	Province of usual residence of deceased											Total
	Western Cape	Eastern Cape	Northern Cape	Free State	KwaZulu-Natal	North West	Gauteng	Mpumalanga	Limpopo	Foreign	Unspecified	
Western Cape	95,1	0,7	0,3	0,1	0,7	0,2	0,8	0,1	0,2	0,1	1,5	100,0
Eastern Cape	1,2	95,3	0,1	0,2	1,0	0,1	0,5	0,3	0,1	0,1	1,1	100,0
Northern Cape	1,2	0,3	93,0	0,7	0,1	2,1	0,4	0,1	0,3	0,1	1,5	100,0
Free State	0,2	0,7	0,7	94,7	0,3	0,7	1,1	0,3	0,2	0,5	0,7	100,0
KwaZulu-Natal	0,5	2,4	0,0	0,1	94,0	0,2	1,4	0,4	0,1	0,1	0,7	100,0
North West	0,1	0,2	0,8	0,9	0,1	93,0	2,4	0,2	0,5	0,2	1,6	100,0
Gauteng	0,4	0,5	0,1	0,7	0,7	2,1	91,0	1,5	1,3	0,3	1,4	100,0
Mpumalanga	0,1	0,5	0,0	0,2	0,8	0,2	2,1	92,3	2,4	0,4	0,9	100,0
Limpopo	0,1	0,1	0,1	0,1	0,2	0,6	0,8	1,8	94,8	0,6	1,0	100,0
Foreign	3,1	1,8	0,7	9,8	4,2	1,8	30,7	5,8	3,2	24,1	14,7	100,0
Unspecified	4,9	5,6	7,0	3,3	14,1	9,0	13,7	13,2	10,9	0,9	17,3	100,0

Appendix I: Number of deaths by age, province and district municipality of death occurrence, 2014

Province of death occurrence	District municipality of death occurrence	Age						
		0	1–14	15–44	45–64	65+	Unsp.	Total
Western Cape	Cape Winelands	215	108	1 469	2 130	2 404	7	6 333
	Central Karoo	32	10	161	255	251	0	709
	City of Cape Town	1 189	517	7 289	7 934	10 160	38	27 127
	Eden	182	77	969	1 565	2 060	1	4 854
	Overberg	71	24	365	529	886	2	1 877
	West Coast	77	36	619	869	973	1	2 575
	Unspecified	20	20	155	146	203	1	545
	Total	1 786	792	11 027	13 428	16 937	50	44 020
Eastern Cape	Alfred Nzo	200	216	1 578	1 120	1 805	12	4 931
	Amathole	301	310	2 831	2 910	4 750	23	11 125
	Buffalo City	290	216	2 461	2 569	3 091	11	8 638
	Cacadu	125	65	943	1 177	1 243	6	3 559
	Chris Hanani	376	251	2 463	2 342	3 292	9	8 733
	Joe Gqabi	167	141	1 237	1 195	1 513	7	4 260
	Nelson Mandela Bay	423	207	2 755	3 256	3 502	14	10 157
	O.R.Tambo	540	709	5 059	3 261	4 412	17	13 998
	Unspecified	29	42	295	306	479	1	1 152
	Total	2 451	2 157	19 622	18 136	24 087	100	66 553
Northern Cape	Frances Baard	249	143	1 036	1 354	1 343	11	4 136
	John Taolo Gaetsewe	300	132	801	741	677	2	2 653
	Namakwa	48	12	196	394	502	1	1 153
	Pixley ka Seme	175	93	873	966	931	3	3 041
	Siyanda	181	73	816	932	859	1	2 862
	Unspecified	23	8	70	45	65	0	211
	Total	976	461	3 792	4 432	4 377	18	14 056
Free State	Fezile Dabi	290	163	1 424	1 670	1 832	6	5 385
	Lejweleputswa	531	202	2 182	2 273	2 036	17	7 241
	Mangaung	465	236	2 561	2 691	2 913	13	8 879
	Thabo Mofutsanyane	642	300	2 687	2 651	2 651	23	8 954
	Xhariep	118	70	621	612	626	4	2 051
	Unspecified	31	29	150	143	180	2	535
	Total	2 077	1 000	9 625	10 040	10 238	65	33 045
KwaZulu-Natal	Amajuba	266	110	842	732	869	8	2 827
	eThekweni	765	472	5 479	4 742	5 105	41	16 604
	iLembe	231	179	1 381	1 111	1 446	18	4 366
	Sisonke	199	193	1 421	1 083	1 450	3	4 349
	Ugu	348	276	2 511	1 928	2 703	16	7 782
	uMgungundlovu	443	272	3 250	3 049	3 759	11	10 784
	uMkhanyakude	226	159	1 150	822	1 111	3	3 471
	uMzinyathi	326	176	1 377	1 197	1 424	15	4 515
	uThukela	374	252	2 746	2 212	2 306	14	7 904
	uThungulu	641	282	2 669	1 929	2 219	31	7 771
	Zululand	494	255	1 980	1 414	1 727	11	5 881
	Unspecified	100	124	882	712	1 060	6	2 884
Total	4 413	2 750	25 688	20 931	25 179	177	79 138	

Appendix I: Number of deaths by age, province and district municipality of death occurrence, 2014* (concluded)

Province of death occurrence	District municipality of death occurrence	Age						Total
		0	1–14	15–44	45–64	65+	Unsp.	
North West	Bojanala	657	388	3 274	3 206	3 724	31	11 280
	Dr Kenneth Kaunda	552	242	2 251	2 484	2 445	29	8 003
	Dr Ruth Segomotsi Mompati	537	293	1 440	1 474	1 735	4	5 483
	Ngaka Modiri Molema	720	416	2 513	2 624	2 766	14	9 053
	Unspecified	80	58	349	272	354	1	1 114
	Total	2 546	1 397	9 827	10 060	11 024	79	34 933
Gauteng	City of Johannesburg	2 131	728	8 743	8 230	9 582	231	29 645
	City of Tshwane	1 210	647	6 243	6 673	8 423	25	23 221
	Ekurhuleni	1 676	682	7 553	6 759	6 824	64	23 558
	Sedibeng	507	220	2 582	2 854	2 951	23	9 137
	West Rand	483	223	2 486	2 617	2 727	40	8 576
	Unspecified	140	113	981	637	689	39	2 599
	Total	6 147	2 613	28 588	27 770	31 196	422	96 736
Mpumalanga	Ehlanzeni	643	563	4 892	3 589	3 758	42	13 487
	Gert Sibande	782	329	3 394	2 723	2 507	24	9 759
	Nkangala	554	378	3 191	3 156	3 019	21	10 319
	Unspecified	57	70	447	347	513	3	1 437
	Total	2 036	1 340	11 924	9 815	9 797	90	35 002
Limpopo	Capricorn	837	593	3 229	3 200	4 414	4	12 277
	Greater Sekhukhune	418	408	2 539	2 403	3 471	5	9 244
	Mopani	816	444	2 566	2 361	2 992	11	9 190
	Vhembe	563	463	2 311	2 293	3 600	31	9 261
	Waterberg	348	223	1 593	1 324	1 634	10	5 132
	Unspecified	162	152	718	619	1 086	8	2 745
	Total	3 144	2 283	12 956	12 200	17 197	69	47 849
Foreign	Total	4	8	229	259	210	3	713

*Excluding deaths with unspecified province of death occurrence.

Appendix I1: Percentage distribution of deaths by age, province and district municipality of death occurrence, 2014

Province of death occurrence	District municipality of death occurrence	Age						
		0	1–14	15–44	45–64	65+	Unsp.	Total
Western Cape	Cape Winelands	3,4	1,7	23,2	33,6	38,0	0,1	100,0
	Central Karoo	4,5	1,4	22,7	36,0	35,4	0,0	100,0
	City of Cape Town	4,4	1,9	26,9	29,2	37,5	0,1	100,0
	Eden	3,7	1,6	20,0	32,2	42,4	0,0	100,0
	Overberg	3,8	1,3	19,4	28,2	47,2	0,1	100,0
	West Coast	3,0	1,4	24,0	33,7	37,8	0,0	100,0
	Unspecified	3,7	3,7	28,4	26,8	37,2	0,2	100,0
	Total	4,1	1,8	25,0	30,5	38,5	0,1	100,0
Eastern Cape	Alfred Nzo	4,1	4,4	32,0	22,7	36,6	0,2	100,0
	Amathole	2,7	2,8	25,4	26,2	42,7	0,2	100,0
	Buffalo City	3,4	2,5	28,5	29,7	35,8	0,1	100,0
	Cacadu	3,5	1,8	26,5	33,1	34,9	0,2	100,0
	Chris Hani	4,3	2,9	28,2	26,8	37,7	0,1	100,0
	Joe Gqabi	3,9	3,3	29,0	28,1	35,5	0,2	100,0
	Nelson Mandela Bay	4,2	2,0	27,1	32,1	34,5	0,1	100,0
	O.R.Tambo	3,9	5,1	36,1	23,3	31,5	0,1	100,0
	Unspecified	2,5	3,6	25,6	26,6	41,6	0,1	100,0
Total	3,7	3,2	29,5	27,3	36,2	0,2	100,0	
Northern Cape	Frances Baard	6,0	3,5	25,0	32,7	32,5	0,3	100,0
	John Taolo Gaetsewe	11,3	5,0	30,2	27,9	25,5	0,1	100,0
	Namakwa	4,2	1,0	17,0	34,2	43,5	0,1	100,0
	Pixley ka Seme	5,8	3,1	28,7	31,8	30,6	0,1	100,0
	Siyanda	6,3	2,6	28,5	32,6	30,0	0,0	100,0
	Unspecified	10,9	3,8	33,2	21,3	30,8	0,0	100,0
	Total	6,9	3,3	27,0	31,5	31,1	0,1	100,0
Free State	Fezile Dabi	5,4	3,0	26,4	31,0	34,0	0,1	100,0
	Lejweleputswa	7,3	2,8	30,1	31,4	28,1	0,2	100,0
	Mangaung	5,2	2,7	28,8	30,3	32,8	0,1	100,0
	Thabo Mofutsanyane	7,2	3,4	30,0	29,6	29,6	0,3	100,0
	Xhariep	5,8	3,4	30,3	29,8	30,5	0,2	100,0
	Unspecified	5,8	5,4	28,0	26,7	33,6	0,4	100,0
	Total	6,3	3,0	29,1	30,4	31,0	0,2	100,0
KwaZulu-Natal	Amajuba	9,4	3,9	29,8	25,9	30,7	0,3	100,0
	eThekwini	4,6	2,8	33,0	28,6	30,7	0,2	100,0
	iLembe	5,3	4,1	31,6	25,4	33,1	0,4	100,0
	Sisonke	4,6	4,4	32,7	24,9	33,3	0,1	100,0
	Ugu	4,5	3,5	32,3	24,8	34,7	0,2	100,0
	uMgungundlovu	4,1	2,5	30,1	28,3	34,9	0,1	100,0
	uMkhanyakude	6,5	4,6	33,1	23,7	32,0	0,1	100,0
	uMzinyathi	7,2	3,9	30,5	26,5	31,5	0,3	100,0
	uThukela	4,7	3,2	34,7	28,0	29,2	0,2	100,0
	uThungulu	8,2	3,6	34,3	24,8	28,6	0,4	100,0
	Zululand	8,4	4,3	33,7	24,0	29,4	0,2	100,0
	Unspecified	3,5	4,3	30,6	24,7	36,8	0,2	100,0
	Total	5,6	3,5	32,5	26,4	31,8	0,2	100,0

Appendix I1: Percentage distribution of deaths by age, province and district municipality of death occurrence, 2014 (concluded)

Province of death occurrence	District municipality of death occurrence	Age						
		0	1–14	15–44	45–64	65+	Unsp.	Total
North West	Bojanala	5,8	3,4	29,0	28,4	33,0	0,3	100,0
	Dr Kenneth Kaunda	6,9	3,0	28,1	31,0	30,6	0,4	100,0
	Dr Ruth Segomotsi Mompati	9,8	5,3	26,3	26,9	31,6	0,1	100,0
	Ngaka Modiri Molema	8,0	4,6	27,8	29,0	30,6	0,2	100,0
	Unspecified	7,2	5,2	31,3	24,4	31,8	0,1	100,0
	Total	7,3	4,0	28,1	28,8	31,6	0,2	100,0
Gauteng	City of Johannesburg	7,2	2,5	29,5	27,8	32,3	0,8	100,0
	City of Tshwane	5,2	2,8	26,9	28,7	36,3	0,1	100,0
	Ekurhuleni	7,1	2,9	32,1	28,7	29,0	0,3	100,0
	Sedibeng	5,5	2,4	28,3	31,2	32,3	0,3	100,0
	West Rand	5,6	2,6	29,0	30,5	31,8	0,5	100,0
	Unspecified	5,4	4,3	37,7	24,5	26,5	1,5	100,0
	Total	6,4	2,7	29,6	28,7	32,2	0,4	100,0
Mpumalanga	Ehlanzeni	4,8	4,2	36,3	26,6	27,9	0,3	100,0
	Gert Sibande	8,0	3,4	34,8	27,9	25,7	0,2	100,0
	Nkangala	5,4	3,7	30,9	30,6	29,3	0,2	100,0
	Unspecified	4,0	4,9	31,1	24,1	35,7	0,2	100,0
	Total	5,8	3,8	34,1	28,0	28,0	0,3	100,0
Limpopo	Capricorn	6,8	4,8	26,3	26,1	36,0	0,0	100,0
	Greater Sekhukhune	4,5	4,4	27,5	26,0	37,5	0,1	100,0
	Mopani	8,9	4,8	27,9	25,7	32,6	0,1	100,0
	Vhembe	6,1	5,0	25,0	24,8	38,9	0,3	100,0
	Waterberg	6,8	4,3	31,0	25,8	31,8	0,2	100,0
	Unspecified	5,9	5,5	26,2	22,6	39,6	0,3	100,0
	Total	6,6	4,8	27,1	25,5	35,9	0,1	100,0
Foreign	Total	0,6	1,1	32,1	36,3	29,5	0,4	100,0

Appendix J: Number of deaths by sex, province and district municipality of death occurrence, 2014*

Province of death occurrence	District municipality of death occurrence	Sex				Sex ratio at death**
		Male	Female	Unspecified	Total	
Western Cape	Cape Winelands	3 500	2 818	15	6 333	124
	Central Karoo	348	361	0	709	96
	City of Cape Town	14 926	12 118	83	27 127	123
	Eden	2 633	2 212	9	4 854	119
	Overberg	1 054	822	1	1 877	128
	West Coast	1 469	1 101	5	2 575	133
	Unspecified	325	220		545	148
	Total	24 255	19 652	113	44 020	123
Eastern Cape	Alfred Nzo	2 407	2 509	15	4 931	96
	Amathole	5 834	5 266	25	11 125	111
	Buffalo City	4 486	4 121	31	8 638	109
	Cacadu	1 915	1 634	10	3 559	117
	Chris Hani	4 500	4 216	17	8 733	107
	Joe Gqabi	2 224	2 028	8	4 260	110
	Nelson Mandela Bay	5 303	4 831	23	10 157	110
	O.R.Tambo	6 962	7 007	29	13 998	99
	Unspecified	603	545	4	1 152	111
	Total	34 234	32 157	162	66 553	106
Northern Cape	Frances Baard	2 137	1 973	26	4 136	108
	John Taolo Gaetsewe	1 405	1 246	2	2 653	113
	Namakwa	661	490	2	1 153	135
	Pixley ka Seme	1 557	1 472	12	3 041	106
	Siyanda	1 507	1 350	5	2 862	112
	Unspecified	115	94	2	211	122
	Total	7 382	6 625	49	14 056	111
Free State	Fezile Dabi	2 865	2 514	6	5 385	114
	Lejweleputswa	3 855	3 355	31	7 241	115
	Mangaung	4 693	4 149	37	8 879	113
	Thabo Mofutsanyane	4 550	4 379	25	8 954	104
	Xhariep	1 103	938	10	2 051	118
	Unspecified	268	265	2	535	101
	Total	17 334	15 600	111	33 045	111
KwaZulu-Natal	Amajuba	1 483	1 336	8	2 827	111
	eThekweni	8 645	7 915	44	16 604	109
	iLembe	2 197	2 144	25	4 366	102
	Sisonke	2 189	2 157	3	4 349	101
	Ugu	4 014	3 744	24	7 782	107
	uMgungundlovu	5 504	5 253	27	10 784	105
	uMkhanyakude	1 775	1 673	23	3 471	106
	uMzinyathi	2 283	2 211	21	4 515	103
	uThukela	4 001	3 883	20	7 904	103
	uThungulu	3 970	3 775	26	7 771	105
	Zululand	2 912	2 944	25	5 881	99
	Unspecified	1 459	1 417	8	2 884	103
Total	40 432	38 452	254	79 138	105	

*Excluding deaths with unspecified province of death occurrence.

** Male deaths per 100 female deaths.

Appendix J: Number of deaths by sex, province and district municipality of death occurrence, 2014* (concluded)

Province of death occurrence	District municipality of death occurrence	Sex				Sex ratio at death**
		Male	Female	Unspecified	Total	
North West	Bojanala	6 068	5 171	41	11 280	117
	Dr Kenneth Kaunda	4 322	3 655	26	8 003	118
	Dr Ruth Segomotsi Mompati	2 896	2 569	18	5 483	113
	Ngaka Modiri Molema	4 857	4 156	40	9 053	117
	Unspecified	626	483	5	1 114	130
	Total	18 769	16 034	130	34 933	117
Gauteng	City of Johannesburg	15 658	13 654	333	29 645	115
	City of Tshwane	12 067	11 045	109	23 221	109
	Ekurhuleni	12 322	11 064	172	23 558	111
	Sedibeng	4 930	4 156	51	9 137	119
	West Rand	4 696	3 805	75	8 576	123
	Unspecified	1 513	1 035	51	2 599	146
	Total	51 186	44 759	791	96 736	114
Mpumalanga	Ehlanzeni	6 899	6 536	52	13 487	106
	Gert Sibande	5 116	4 624	19	9 759	111
	Nkangala	5 490	4 785	44	10 319	115
	Unspecified	739	692	6	1 437	107
	Total	18 244	16 637	121	35 002	110
Limpopo	Capricorn	6 202	6 055	20	12 277	102
	Greater Sekhukhune	4 486	4 745	13	9 244	95
	Mopani	4 507	4 657	26	9 190	97
	Vhembe	4 394	4 838	29	9 261	91
	Waterberg	2 677	2 440	15	5 132	110
	Unspecified	1 367	1 367	11	2 745	100
	Total	23 633	24 102	114	47 849	98
Foreign	Unspecified	447	264	2	713	169

*Excluding deaths with unspecified province of death occurrence.

** Male deaths per 100 female deaths

Appendix K: All underlying causes of death, 2014

Causes of death (based on the 10th revision, International Classification of Disease, 1992)	Number	Percentage
All causes	453 360	100,0
Ill-defined and unknown causes of mortality (R95-R99)	54 152	11,9
Tuberculosis (A15-A19)	37 878	8,4
Other external causes of accidental injury (W00-X59)	26 056	5,7
Cerebrovascular diseases (I60-I69)	23 088	5,1
Diabetes mellitus (E10-E14)	22 747	5,0
Influenza and pneumonia (J09-J18)	22 036	4,9
Human immunodeficiency virus [HIV] disease (B20-B24)	21 938	4,8
Other forms of heart disease (I30-I52)	21 339	4,7
Hypertensive diseases (I10-I15)	17 770	3,9
Intestinal infectious diseases (A00-A09)	14 471	3,2
Other viral diseases (B25-B34)	13 996	3,1
Chronic lower respiratory diseases (J40-J47)	12 096	2,7
Ischaemic heart diseases (I20-I25)	10 916	2,4
Malignant neoplasms of digestive organs (C15-C26)	9 636	2,1
Event of undetermined intent (Y10-Y34)	8 176	1,8
Certain disorders involving the immune mechanism (D80-D89)	6 938	1,5
Renal failure (N17-N19)	6 848	1,5
Transport accidents (V01-V99)	5 926	1,3
Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	5 771	1,3
Other bacterial diseases (A30-A49)	5 678	1,3
Assault (X85-Y09)	5 314	1,2
Malignant neoplasms of female genital organs (C51-C58)	4 913	1,1
Other acute lower respiratory infections (J20-J22)	4 589	1,0
Diseases of liver (K70-K77)	4 173	0,9
Inflammatory diseases of the central nervous system (G00-G09)	3 810	0,8
Other diseases of the respiratory system (J95-J99)	3 803	0,8
Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)	3 717	0,8
Malignant neoplasms of ill-defined, secondary and unspecified sites (C76-C80)	3 456	0,8
Episodic and paroxysmal disorders (G40-G47)	3 207	0,7
Malignant neoplasms of breast (C50)	3 186	0,7
Metabolic disorders (E70-E90)	2 938	0,6
Malignant neoplasms, stated or presumed to be primary, of lymphoid, haematopoietic and related tissue (C81-C96)	2 852	0,6
Malignant neoplasms of male genital organs (C60-C63)	2 827	0,6
General symptoms and signs (R50-R69)	2 616	0,6
Protozoal diseases (B50-B64)	2 598	0,6
Pulmonary heart disease and diseases of pulmonary circulation (I26-I28)	2 525	0,6
Diseases of oesophagus, stomach and duodenum (K20-K31)	2 095	0,5
Aplastic and other anaemias (D60-D64)	2 014	0,4
Malnutrition (E40-E46)	1 879	0,4
Complications of medical and surgical care (Y40-Y84)	1 660	0,4
Non-infective enteritis and colitis (K50-K52)	1 503	0,3
Other diseases of intestines (K55-K63)	1 471	0,3
Diseases of arteries, arterioles and capillaries (I70-I79)	1 449	0,3
Other disorders originating in the perinatal period (P90-P96)	1 346	0,3
Other respiratory diseases principally affecting the interstitium (J80-J84)	1 320	0,3

Appendix K: All underlying causes of death, 2014 (continued)

Causes of death (based on the 10th revision, International Classification of Disease, 1992)	Number	Percentage
All causes	453 360	100,0
Organic, including symptomatic, mental disorders (F00-F09)	1 260	0,3
Other disorders of glucose regulation and pancreatic internal secretion (E15-E16)	1 243	0,3
Malignant neoplasms of mesothelial and soft tissue (C45-C49)	1 222	0,3
Disorders related to length of gestation and fetal growth (P05-P08)	1 217	0,3
Infections specific to the perinatal period (P35-P39)	1 212	0,3
Neoplasms of uncertain or unknown behaviour (D37-D48)	1 128	0,2
Other diseases of the digestive system (K90-K93)	1 079	0,2
Malignant neoplasms of lip, oral cavity and pharynx (C00-C14)	1 035	0,2
Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)	950	0,2
Malignant neoplasms of urinary tract (C64-C68)	947	0,2
Disorders of gallbladder, biliary tract and pancreas (K80-K87)	944	0,2
Other disorders of the nervous system (G90-G99)	849	0,2
Other degenerative diseases of the nervous system (G30-G32)	786	0,2
Cerebral palsy and other paralytic syndromes (G80-G83)	776	0,2
Lung diseases due to external agents (J60-J70)	709	0,2
Mycoses (B35-B49)	706	0,2
Arthropathies (M00-M25)	694	0,2
Sequelae of infectious and parasitic diseases (B90-B94)	693	0,2
Diseases of veins, lymphatic vessels and lymph nodes, not elsewhere classified (I80-I89)	681	0,2
Congenital malformations of the circulatory system (Q20-Q28)	661	0,1
Malignant neoplasms of skin (C43-C44)	623	0,1
Intentional self-harm (X60-X84)	585	0,1
Malignant neoplasms of eye, brain and other parts of central nervous system (C69-C72)	541	0,1
Glomerular diseases (N00-N08)	501	0,1
Malignant neoplasms of independent (primary) multiple sites (C97)	486	0,1
Haemorrhagic and haematological disorders of fetus and newborn (P50-P61)	470	0,1
Mental and behavioural disorders due to psychoactive substance use (F10-F19)	450	0,1
Coagulation defects, purpura and other haemorrhagic conditions (D65-D69)	440	0,1
Other congenital malformations (Q80-Q89)	432	0,1
Systemic connective tissue disorders (M30-M36)	401	0,1
Obesity and other hyperalimentation (E65-E68)	397	0,1
Infections of the skin and subcutaneous tissue (L00-L08)	377	0,1
Other diseases of pleura (J90-J94)	365	0,1
Other diseases of urinary system (N30-N39)	354	0,1
Other obstetric conditions, not elsewhere classified (O95-O99)	350	0,1
Digestive system disorders of fetus and newborn (P75-P78)	348	0,1
Extrapyramidal and movement disorders (G20-G26)	344	0,1
Soft tissue disorders (M60-M79)	322	0,1
Chromosomal abnormalities, not elsewhere classified (Q90-Q99)	304	0,1
Chronic rheumatic heart diseases (I05-I09)	300	0,1
Disorders of thyroid gland (E00-E07)	291	0,1
Diseases of male genital organs (N40-N51)	283	0,1
Viral hepatitis (B15-B19)	282	0,1
Other disorders of kidney and ureter (N25-N29)	272	0,1
Other disorders of the skin and subcutaneous tissue (L80-L99)	271	0,1

Appendix K: All underlying causes of death, 2014 (continued)

Causes of death (based on the 10th revision, International Classification of Disease, 1992)	Number	Percentage
All causes	453 360	100,0
Renal tubulo-interstitial diseases (N10-N16)	268	0,1
Congenital malformations of the nervous system (Q00-Q07)	258	0,1
Hernia (K40-K46)	231	0,1
Suppurative and necrotic conditions of lower respiratory tract (J85-J86)	221	0,0
Diseases of peritoneum (K65-K67)	218	0,0
Schizophrenia, schizotypal and delusional disorders (F20-F29)	203	0,0
Oedema, proteinuria and hypertensive disorders in pregnancy, childbirth and the puerperium (O10-O16)	201	0,0
Benign neoplasms (D10-D36)	196	0,0
Systemic atrophies primarily affecting the central nervous system (G10-G13)	187	0,0
Malignant neoplasms of thyroid and other endocrine glands (C73-C75)	184	0,0
Viral infections characterized by skin and mucous membrane lesions (B00-B09)	182	0,0
Other congenital malformations of the digestive system (Q38-Q45)	173	0,0
Other and unspecified disorders of the circulatory system (I95-I99)	165	0,0
Acute upper respiratory infections (J00-J06)	149	0,0
Diseases of appendix (K35-K38)	145	0,0
Complications predominantly related to the puerperium (O85-O92)	138	0,0
Polyneuropathies and other disorders of the peripheral nervous system (G60-G64)	136	0,0
Complications of labour and delivery (O60-O75)	134	0,0
Malignant neoplasms of bone and articular cartilage (C40-C41)	133	0,0
Non-inflammatory disorders of female genital tract (N80-N98)	129	0,0
Congenital malformations and deformations of the musculoskeletal system (Q65-Q79)	127	0,0
Osteopathies and chondropathies (M80-M94)	122	0,0
Viral infections of the central nervous system (A80-A89)	117	0,0
Disorders of other endocrine glands (E20-E35)	104	0,0
Pregnancy with abortive outcome (O00-O08)	103	0,0
Diseases of myoneural junction and muscle (G70-G73)	96	0,0
Other diseases of upper respiratory tract (J30-J39)	93	0,0
Inflammatory diseases of female pelvic organs (N70-N77)	89	0,0
Urticaria and erythema (L50-L54)	85	0,0
Infections with a predominantly sexual mode of transmission (A50-A64)	84	0,0
Helminthiasis (B65-B83)	83	0,0
Other diseases of blood and blood-forming organs (D70-D77)	81	0,0
Congenital malformations of the respiratory system (Q30-Q34)	81	0,0
Dorsopathies (M40-M54)	78	0,0
Conditions involving the integument and temperature regulation of fetus and newborn (P80-P83)	76	0,0
Demyelinating diseases of the central nervous system (G35-G37)	73	0,0
Congenital malformations of the urinary system (Q60-Q64)	70	0,0
Diseases of oral cavity, salivary glands and jaws (K00-K14)	69	0,0
Other infectious diseases (B99)	62	0,0
Nutritional anaemias (D50-D53)	61	0,0
Haemolytic anaemias (D55-D59)	60	0,0
Other maternal disorders predominantly related to pregnancy (O20-O29)	58	0,0
Diseases of middle ear and mastoid (H65-H75)	52	0,0
Sequelae of external causes of morbidity and mortality (Y85-Y89)	44	0,0
Other nutritional deficiencies (E50-E64)	43	0,0
Maternal care related to the fetus and amniotic cavity and possible delivery problems (O30-O48)	43	0,0
Mood [affective] disorders (F30-F39)	33	0,0
Dermatitis and eczema (L20-L30)	31	0,0
Arthropod-borne viral fevers and viral haemorrhagic fevers (A90-A99)	26	0,0

Appendix K: All underlying causes of death, 2014 (concluded)

Causes of death (based on the 10th revision, International Classification of Disease, 1992)	Number	Percentage
All causes	453 360	100,0
Acute rheumatic fever (I00-I02)	25	0,0
Bullous disorders (L10-L14)	23	0,0
Disorders of breast (N60-N64)	22	0,0
Cleft lip and cleft palate (Q35-Q37)	19	0,0
Birth trauma (P10-P15)	17	0,0
Neurotic, stress-related and somatoform disorders (F40-F48)	16	0,0
Unspecified mental disorder (F99)	12	0,0
Nerve, nerve root and plexus disorders (G50-G59)	10	0,0
Transitory endocrine and metabolic disorders specific to fetus and newborn (P70-P74)	10	0,0
Congenital malformations of eye, ear, face and neck (Q10-Q18)	9	0,0
Behavioural syndromes associated with physiological disturbances and physical factors (F50-F59)	8	0,0
Other spirochaetal diseases (A65-A69)	7	0,0
Rickettsioses (A75-A79)	7	0,0
In situ neoplasms (D00-D09)	7	0,0
Mental retardation (F70-F79)	6	0,0
Behavioural and emotional disorders with onset usually occurring in childhood and adolescence (F90-F98)	6	0,0
Urolithiasis (N20-N23)	6	0,0
Certain zoonotic bacterial diseases (A20-A28)	5	0,0
Symptoms and signs involving the urinary system (R30-R39)	5	0,0
Disorders of sclera, cornea, iris and ciliary body (H15-H22)	4	0,0
Visual disturbances and blindness (H53-H54)	4	0,0
Abnormal findings on examination of other body fluids, substances and tissues, without diagnosis (R83-R89)	4	0,0
Pediculosis, acariasis and other infestations (B85-B89)	3	0,0
Papulosquamous disorders (L40-L45)	3	0,0
Congenital malformations of genital organs (Q50-Q56)	3	0,0
Disorders of adult personality and behaviour (F60-F69)	2	0,0
Disorders of eyelid, lacrimal system and orbit (H00-H06)	2	0,0
Disorders of lens (H25-H28)	2	0,0
Glaucoma (H40-H42)	2	0,0
Disorders of skin appendages (L60-L75)	2	0,0
Other disorders of the musculoskeletal system and connective tissue (M95-M99)	2	0,0
Symptoms and signs involving the circulatory and respiratory systems (R00-R09)	2	0,0
Symptoms and signs involving the nervous and musculoskeletal systems (R25-R29)	2	0,0
Abnormal findings on examination of blood, without diagnosis (R70-R79)	2	0,0
Other diseases caused by chlamydiae (A70-A74)	1	0,0
Disorders of choroid and retina (H30-H36)	1	0,0
Disorders of ocular muscles, binocular movement, accommodation and refraction (H49-H52)	1	0,0
Diseases of external ear (H60-H62)	1	0,0
Other disorders of ear (H90-H95)	1	0,0
Radiation-related disorders of the skin and subcutaneous tissue (L55-L59)	1	0,0
Symptoms and signs involving the skin and subcutaneous tissue (R20-R23)	1	0,0

Appendix L: Detailed description of the broad groups of natural causes of death which were among the ten leading causes in 2014

Causes of death (based on ICD-10)		Number	Percentage
Intestinal infectious diseases (A00-A09)			
A00	Cholera (A00)	1	0,0
A01	Typhoid and paratyphoid fevers (A01)	7	0,0
A02	Other salmonella infections (A02)	13	0,1
A03	Shigellosis (A03)	7	0,0
A04	Other bacterial intestinal infections (A04)	18	0,1
A05	Other bacterial foodborne intoxications (A05)	1	0,0
A06	Amoebiasis (A06)	14	0,1
A07	Other protozoal intestinal diseases (A07)	19	0,1
A08	Viral and other specified intestinal infections (A08)	20	0,1
A09	Diarrhoea and gastroenteritis of presumed infectious origin (A09)	14 371	99,3
	Total	14 471	100,0
Tuberculosis (A15-A19)			
A16	Respiratory tuberculosis, not confirmed bacteriologically or histologically (A16)	29 524	77,9
A17	Tuberculosis of nervous system (A17)	2 182	5,8
A18	Tuberculosis of other organs (A18)	1 287	3,4
A19	Miliary tuberculosis (A19)	4 029	10,6
Drug-resistant tuberculosis			
U51	Multidrug-resistant tuberculosis (U51)	779	2,1
U52	Extensively drug-resistant tuberculosis (U52)	77	0,2
	Total	37 878	100,0
Human immunodeficiency virus [HIV] disease (B20-B24)			
B20	Human immunodeficiency virus [HIV] disease resulting in infectious and parasitic diseases (B20)	14 270	65,0
B21	Human immunodeficiency virus [HIV] disease resulting in malignant neoplasms (B21)	830	3,8
B22	Human immunodeficiency virus [HIV] disease resulting in other specified diseases (B22)	1 233	5,6
B23	Human immunodeficiency virus [HIV] disease resulting in other conditions (B23)	3 268	14,9
B24	Unspecified human immunodeficiency virus [HIV] disease (B24)	2 337	10,7
	Total	21 938	100,0
Other viral diseases (B25-B34)			
B25	Cytomegaloviral disease (B25)	64	0,5
B26	Mumps (B26)	1	0,0
B27	Infectious mononucleosis (B27)	1	0,0
B30	Viral conjunctivitis (B30)	2	0,0
B33	Other viral diseases, not elsewhere classified (B33)	13 792	98,5
B34	Viral infection of unspecified site (B34)	136	1,0
	Total	13 996	100,0
Diabetes mellitus (E10-E14)			
E10	Insulin-dependent diabetes mellitus (E10)	264	1,2
E11	Non-insulin-dependent diabetes mellitus (E11)	1 478	6,5
E12	Malnutrition-related diabetes mellitus (E12)	6	0,0
E14	Unspecified diabetes mellitus (E14)	20 999	92,3
	Total	22 747	100,0

Appendix L: Detailed description of the broad groups of natural causes of death which were among the ten leading causes in 2014 (continued)

Causes of death (based on ICD-10)		Number	Percentage
	Hypertensive disease (I10-I15)		
I10	Essential (primary) hypertension (I10)	8 652	48,7
I11	Hypertensive heart disease (I11)	7 047	39,7
I12	Hypertensive renal disease (I12)	1 670	9,4
I13	Hypertensive heart and renal disease (I13)	401	2,3
	Total	17 770	100,0
	Other forms of heart disease (I30-I52)		
I30	Acute pericarditis (I30)	11	0,1
I31	Other diseases of pericardium (I31)	106	0,5
I33	Acute and subacute endocarditis (I33)	54	0,3
I34	Nonrheumatic mitral valve disorders (I34)	106	0,5
I35	Nonrheumatic aortic valve disorders (I35)	209	1,0
I36	Nonrheumatic tricuspid valve disorders (I36)	2	0,0
I37	Pulmonary valve disorders (I37)	3	0,0
I38	Endocarditis, valve unspecified (I38)	189	0,9
I40	Acute myocarditis (I40)	28	0,1
I42	Cardiomyopathy (I42)	2 762	12,9
I44	Atrioventricular and left bundle-branch block (I44)	28	0,1
I45	Other conduction disorders (I45)	53	0,2
I46	Cardiac arrest (I46)	3 673	17,2
I47	Paroxysmal tachycardia (I47)	33	0,2
I48	Atrial fibrillation and flutter (I48)	512	2,4
I49	Other cardiac arrhythmias (I49)	269	1,3
I50	Heart failure (I50)	12 297	57,6
I51	Complications and ill-defined descriptions of heart disease (I51)	1 004	4,7
	Total	21 339	100,0
	Cerebrovascular disease (I60-I69)		
I60	Subarachnoid haemorrhage (I60)	394	1,7
I61	Intracerebral haemorrhage (I61)	1 543	6,7
I62	Other nontraumatic intracranial haemorrhage (I62)	784	3,4
I63	Cerebral infarction (I63)	448	1,9
I64	Stroke, not specified as haemorrhage or infarction (I64)	18 929	82,0
I67	Other cerebrovascular diseases (I67)	654	2,8
I69	Sequelae of cerebrovascular disease (I69)	336	1,5
	Total	23 088	100,0
	Influenza and pneumonia (J09-J18)		
J10	Influenza due to identified influenza virus (J10)	23	0,1
J11	Influenza, virus not identified (J11)	453	2,1
J12	Viral pneumonia, not elsewhere classified (J12)	25	0,1
J13	Pneumonia due to Streptococcus pneumoniae (J13)	5	0,0
J14	Pneumonia due to Haemophilus influenzae (J14)	1	0,0
J15	Bacterial pneumonia, not elsewhere classified (J15)	78	0,4
J18	Pneumonia, organism unspecified (J18)	21 451	97,3
	Total	22 036	100,0

Appendix L: Detailed description of the broad groups of natural causes of death which were among the ten leading causes in 2014 (concluded)

Causes of death (based on ICD-10)		Number	Percentage
	Chronic lower respiratory diseases (J40-J47)		
J40	Bronchitis, not specified as acute or chronic (J40)	312	2,6
J42	Unspecified chronic bronchitis (J42)	233	1,9
J43	Emphysema (J43)	798	6,6
J44	Other chronic obstructive pulmonary disease (J44)	6 729	55,6
J45	Asthma (J45)	3 040	25,1
J46	Status asthmaticus (J46)	798	6,6
J47	Bronchiectasis (J47)	186	1,5
	Total	12 096	100,0

Appendix M: The ten leading underlying natural causes of death by age and sex: South Africa, 2014

South Africa, both sexes, all ages			South Africa, males, all ages			South Africa, females, all ages		
No.	%	%	No.	%	%	No.	%	%
1	37 876	6.4	1	22 545	9.5	1	15 174	7.1
2	23 088	5.1	2	11 203	4.7	2	13 819	6.4
3	22 747	5.0	3	11 180	4.7	3	13 149	6.1
4	22 036	4.9	4	9 908	4.2	4	11 418	5.3
5	21 938	4.8	5	9 872	4.2	5	11 081	5.2
6	21 339	4.7	6	8 914	3.8	6	10 739	5.0
7	17 770	3.9	7	7 300	3.1	7	10 685	5.0
8	14 471	3.2	8	6 913	2.9	8	7 607	3.5
9	13 996	3.1	9	6 795	2.9	9	7 019	3.3
10	12 096	2.7	10	6 670	2.8	10	4 913	2.3
	198 240	43.7		99 026	41.9		96 205	45.7
	47 761	10.5		36 307	15.3		11 017	5.1
All causes	453 360	100.0	All causes	236 613	100.0	All causes	214 826	100.0
South Africa, both sexes, 0			South Africa, males, 0			South Africa, females, 0		
No.	%	%	No.	%	%	No.	%	%
1	3 707	14.5	1	1 997	14.8	1	1 605	13.8
2	3 316	12.9	2	1 791	13.2	2	1 494	12.9
3	2 301	9.0	3	1 147	8.5	3	1 126	9.7
4	1 345	5.2	4	731	5.4	4	548	4.7
5	1 211	4.7	5	661	4.9	5	526	4.5
6	1 210	4.7	6	648	4.8	6	525	4.5
7	938	3.7	7	474	3.5	7	433	3.7
8	866	3.4	8	466	3.4	8	394	3.4
9	480	1.9	9	282	2.1	9	222	1.9
10	470	1.8	10	258	1.9	10	214	1.8
	8 894	34.7		4 608	34.1		4 118	35.4
All causes	25 643	100.0	All causes	13 529	100.0	All causes	11 618	100.0
South Africa both sexes, 1-14			South Africa, males, 1-14			South Africa, females, 1-14		
No.	%	%	No.	%	%	No.	%	%
1	1 817	12.2	1	993	12.3	1	809	12.1
2	1 118	7.5	2	584	7.2	2	532	8.0
3	785	5.3	3	419	5.2	3	357	5.3
4	686	4.6	4	370	4.6	4	315	4.7
5	412	2.8	5	220	2.7	5	190	2.8
6	341	2.3	6	191	2.4	6	149	2.2
7	289	1.9	7	151	1.9	7	145	2.2
8	268	1.8	8	142	1.8	8	141	2.1
9	251	1.7	9	126	1.6	9	108	1.6
10	212	1.4	10	109	1.3	10	103	1.5
	5 127	34.5		2 610	32.2		2 482	37.2
	3 548	23.9		2 184	27.0		1 347	20.2
All causes	14 854	100.0	All causes	8 099	100.0	All causes	6 678	100.0

*Including deaths due to MDR-TB and XDR-TB.

Appendix M: The ten leading underlying natural causes of death by age and sex: South Africa, 2014 (concluded)

South Africa, both sexes, 15-44			South Africa, males, 15-44			South Africa, females, all ages, 15-44				
No.	%	No.	%	No.	%	No.	%	No.	%	
1	14,6	19 506	14,6	10 445	13,8	1	13,8	8 866	15,6	
2	10,6	14 106	10,6	6 679	8,8	2	8,8	7 365	12,8	
3	6,3	8 480	6,3	3 995	5,2	3	5,2	4 546	7,9	
4	4,7	6 267	4,7	3 034	4,0	4	4,0	3 200	5,6	
5	3,1	4 132	3,1	1 854	2,5	5	2,5	2 267	3,9	
6	2,4	3 256	2,4	1 603	2,1	6	2,1	1 786	3,1	
7	2,3	3 073	2,3	1 453	1,9	7	1,9	1 455	2,5	
8	1,5	1 987	1,5	991	1,3	8	1,3	1 126	2,0	
9	1,4	1 808	1,4	944	1,3	9	1,3	1 037	1,8	
10	1,3	1 715	1,3	853	1,1	10	1,1	987	1,7	
	29,4	39 343	29,4	18 939	25,1		25,1	19 762	34,4	
	22,4	30 000	22,4	24 826	32,9		32,9	4 983	8,7	
	100,0	133 673	100,0	75 516	100,0		100,0	57 480	100,0	
All provinces, both sexes, 45-64			All provinces, males, 45-64			All provinces, females, 45-64				
1	10,1	12 860	10,1	8 785	11,8	1	11,8	4 729	8,9	
2	6,6	8 377	6,6	3 711	5,0	2	5,0	4 035	7,6	
3	5,3	6 790	5,3	3 643	4,9	3	4,9	3 165	6,0	
4	5,0	6 427	5,0	3 610	4,9	4	4,9	2 701	5,1	
5	4,6	5 898	4,6	3 403	4,6	5	4,6	2 689	5,1	
6	4,4	5 558	4,4	3 356	4,5	6	4,5	2 527	4,8	
7	3,9	5 013	3,9	2 902	3,9	7	3,9	2 139	4,0	
8	3,4	4 330	3,4	2 437	3,3	8	3,3	2 129	4,0	
9	3,3	4 205	3,3	2 423	3,3	9	3,3	1 840	3,5	
10	3,1	3 957	3,1	2 355	3,2	10	3,2	1 529	2,9	
	43,4	55 276	43,4	31 111	41,9		41,9	23 249	43,9	
	6,8	8 683	6,8	6 478	8,7		8,7	2 180	4,1	
	100,0	127 374	100,0	74 214	100,0		100,0	52 922	100,0	
All provinces, both sexes, 65+			All provinces, males, 65+			All provinces, females, 65+				
1	9,6	14 399	9,6	5 304	8,2	1	8,2	9 086	10,6	
2	8,6	12 938	8,6	4 666	7,2	2	7,2	8 316	9,7	
3	7,9	11 852	7,9	4 617	7,1	3	7,1	7 865	9,2	
4	7,8	11 781	7,8	3 911	6,1	4	6,1	7 179	8,4	
5	4,5	6 732	4,5	3 772	5,8	5	5,8	3 729	4,3	
6	4,4	6 607	4,4	3 290	5,1	6	5,1	3 301	3,8	
7	4,4	6 596	4,4	2 998	4,6	7	4,6	2 833	3,3	
8	3,2	4 790	3,2	2 785	4,3	8	4,3	2 309	2,7	
9	3,0	4 509	3,0	2 477	3,8	9	3,8	2 236	2,6	
10	2,2	3 375	2,2	2 259	3,5	10	3,5	1 839	2,1	
	41,7	62 877	41,7	26 428	40,9		40,9	35 173	40,9	
	2,8	4 191	2,8	2 121	3,3		3,3	2 065	2,4	
	100,0	150 647	100,0	64 628	100,0		100,0	85 931	100,0	

*Including deaths due to MDR-TB and XDR-TB.

Appendix M1: The ten leading underlying natural causes of death by age and sex: Western Cape, 2014

Western Cape, both sexes, all ages			Western Cape, males, all ages			Western Cape, females, all ages			
No.	%	No.	%	No.	%	No.	%	No.	%
1	6.8	3 006	6.8	1 600	6.6	1	6.6	1 739	8.8
2	5.8	2 567	5.8	1 413	5.8	2	5.8	1 363	6.9
3	5.7	2 531	5.7	1 269	5.2	3	5.2	1 288	6.6
4	5.6	2 473	5.6	1 266	5.2	4	5.2	1 031	5.2
5	5.6	2 447	5.6	1 248	5.1	5	5.1	1 020	5.2
6	4.6	2 045	4.6	1 207	5.0	6	5.0	874	4.4
7	4.5	1 982	4.5	1 166	4.8	7	4.8	856	4.3
8	4.4	1 930	4.4	1 104	4.6	8	4.6	836	4.3
9	3.8	1 673	3.8	650	2.7	9	2.7	734	3.7
10	3.1	1 361	3.1	642	2.6	10	2.6	718	3.7
	36.3	15 974	36.3	7 791	32.1		32.1	8 089	41.2
	13.7	6 031	13.7	4 899	20.2		20.2	1 107	5.6
All causes	100.0	44 020	100.0	24 255	100.0	All causes	100.0	19 652	100.0
All Western Cape, both sexes, Age 0									
1	12.4	222	12.4	115	12.8	1	12.8	103	11.9
2	8.0	142	8.0	79	8.8	2	8.8	72	8.3
3	7.6	136	7.6	64	7.1	3	7.1	60	6.9
4	5.9	105	5.9	57	6.3	4	6.3	53	6.1
5	5.4	96	5.4	49	5.4	5	5.4	46	5.3
6	4.8	86	4.8	41	4.6	6	4.6	41	4.7
7	4.6	82	4.6	40	4.4	7	4.4	39	4.5
8	3.4	61	3.4	30	3.3	8	3.3	29	3.3
9	2.9	52	2.9	30	3.3	9	3.3	22	2.5
10	2.8	50	2.8	29	3.2	10	3.2	20	2.3
	40.0	715	40.0	348	38.7		38.7	361	41.6
	2.2	39	2.2	18	2.0		2.0	21	2.4
All causes	100.0	1 786	100.0	900	100.0	All causes	100.0	867	100.0
All Western Cape, females, 1-14									
1	6.6	52	6.6	27	6.0	1	6.0	26	7.8
2	4.7	37	4.7	26	5.7	2	5.7	14	4.2
3	3.7	29	3.7	16	3.5	2	3.5	14	4.2
4	3.7	29	3.7	14	3.1	4	3.1	13	3.9
5	2.8	22	2.8	10	2.2	4	2.2	13	3.9
6	2.8	22	2.8	9	2.0	6	2.0	10	3.0
7	1.9	15	1.9	8	1.8	7	1.8	8	2.4
8	1.9	15	1.9	8	1.8	7	1.8	8	2.4
9	1.4	11	1.4	7	1.5	9	1.5	6	1.8
10	1.4	11	1.4	6	1.3	10	1.3	5	1.5
	30.7	243	30.7	131	28.9		28.9	106	31.6
	38.6	306	38.6	191	42.2		42.2	112	33.4
All causes	100.0	792	100.0	463	100.0	All causes	100.0	335	100.0
All Western Cape, males, 1-14									
1	6.6	52	6.6	27	6.0	1	6.0	26	7.8
2	4.7	37	4.7	26	5.7	2	5.7	14	4.2
3	3.7	29	3.7	16	3.5	2	3.5	14	4.2
4	3.7	29	3.7	14	3.1	4	3.1	13	3.9
5	2.8	22	2.8	10	2.2	4	2.2	13	3.9
6	2.8	22	2.8	9	2.0	6	2.0	10	3.0
7	1.9	15	1.9	8	1.8	7	1.8	8	2.4
8	1.9	15	1.9	8	1.8	7	1.8	8	2.4
9	1.4	11	1.4	7	1.5	9	1.5	6	1.8
10	1.4	11	1.4	6	1.3	10	1.3	5	1.5
	30.7	243	30.7	131	28.9		28.9	106	31.6
	38.6	306	38.6	191	42.2		42.2	112	33.4
All causes	100.0	792	100.0	463	100.0	All causes	100.0	335	100.0

*Including deaths due to MDR-TB and XDR-TB.

Appendix M2: The ten leading underlying natural causes of death by age and sex: Eastern Cape, 2014

Eastern Cape, both sexes, all ages			Eastern Cape, males, all ages			Eastern Cape, females, all ages					
No.	%	No.	%	No.	%	No.	%	No.	%		
1	9.0	5 985	10.2	3 477	10.2	1	10.2	2 490	7.7		
2	5.8	3 857	5.3	1 806	5.3	2	5.3	2 041	6.3		
3	4.9	3 281	4.3	1 481	4.3	3	4.3	1 887	5.9		
4	4.6	3 043	4.1	1 392	4.1	4	4.1	1 878	5.8		
5	4.5	2 971	4.0	1 386	4.0	5	4.0	1 653	5.1		
6	3.9	2 569	3.2	1 090	3.2	6	3.2	1 540	4.8		
7	3.5	2 353	3.1	1 045	3.1	7	3.1	1 088	3.4		
8	3.1	2 057	2.4	822	2.4	8	2.4	1 004	3.1		
9	2.6	1 699	2.4	812	2.4	9	2.4	900	2.8		
10	2.4	1 598	2.3	795	2.3	10	2.3	823	2.6		
	44.9	29 897	42.4	14 530	42.4			15 230	47.4		
	10.9	7 243	16.4	5 598	16.4			1 623	5.0		
All causes	100.0	66 553	100.0	34 234	100.0	All causes	100.0	32 157	100.0		
All Eastern Cape, both sexes, Age 0			All Eastern Cape, males, Age 0			All Eastern Cape, females, Age 0					
1	14.6	358	15.5	204	15.5	1	15.5	152	14.0		
2	10.6	259	10.5	139	10.5	2	10.5	113	10.4		
3	8.6	211	9.2	121	9.2	3	9.2	81	7.5		
4	4.8	118	4.6	60	4.6	4	4.6	57	5.2		
5	4.3	106	4.5	59	4.5	5	4.5	44	4.1		
6	2.9	70	3.0	40	3.0	6	3.0	28	2.6		
7	2.7	67	2.9	38	2.9	7	2.9	27	2.5		
8	2.6	63	2.7	36	2.7	8	2.7	23	2.1		
9	2.2	55	2.4	31	2.4	8	2.4	23	2.1		
10	1.8	44	1.8	24	1.8	10	1.8	19	1.7		
	39.8	975	37.3	492	37.3			470	43.3		
	5.1	125	5.6	74	5.6			49	4.5		
All causes	100.0	2 451	100.0	1 318	100.0	All causes	100.0	1 086	100.0		
All Eastern Cape, both sexes, 1-14			All Eastern Cape, males, 1-14			All Eastern Cape, females, 1-14					
1	9.4	203	8.8	105	8.8	1	8.8	97	10.1		
2	5.9	128	6.5	77	6.5	2	6.5	55	5.7		
3	5.1	111	4.7	56	4.7	3	4.7	51	5.3		
4	4.3	92	3.5	42	3.5	4	3.5	50	5.2		
5	3.0	65	3.4	41	3.4	5	3.4	23	2.4		
6	1.7	37	1.5	18	1.5	6	1.5	21	2.2		
7	1.6	34	1.3	16	1.3	7	1.3	19	2.0		
8	1.4	31	1.3	16	1.3	8	1.3	18	1.9		
9	1.3	29	1.3	15	1.3	9	1.3	13	1.4		
10	1.2	26	1.2	14	1.2	10	1.2	12	1.3		
	39.8	858	37.5	447	37.5			402	42.0		
	25.2	543	28.9	345	28.9			197	20.6		
All causes	100.0	2 157	100.0	1 192	100.0	All causes	100.0	958	100.0		

*Including deaths due to MDR-TB and XDR-TB.

Appendix M2: The ten leading underlying natural causes of death by age and sex: Eastern Cape, 2014 (concluded)

Eastern Cape, both sexes, 15-44		Eastern Cape, males, 15-44		Eastern Cape, females, 15-44	
No.	%	No.	%	No.	%
1	13.9	2 720	10.9	1 372	12.5
2	13.4	2 622	10.9	1 123	10.2
3	5.7	1 121	4.5	495	4.5
4	3.1	604	2.4	275	2.5
5	2.1	409	1.6	213	1.9
6	2.0	402	1.6	198	1.8
7	1.7	331	1.3	189	1.7
8	1.5	298	1.2	144	1.3
9	1.3	250	1.0	142	1.3
10	1.1	217	0.9	116	1.1
	30.8	6 051	24.4	2 872	26.1
	23.4	4 597	18.5	3 859	35.1
All causes	100.0	19 622	100.0	10 998	100.0
All Eastern Cape, both sexes, 45-64		All Eastern Cape, males, 45-64		All Eastern Cape, females, 45-64	
1	10.9	1 971	6.2	1 380	13.0
2	6.2	1 127	3.6	586	5.6
3	5.7	1 031	3.3	560	5.3
4	5.0	907	2.9	447	4.3
5	4.6	842	2.7	441	4.2
6	4.4	793	2.5	425	4.0
7	3.6	651	2.1	389	3.5
8	3.4	620	2.0	297	2.8
9	2.7	495	1.6	263	2.5
10	2.5	449	1.4	260	2.5
	43.9	7 963	25.3	4 533	43.2
	7.1	1 287	4.1	958	9.1
All causes	100.0	18 136	100.0	10 499	100.0
All Eastern Cape, both sexes, 65+		All Eastern Cape, males, 65+		All Eastern Cape, females, 65+	
1	9.0	2 164	8.1	824	8.1
2	7.4	1 790	6.8	736	7.2
3	6.9	1 660	6.3	706	6.9
4	6.6	1 589	6.1	689	6.6
5	6.0	1 445	5.5	583	5.7
6	4.8	1 148	4.4	505	5.0
7	3.5	853	3.2	379	3.7
8	3.2	764	2.9	341	3.4
9	2.4	580	2.2	289	2.8
10	1.7	398	1.5	271	2.7
	45.8	11 038	41.8	4 529	44.5
	2.7	658	2.4	336	3.3
All causes	100.0	24 087	100.0	10 168	100.0
1	9.6	1 340	9.6	1 340	9.6
2	7.8	1 084	7.8	1 084	7.8
3	7.8	1 083	7.8	1 083	7.8
4	7.7	1 076	7.7	1 076	7.7
5	5.1	709	5.1	709	5.1
6	3.4	479	3.4	479	3.4
7	3.4	474	3.4	474	3.4
8	3.0	423	3.0	423	3.0
9	2.2	309	2.2	309	2.2
10	2.0	274	2.0	274	2.0
	45.6	6 339	45.6	6 339	45.6
	2.3	322	2.3	322	2.3
All causes	100.0	13 912	100.0	8 565	100.0

*Including deaths due to MDR-TB and XDR-TB.

Appendix M3: The ten leading underlying natural causes of death by age and sex: Northern Cape, 2014

Northern Cape, both sexes, all ages			Northern Cape, males, all ages			Northern Cape, females, all ages		
No.	%	No.	%	No.	%			
1	8.5	1 188	8.4	1	8.4			
2	7.4	1 046	7.6	2	7.6			
3	5.1	721	5.0	3	5.0			
4	5.0	698	4.6	4	4.6			
5	4.5	630	4.3	5	4.3			
6	4.2	595	3.9	6	3.9			
7	4.1	582	3.4	7	3.4			
8	3.5	490	3.0	8	3.0			
9	3.2	453	2.7	9	2.7			
10	3.0	422	2.5	10	2.5			
	40.3	5 069	39.1		39.1			
	11.1	1 562	15.3		15.3			
	100.0	14 056	100.0		100.0			
All Northern Cape, both sexes, Age 0			All Northern Cape, males, Age 0			All Northern Cape, females, Age 0		
No.	%	No.	%	No.	%			
1	13.5	132	12.9	1	12.9			
2	13.2	129	12.5	2	12.5			
3	8.9	87	9.8	3	9.8			
4	7.2	70	7.8	4	7.8			
4	7.2	70	7.4	5	7.4			
6	3.7	36	3.8	6	3.8			
7	3.3	32	3.8	7	3.8			
8	3.2	31	2.8	8	2.8			
9	2.5	24	2.6	9	2.6			
10	1.9	19	2.2	10	2.2			
	29.8	291	29.9		29.9			
	5.6	55	4.6		4.6			
	100.0	976	100.0		100.0			
All Northern Cape, both sexes, 1–14			All Northern Cape, males, 1–14			All Northern Cape, females, 1–14		
No.	%	No.	%	No.	%			
1	18.7	86	16.8	1	16.8			
2	11.3	52	13.8	2	13.8			
3	6.9	32	6.0	3	6.0			
4	3.3	15	4.7	4	4.7			
4	3.3	15	3.0	5	3.0			
6	2.6	12	3.0	6	3.0			
7	2.4	11	2.6	7	2.6			
8	2.2	10	1.7	8	1.7			
9	1.3	6	1.3	9	1.3			
9	1.3	6	1.3	9	1.3			
	21.0	97	17.2		17.2			
	25.8	119	28.4		28.4			
	100.0	461	100.0		100.0			
All Northern Cape, both sexes, 15–64			All Northern Cape, males, 15–64			All Northern Cape, females, 15–64		
No.	%	No.	%	No.	%			
1	14.8	68	14.8	1	14.8			
2	13.5	62	13.5	2	13.5			
3	8.1	37	8.1	3	8.1			
4	6.8	31	6.8	4	6.8			
4	5.9	27	5.9	5	5.9			
6	4.1	19	4.1	6	4.1			
7	3.7	17	3.7	7	3.7			
8	2.6	12	2.6	8	2.6			
9	2.0	9	2.0	9	2.0			
10	1.7	8	1.7	10	1.7			
	29.9	137	29.9		29.9			
	6.8	31	6.8		6.8			
	100.0	458	100.0		100.0			

*Including deaths due to MDR-TB and XDR-TB.

Appendix M3: The ten leading underlying natural causes of death by age and sex: Northern Cape, 2014 (concluded)

Northern Cape, both sexes, 15-44			Northern Cape, males, 15-44			Northern Cape, females, 15-44			
No.	%	No.	%	No.	%	No.	%	No.	%
1	19.2	729	19.2	1	14.9	319	14.9	1	24.8
2	13.3	506	13.3	2	12.5	288	12.5	2	14.5
3	5.8	219	5.8	3	4.9	105	4.9	3	7.0
4	3.9	146	3.9	4	3.8	82	3.8	4	4.5
5	3.6	137	3.6	5	3.0	64	3.0	5	3.9
6	1.8	67	1.8	6	1.9	40	1.9	6	1.7
7	1.5	57	1.5	7	1.5	32	1.5	7	1.7
8	1.2	47	1.2	8	1.4	30	1.4	8	1.5
9	1.1	42	1.1	9	1.0	22	1.0	9	1.5
10	1.1	40	1.1	10	1.0	21	1.0	10	1.3
	22.4	851	22.4		18.5	398	18.5		26.7
	25.1	951	25.1		35.6	765	35.6		11.0
All causes	100.0	3 792	100.0	All causes	100.0	2 146	100.0	All causes	1 631
All Northern Cape, both sexes, 45-64			All Northern Cape, males, 45-64			All Northern Cape, females, 45-64			
1	9.2	409	9.2	1	10.7	287	10.7	1	9.3
2	8.3	369	8.3	2	7.6	191	7.6	2	7.3
3	6.2	274	6.2	3	6.8	171	6.8	3	6.6
4	5.5	244	5.5	4	4.7	117	4.7	4	6.5
5	5.1	226	5.1	5	4.5	113	4.5	5	5.4
6	4.5	199	4.5	6	4.4	109	4.4	6	4.5
7	4.3	189	4.3	7	4.1	103	4.1	7	4.4
8	4.1	181	4.1	8	4.0	99	4.0	8	3.7
9	3.5	153	3.5	9	3.9	97	3.9	9	3.3
10	3.3	148	3.3	10	3.5	88	3.5	10	3.2
	39.1	1 732	39.1		37.5	940	37.5		40.6
	6.9	308	6.9		8.3	209	8.3		5.1
All causes	100.0	4 432	100.0	All causes	100.0	2 504	100.0	All causes	1 924
All Northern Cape, both sexes, 65+			All Northern Cape, males, 65+			All Northern Cape, females, 65+			
1	10.7	468	10.7	1	9.2	183	9.2	1	12.5
2	9.3	409	9.3	2	8.5	170	8.5	2	10.4
3	7.2	315	7.2	3	8.1	161	8.1	3	8.8
4	6.6	289	6.6	4	6.7	133	6.7	4	7.0
5	6.6	289	6.6	5	5.3	106	5.3	5	6.5
6	6.2	271	6.2	6	5.2	103	5.2	6	4.4
7	4.2	183	4.2	7	4.9	98	4.9	7	3.8
8	3.4	151	3.4	8	4.6	92	4.6	8	2.7
9	2.4	106	2.4	9	4.4	87	4.4	9	2.7
10	2.4	103	2.4	10	3.7	74	3.7	10	2.2
	38.2	1 671	38.2		36.1	719	36.1		36.5
	2.8	122	2.8		3.2	64	3.2		2.4
All causes	100.0	4 377	100.0	All causes	100.0	1 990	100.0	All causes	2 385

*Including deaths due to MDR-TB and XDR-TB.

Appendix M4: The ten leading underlying natural causes of death by age and sex: Free State, 2014

Free State, both sexes, all ages		Free State, males, all ages		Free State, females, all ages		
No.	%	No.	%	No.	%	
1	2 785	8.4	1 720	9.9	1 060	6.8
2	2 262	6.8	1 194	6.9	1 057	6.8
3	1 749	5.3	766	4.4	980	6.3
4	1 653	5.0	745	4.3	949	6.1
5	1 516	4.6	713	4.1	906	5.8
6	1 423	4.3	597	3.4	886	5.7
7	1 349	4.1	570	3.3	647	4.1
8	1 249	3.8	566	3.3	631	4.0
9	1 169	3.5	537	3.1	596	3.8
10	775	2.3	501	2.9	391	2.5
	13 950	42.2	7 104	41.0	6 672	42.8
	3 165	9.6	2 321	13.4	825	5.3
All causes	35 045	100.0	17 394	100.0	15 600	100.0
All Free State, both sexes, Age 0		All Free State, males, Age 0		All Free State, females, Age 0		
	No.	%	No.	%	No.	%
1	323	15.6	181	16.2	1	14.7
2	276	13.3	145	13.0	2	13.9
3	226	10.9	115	10.3	3	11.8
4	141	6.8	89	8.0	4	5.5
5	103	5.0	58	5.2	5	4.5
6	99	4.8	55	4.9	6	4.3
7	80	3.9	43	3.8	7	4.2
8	80	3.9	38	3.4	8	3.6
9	43	2.1	25	2.2	9	2.3
10	40	1.9	24	2.1	10	1.9
	597	28.7	312	27.9		29.7
	69	3.3	34	3.0		3.6
All causes	2 077	100.0	1 119	100.0	929	100.0
All Free State, both sexes, 1–14		All Free State, males, 1–14		All Free State, females, 1–14		
	No.	%	No.	%	No.	%
1	134	13.4	68	12.3	1	14.5
2	88	8.8	43	7.8	2	10.2
3	62	6.2	36	6.5	3	5.5
4	48	4.8	26	4.7	4	5.0
5	28	2.8	21	3.8	5	2.3
6	25	2.5	15	2.7	5	2.3
7	21	2.1	11	2.0	7	2.0
8	17	1.7	9	1.6	8	1.6
9	16	1.6	9	1.6	8	1.6
10	14	1.4	7	1.3	10	1.4
	291	29.1	152	27.6		30.9
	256	25.6	154	27.9		22.7
All causes	1 000	100.0	551	100.0	440	100.0

*Including deaths due to MDR-TB and XDR-TB

Appendix M4: The ten leading underlying natural causes of death by age and sex: Free State, 2014 (concluded)

Free State, both sexes, 15-44		Free State, males, 15-44		Free State, females, 15-44	
No.	%	No.	%	No.	%
1	15.3	1 475	15.3	849	15.7
2	8.4	809	8.4	404	7.5
3	7.0	670	7.0	321	5.9
4	6.6	633	6.6	302	5.6
5	4.4	419	4.4	199	3.7
6	2.9	280	2.9	136	2.5
7	2.3	217	2.3	101	1.9
8	1.6	152	1.6	72	1.3
9	1.6	150	1.6	66	1.2
10	1.5	143	1.5	63	1.2
Other natural causes		2 776	28.8	1 392	25.7
Non-natural causes		1 901	19.8	1 509	27.9
All causes		9 625	100.0	5 414	100.0
All Free State, both sexes, 45-64		All Free State, males, 45-64		All Free State, females, 45-64	
No.	%	No.	%	No.	%
1	9.8	986	9.8	672	11.5
2	6.4	639	6.4	412	7.0
3	6.3	632	6.3	323	5.5
4	6.0	598	6.0	283	4.8
5	4.9	480	4.9	270	4.6
6	4.5	452	4.5	265	4.5
7	4.3	435	4.3	211	3.6
8	3.8	380	3.8	209	3.6
9	3.0	300	3.0	205	3.5
10	2.7	289	2.7	167	2.8
Other natural causes		4 195	41.8	2 358	40.2
Non-natural causes		664	6.6	489	8.3
All causes		10 040	100.0	5 864	100.0
All Free State, both sexes, 65+		All Free State, males, 65+		All Free State, females, 65+	
No.	%	No.	%	No.	%
1	9.4	962	9.4	369	8.5
2	8.9	916	8.9	347	8.0
3	8.8	903	8.8	301	6.9
4	7.9	813	7.9	284	6.5
5	6.6	672	6.6	285	6.1
6	4.5	465	4.5	255	5.9
7	4.2	428	4.2	218	5.0
8	2.9	294	2.9	169	3.9
9	2.7	276	2.7	162	3.7
10	2.6	263	2.6	145	3.3
Other natural causes		3 994	39.0	1 716	39.5
Non-natural causes		252	2.5	118	2.7
All causes		10 238	100.0	4 349	100.0

Free State, both sexes, 15-44		Free State, males, 15-44		Free State, females, 15-44	
No.	%	No.	%	No.	%
1	14.9	621	14.9	621	14.9
2	9.6	402	9.6	402	9.6
3	8.7	365	8.7	365	8.7
4	7.4	308	7.4	308	7.4
5	5.3	220	5.3	220	5.3
6	3.4	143	3.4	143	3.4
7	2.8	116	2.8	116	2.8
8	2.3	97	2.3	97	2.3
9	1.9	80	1.9	80	1.9
10	1.9	78	1.9	78	1.9
Other natural causes		1 361	32.6	1 361	32.6
Non-natural causes		381	9.1	381	9.1
All causes		4 172	100.0	4 172	100.0

*Including deaths due to MDR-TB and XDR-TB

Appendix M5: The ten leading underlying natural causes of death by age and sex: KwaZulu-Natal, 2014

KwaZulu-Natal, both sexes, all ages			KwaZulu-Natal, males, all ages			KwaZulu-Natal, females, all ages		
No.	%		No.	%		No.	%	
1	8 863	11,2	1	5 379	13,3	1	3 459	9,0
2	4 940	6,2	2	2 567	6,3	2	3 135	8,2
3	4 927	6,2	3	1 900	4,7	3	3 038	7,9
4	4 868	6,2	4	1 733	4,3	4	2 343	6,1
5	3 812	4,8	5	1 628	4,0	5	2 182	5,7
6	3 101	3,9	6	1 601	4,0	6	1 828	4,8
7	2 914	3,7	7	1 451	3,6	7	1 486	3,9
8	2 815	3,6	8	1 316	3,3	8	1 483	3,9
9	2 805	3,5	9	974	2,4	9	1 457	3,8
10	1 749	2,2	10	962	2,4	10	942	2,4
	29 997	37,9		14 606	36,1		15 111	39,3
	8 347	10,5		6 315	15,6		1 988	5,2
All causes	79 138	100,0	All causes	40 432	100,0	All causes	38 452	100,0
All KwaZulu-Natal, both sexes, Age 0			All KwaZulu-Natal, males, Age 0			All KwaZulu-Natal, females, Age 0		
No.	%		No.	%		No.	%	
1	693	15,7	1	365	15,6	1	302	15,2
2	594	13,5	2	323	13,8	2	265	13,3
3	327	7,4	3	170	7,3	3	154	7,7
4	313	7,1	4	155	6,6	4	149	7,5
5	245	5,6	5	139	6,0	5	104	5,2
6	209	4,7	6	111	4,8	6	88	4,4
7	197	4,5	7	101	4,3	7	87	4,4
8	161	3,6	8	85	3,6	8	74	3,7
9	108	2,4	9	68	2,9	9	51	2,6
10	102	2,3	10	48	2,1	10	50	2,5
	1 309	29,7		693	29,7		588	29,6
	155	3,5		75	3,2		76	3,8
All causes	4 413	100,0	All causes	2 333	100,0	All causes	1 988	100,0
All KwaZulu-Natal, both sexes, 1-14			All KwaZulu-Natal, males, 1-14			All KwaZulu-Natal, females, 1-14		
No.	%		No.	%		No.	%	
1	333	12,1	1	185	12,1	1	146	12,1
2	160	5,8	2	90	5,9	2	70	5,8
3	154	5,6	3	89	5,8	3	65	5,4
4	119	4,3	4	63	4,1	4	60	5,0
5	112	4,1	5	57	3,7	5	48	4,0
6	77	2,8	6	43	2,8	6	35	2,9
7	61	2,2	7	28	1,8	7	34	2,8
8	56	2,0	8	26	1,7	8	28	2,3
9	41	1,5	9	23	1,5	9	23	1,9
9	41	1,5	10	20	1,3	10	18	1,5
	979	35,6		515	33,6		462	36,2
	617	22,4		394	25,7		220	16,2
All causes	2 750	100,0	All causes	1 533	100,0	All causes	1 209	100,0

*Including deaths due to MDR-TB and XDR-TB

Appendix M5: The ten leading underlying natural causes of death by age and sex: KwaZulu-Natal, 2014 (concluded)

KwaZulu-Natal, both sexes, 15-44			KwaZulu-Natal, males, 15-44			KwaZulu-Natal, females, 15-44		
No.	%	No.	%	No.	%	No.	%	No.
1	18,8	4 842	18,6	2 729	1	18,6	2 095	19,2
2	12,8	3 294	11,2	1 640	2	11,2	1 643	15,0
3	7,7	1 970	6,6	967	3	6,6	993	9,1
4	3,1	799	2,7	399	4	2,7	399	3,7
5	2,6	678	2,2	320	5	2,2	361	3,3
6	2,4	628	1,8	269	6	1,8	353	3,2
7	2,1	535	1,8	263	7	1,8	264	2,4
8	1,7	435	1,5	222	8	1,5	256	2,3
9	1,4	353	1,3	187	9	1,3	212	1,9
10	1,3	336	1,2	177	10	1,2	206	1,9
		7 221	25,2	3 699			3 364	30,8
		4 597	25,9	3 808			772	7,1
		25 688	100,0	14 680			10 918	100,0
All KwaZulu-Natal, both sexes, 45-64			All KwaZulu-Natal, males, 45-64			All KwaZulu-Natal, females, 45-64		
No.	%	No.	%	No.	%	No.	%	No.
1	13,0	2 724	15,8	1 918	1	15,8	1 072	12,2
2	8,5	1 781	6,0	727	2	6,0	802	9,1
3	6,5	1 361	6,0	723	3	6,0	637	7,2
4	6,1	1 277	5,9	709	4	5,9	547	6,2
5	4,8	997	4,5	546	5	4,5	451	5,1
6	4,0	834	4,0	484	6	4,0	443	5,0
7	3,8	791	3,3	405	7	3,3	392	4,5
8	3,3	682	3,2	389	8	3,2	350	4,0
9	2,8	583	3,0	363	9	3,0	276	3,1
10	2,7	571	2,9	355	10	2,9	227	2,6
		8 069	37,7	4 564			3 263	37,1
		1 261	7,7	932			327	3,7
		20 931	100,0	12 115			8 787	100,0
All KwaZulu-Natal, both sexes, 65+			All KwaZulu-Natal, males, 65+			All KwaZulu-Natal, females, 65+		
No.	%	No.	%	No.	%	No.	%	No.
1	12,8	3 219	10,2	988	1	10,2	2 231	14,4
2	11,4	2 866	9,5	916	2	9,5	1 950	12,6
3	8,7	2 184	7,9	764	3	7,9	1 420	9,2
4	7,4	1 875	6,2	599	4	6,2	1 313	8,5
5	4,2	1 067	5,8	562	5	5,8	570	3,7
6	4,2	1 062	5,1	496	6	5,1	561	3,6
7	3,8	959	4,9	475	7	4,9	509	3,3
8	3,2	797	4,1	398	8	4,1	463	3,0
9	2,9	721	3,4	326	9	3,4	321	2,1
10	2,6	661	2,8	267	9	2,8	321	2,1
		9 110	36,9	3 569			5 499	35,5
		658	3,2	307			350	2,3
		25 179	100,0	9 667			15 508	100,0

*Including deaths due to MDR-TB and XDR-TB

Appendix M6: The ten leading underlying natural causes of death by age and sex: North West, 2014

North West, both sexes, all ages			North West, males, all ages			North West, females, all ages				
No.	%	No.	%	No.	%	No.	%	No.	%	
1	3 112	8.9	1 904	10.1	1	10.1	1 904	10.1	7.5	
2	2 098	6.0	1 068	5.7	2	5.7	1 068	5.7	7.4	
3	1 950	5.6	1 064	5.7	3	5.7	1 064	5.7	6.4	
4	1 890	5.4	812	4.3	4	4.3	812	4.3	5.5	
5	1 669	4.8	785	4.2	5	4.2	785	4.2	5.4	
6	1 527	4.4	725	3.9	6	3.9	725	3.9	5.1	
7	1 466	4.2	696	3.7	7	3.7	696	3.7	4.6	
8	1 387	3.9	663	3.5	8	3.5	663	3.5	4.4	
9	1 227	3.5	553	2.9	9	2.9	553	2.9	3.5	
10	824	2.4	507	2.7	10	2.7	507	2.7	2.3	
	14 931	42.7	7 831	41.7		41.7	7 831	41.7	43.6	
	2 872	8.2	2 171	11.6		11.6	2 171	11.6	4.3	
All causes	34 933	100.0	18 769	100.0	All causes	100.0	18 769	100.0	100.0	
All North West, both sexes, Age 0			All North West, males, Age 0			All North West, females, Age 0				
1	465	18.3	254	18.7	1	18.7	254	18.7	18.2	
2	392	15.4	215	15.8	2	15.8	215	15.8	14.8	
3	222	8.7	112	8.2	3	8.2	112	8.2	9.4	
4	149	5.9	85	6.3	4	6.3	85	6.3	5.2	
5	133	5.2	73	5.4	5	5.4	73	5.4	5.0	
6	113	4.4	64	4.7	6	4.7	64	4.7	4.1	
7	108	4.2	58	4.3	7	4.3	58	4.3	4.0	
8	62	2.4	30	2.2	8	2.2	30	2.2	2.6	
9	43	1.7	25	1.8	9	1.8	25	1.8	1.7	
10	37	1.5	25	1.8	10	1.8	25	1.8	1.6	
	761	29.9	389	28.6		28.6	389	28.6	31.0	
	61	2.4	30	2.2		2.2	30	2.2	2.5	
All causes	2 546	100.0	1 360	100.0	All causes	100.0	1 360	100.0	100.0	
All North West, both sexes, 1–14			All North West, males, 1–14			All North West, females, 1–14				
1	265	19.0	140	19.2	1	19.2	140	19.2	18.5	
2	166	11.9	89	12.2	2	12.2	89	12.2	11.6	
3	97	6.9	47	6.5	3	6.5	47	6.5	7.4	
4	64	4.6	35	4.8	4	4.8	35	4.8	4.3	
5	33	2.4	21	2.9	5	2.9	21	2.9	2.7	
6	32	2.3	14	1.9	6	1.9	14	1.9	1.8	
7	24	1.7	14	1.9	7	1.9	14	1.9	1.8	
8	21	1.5	12	1.6	8	1.6	12	1.6	1.7	
9	21	1.5	12	1.6	9	1.6	12	1.6	1.5	
10	19	1.4	11	1.5	10	1.5	11	1.5	1.1	
	409	29.3	203	27.9		27.9	203	27.9	30.4	
	246	17.6	130	17.9		17.9	130	17.9	17.2	
All causes	1 397	100.0	728	100.0	All causes	100.0	728	100.0	100.0	

*Including deaths due to MDR-TB and XDR-TB.

Appendix M6: The ten leading underlying natural causes of death by age and sex: North West, 2014 (concluded)

North West, both sexes, all ages			North West, males, all ages			North West, females, all ages			
No.	%	No.	%	No.	%	No.	%	No.	%
1	15.9	1 562	15.6	855	15.6	1	16.3	703	16.3
2	9.5	935	8.7	476	8.7	2	10.5	455	10.5
3	7.1	694	6.2	339	6.2	3	8.1	351	8.1
4	6.7	663	5.8	317	5.8	4	7.9	342	7.9
5	4.0	397	3.5	189	3.5	5	4.8	207	4.8
6	3.2	319	3.0	162	3.0	6	3.6	156	3.6
7	2.4	234	1.8	96	1.8	7	3.1	136	3.1
8	1.3	126	1.5	83	1.5	8	1.8	77	1.8
9	1.2	121	1.2	66	1.2	9	1.6	70	1.6
10	1.1	112	1.2	64	1.2	10	1.5	67	1.5
	29.7	2 918	25.7	1 406	25.7		33.2	1 435	33.2
	17.8	1 746	25.9	1 414	25.9		7.5	325	7.5
	100.0	9 827	100.0	5 467	100.0			4 324	100.0
All North West, both sexes, 45-64			All North West, males, 45-64			All North West, females, 45-64			
No.	%	No.	%	No.	%	No.	%	No.	%
1	10.9	1 098	12.6	756	12.6	1	8.4	338	8.4
2	6.3	631	6.4	386	6.4	2	7.5	301	7.5
3	5.3	532	5.7	344	5.7	3	7.1	285	7.1
4	5.2	524	4.7	282	4.7	4	6.0	243	6.0
5	5.1	518	4.2	253	4.2	5	5.1	207	5.1
6	4.9	489	4.1	248	4.1	6	4.9	199	4.9
7	4.4	447	4.0	239	4.0	7	4.6	186	4.6
8	4.2	423	3.6	216	3.6	8	4.2	168	4.2
9	2.8	284	3.3	196	3.3	9	4.0	161	4.0
10	2.5	256	2.7	162	2.7	10	2.8	114	2.8
	42.5	4 272	41.1	2 467	41.1		42.2	1 706	42.2
	5.8	586	7.6	454	7.6		3.2	131	3.2
	100.0	10 060	100.0	6 003	100.0			4 039	100.0
All North West, both sexes, 65+			All North West, males, 65+			All North West, females, 65+			
No.	%	No.	%	No.	%	No.	%	No.	%
1	11.5	1 272	9.5	491	9.5	1	14.6	856	14.6
2	10.0	1 102	8.8	451	8.8	2	10.8	635	10.8
3	9.9	1 086	8.0	413	8.0	3	10.4	610	10.4
4	6.9	756	5.7	296	5.7	4	7.8	459	7.8
5	4.1	449	5.3	273	5.3	5	3.2	187	3.2
6	3.9	432	4.8	245	4.8	6	3.0	176	3.0
7	3.2	355	4.7	244	4.7	7	2.8	165	2.8
8	2.9	323	3.5	180	3.5	8	2.6	152	2.6
9	2.6	282	3.1	161	3.1	9	2.1	126	2.1
10	2.4	266	3.0	157	3.0	10	1.9	109	1.9
	40.7	4 491	41.1	2 117	41.1		39.2	2 300	39.2
	1.9	210	2.4	125	2.4		1.5	85	1.5
	100.0	11 024	100.0	5 153	100.0			5 862	100.0

*Including deaths due to MDR-TB and XDR-TB

Appendix M7: The ten leading underlying natural causes of death by age and sex: Gauteng, 2014

Gauteng, both sexes, all ages			Gauteng, males, all ages			Gauteng, females, all ages		
No.	%		No.	%		No.	%	
1	6.7	Tuberculosis (A15-A19)*	6 517	6.7	Tuberculosis (A15-A19)*	3 712	7.3	Tuberculosis (A15-A19)*
2	5.5	Influenza and pneumonia (J09-J18)	5 358	5.5	Influenza and pneumonia (J09-J18)	2 721	5.0	Influenza and pneumonia (J09-J18)
3	5.3	Other forms of heart disease (I30-I52)	5 323	5.5	Other forms of heart disease (I30-I52)	2 578	5.0	Influenza and pneumonia (J09-J18)
4	4.2	Cerebrovascular diseases (I60-I69)	4 073	4.2	Cerebrovascular diseases (I60-I69)	1 872	3.7	Diabetes mellitus (E10-E14)
5	4.2	Diabetes mellitus (E10-E14)	4 034	4.2	Diabetes mellitus (E10-E14)	1 766	3.5	Cerebrovascular diseases (I60-I69)
6	3.4	Hypertensive diseases (I10-I15)	3 269	3.4	Ischaemic heart diseases (I20-I25)	1 654	3.2	Hypertensive diseases (I10-I15)
7	3.1	Human immunodeficiency virus [HIV] disease (B20-B24)	2 980	3.1	Human immunodeficiency virus [HIV] disease (B20-B24)	1 594	3.1	Human immunodeficiency virus [HIV] disease (B20-B24)
8	2.8	Ischaemic heart diseases (I20-I25)	2 753	2.8	Chronic lower respiratory diseases (J40-J47)	1 302	2.5	Other viral diseases (B25-B34)
9	2.6	Other viral diseases (B25-B34)	2 488	2.6	Malignant neoplasms of digestive organs (C15-C28)	1 282	2.5	Intestinal infectious diseases (A00-A09)
10	2.3	Chronic lower respiratory diseases (J40-J47)	2 266	2.3	Other viral diseases (B25-B34)	1 265	2.5	Ischaemic heart diseases (I20-I25)
	48.8	Other natural causes	47 250	48.8	Other natural causes	23 528	46.0	Other natural causes
	10.8	Non-natural causes	10 425	10.8	Non-natural causes	7 912	15.5	Non-natural causes
	100.0	All causes	96 736	100.0	All causes	51 186	100.0	All causes
All Gauteng, both sexes, Age 0			All Gauteng, males, Age 0			All Gauteng, females, Age 0		
No.	%		No.	%		No.	%	
1	16.7	Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)	1 027	16.7	Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)	564	17.5	Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)
2	7.6	Intestinal infectious diseases (A00-A09)	466	7.6	Intestinal infectious diseases (A00-A09)	249	7.7	Intestinal infectious diseases (A00-A09)
3	7.3	Infections specific to the perinatal period (P35-P39)	449	7.3	Infections specific to the perinatal period (P35-P39)	236	7.3	Influenza and pneumonia (J09-J18)
4	6.7	Influenza and pneumonia (J09-J18)	410	6.7	Influenza and pneumonia (J09-J18)	199	6.2	Infections specific to the perinatal period (P35-P39)
5	6.0	Other disorders originating in the perinatal period (P90-P96)	371	6.0	Other disorders originating in the perinatal period (P90-P96)	199	6.2	Other disorders originating in the perinatal period (P90-P96)
6	4.0	Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)	248	4.0	Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)	128	4.0	Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)
7	3.3	Disorders related to length of gestation and fetal growth (P05-P08)	202	3.3	Disorders related to length of gestation and fetal growth (P05-P08)	106	3.3	Disorders related to length of gestation and fetal growth (P05-P08)
8	2.7	Congenital malformations of the circulatory system (Q20-Q28)	188	2.7	Congenital malformations of the circulatory system (Q20-Q28)	93	2.9	Congenital malformations of the circulatory system (Q20-Q28)
9	2.3	Digestive system disorders of fetus and newborn (P75-P78)	143	2.3	Digestive system disorders of fetus and newborn (P75-P78)	78	2.4	Other bacterial diseases (A30-A49)
10	2.3	Other bacterial diseases (A30-A49)	139	2.3	Haemorrhagic and haematological disorders of fetus and newborn (P50-P61)	77	2.4	Other acute lower respiratory infections (J20-J22)
	38.5	Other natural causes	2 365	38.5	Other natural causes	1 228	38.0	Other natural causes
	2.6	Non-natural causes	159	2.6	Non-natural causes	75	2.3	Non-natural causes
	100.0	All causes	6 147	100.0	All causes	3 232	100.0	All causes
All Gauteng, both sexes, 1-14			All Gauteng, males, 1-14			All Gauteng, females, 1-14		
No.	%		No.	%		No.	%	
1	7.8	Influenza and pneumonia (J09-J18)	205	7.8	Intestinal infectious diseases (A00-A09)	106	7.5	Influenza and pneumonia (J09-J18)
2	7.1	Intestinal infectious diseases (A00-A09)	185	7.1	Influenza and pneumonia (J09-J18)	103	7.3	Intestinal infectious diseases (A00-A09)
3	3.4	Malnutrition (E40-E46)	88	3.4	Malnutrition (E40-E46)	52	3.7	Tuberculosis (A15-A19)*
4	3.3	Tuberculosis (A15-A19)*	87	3.3	Tuberculosis (A15-A19)*	51	3.6	Other diseases of the respiratory system (J95-J99)
5	2.6	Other diseases of the respiratory system (J95-J99)	67	2.6	Other diseases of the respiratory system (J95-J99)	29	2.0	Malnutrition (E40-E46)
6	2.2	Human immunodeficiency virus [HIV] disease (B20-B24)	57	2.2	Human immunodeficiency virus [HIV] disease (B20-B24)	28	2.0	Other forms of heart disease (I30-I52)
7	2.1	Inflammatory diseases of the central nervous system (G00-G09)	56	2.1	Inflammatory diseases of the central nervous system (G00-G09)	28	2.0	Human immunodeficiency virus [HIV] disease (B20-B24)
8	1.9	Other viral diseases (B25-B34)	50	1.9	Other viral diseases (B25-B34)	26	1.8	Inflammatory diseases of the central nervous system (G00-G09)
8	1.9	Other forms of heart disease (I30-I52)	50	1.9	Cerebral palsy and other paralytic syndromes (G80-G83)	26	1.8	Other viral diseases (B25-B34)
10	1.8	Cerebral palsy and other paralytic syndromes (G80-G83)	46	1.8	Malignant neoplasms, stated or presumed to be primary, of lymphoid, haematinetic and related tissue (C81-C86)	25	1.8	Congenital malformations of the circulatory system (Q20-Q28)
	41.0	Other natural causes	1 071	41.0	Other natural causes	537	38.0	Other natural causes
	24.9	Non-natural causes	651	24.9	Non-natural causes	404	28.6	Non-natural causes
	100.0	All causes	2 613	100.0	All causes	1 415	100.0	All causes

*Including deaths due to MDR-TB and XDR-TB.

Appendix M7: The ten leading underlying natural causes of death by age and sex: Gauteng, 2014 (concluded)

Gauteng, both sexes, 15-44			Gauteng, males, 15-44			Gauteng, females, 15-44			
No.	%	No.	%	No.	%	No.	%	No.	%
1	12.5	3 563	11.3	1 857	11.3	1 687	14.2	1 687	14.2
2	6.4	1 843	5.6	921	5.6	906	7.6	906	7.6
3	6.4	1 819	5.5	909	5.5	894	7.5	894	7.5
4	5.1	1 471	4.3	706	4.3	753	6.3	753	6.3
5	3.1	889	3.1	505	3.1	479	4.0	479	4.0
6	3.1	883	2.5	406	2.5	370	3.1	370	3.1
7	2.0	578	1.7	274	1.7	324	2.7	324	2.7
8	1.9	546	1.5	250	1.5	282	2.4	282	2.4
9	1.6	463	1.4	230	1.4	266	2.2	266	2.2
10	1.5	437	1.3	208	1.3	249	2.1	249	2.1
	33.4	9 553	28.7	4 705	28.7	4 667	39.3	4 667	39.3
	22.8	6 523	33.1	5 416	33.1	1 007	8.5	1 007	8.5
	100.0	28 588	100.0	16 387	100.0	11 884	100.0	11 884	100.0
All causes			All causes			All causes			
All Gauteng, both sexes, 45-64			All Gauteng, males, 45-64			All Gauteng, females, 45-64			
No.	%	No.	%	No.	%	No.	%	No.	%
1	8.2	2 273	9.1	1 469	9.1	793	6.9	793	6.9
2	5.9	1 628	5.7	918	5.7	754	6.6	754	6.6
3	5.4	1 487	5.2	839	5.2	706	6.1	706	6.1
4	5.0	1 386	4.5	733	4.5	598	5.2	598	5.2
5	4.8	1 334	4.5	729	4.5	537	4.7	537	4.7
6	3.5	964	3.8	617	3.8	493	4.3	493	4.3
7	3.3	924	3.6	589	3.6	473	4.1	473	4.1
8	3.3	915	3.5	563	3.5	369	3.2	369	3.2
9	3.1	854	2.8	457	2.8	351	3.1	351	3.1
10	2.8	789	2.8	448	2.8	351	3.1	351	3.1
	48.0	13 326	45.7	7 404	45.7	5 614	48.9	5 614	48.9
	6.8	1 890	8.8	1 424	8.8	452	3.9	452	3.9
	100.0	27 770	100.0	16 190	100.0	11 491	100.0	11 491	100.0
All causes			All causes			All causes			
All Gauteng, both sexes, 65+			All Gauteng, males, 65+			All Gauteng, females, 65+			
No.	%	No.	%	No.	%	No.	%	No.	%
1	8.6	2 678	8.0	1 094	8.0	1 582	9.1	1 582	9.1
2	7.3	2 285	6.7	918	6.7	1 455	8.4	1 455	8.4
3	7.2	2 256	6.6	903	6.6	1 379	7.9	1 379	7.9
4	6.9	2 142	6.5	889	6.5	1 366	7.8	1 366	7.8
5	5.5	1 713	5.4	746	5.4	840	4.8	840	4.8
6	4.8	1 482	5.0	684	5.0	793	4.6	793	4.6
7	4.5	1 389	4.7	642	4.7	643	3.7	643	3.7
8	3.6	1 126	4.3	591	4.3	535	3.1	535	3.1
9	2.3	733	3.9	542	3.9	378	2.2	378	2.2
10	2.0	618	2.8	379	2.8	371	2.1	371	2.1
	44.0	13 735	42.5	5 853	42.5	7 547	43.4	7 547	43.4
	3.3	1 039	3.8	520	3.8	518	3.0	518	3.0
	100.0	31 196	100.0	13 761	100.0	17 407	100.0	17 407	100.0
All causes			All causes			All causes			

*Including deaths due to MDR-TB and XDR-TB.

Appendix M8: The ten leading underlying natural causes of death by age and sex: Mpumalanga, 2014

Mpumalanga, both sexes, all ages		Mpumalanga, males, all ages		Mpumalanga, females, all ages		
No.	%	No.	%	No.	%	
1	3 445	9,8	2 028	11,1	1	Tuberculosis (A15-A19)*
2	2 098	6,0	1 150	6,3	2	Human immunodeficiency virus [HIV] disease (B20-B24)
3	1 958	5,6	1 021	5,6	3	Influenza and pneumonia (J09-J18)
4	1 822	5,2	766	4,2	4	Cerebrovascular diseases (I60-I69)
5	1 660	4,7	756	4,1	5	Hypertensive diseases (I10-I15)
6	1 563	4,5	730	4,0	6	Human immunodeficiency virus [HIV] disease (B20-B24)
7	1 547	4,4	690	3,8	7	Influenza and pneumonia (J09-J18)
8	1 531	4,4	611	3,3	8	Other forms of heart disease (I30-I52)
9	1 508	4,3	602	3,3	9	Intestinal infectious diseases (A00-A09)
10	851	2,4	435	2,4	10	Other viral diseases (B25-B34)
	13 311	36,0	6 637	36,4		Certain disorders involving the immune mechanism (D80-D89)
	3 708	10,6	2 818	15,4		Other natural causes
	35 002	100,0	18 244	100,0		Non-natural causes
						All causes
All Mpumalanga, both sexes, Age 0	No.	%	No.	%	No.	%
1	397	19,5	213	20,2	1	Intestinal infectious diseases (A00-A09)
2	294	14,4	138	13,1	2	Respiratory and cardiovascular disorders specific to the perinatal period (P20-P29)
3	233	11,4	122	11,6	3	Influenza and pneumonia (J09-J18)
4	87	4,3	50	4,7	4	Other disorders originating in the perinatal period (P90-P96)
5	86	4,2	44	4,2	5	Disorders related to length of gestation and fetal growth (P05-P08)
6	85	4,2	39	3,7	6	Malnutrition (E40-E46)
7	68	3,3	30	2,8	7	Fetus and newborn affected by maternal factors and by complications of pregnancy, labour and delivery (P00-P04)
8	51	2,5	26	2,5	8	Infections specific to the perinatal period (P35-P39)
9	41	2,0	22	2,1	9	Certain disorders involving the immune mechanism (D80-D89)
10	39	1,9	22	2,1	10	Other acute lower respiratory infections (J20-J22)
	566	27,8	302	28,6		Other natural causes
	89	4,4	48	4,5		Non-natural causes
	2 036	100,0	1 056	100,0		All causes
All Mpumalanga, both sexes, 1-14	No.	%	No.	%	No.	%
1	188	14,0	112	15,3	1	Intestinal infectious diseases (A00-A09)
2	113	8,4	57	7,8	2	Influenza and pneumonia (J09-J18)
3	73	5,4	37	5,0	3	Tuberculosis (A15-A19)*
4	58	4,3	30	4,1	4	Malnutrition (E40-E46)
5	41	3,1	22	3,0	5	Human immunodeficiency virus [HIV] disease (B20-B24)
6	40	3,0	22	3,0	6	Other acute lower respiratory infections (J20-J22)
7	39	2,9	19	2,6	7	Human immunodeficiency virus [HIV] disease (B20-B24)
8	32	2,4	16	2,2	8	Other viral diseases (B25-B34)
9	27	2,0	16	2,2	9	Other bacterial diseases (A30-A49)
10	27	2,0	16	2,2	10	Episodic and paroxysmal disorders (G40-G47)
	398	29,7	205	27,9		Certain disorders involving the immune mechanism (D80-D89)
	304	22,7	182	24,8		Other natural causes
	1 340	100,0	734	100,0		Non-natural causes
						All causes
All Mpumalanga, both sexes, 15-19	No.	%	No.	%	No.	%
1	1 407	8,5	74	12,4	1	Intestinal infectious diseases (A00-A09)
2	1 058	6,4	56	9,3	2	Influenza and pneumonia (J09-J18)
3	1 050	6,3	36	6,0	3	Tuberculosis (A15-A19)*
4	950	5,7	27	4,5	4	Malnutrition (E40-E46)
5	940	5,7	24	4,0	5	Other acute lower respiratory infections (J20-J22)
6	930	5,6	19	3,2	6	Human immunodeficiency virus [HIV] disease (B20-B24)
7	810	4,9	17	2,8	7	Other viral diseases (B25-B34)
8	797	4,8	16	2,7	8	Other bacterial diseases (A30-A49)
9	786	4,7	14	2,3	9	Episodic and paroxysmal disorders (G40-G47)
10	439	2,6	13	2,2	10	Certain disorders involving the immune mechanism (D80-D89)
	6 589	39,6	181	30,2		Other natural causes
	881	5,3	122	20,4		Non-natural causes
	16 637	100,0	599	100,0		All causes

*Including deaths due to MDR-TB and XDR-TB.

Appendix M8: The ten leading underlying natural causes of death by age and sex: Mpumalanga, 2014 (concluded)

Mpumalanga, both sexes, 15-44		Mpumalanga, males, 15-44		Mpumalanga, females, 15-44	
No.	%	No.	%	No.	%
1	16.0	1 902	16.0	1 000	15.4
2	11.2	1 335	11.2	693	10.7
3	8.0	956	8.0	425	6.5
4	5.0	592	5.0	289	4.5
5	4.1	488	4.1	215	3.3
6	3.1	372	3.1	158	2.4
7	2.3	277	2.3	126	1.9
8	1.9	225	1.9	105	1.6
9	1.6	191	1.6	88	1.4
10	1.5	179	1.5	68	1.0
	25.6	3 054	25.6	1 421	21.9
	19.7	2 353	19.7	1 906	29.4
All causes	100.0	11 924	100.0	6 494	100.0
All Mpumalanga, both sexes, 45-64		All Mpumalanga, males, 45-64		All Mpumalanga, females, 45-64	
No.	%	No.	%	No.	%
1	11.1	1 089	11.1	742	13.1
2	6.3	617	6.3	372	6.6
3	6.2	611	6.2	323	5.7
4	5.3	525	5.3	281	5.0
5	5.3	525	5.3	267	4.7
6	4.8	470	4.8	244	4.3
7	4.5	441	4.5	238	4.2
8	4.4	435	4.4	201	3.5
9	3.1	301	3.1	167	2.9
10	2.7	262	2.7	166	2.9
	39.4	3 868	39.4	2 157	38.0
	6.8	671	6.8	518	9.1
All causes	100.0	9 815	100.0	5 676	100.0
All Mpumalanga, both sexes, 65+		All Mpumalanga, males, 65+		All Mpumalanga, females, 65+	
No.	%	No.	%	No.	%
1	11.5	1 131	11.5	409	9.7
2	10.6	1 035	10.6	365	8.6
3	9.3	913	9.3	321	7.6
4	8.2	806	8.2	310	7.3
5	5.0	480	5.0	232	5.5
6	3.7	367	3.7	226	5.4
7	3.6	355	3.6	214	5.1
8	3.4	331	3.4	177	4.2
9	2.8	272	2.8	138	3.3
10	2.1	202	2.1	97	2.3
	37.0	3 625	37.0	1 586	37.6
	2.8	270	2.8	147	3.5
All causes	100.0	9 797	100.0	4 222	100.0

*Including deaths due to MDR-TB and XDR-TB.

Appendix M9: The ten leading underlying natural causes of death by age and sex: Limpopo, 2014

Limpopo, both sexes, all ages			Limpopo, males, all ages			Limpopo, females, all ages				
No.	%	No.	%	No.	%	No.	%	No.	%	
1	8.2	3 911	8.2	2 032	8.6	1	8.6	2 022	8.4	
2	7.4	3 545	7.4	1 883	8.0	2	8.0	1 590	6.6	
3	5.8	2 767	5.8	1 325	5.6	3	5.6	1 507	6.3	
4	5.6	2 684	5.6	1 092	4.6	4	4.6	1 432	5.9	
5	4.7	2 237	4.7	917	3.9	5	3.9	1 319	5.5	
6	4.2	2 024	4.2	888	3.8	6	3.8	1 162	4.8	
7	4.1	1 982	4.1	877	3.7	7	3.7	1 081	4.5	
8	4.0	1 936	4.0	860	3.6	8	3.6	1 054	4.4	
9	2.9	1 407	2.9	666	2.8	9	2.8	738	3.1	
10	2.3	1 085	2.3	533	2.3	10	2.3	570	2.4	
	42.5	20 319	42.5	9 705	41.1		41.1	10 544	43.7	
	8.3	3 952	8.3	2 855	12.1		12.1	1 073	4.5	
	100.0	47 849	100.0	23 633	100.0		100.0	24 102	100.0	
All Limpopo, both sexes, Age 0			All Limpopo, males, Age 0			All Limpopo, females, Age 0				
1	15.3	481	15.3	269	16.1	1	16.1	237	16.6	
2	14.4	453	14.4	229	13.7	2	13.7	209	14.6	
3	13.0	409	13.0	212	12.7	3	12.7	174	12.2	
4	4.6	146	4.6	83	5.0	4	5.0	55	3.8	
5	3.8	120	3.8	65	3.9	5	3.9	52	3.6	
6	3.2	100	3.2	50	3.0	6	3.0	49	3.4	
7	2.7	84	2.7	48	2.9	7	2.9	36	2.5	
8	2.2	68	2.2	35	2.1	8	2.1	33	2.3	
8	2.2	68	2.2	35	2.1	9	2.1	31	2.2	
10	1.7	55	1.7	31	1.9	10	1.9	28	2.0	
	32.3	1 015	32.3	533	31.8		31.8	468	32.7	
	4.6	145	4.6	84	5.0		5.0	58	4.1	
	100.0	3 144	100.0	1 674	100.0		100.0	1 430	100.0	
All Limpopo, both sexes, 1-14			All Limpopo, males, 1-14			All Limpopo, females, 1-14				
1	15.8	361	15.8	206	16.8	1	16.8	154	14.7	
2	12.5	285	12.5	145	11.8	2	11.8	140	13.3	
3	5.7	130	5.7	71	5.8	3	5.8	59	5.6	
4	4.3	98	4.3	48	3.9	4	3.9	50	4.8	
5	3.0	68	3.0	37	3.0	5	3.0	31	3.0	
6	2.5	58	2.5	30	2.4	6	2.4	28	2.7	
7	1.6	37	1.6	17	1.4	7	1.4	22	2.1	
8	1.4	33	1.4	15	1.2	8	1.2	18	1.7	
8	1.4	33	1.4	15	1.2	8	1.2	18	1.7	
10	1.4	32	1.4	15	1.2	10	1.2	15	1.4	
	33.9	774	33.9	405	33.0		33.0	366	34.9	
	16.4	374	16.4	222	18.1		18.1	149	14.2	
	100.0	2 283	100.0	1 226	100.0		100.0	1 050	100.0	

*Including deaths due to MDR-TB and XDR-TB.

Appendix M9: The ten leading underlying natural causes of death by age and sex: Limpopo, 2014 (concluded)

Limpopo, both sexes, 15-44		Limpopo, males, 15-44		Limpopo, females, 15-44	
No.	%	No.	%	No.	%
1	13,5	1 749	12,7	812	12,7
2	8,5	1 104	6,9	442	6,9
3	7,9	1 019	6,8	431	6,8
4	6,4	828	5,2	331	5,2
5	5,1	665	4,5	289	4,5
6	3,4	444	2,9	185	2,9
7	2,4	315	2,2	138	2,2
8	2,2	291	2,1	131	2,1
9	1,9	252	1,6	100	1,6
10	1,7	218	1,5	96	1,5
	29,6	3 838	25,9	1 650	25,9
	17,2	2 233	27,8	1 776	27,8
All causes	100,0	12 956	100,0	6 381	100,0
All Limpopo, both sexes, 45-64		All Limpopo, males, 45-64		All Limpopo, females, 45-64	
No.	%	No.	%	No.	%
1	10,2	1 244	8,1	861	12,0
2	7,4	904	6,1	544	7,6
3	7,2	874	6,1	433	6,1
4	5,0	609	4,5	320	4,5
5	4,6	558	4,3	308	4,3
6	4,5	550	4,1	295	4,1
7	4,5	544	4,1	290	4,1
8	3,9	472	3,6	284	4,0
9	3,5	432	3,6	256	3,6
10	2,6	321	2,7	191	2,7
	40,5	4 936	39,4	2 816	39,4
	6,2	756	7,7	553	7,7
All causes	100,0	12 200	100,0	7 151	100,0
All Limpopo, both sexes, 65+		All Limpopo, males, 65+		All Limpopo, females, 65+	
No.	%	No.	%	No.	%
1	9,0	1 556	7,8	557	7,8
2	8,8	1 516	7,7	551	7,7
3	7,9	1 363	7,4	532	7,4
4	7,4	1 279	7,3	526	7,3
5	7,0	1 199	6,7	480	6,7
6	4,1	713	4,0	290	4,0
7	4,1	489	4,0	286	4,0
8	2,5	432	3,7	265	3,7
9	2,4	408	3,3	238	3,3
10	1,8	304	2,5	177	2,5
	43,7	7 510	42,7	3 062	42,7
	2,4	418	2,8	202	2,8
All causes	100,0	17 197	100,0	7 166	100,0
All Limpopo, both sexes, 65+		All Limpopo, males, 65+		All Limpopo, females, 65+	
No.	%	No.	%	No.	%
1	9,9	997	9,9	997	9,9
2	9,8	983	9,8	983	9,8
3	8,4	837	8,4	837	8,4
4	7,3	728	7,3	728	7,3
5	7,2	718	7,2	718	7,2
6	4,5	448	4,5	448	4,5
7	2,6	261	2,6	261	2,6
8	2,0	200	2,0	200	2,0
9	1,9	192	1,9	192	1,9
10	1,7	175	1,7	175	1,7
	42,6	4 268	42,6	4 268	42,6
	2,1	214	2,1	214	2,1
All causes	100,0	10 021	100,0	10 021	100,0

*Including deaths due to MDR-TB and XDR-TB.

Appendix N: Number of deaths by main groups of causes of death and district municipality of death occurrence (Western Cape, Eastern Cape and Northern Cape), 2014

Province of death	District municipality of death occurrence	Certain infectious and parasitic diseases	Neoplasms	Diseases of the blood and immune mechanism	Endocrine, nutritional and metabolic diseases	Diseases of the nervous system	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Perinatal conditions	Other natural causes	External causes of morbidity and mortality	Total	
		A00-B99*	C00-D48	D50-D89	E00-E90	G00-G99	I00-I99	J00-J99	K00-K93	P00-P96	Other	V01-Y98		
Western Cape	Cape Winelands	1 151	1 115	35	486	124	1 247	594	142	85	607	747	6 333	
	Central Karoo	115	112	22	45	17	136	84	14	14	51	99	709	
	City of Cape Town	4 156	4 938	176	2 276	646	5 098	1 966	600	477	2 763	4 031	27 127	
	Eden	778	941	53	359	122	1 139	463	138	92	303	466	4 854	
	Overberg	187	357	29	142	52	394	179	41	27	234	235	1 877	
	West Coast	474	436	32	166	50	529	256	49	27	240	316	2 575	
	Unspecified	55	80	3	44	14	91	41	9	4	67	137	545	
	Total	6 916	7 979	350	3 518	1 025	8 634	3 583	993	726	4 265	6 031	44 020	
	Eastern Cape	Alfred Nzo	679	96	56	90	68	300	247	53	43	2 766	533	4 931
		Amathole	2 333	756	143	657	324	2 095	1 576	239	43	1 710	1 249	11 125
Buffalo City		1 763	1 234	167	546	191	1 604	870	215	61	926	1 061	8 638	
Cacadu		696	339	82	233	75	681	404	88	31	500	430	3 559	
Chris Hani		2 055	490	155	562	229	1 546	991	204	99	1 511	891	8 733	
Joe Gqabi		858	196	151	168	69	527	309	71	37	1 511	363	4 260	
Nelson Mandela Bay		2 039	1 333	235	937	242	2 021	911	301	208	944	986	10 157	
O.R. Tambo		3 562	592	178	566	266	1 435	842	340	49	4 589	1 579	13 998	
Unspecified		126	59	9	48	26	197	138	17	3	378	151	1 152	
Total		14 111	5 095	1 176	3 807	1 490	10 406	6 288	1 528	574	14 835	7 243	66 553	
Northern Cape	Frances Baard	937	518	87	283	78	724	350	144	82	539	394	4 136	
	John Taolo Gaetsewe	901	115	33	136	41	361	325	40	115	356	230	2 653	
	Namakwa	131	194	9	85	13	285	155	16	24	89	152	1 153	
	Pixley ka Seme	645	246	91	185	74	602	363	72	65	295	403	3 041	
	Siyanda	600	265	91	191	71	550	387	66	66	241	334	2 862	
	Unspecified	33	16	2	7	3	30	21	5	5	40	49	211	
Total	3 247	1 354	313	887	280	2 552	1 601	343	357	1 560	1 562	14 056		

*Including deaths due to MDR-TB and XDR-TB.

Appendix N1: Number of deaths by main groups of causes of death and district municipality of death occurrence (Free State, KwaZulu-Natal and North West), 2014

Province of death	District municipality of death occurrence	Certain infectious and parasitic diseases		Neoplasms		Diseases of the blood and immune mechanism		Endocrine, nutritional and metabolic diseases		Diseases of the nervous system		Diseases of the circulatory system		Diseases of the respiratory system		Diseases of the digestive system		Perinatal conditions		Other natural causes		External causes of morbidity and mortality		Total
		A00-B99*	C00-D48	D50-D89	E00-E90	G00-G99	I00-I99	J00-J99	K00-K93	P00-P96	Other	V01-Y98												
Free State	Fezile Dabi	1 161	366	142	449	96	1 168	738	184	102	479	500	5 385											
	Lejweleputswa	1 586	380	246	498	135	1 211	1 072	210	203	991	709	7 241											
	Mangaung	1 764	1 009	243	518	166	1 359	772	236	189	1 749	874	8 879											
	Thabo Mofutsanyane	2 374	486	314	693	150	1 739	958	261	234	1 025	720	8 954											
	Xhariep	366	116	53	104	41	418	230	47	24	358	294	2 051											
	Unspecified	88	29	12	28	18	103	59	18	7	105	68	535											
	Total	7 339	2 386	1 010	2 290	606	5 998	3 829	956	759	4 707	3 165	33 045											
	KwaZulu-Natal	Amajuba	566	170	37	188	68	586	368	79	114	238	413	2 827										
		eThekweni	3 900	1 379	369	1 281	386	3 052	1 222	462	392	2 435	1 726	16 604										
		iLembe	1 263	340	88	335	106	808	319	114	120	442	431	4 366										
Sisonke		1 234	217	91	305	78	673	361	101	67	824	398	4 349											
Ugu		2 147	558	127	608	172	1 365	755	173	147	866	864	7 782											
UMgungundlovu		2 525	1 092	141	1 028	213	1 960	737	345	175	1 450	1 118	10 784											
Umkhanyakude		1 192	214	44	216	63	504	179	78	69	555	357	3 471											
Umkhanyathathi		1 338	253	75	283	89	809	452	102	147	542	425	4 515											
Uthukela		2 741	455	92	529	200	1 554	714	264	98	578	679	7 904											
Uthungulu		2 199	632	182	562	185	1 154	501	238	338	892	888	7 771											
Zululand	1 845	311	159	413	141	846	466	161	177	785	577	5 881												
Unspecified	585	112	24	184	74	648	269	55	17	445	471	2 884												
Total	21 535	5 733	1 429	5 932	1 775	13 959	6 343	2 172	1 861	10 052	8 347	79 138												
North West	Bojanala	2 337	656	333	757	143	2 185	1 249	277	198	2 052	1 093	11 280											
	Dr Kenneth Kaunda	2 125	918	179	414	138	1 279	700	264	216	1 101	669	8 003											
	Dr Ruth Segomotsi Mompoti	1 621	290	166	326	108	1 051	595	115	204	670	337	5 483											
	Ngaka Modiri Molema	1 800	422	304	530	154	1 747	1 109	180	263	1 935	609	9 053											
	Unspecified	177	40	10	42	13	239	118	15	21	275	164	1 114											
Total	8 060	2 326	992	2 069	556	6 501	3 771	851	902	6 033	2 872	34 933												

*Including deaths due to MDR-TB and XDR-TB.

Appendix N2: Number of deaths by main groups of causes of death and district municipality of death occurrence (Gauteng, Mpumalanga and Limpopo), 2014

Province of death	District municipality of death occurrence	Certain infectious and parasitic diseases		Neoplasms	Diseases of the blood and immune mechanism	Endocrine, nutritional and metabolic diseases	Diseases of the nervous system	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Perinatal conditions	External causes of morbidity and mortality		Total
		A00-B99*	C00-D48									D50-D89	E00-E90		G00-G99	I00-I99	J00-J99	K00-K93	P00-P96	Other natural causes	V01-Y98
Gauteng	City of Johannesburg	4 840	3 466	599	1 354	725	4 490	2 552	785	901	3 199	29 645		
	City of Tshwane	4 304	2 939	456	1 660	610	4 971	2 379	728	479	2 061	23 221		
	Ekurhuleni	4 408	1 673	639	1 327	563	3 651	2 658	672	779	4 760	23 558		
	Sedibeng	1 709	676	221	486	246	1 945	1 321	273	233	990	9 137		
	West Rand	1 361	734	226	516	198	1 549	958	246	172	1 588	8 576		
	Unspecified	274	176	28	76	58	406	233	64	42	570	2 599		
	Total	16 896	9 664	2 169	5 419	2 400	17 012	10 101	2 768	2 606	17 276	96 736		
Mpumalanga	Ehlanzeni	4 322	896	411	838	327	2 097	1 134	411	211	1 600	13 487		
	Gert Sibande	2 777	461	435	631	175	1 471	1 022	244	253	1 268	9 759		
	Nkangala	2 220	481	265	660	188	2 013	1 539	255	170	1 303	10 319		
	Unspecified	227	65	19	92	27	301	176	35	8	266	1 437		
	Total	9 546	1 903	1 130	2 221	717	5 882	3 871	945	642	4 437	3 708	35 002	
Limpopo	Capricorn	2 759	946	189	945	264	1 959	1 459	395	285	2 046	12 277		
	Greater Sekhukhune	2 618	383	160	617	247	1 630	1 626	278	83	887	9 244		
	Mopani	2 070	418	229	661	543	1 159	1 131	222	281	1 835	9 190		
	Vhembe	1 637	462	243	693	112	857	550	254	144	3 540	9 261		
	Waterberg	1 346	340	157	367	98	949	644	143	110	487	5 132		
	Unspecified	474	67	21	144	129	451	420	54	18	661	2 745		
	Total	10 904	2 616	999	3 427	1 393	7 005	5 830	1 346	921	9 456	47 849		

*Including deaths due to MDR-TB and XDR-TB.

Appendix O: Percentage distribution of deaths by main groups of causes of death and district municipality of death occurrence (Western Cape, Eastern Cape and Northern Cape), 2014

Province of death	District municipality of death occurrence	Certain infectious and parasitic diseases	Neoplasms	Diseases of the blood and immune mechanism	Endocrine, nutritional and metabolic diseases	Diseases of the nervous system	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Perinatal conditions		Other natural causes	External causes of morbidity and mortality	Total
		A00-B99*	C00-D48	D50-D89	E00-E90	G00-G99	I00-I99	J00-J99	K00-K93	P00-P96	Other	V01-Y98		
Western Cape	Cape Winelands	18,2	17,6	0,6	7,7	2,0	19,7	9,4	2,2	1,3	9,6	11,8	100,0	
	Central Karoo	16,2	15,8	3,1	6,3	2,4	19,2	11,8	2,0	2,0	7,2	14,0	100,0	
	City of Cape Town	15,3	18,2	0,6	8,4	2,4	18,8	7,2	2,2	1,8	10,2	14,9	100,0	
	Eden	16,0	19,4	1,1	7,4	2,5	23,5	9,5	2,8	1,9	6,2	9,6	100,0	
	Overberg	10,0	19,0	1,5	7,6	2,8	21,0	9,5	2,2	1,4	12,5	12,5	100,0	
	West Coast	18,4	16,9	1,2	6,4	1,9	20,5	9,9	1,9	1,0	9,3	12,3	100,0	
	Unspecified	10,1	14,7	0,6	8,1	2,6	16,7	7,5	1,7	0,7	12,3	25,1	100,0	
	Total	15,7	18,1	0,8	8,0	2,3	19,6	8,1	2,3	1,6	9,7	13,7	100,0	
	Eastern Cape	Alfred Nzo	13,8	1,9	1,1	1,8	1,4	6,1	5,0	1,1	0,9	56,1	10,8	100,0
		Amathole	21,0	6,8	1,3	5,9	2,9	18,8	14,2	2,1	0,4	15,4	11,2	100,0
Buffalo City		20,4	14,3	1,9	6,3	2,2	18,6	10,1	2,5	0,7	10,7	12,3	100,0	
Cacadu		19,6	9,5	2,3	6,5	2,1	19,1	11,4	2,5	0,9	14,0	12,1	100,0	
Chris Hani		23,5	5,6	1,8	6,4	2,6	17,7	11,3	2,3	1,1	17,3	10,2	100,0	
Joe Gqabi		20,1	4,6	3,5	3,9	1,6	12,4	7,3	1,7	0,9	35,5	8,5	100,0	
Nelson Mandela Bay		20,1	13,1	2,3	9,2	2,4	19,9	9,0	3,0	2,0	9,3	9,7	100,0	
O.R. Tambo		25,4	4,2	1,3	4,0	1,9	10,3	6,0	2,4	0,4	32,8	11,3	100,0	
Unspecified		10,9	5,1	0,8	4,2	2,3	17,1	12,0	1,5	0,3	32,8	13,1	100,0	
Total		21,2	7,7	1,8	5,7	2,2	15,6	9,4	2,3	0,9	22,3	10,9	100,0	
Northern Cape	Frances Baard	22,7	12,5	2,1	6,8	1,9	17,5	8,5	3,5	2,0	13,0	9,5	100,0	
	John Taolo Gaetsewe	34,0	4,3	1,2	5,1	1,5	13,6	12,3	1,5	4,3	13,4	8,7	100,0	
	Namakwa	11,4	16,8	0,8	7,4	1,1	24,7	13,4	1,4	2,1	7,7	13,2	100,0	
	Pixley ka Seme	21,2	8,1	3,0	6,1	2,4	19,8	11,9	2,4	2,1	9,7	13,3	100,0	
	Siyanda	21,0	9,3	3,2	6,7	2,5	19,2	13,5	2,3	2,3	8,4	11,7	100,0	
	Unspecified	15,6	7,6	0,9	3,3	1,4	14,2	10,0	2,4	2,4	19,0	23,2	100,0	
	Total	23,1	9,6	2,2	6,3	2,0	18,2	11,4	2,4	2,5	11,1	11,1	100,0	

*Including deaths due to MDR-TB and XDR-TB.

Appendix O1: Percentage distribution of deaths by main groups of causes of death and district municipality of death occurrence (Free State, KwaZulu-Natal and North West), 2014

Province of death	District municipality of death occurrence	Certain infectious and parasitic diseases		Neoplasms	Diseases of the blood and immune mechanism		Endocrine, nutritional and metabolic diseases		Diseases of the nervous system		Diseases of the circulatory system		Diseases of the respiratory system		Diseases of the digestive system		Perinatal conditions		Other natural causes		External causes of morbidity and mortality		Total
		A00-B99*	C00-D48		D50-D89	E00-E90	G00-G99	I00-I99	J00-J99	K00-K93	P00-P96	Other	V01-Y98										
Free State	Fezile Dabi	21,6	6,8	2,6	8,3	1,8	21,7	13,7	3,4	1,9	8,9	9,3	100,0										
	Lejweleputswa	21,9	5,2	3,4	6,9	1,9	16,7	14,8	2,9	2,8	13,7	9,8	100,0										
	Mangaung	19,9	11,4	2,7	5,8	1,9	15,3	8,7	2,7	2,1	19,7	9,8	100,0										
	Thabo Mofutsanyane	26,5	5,4	3,5	7,7	1,7	19,4	10,7	2,9	2,6	11,4	8,0	100,0										
	Xhariep	17,8	5,7	2,6	5,1	2,0	20,4	11,2	2,3	1,2	17,5	14,3	100,0										
	Unspecified	16,4	5,4	2,2	5,2	3,4	19,3	11,0	3,4	1,3	19,6	12,7	100,0										
	Total	22,2	7,2	3,1	6,9	1,8	18,2	11,6	2,9	2,3	14,2	9,6	100,0										
KwaZulu-Natal	Amajuba	20,0	6,0	1,3	6,7	2,4	20,7	13,0	2,8	4,0	8,4	14,6	100,0										
	eThekweni	23,5	8,3	2,2	7,7	2,3	18,4	7,4	2,8	2,4	14,7	10,4	100,0										
	iLembe	28,9	7,8	2,0	7,7	2,4	18,5	7,3	2,6	2,7	10,1	9,9	100,0										
	Sisonke	28,4	5,0	2,1	7,0	1,8	15,5	8,3	2,3	1,5	18,9	9,2	100,0										
	Ugu	27,6	7,2	1,6	7,8	2,2	17,5	9,7	2,2	1,9	11,1	11,1	100,0										
	UMgungundlovu	23,4	10,1	1,3	9,5	2,0	18,2	6,8	3,2	1,6	13,4	10,4	100,0										
	Umkhanyakude	34,3	6,2	1,3	6,2	1,8	14,5	5,2	2,2	2,0	16,0	10,3	100,0										
	Umkhanyathathi	29,6	5,6	1,7	6,3	2,0	17,9	10,0	2,3	3,3	12,0	9,4	100,0										
	Uthukela	34,7	5,8	1,2	6,7	2,5	19,7	9,0	3,3	1,2	7,3	8,6	100,0										
	Uthungulu	28,3	8,1	2,3	7,2	2,4	14,9	6,4	3,1	4,3	11,5	11,4	100,0										
North West	Zululand	31,4	5,3	2,7	7,0	2,4	14,4	7,9	2,7	3,0	13,3	9,8	100,0										
	Unspecified	20,3	3,9	0,8	6,4	2,6	22,5	9,3	1,9	0,6	15,4	16,3	100,0										
	Total	27,2	7,2	1,8	7,5	2,2	17,6	8,0	2,7	2,4	12,7	10,5	100,0										
	Bojanala	20,7	5,8	3,0	6,7	1,3	19,4	11,1	2,5	1,8	18,2	9,7	100,0										
	Dr Kenneth Kaunda	26,6	11,5	2,2	5,2	1,7	16,0	8,7	3,3	2,7	13,8	8,4	100,0										
North West	Dr Ruth Segomotsi Mompoti	29,6	5,3	3,0	5,9	2,0	19,2	10,9	2,1	3,7	12,2	6,1	100,0										
	Ngaka Modiri Molema	19,9	4,7	3,4	5,9	1,7	19,3	12,3	2,0	2,9	21,4	6,7	100,0										
	Unspecified	15,9	3,6	0,9	3,8	1,2	21,5	10,6	1,3	1,9	24,7	14,7	100,0										
	Total	23,1	6,7	2,8	5,9	1,6	18,6	10,8	2,4	2,6	17,3	8,2	100,0										

*Including deaths due to MDR-TB and XDR-TB.

Appendix O2: Percentage distribution of deaths by main groups of causes of death and district municipality of death occurrence (Gauteng, Mpumalanga and Limpopo), 2014

Province of death	District municipality of death occurrence	Certain infectious and parasitic diseases	Neoplasms	Diseases of the blood and immune mechanism	Endocrine, nutritional and metabolic diseases	Diseases of the nervous system	Diseases of the circulatory system	Diseases of the respiratory system	Diseases of the digestive system	Perinatal conditions	Other natural causes	External causes of morbidity and mortality	Total
		A00-B99*	C00-D48	D50-D89	E00-E90	G00-G99	I00-I99	J00-J99	K00-K93	P00-P96	Other	V01-Y98	
Gauteng	City of Johannesburg	16,3	11,7	2,0	4,6	2,4	15,1	8,6	2,6	3,0	22,7	10,8	100,0
	City of Tshwane	18,5	12,7	2,0	7,1	2,6	21,4	10,2	3,1	2,1	11,3	8,9	100,0
	Ekurhuleni	18,7	7,1	2,7	5,6	2,4	15,5	11,3	2,9	3,3	20,2	10,3	100,0
	Sedibeng	18,7	7,4	2,4	5,3	2,7	21,3	14,5	3,0	2,6	10,8	11,3	100,0
	West Rand	15,9	8,6	2,6	6,0	2,3	18,1	11,2	2,9	2,0	18,5	12,0	100,0
	Unspecified	10,5	6,8	1,1	2,9	2,2	15,6	9,0	2,5	1,6	21,9	25,9	100,0
	Total	17,5	10,0	2,2	5,6	2,5	17,6	10,4	2,9	2,7	17,9	10,8	100,0
Mpumalanga	Ehlanzeni	32,0	6,6	3,0	6,2	2,4	15,5	8,4	3,0	1,6	11,9	9,2	100,0
	Gert Sibande	28,5	4,7	4,5	6,5	1,8	15,1	10,5	2,5	2,6	13,0	10,5	100,0
	Nkangala	21,5	4,7	2,6	6,4	1,8	19,5	14,9	2,5	1,6	12,6	11,9	100,0
	Unspecified	15,8	4,5	1,3	6,4	1,9	20,9	12,2	2,4	0,6	18,5	15,4	100,0
	Total	27,3	5,4	3,2	6,3	2,0	16,8	11,1	2,7	1,8	12,7	10,6	100,0
Limpopo	Capricorn	22,5	7,7	1,5	7,7	2,2	16,0	11,9	3,2	2,3	16,7	8,4	100,0
	Greater Sekhukhune	28,3	4,1	1,7	6,7	2,7	17,6	17,6	3,0	0,9	9,6	7,7	100,0
	Mopani	22,5	4,5	2,5	7,2	5,9	12,6	12,3	2,4	3,1	20,0	7,0	100,0
	Vhembe	17,7	5,0	2,6	7,5	1,2	9,3	5,9	2,7	1,6	38,2	8,3	100,0
	Waterberg	26,2	6,6	3,1	7,2	1,9	18,5	12,5	2,8	2,1	9,5	9,6	100,0
	Unspecified	17,3	2,4	0,8	5,2	4,7	16,4	15,3	2,0	0,7	24,1	11,1	100,0
	Total	22,8	5,5	2,1	7,2	2,9	14,6	12,2	2,8	1,9	19,8	8,3	100,0

*Including deaths due to MDR-TB and XDR-TB.

Appendix P: The ten leading underlying natural causes of death by district municipality of death occurrence, Western Cape, 2014*

Cape Winelands			Central Karoo			City of Cape Town				
No.	%	No.	%	No.	%	No.	%	No.		
1	482	7,6	1	Tuberculosis (A15-A19)**	80	11,3	1	Diabetes mellitus (E10-E14)	1 964	7,2
2	432	6,8	2	Chronic lower respiratory diseases (J40-J47)	61	8,6	2	Human immunodeficiency virus [HIV] disease (B20-B24)	1 644	6,1
3	412	6,5	3	Diabetes mellitus (E10-E14)	35	4,9	3	Cerebrovascular diseases (I60-I69)	1 475	5,4
4	405	6,4	3	Hypertensive diseases (I10-I15)	35	4,9	4	Ischaemic heart diseases (I20-I25)	1 418	5,2
5	400	6,3	5	Ischaemic heart diseases (I20-I25)	32	4,5	5	Tuberculosis (A15-A19)**	1 304	4,8
6	359	5,7	6	Malignant neoplasms of digestive organs (C15-C26)	30	4,2	6	Malignant neoplasms of digestive organs (C15-C26)	1 218	4,5
7	310	4,9	7	Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	29	4,1	7	Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	1 148	4,2
8	274	4,3	7	Other forms of heart disease (I30-I52)	29	4,1	8	Hypertensive diseases (I10-I15)	1 038	3,8
9	204	3,2	7	Cerebrovascular diseases (I60-I69)	29	4,1	9	Chronic lower respiratory diseases (J40-J47)	1 009	3,7
10	170	2,7	10	Certain disorders involving the immune mechanism (D80-D89)	20	2,8	10	Other forms of heart disease (I30-I52)	822	3,0
	2 138	33,8		Other natural causes	230	32,4		Other natural causes	10 056	37,1
	747	11,8		Non-natural causes	99	14,0		Non-natural causes	4 031	14,9
	6 333	100,0		All causes	709	100,0		All causes	27 127	100,0
Eden			Overberg			West Coast				
No.	%	No.	%	No.	%	No.	%	No.		
1	348	7,2	1	Ischaemic heart diseases (I20-I25)	134	7,1	1	Tuberculosis (A15-A19)**	217	8,4
2	329	6,8	2	Chronic lower respiratory diseases (J40-J47)	116	6,2	2	Chronic lower respiratory diseases (J40-J47)	179	7,0
3	319	6,6	3	Diabetes mellitus (E10-E14)	115	6,1	3	Cerebrovascular diseases (I60-I69)	146	5,7
4	298	6,1	4	Cerebrovascular diseases (I60-I69)	104	5,5	4	Ischaemic heart diseases (I20-I25)	145	5,6
5	254	5,2	5	Tuberculosis (A15-A19)**	99	5,3	5	Diabetes mellitus (E10-E14)	140	5,4
6	251	5,2	5	Malignant neoplasms of digestive organs (C15-C26)	99	5,3	6	Human immunodeficiency virus [HIV] disease (B20-B24)	136	5,3
7	238	4,9	7	Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	94	5,0	7	Hypertensive diseases (I10-I15)	126	4,9
8	206	4,2	8	Hypertensive diseases (I10-I15)	76	4,0	8	Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	117	4,5
9	196	4,0	9	Other forms of heart disease (I30-I52)	55	2,9	9	Malignant neoplasms of digestive organs (C15-C26)	108	4,2
10	177	3,6	10	Influenza and pneumonia (J09-J18)	50	2,7	10	Other forms of heart disease (I30-I52)	77	3,0
	1 772	36,5		Other natural causes	700	37,3		Other natural causes	868	33,7
	466	9,6		Non-natural causes	235	12,5		Non-natural causes	316	12,3
	4 854	100,0		All causes	1 877	100,0		All causes	2 575	100,0

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix P1: The ten leading underlying natural causes of death by district municipality of death occurrence, Eastern Cape, 2014*

Alfred Nzo			Amathole			Buffalo City Metro			Cacadu			Chris Hani			Joe Gqabi		
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	5.4	265	5.4	1	9.8	1 091	9.8	1	9.8	1	9.8	1	9.8	1	9.8	1	9.8
2	2.7	135	2.7	2	6.3	706	6.3	2	6.3	2	6.3	2	6.3	2	6.3	2	6.3
3	2.5	122	2.5	3	6.2	690	6.2	3	6.2	3	6.2	3	6.2	3	6.2	3	6.2
4	2.3	113	2.3	4	5.7	636	5.7	4	5.7	4	5.7	4	5.7	4	5.7	4	5.7
5	2.3	111	2.3	5	4.8	532	4.8	5	4.8	5	4.8	5	4.8	5	4.8	5	4.8
6	2.1	106	2.1	6	4.6	514	4.6	6	4.6	6	4.6	6	4.6	6	4.6	6	4.6
7	1.9	94	1.9	7	3.9	433	3.9	7	3.9	7	3.9	7	3.9	7	3.9	7	3.9
8	1.2	61	1.2	8	3.8	418	3.8	8	3.8	8	3.8	8	3.8	8	3.8	8	3.8
9	1.1	54	1.1	9	2.9	327	2.9	9	2.9	9	2.9	9	2.9	9	2.9	9	2.9
10	0.9	44	0.9	10	2.9	318	2.9	10	2.9	10	2.9	10	2.9	10	2.9	10	2.9
	66.8	3 293	66.8		37.9	4 211	37.9		37.9		37.9		37.9		37.9		37.9
	10.8	533	10.8		11.2	1 249	11.2		11.2		11.2		11.2		11.2		11.2
	100.0	4 931	100.0		100.0	11 125	100.0		100.0		100.0		100.0		100.0		100.0
All causes			All causes			All causes			All causes			All causes			All causes		
Cacadu			Chris Hani			Joe Gqabi			Joe Gqabi			Joe Gqabi			Joe Gqabi		
No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
1	9.3	330	9.3	1	9.5	827	9.5	1	9.5	1	9.5	1	9.5	1	9.5	1	9.5
2	5.4	192	5.4	2	5.8	503	5.8	2	5.8	2	5.8	2	5.8	2	5.8	2	5.8
3	5.2	186	5.2	3	5.7	500	5.7	3	5.7	3	5.7	3	5.7	3	5.7	3	5.7
4	5.2	185	5.2	4	4.8	498	4.8	4	4.8	4	4.8	4	4.8	4	4.8	4	4.8
5	5.2	184	5.2	5	4.7	416	4.7	5	4.7	5	4.7	5	4.7	5	4.7	5	4.7
6	5.1	183	5.1	6	4.7	413	4.7	6	4.7	6	4.7	6	4.7	6	4.7	6	4.7
7	4.2	149	4.2	7	4.3	377	4.3	7	4.3	7	4.3	7	4.3	7	4.3	7	4.3
8	4.1	147	4.1	8	4.0	352	4.0	8	4.0	8	4.0	8	4.0	8	4.0	8	4.0
9	3.0	105	3.0	9	3.5	309	3.5	9	3.5	9	3.5	9	3.5	9	3.5	9	3.5
10	2.3	83	2.3	10	3.3	291	3.3	10	3.3	10	3.3	10	3.3	10	3.3	10	3.3
	38.9	1 385	38.9		38.4	3 356	38.4		38.4		38.4		38.4		38.4		38.4
	12.1	430	12.1		10.2	891	10.2		10.2		10.2		10.2		10.2		10.2
	100.0	3 559	100.0		100.0	8 733	100.0		100.0		100.0		100.0		100.0		100.0
All causes			All causes			All causes			All causes			All causes			All causes		

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix P3: The ten leading underlying natural causes of death by district municipality of death occurrence, Free State, 2014*

Fezile Dabi			Lejweleputswa			Mangaung Metro		
No.	%		No.	%		No.	%	
1	548	10,2	1	748	10,3	1	572	6,4
2	398	7,4	2	649	9,0	2	569	6,4
3	336	6,2	3	364	5,0	3	469	5,3
4	320	5,9	4	345	4,8	4	415	4,7
5	303	5,6	5	337	4,7	5	335	3,8
6	302	5,6	6	318	4,4	6	294	3,3
7	227	4,2	7	272	3,8	7	285	3,2
8	195	3,6	8	232	3,2	8	251	2,8
9	139	2,6	9	197	2,7	9	195	2,2
10	135	2,5	10	187	2,6	10	190	2,1
	1 982	36,8		2 883	39,8		4 430	49,9
	500	9,3		709	9,8		874	9,8
	5 385	100,0		7 241	100,0		8 879	100,0
Thabo Mofutsanyane			Xhariep					
No.	%		No.	%		No.	%	
1	836	9,3	1	156	7,6			
2	528	5,9	2	132	6,4			
3	528	5,9	3	125	6,1			
4	525	5,9	4	104	5,1			
5	482	5,4	5	86	4,2			
6	476	5,3	6	80	3,9			
7	436	4,9	7	78	3,8			
8	433	4,8	8	69	3,4			
9	403	4,5	9	67	3,3			
10	248	2,8	10	63	3,1			
	3 339	37,3		797	38,9			
	720	8,0		294	14,3			
	8 954	100,0		2 051	100,0			

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix P4: The ten leading underlying natural causes of death by district municipality of death occurrence, KwaZulu-Natal, 2014*

Amajuba		eThekweni Metro		iLembe	
No.	%	No.	%	No.	%
1	8.9	1 744	10.5	1	13.7
2	6.7	1 057	6.4	2	8.0
3	6.4	1 029	6.2	3	6.4
4	6.2	926	5.6	4	4.9
5	5.3	800	4.8	5	4.6
6	5.1	541	3.3	6	3.8
7	4.0	536	3.2	7	3.6
8	3.1	509	3.1	8	3.0
9	2.7	421	2.5	9	3.0
10	2.5	370	2.2	10	2.7
	34.4	6 945	41.8		36.4
	14.6	1 726	10.4		9.9
All causes	100.0	16 604	100.0	All causes	100.0
Sisonke		Ugu		uMgungundlovu	
No.	%	No.	%	No.	%
1	12.9	978	12.6	1	8.6
2	7.3	555	7.1	2	8.1
3	6.1	528	6.8	3	7.2
4	6.0	461	5.9	4	6.0
5	4.3	370	4.8	5	5.0
6	4.2	321	4.1	6	3.3
7	4.0	287	3.7	7	3.2
8	3.8	286	3.7	8	2.9
9	2.8	241	3.1	9	2.9
10	2.3	220	2.8	10	2.7
	37.2	2 671	34.3		39.7
	9.2	864	11.1		10.4
All causes	100.0	7 782	100.0	All causes	100.0

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix P4: The ten leading underlying natural causes of death by district municipality of death occurrence, KwaZulu-Natal, 2014* (concluded)

uMkhanyakude		No.	%	uMzinyathi		No.	%	uThukela		No.	%
1	Tuberculosis (A15-A19)**	438	12,6	1	Tuberculosis (A15-A19)**	445	9,9	1	Tuberculosis (A15-A19)**	958	12,1
2	Human immunodeficiency virus [HIV] disease (B20-B24)	373	10,7	2	Cerebrovascular diseases (I60-I69)	305	6,8	2	Human immunodeficiency virus [HIV] disease (B20-B24)	703	8,9
3	Cerebrovascular diseases (I60-I69)	196	5,6	3	Human immunodeficiency virus [HIV] disease (B20-B24)	301	6,7	3	Cerebrovascular diseases (I60-I69)	548	6,9
4	Other viral diseases (B25-B34)	159	4,6	4	Other viral diseases (B25-B34)	300	6,6	4	Other viral diseases (B25-B34)	451	5,7
4	Diabetes mellitus (E10-E14)	159	4,6	5	Other forms of heart disease (I30-I52)	274	6,1	5	Diabetes mellitus (E10-E14)	438	5,5
6	Other forms of heart disease (I30-I52)	155	4,5	6	Diabetes mellitus (E10-E14)	199	4,4	6	Intestinal infectious diseases (A00-A09)	435	5,5
7	Intestinal infectious diseases (A00-A09)	130	3,7	7	Intestinal infectious diseases (A00-A09)	198	4,4	7	Other forms of heart disease (I30-I52)	389	4,9
8	Hypertensive diseases (I10-I15)	107	3,1	8	Influenza and pneumonia (J09-J18)	177	3,9	8	Influenza and pneumonia (J09-J18)	360	4,6
9	Influenza and pneumonia (J09-J18)	89	2,6	9	Other acute lower respiratory infections (J20-J22)	148	3,3	9	Hypertensive diseases (I10-I15)	319	4,0
10	Other bacterial diseases (A30-A49)	47	1,4	10	Hypertensive diseases (I10-I15)	126	2,8	10	Ischaemic heart diseases (I20-I25)	215	2,7
	Other natural causes	1 261	36,3		Other natural causes	1 617	35,8		Other natural causes	2 409	30,5
	Non-natural causes	357	10,3		Non-natural causes	425	9,4		Non-natural causes	679	8,6
	All causes	3 471	100,0		All causes	4 515	100,0		All causes	7 904	100,0
uThungulu		No.	%	Zululand		No.	%				
1	Tuberculosis (A15-A19)**	816	10,5	1	Tuberculosis (A15-A19)**	880	15,0				
2	Human immunodeficiency virus [HIV] disease (B20-B24)	553	7,1	2	Cerebrovascular diseases (I60-I69)	325	5,5				
3	Diabetes mellitus (E10-E14)	449	5,8	3	Diabetes mellitus (E10-E14)	310	5,3				
4	Cerebrovascular diseases (I60-I69)	431	5,5	4	Human immunodeficiency virus [HIV] disease (B20-B24)	299	5,1				
5	Other viral diseases (B25-B34)	342	4,4	5	Intestinal infectious diseases (A00-A09)	287	4,9				
6	Other forms of heart disease (I30-I52)	293	3,8	6	Other viral diseases (B25-B34)	276	4,7				
7	Hypertensive diseases (I10-I15)	275	3,5	7	Other forms of heart disease (I30-I52)	272	4,6				
8	Intestinal infectious diseases (A00-A09)	228	2,9	8	Influenza and pneumonia (J09-J18)	224	3,8				
9	Influenza and pneumonia (J09-J18)	219	2,8	9	Hypertensive diseases (I10-I15)	161	2,7				
10	Malignant neoplasms of digestive organs (C15-C26)	142	1,8	10	Other acute lower respiratory infections (J20-J22)	134	2,3				
	Other natural causes	3 135	40,3		Other natural causes	2 136	36,3				
	Non-natural causes	888	11,4		Non-natural causes	577	9,8				
	All causes	7 771	100,0		All causes	5 881	100,0				

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix P5: The ten leading underlying natural causes of death by district municipality of death occurrence, North West, 2014*

Bojanala Platinum		Dr Kenneth Kaunda		Dr Ruth Segomotsi Mompati		No.	%	No.	%	No.	%
1	Tuberculosis (A15-A19)**	915	8,1	1	Tuberculosis (A15-A19)**	854	10,7	1	Tuberculosis (A15-A19)**	517	9,4
2	Hypertensive diseases (I10-I15)	739	6,6	2	Human immunodeficiency virus [HIV] disease (B20-B24)	522	6,5	2	Human immunodeficiency virus [HIV] disease (B20-B24)	362	6,6
3	Other forms of heart disease (I30-I52)	679	6,0	3	Cerebrovascular diseases (I60-I69)	377	4,7	3	Hypertensive diseases (I10-I15)	348	6,3
4	Influenza and pneumonia (J09-J18)	673	6,0	4	Influenza and pneumonia (J09-J18)	335	4,2	4	Other viral diseases (B25-B34)	335	6,1
5	Diabetes mellitus (E10-E14)	591	5,2	5	Hypertensive diseases (I10-I15)	292	3,6	5	Intestinal infectious diseases (A00-A09)	325	5,9
6	Cerebrovascular diseases (I60-I69)	565	5,0	6	Other forms of heart disease (I30-I52)	287	3,6	6	Other forms of heart disease (I30-I52)	297	5,4
7	Intestinal infectious diseases (A00-A09)	444	3,9	7	Other viral diseases (B25-B34)	269	3,4	7	Influenza and pneumonia (J09-J18)	286	5,2
8	Other viral diseases (B25-B34)	391	3,5	8	Diabetes mellitus (E10-E14)	260	3,2	8	Cerebrovascular diseases (I60-I69)	263	4,8
9	Human immunodeficiency virus [HIV] disease (B20-B24)	321	2,8	9	Intestinal infectious diseases (A00-A09)	241	3,0	9	Diabetes mellitus (E10-E14)	157	2,9
10	Chronic lower respiratory diseases (J40-J47)	270	2,4	10	Malignant neoplasms of digestive organs (C15-C26)	219	2,7	10	Certain disorders involving the immune mechanism (D80-D89)	129	2,4
	Other natural causes	4 599	40,8		Other natural causes	3 678	46,0		Other natural causes	2 127	38,8
	Non-natural causes	1 093	9,7		Non-natural causes	669	8,4		Non-natural causes	337	6,1
	All causes	11 280	100,0		All causes	8 003	100,0		All causes	5 483	100,0
Ngaka Modiri Molema		%		%		%		%		%	
1	Other forms of heart disease (I30-I52)	757	8,4								
2	Tuberculosis (A15-A19)**	750	8,3								
3	Influenza and pneumonia (J09-J18)	590	6,5								
4	Hypertensive diseases (I10-I15)	435	4,8								
5	Cerebrovascular diseases (I60-I69)	405	4,5								
6	Intestinal infectious diseases (A00-A09)	400	4,4								
7	Diabetes mellitus (E10-E14)	326	3,6								
8	Human immunodeficiency virus [HIV] disease (B20-B24)	306	3,4								
9	Other viral diseases (B25-B34)	216	2,4								
10	Certain disorders involving the immune mechanism (D80-D89)	214	2,4								
	Other natural causes	4 045	44,7								
	Non-natural causes	609	6,7								
	All causes	9 053	100,0								

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix P6: The ten leading underlying natural causes of death by district municipality of death occurrence, Gauteng, 2014*

City of Johannesburg Metro			City of Tshwane Metro			Ekurhuleni Metro		
No.	%	No.	%	No.	%	No.	%	No.
1	5,5	1 640	1	1	1 597	1	6,9	1 749
2	4,7	1 385	2	2	1 555	2	6,7	1 353
3	4,4	1 298	3	3	1 238	3	5,3	1 064
4	4,0	1 174	4	4	1 166	4	5,0	960
5	3,6	1 054	5	5	1 124	5	4,8	954
6	3,4	1 004	6	6	1 121	6	4,8	950
7	2,8	839	7	7	936	7	4,0	754
8	2,6	776	8	8	752	8	3,2	584
9	2,3	681	9	9	671	9	2,9	570
10	2,1	628	10	10	607	10	2,6	524
	53,9	15 967			10 393		44,8	11 668
	10,8	3 199			2 061		8,9	2 428
All causes	100,0	29 645	All causes	100,0	23 221	All causes	100,0	23 558
Sedibeng			West Rand					
1	10,5	955	1	1	571		6,7	
2	9,7	889	2	2	524		6,1	
3	7,1	652	3	3	486		5,7	
4	4,9	444	4	4	387		4,5	
5	4,8	442	5	5	362		4,2	
6	4,3	397	6	6	275		3,2	
7	3,7	336	7	7	256		3,0	
8	2,8	255	8	8	229		2,7	
9	2,4	219	9	9	215		2,5	
10	1,9	174	10	10	208		2,4	
	36,5	3 337			4 035		47,0	
	11,3	1 037			1 028		12,0	
All causes	100,0	9 137	All causes	100,0	8 576		100,0	

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix P7: The ten leading underlying natural causes of death by district municipality of death occurrence, Mpumalanga, 2014*

Ehlanzeni		No.	%	Gert Sibande		No.	%	Nkangala		No.	%
1	Tuberculosis (A15-A19)**	1 651	12,2	1	Tuberculosis (A15-A19)**	862	8,8	1	Tuberculosis (A15-A19)**	838	8,1
2	Human immunodeficiency virus [HIV] disease (B20-B24)	1 008	7,5	2	Human immunodeficiency virus [HIV] disease (B20-B24)	623	6,4	2	Influenza and pneumonia (J09-J18)	774	7,5
3	Cerebrovascular diseases (I60-I69)	779	5,8	3	Influenza and pneumonia (J09-J18)	586	6,0	3	Hypertensive diseases (I10-I15)	647	6,3
4	Intestinal infectious diseases (A00-A09)	606	4,5	4	Other viral diseases (B25-B34)	542	5,6	4	Cerebrovascular diseases (I60-I69)	535	5,2
5	Diabetes mellitus (E10-E14)	604	4,5	5	Intestinal infectious diseases (A00-A09)	507	5,2	5	Diabetes mellitus (E10-E14)	526	5,1
6	Other viral diseases (B25-B34)	594	4,4	6	Diabetes mellitus (E10-E14)	464	4,8	6	Other forms of heart disease (I30-I52)	468	4,5
7	Other forms of heart disease (I30-I52)	536	4,0	7	Cerebrovascular diseases (I60-I69)	434	4,4	7	Human immunodeficiency virus [HIV] disease (B20-B24)	446	4,3
8	Influenza and pneumonia (J09-J18)	508	3,8	8	Hypertensive diseases (I10-I15)	427	4,4	8	Other viral diseases (B25-B34)	391	3,8
9	Hypertensive diseases (I10-I15)	399	3,0	9	Other forms of heart disease (I30-I52)	414	4,2	9	Intestinal infectious diseases (A00-A09)	343	3,3
10	Certain disorders involving the immune mechanism (D80-D89)	299	2,2	10	Certain disorders involving the immune mechanism (D80-D89)	379	3,9	10	Other acute lower respiratory infections (J20-J22)	337	3,3
	Other natural causes	5 263	39,0		Other natural causes	3 499	35,9		Other natural causes	3 789	36,7
	Non-natural causes	1 240	9,2		Non-natural causes	1 022	10,5		Non-natural causes	1 225	11,9
	All causes	13 487	100,0		All causes	9 759	100,0		All causes	10 319	100,0

*Excluding cases with unspecified district municipality.

**Including deaths due to *MDR-TB* and *XDR-TB*.

Appendix P8: The ten leading underlying natural causes of death by district municipality of death occurrence, Limpopo, 2014*

Capricorn			Greater Sekhukhune			Mopani		
No.	%	No.	No.	%	No.	%	No.	%
1	8,2	1 011	1	13,1	1 208	1	8,8	811
2	6,6	815	2	8,1	753	2	7,8	718
3	6,5	799	3	7,2	670	3	5,5	508
4	5,4	658	4	6,7	621	4	5,5	508
5	5,3	656	5	6,4	591	5	5,0	458
6	5,2	643	6	5,4	500	6	4,6	423
7	4,7	578	7	5,1	475	7	4,3	393
8	3,8	465	8	4,7	430	8	3,9	355
9	2,8	349	9	3,0	280	9	3,7	337
10	1,9	236	10	2,4	220	10	3,4	315
	41,0	5 037		30,1	2 781		40,5	3 723
	8,4	1 030		7,7	715		7,0	641
All causes	100,0	12 277	All causes	100,0	9 244	All causes	100,0	9 190
Vhembe			Waterberg					
No.	%	No.	No.	%	No.	%	No.	%
1	6,4	594	1	10,7	549	1	10,7	811
2	5,1	475	2	7,1	365	2	7,8	718
3	4,0	371	3	6,3	324	3	5,5	508
4	4,0	367	4	5,6	287	4	5,5	508
5	3,6	334	5	5,6	287	5	5,0	458
6	3,4	314	6	4,7	241	6	4,6	423
7	2,5	231	7	4,4	228	7	4,3	393
8	2,4	224	8	3,9	202	8	3,9	355
9	2,0	189	9	3,4	177	9	3,7	337
10	2,0	182	10	2,4	124	10	3,4	315
	56,3	5 211		36,2	1 857		40,5	3 723
	8,3	769		9,6	491		7,0	641
All causes	100,0	9 261	All causes	100,0	5 132	All causes	100,0	9 190

*Excluding cases with unspecified district municipality.

**Including deaths due to MDR-TB and XDR-TB.

Appendix Q: Population group differences

The ten leading underlying causes of death by population group for 2014 are shown in Appendix Q1 (see page 127). Five of the ten leading causes were common for the four population groups, namely *cerebrovascular diseases*, *diabetes mellitus*, *other forms of heart disease*, *hypertensive diseases*, and *chronic lower respiratory diseases*, even though their rankings were not the same across all population groups.

Tuberculosis was the leading cause of death in 2014 among the black African population, accounting for 10,1% deaths in this population group, whilst for the white population group, the leading cause of death was *ischaemic heart diseases* responsible for 11,0% deaths in this population group. Among the Indian and coloured population groups, *diabetes mellitus* was the leading cause of death, accounting for 14,8% and 7,3% deaths in these population groups respectively. *Malignant neoplasms of digestive organs* and *malignant neoplasms of respiratory and intrathoracic organs* were part of the ten leading causes of death for all the population groups except for the black African population group. Likewise, the black African population group was the only population group that had *intestinal infectious diseases* and *other viral diseases* as part of its ten leading causes of death.

The second leading cause of death for the black African population was *HIV disease* (6,0%), whilst for white population group, *other forms of heart disease* (6,9%) was the second leading cause. For the Indian population, the second leading cause of death was *ischaemic heart diseases*, accounting for 12,9% deaths, whilst *tuberculosis* was the second leading cause of death amongst the coloured population (6,9%). The coloured population had a higher proportion of deaths due to non-natural causes compared to other population groups at (12,1%) and white population group had lowest (8,7).

According to the global burden of disease, black Africans had five communicable diseases on the ten leading underlying causes of death. For both white and Indian/Asian population groups, nine of the ten leading underlying causes of death were non-communicable diseases while eight of the ten leading underlying causes of death amongst the coloured population group were non-communicable diseases.

Appendix Q1: The ten leading underlying natural causes of death by population group, 2014

Causes of death (based on ICD-10)	Black African			White			Indian or Asian			Colored			Other/Unknown/Unspecified		
	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%	Rank	No.	%
Tuberculosis (A15-A19)	1	32 405	10,1	...	...	...	...	...	...	2	2 148	6,9	1	3 036	5,2
Human immunodeficiency virus [HIV] disease (B20-B24)	2	19 150	6,0	...	...	...	...	...	...	7	1 324	4,3	8	1 372	2,4
Influenza and pneumonia (J09-J18)	3	17 417	5,4	7	1 622	4,2	9	134	2,1	...	...	...	2	2 095	3,6
Cerebrovascular diseases (I60-I69)	4	16 551	5,2	3	2 281	5,9	4	353	5,7	4	1 864	6,0	3	2 039	3,5
Diabetes mellitus (E10-E14)	5	15 882	5,0	6	1 684	4,4	1	924	14,8	1	2 273	7,3	4	1 984	3,4
Other forms of heart disease (I30-I52)	6	15 353	4,8	2	2 655	6,9	3	399	6,4	10	996	3,2	5	1 936	3,3
Hypertensive diseases (I10-I15)	7	13 607	4,3	9	1 077	2,8	7	199	3,2	8	1 319	4,3	6	1 568	2,7
Other viral diseases (B25-B34)	8	12 737	4,0	...	...	...	...	...	...	...	...	...	...	...	...
Intestinal infectious diseases (A00-A09)	9	12 518	3,9	...	...	...	...	...	...	...	...	...	9	1 229	2,1
Chronic lower respiratory diseases (J40-J47)	10	6 323	2,0	4	2 150	5,6	5	232	3,7	3	1 993	6,4	7	1 398	2,4
Ischaemic heart diseases (I20-I25)	...	...	...	1	4 234	11,0	2	805	12,9	5	1509,0	4,9	10	1096	1,9
Malignant neoplasms of digestive organs (C15-C26)	...	...	...	5	2 108	5,5	6	213	3,4	9	1147,0	3,7	...	...	...
Malignant neoplasms of respiratory and intrathoracic organs (C30-C39)	...	...	...	8	1 268	3,3	10	124	2,0	6	1345,0	4,3	...	...	...
Renal failure (N17-N19)	...	...	...	10	863	2,2	8	187	3,0	...	...	...	...	...	...
Other natural causes		122 616	38,4		15 143	39,4		1 983	31,8		11 354	36,6		35 377	60,9
Non natural causes		35 028	11,0		3 357	8,7		688	11,0		3 746	12,1		4 942	8,5
All causes		319 587	100,0		38 442	100,0		6 241	100,0		31 018	100,0		58 072	100,0

* Including deaths due to MDR-TB and XDR-TB