HISTORY OF MEDICINE

Sources of South African mortality data, 1910 - 1992

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A complete bibliography is given of official statistical publications that are the primary source of mortality data (number of deaths, ages and causes) for the South African population for the period 1910 - 1992. Details of the edition of the International Classification of Diseases used in the reports are noted, as well as the causes of death listed in the reports.

Details of unpublished computer tapes used to produce these reports from 1968 onwards are also presented.

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Cohort studies and studies of secular trends in mortality require a knowledge of the deaths in a population in respect of age and cause over a long period of time. It is difficult to locate all the official statistical reports on deaths for South Africa.

The official bibliography of statistical publications' is incomplete and does not list all reports relating to death. It gives no indication of the tabular content of these reports.

This paper provides a complete bibliography of the official statistical publications that are a primary source of the numbers of deaths by age and cause in the South African population. (Life tables are excluded from this study.)

Until 1924, each of the provinces had a different series of laws relating to the registration of births and deaths. In 1923, the Births, Deaths and Marriages Registration Act (No. 17), consolidating the laws of the various provinces, was passed. It came into force at the beginning of 1924. Under this act, registration was compulsory for all races in urban areas. For blacks in rural areas, registration was voluntary.

All deaths in urban areas had to be certified by a medical practitioner, or an inquest had to be held. A medical certificate was not ordinarily required in the event of a death in a rural area.

Since 1924 death statistics have been tabulated by area of residence. The first year in which all death certificates were examined by a medical assessor attached to the office of census and statistics was 1929.

South Africa was a signatory to the agreement in Paris in 1909 which revised the then International Classification of the Causes of Sickness and Death (now the International Classification of Diseases, Injuries and Causes of Death (ICD)). The dates of revision of the ICD and the dates at which such revisions became effective in the statistical reporting of mortality in South Africa are given in Table I.

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Table I. Revisions of the International Classification of Diseases

ICD revision	Date	Dates of annual statistics used in South Africa
1st	1900	
2nd	1909	1912 - 1921
3rd	1920	1922 - 1929
4th	1929	1930 - 1938
5th	1939	1939 - 1948*
6th	1948	1949 - 1958 [†]
7th	1955	1959 - 1967‡
8th	1965	1968 - 1977
9th	1975	1978

Age-specific mortality statistics according to intermediate list of 87 causes only. † Mortality statistics according to intermediate list of 150 causes except for blacks where an abridged list of 50 causes is used.

‡ For the period 1959 - 1966 mortality statistics are according to an intermediate list of 150 causes.

It should however be noted that certain additional codes have at times been added to the classification used in South Africa. These are listed in the explanatory notes that accompany the local versions of the classification.23 At times these codes fall outside the chapters of the classification where they belong. For example, in the 9th revision, code 609, cirrhosis of the liver, is classified a disease of the genito-urinary system instead of a disease of the digestive system. Code 509, mesothelioma, falls under respiratory diseases rather than carcinomas. These local codes are incorrectly omitted from the listings of the basic tabulation list of the 9th revision in the South African edition.³

Not all the statistical reports on death have used the full ICD classification. The exceptions are indicated in the footnote to Table I

Chronology

For the years 1910 - 1918 official mortality statistics were reported in the series Statistics of Population.46 These contained the full ICD list, 19 age categories and details of gender only for the period 1916 - 1918. For earlier years, deaths were listed separately by cause (abridged list) or by age.

This series was discontinued for reasons of economy and the statistics were subsequently issued in the form of a roneo pamphlet.78 These reports, for whites* only, either list deaths by age (no cause), or by cause (abridged list) but with no ages given. For non-whites, only the total number of registered deaths is given.

From 1926 to 1938, an exceptionally detailed series of reports was issued - 'Report on the Vital Statistics of the Union of South Africa'. 9-21 These reports had extensive commentating definitions of terms and analyses. They serve as a model which could with profit be emulated today.

Mortality data in respect of age and sex (12 categories) and cause (full ICD list) are given for the white population.

* In this paper the official South African governmental racial stratification of the population has been followed. No attempt has been made to indicate changes in official terminology over the period of time covered.

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For non-whites, only the total number of registered deaths is given until 1937 when detailed age, sex and cause tables for the coloured population were introduced.

The war caused a hiatus in the issuing of vital statistics reports and it was only in 1961 that a report appeared covering the years up to 1958.²²³³ Commentaries were now non-existent. Whites, coloureds and Asians were covered in separate tables in respect of age (22 categories), sex and cause, although the latter was an abridged list. Data for blacks began to appear, although for selected municipal areas only. Only a percentage distribution in respect of cause was given. Absolute numbers are omitted. Whites in South West Africa are covered in a separate table.

The next report^{24,25} covered the period 1959 - 1962 in the same format as the previous one, with the addition of the coloured population of South West Africa in a separate table. While an abridged *ICD* list was used for the recording of age-specific deaths for all years, a tabulation of causes is given for 1962 only by the full *ICD*-7, but this is not broken down according to age!

From 1963 onwards, the Department of Statistics began to issue a numbered series of reports (07-03-).²⁶⁻⁴⁹ Initially this covered whites, coloureds and Asians. For the period 1963 - 1966, age-specific mortality data (22 categories) are given only for an abridged list of causes.²⁸ From 1967 onwards they are given for the full *ICD*.^{27,28,30,32,34-36,38,41-49}

Starting in 1968,²⁹ a separate report series (still utilising the 07-03- numbering sequence) was issued for blacks in selected urban magisterial districts. Age-specific mortality data (22 categories) were given for the full *ICD*.²⁹ From 1978 a new series of reports was issued (07-05-) covering deaths of blacks throughout the country.⁵⁰⁻⁵⁷ As the comprehensiveness of registration of deaths of blacks varies widely throughout the country, this series of reports is not compatible with the earlier series for blacks.

In 1985 a new numbering series was adopted for statistical reports. The series (03-09-01) covers whites, coloureds and Asians,⁵⁸⁻⁶² and series (03-10-01)⁶⁵⁻⁶⁷ covers blacks. The different reports in the series are now distinguished by the year of publication, not by a change in the last two digits of the report number.

With the repeal of the Population Registration Act and other apartheid legislation in 1991 the form of reporting of mortality in official statistics changed, beginning with data collected in that year.

The report series (03-10-01) was discontinued and series (03-09-01) became 'recorded deaths' which included all deaths registered in South Africa but without a racial classification.^{68,69} In the strict legal sense, the reports cover South Africa only. The exception is the coverage of South West Africa mentioned above. Deaths in Walvis Bay have been included in South African mortality data since 1978. After the 'independence' of Transkei, Bophuthatswana, Ciskei and Venda, deaths in these areas were being excluded from South African mortality data.

No geographical tabulation of deaths by age or cause has been given in official reports, although the total number of deaths according to magisterial district has been recorded.

From 1968 onwards, analyses of these reports was done by computer. A computer tape was produced which, *inter alia*, contained details of age (in single years), sex, race, date of death and place of residence, place of death and cause of death (single full *ICD* code) for each deceased. The Central Statistical Services have not retained all these tapes but the Department of Community Health at UCT and the Medical Research Council have together managed to assemble a full set. These are held at both institutions and are in active use. There are as yet no plans to ensure their long-term archival survival.

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ARTICLES

Deaths of military personnel during the two world wars are recorded elsewhere.^{70,71}

REFERENCES

- Department of Cultural Affairs. Bibliography of South African Government Publications. Vol 1: Department of Statistics 1910-1969. Pretoria: Government Printer, 1969.
- Department of Statistics. Statistical Classification of Diseases, Injuries and Causes of Death, 8th rev. Manual 07-03-00. Pretoria: Government Printer, 1971.
- Department of Statistics. Statistical Classification of Diseases, Injuries and Causes of Death, 9th rev. Manual 07-03-15 (sict). Pretoria: Government Printer, 1979.
- Office of Census and Statistics. Statistics of Population 1916. SP 3. UG 40-18. Pretoria: Government Printer, 1918.
 Office of Census and Statistics. Statistics of Population 1917. SP 7. UG 37-19.
- Pretoria: Government Printer, 1919. 6. Office of Census and Statistics. Statistics of Population No. 3 1918. UG 36-21.
- Office of Census and Statistics. Statistics of Population No. 3 1916. OG 50-21.
 Pretoria: Government Printer, 1921.
 Office of Census and Statistics. Special Report Series No. 23. Vital Statistics of the
- Office of Census and Statistics. Special Report Series No. 23, Vital Statistics of the Union 1919-1923, Pretoria: Government Printer, 1925.
 Office of Census and Statistics. Special Report Series No. 43. Vital Statistics of the
- Office of Census and Statistics. Special Report Series No. 43. Vital Statistics of the Union 1924-1925. Pretoria: Government Printer, 1927.
 Office of Census and Statistics. Report on the Vital Statistics of the Union of South
- Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1926. SP65. UG 24-1929. Pretoria: Government Printer, 1929.
 Office of Census and Statistics. Report on the Vital Statistics of the Union of South
- Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1927. (No SP number.) UG 52-1929. Pretonia: Government Printer, 1929.
 Office of Census and Statistics. Report on the Vital Statistics of the Union of South
- Africa 1928, SP 73, UG 32-1930, Pretoria: Government Printer, 1930, 2. Office of Census and Statistics. Report on the Vital Statistics of the Union of South
- Africa 1929, SP 79, UG 11-1931. Pretoria: Government Printer, 1931.
 Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1930, SP 86, UG 24-1932. Pretoria: Government Printer, 1932.
- Africa 1930. SP 86. UG 24-1932. Pretoria: Government Printer, 1932.
 14. Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1931. SP 91. UG 31-1933. Pretoria: Government Printer, 1933.
- Africa 1937. SP 91. 053 F1953. Pretona: Government Printer, 1933.
 Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1932. SP 95. UG 33-1934. Pretona: Government Printer, 1934.
- Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1933. SP 98. UG 30-1935. Pretoria: Government Printer, 1935.
- Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1934. SP 106. UG 35-1936. Pretoria: Government Printer, 1936.
- Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1935. SP 114. UG 37-1937. Pretoria: Government Printer, 1937.
- Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1936. SP 119. UG 18-1938. Pretoria: Government Printer, 1938.
 Office of Census and Statistics. Report on the Vital Statistics of the Union of South
- Office of Census and Statistics. Report on the Vital Statistics of the Union of South Africa 1937. SP 126. UG 27-1939. Pretoria: Government Printer, 1939.
 Office of Census and Statistics. Report on the Vital Statistics of the Union of South
- Ornice of Census and Statistics. *Heport on the Vital Statistics of the United of Sourt* Africa 1938. SP 133. UG 29-1940. Pretoria: Government Printer, 1940.
 Bureau of Census and Statistics. *Deaths South Africa and South West Africa*, 1958
- and earlier years. Vol. 1 General. UG 26/1961. Pretoria: Government Printer, 1961.
- Bureau of Census and Statistics. Deaths South Africa and South West Africa, 1958 and earlier years. Vol. 2 — Causes. RP 17/1961. Pretoria: Government Printer, 1961.
- Bureau of Census and Statistics. Deaths South Africa and South West Africa, 1959-1962. Vol. 1 — Causes. RP 45/1965. Pretoria: Government Printer, 1965.
- Bureau of Census and Statistics. Deaths South Africa and South West Africa, 1959-1962. Vol. 2 — Causes. RP 63/1965. Pretoria: Government Printer, 1965.
 Department of Statistics. Report on Deaths 1963-1966. South Africa. Report 07-03-
- 01. Pretoria: Government Printer, 1971. 27. Department of Statistics. Report or Deaths 1967. South Africa. Report 07-03-02.
- Pretoria: Government Printer, 1971. 26. Department of Statistics. Report on Deaths 1968-1971. South Africa. Report 07-03-
- Department of Statistics. Report on Deans Index 17, Sound Amaz, Report of Sound 03, Pretoria: Government Printer, 1974.
 Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts
- Department of Statistics. *Report on Banka Deaths in Selected Wagsteina Districts* 1968-1971. Report 07-03-04. Pretoria: Government Printer, 1974.
 Department of Statistics. *Report on Deaths, Whites, Coloureds and Asians* 1972.
- Department of Statistics. Report on Deaths, Whites, Coloureds and Asians 1972. South Africa. Report 07-03-05. Pretoria: Government Printer, 1975.
 Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts
- Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts 1972. Report 07-03-06. Pretoria: Government Printer, 1976.
 Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts
- Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts 1973. Report 07-03-07. Pretoria: Government Printer, 1976.
 Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts
- Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts 1974. Report 07-03-08. Pretoria: Government Printer, 1976.
 Department of Statistics. Report on Deaths. Whites. Coloured and Asians 1973.
- Department of Statistics. Report on Deaths, Whites, Coloured and Asians 1973. South Africa. Report 07-03-09. Pretoria: Government Printer, 1976.
 Department of Statistics. Report on Deaths, (sic) 1974. South Africa. Report 07-1
- Department of Statistics. Report on Deaths. (sic) 1974. South Africa. Report 07-03-10. Pretoria: Government Printer, 1977.
 Department of Statistics. Report on Deaths, Whites, Coloureds and Asians 1975. South Africa. Report 07-03-11. Pretoria: Government Printer, 1977.
- South Africa. Report 07-03-11. Pretoria: Government Printer, 1977. 37. Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts
- 1975. Report 07-03-12. Pretoria: Government Printer, 1977.
 28. Department of Statistics. *Report on Deaths, Whites, Coloureds and Asians* 1976. South Africa. Report 07-03-13. Pretoria: Government Printer, 1978.

- Department of Statistics. Report on Bantu Deaths in Selected Magisterial Districts 1976. Report 07-03-14. Pretoria: Government Printer, 1978.
- Department of Statistics. Report on Deaths of Blacks in Selected Magisterial Districts 1977. Report 07-03-15. Pretoria: Government Printer, 1980.
- Department of Statistics. Report on Deaths, Whites, Coloureds and Asians 1977. South Africa. Report 07-03-16. Pretoria: Government Printer, 1980.
- Department of Statistics. Report on Deaths, Whites, Coloureds and Asians 1978. South Africa. Report 07-03-17. Pretoria: Government Printer, 1982.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1979. South Africa. Report 07-03-18. Pretoria: Government Printer, 1983.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1980. South Africa. Report 07-03-19. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1981. South Africa. Report 07-03-20. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1982. South Africa. Report 07-03-21. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1983. South Africa. Report 07-03-22. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1984. South Africa. Report 07-03-23. Pretoria: Government Printer, 1986.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1985. South Africa. Report 07-03-24. Pretoria: Government Printer, 1987.
- Department of Statistics. Deaths of Blacks 1978. Report 07-05-01. Pretoria: Government Printer, 1982.
- Central Statistical Services. Deaths of Blacks 1979. Report 07-05-02. Pretoria: Government Printer, 1982.
- Central Statistical Services. Deaths of Blacks 1980. Report 07-05-03. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths of Blacks 1981. Report 07-05-04. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths of Blacks 1982. Report 07-05-05. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths of Blacks 1983. Report 07-05-06. Pretoria: Government Printer, 1985.
- Central Statistical Services. Deaths of Blacks 1984. Report 07-05-07. Pretoria: Government Printer, 1986.
- Central Statistical Services. Deaths of Blacks 1985. Report 07-05-08. Pretoria: Government Printer, 1987.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1986. Report 03-09-01 (1986). Pretoria: Government Printer, 1987.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1987. Report 03-09-01 (1987). Pretoria: Government Printer, 1987.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1988. Report 03-09-01 (1988). Pretoria: Government Printer, 1990.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1989. Report 03-09-01 (1989). Pretoria: Government Printer, 1991.
- Central Statistical Services. Deaths, Whites, Coloureds and Asians 1990. Report 03-09-01 (1990). Pretoria: Government Printer, 1992.
- 63. Central Statistical Services. *Deaths of Blacks 1986*. Report 03-10-01. Pretoria: Government Printer, 1987.
- Central Statistical Services. Deaths of Blacks 1987. Report 03-10-01 (1987). Pretoria: Government Printer, 1989.
- Central Statistical Services. Deaths of Blacks 1988. Report 03-10-01 (1988). Pretoria: Government Printer, 1990.
- Central Statistical Services. Deaths of Blacks 1989. Report 03-10-01 (1989). Pretoria: Government Printer, 1991.
- Central Statistical Services. Deaths of Blacks 1990. Report 03-10-01 (1990). Pretoria: Government Printer, 1992.
- Central Statistical Services. Recorded Deaths, 1991. Report 03-09-01 (1991). Pretoria: Government Printer, 1992.
- Central Statistical Services. Recorded Deaths, 1992. Report 03-09-01 (1992). Pretoria: Government Printer, 1993.
- Office of Census and Statistics. Official Year Book of the Union No. 2. Pretoria: Government Printer, 1919, pp. 374-378.
- Office of Census and Statistics. Official Year Book of the Union No. 23. Pretoria: Government Printer, 1948, Chapter 29.

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