

# Getting all the facts of death

## Abstract

We conducted a study of death notification form (DNF) completion relating to 844 deceased Cape Town residents, and evaluated the completeness of information on the forms. The DNFs frequently lacked important data on both the deceased and the health professional who completed the DNF (completing health professional). Urgent intervention is needed to improve the usefulness of the DNF as a source data on health statistics in South Africa.

Ⓟ This article has been peer reviewed.

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**To the Editor:** A new Death Notice Form (DNF), the BI-1663, was introduced in South Africa in 1998. Nine months after its implementation the South African Department of Health's National Health Information System Committee (NHIS/SA) studied a large but non-representative sample of DNFs from more than a third of the Regional Home Affairs offices across South Africa, and found that the forms were being completed reasonably well.<sup>1</sup> Recommendations for improvements to the BI-1663 and for a repeat evaluation were nevertheless made, but neither of these recommendations has been implemented yet (Dr D Kielkowski, personal communication).

As part of a study of the accuracy of DNF completion in the Cape Town metropolitan area,<sup>2</sup> we also assessed how adequately various items in the DNF are being attended to by the health professionals.

## Methods

We evaluated DNFs of all residents of the communities of Bonteheuwel and Langa who died of natural and unnatural causes during the period 1 June 2003 to 31 May 2004.

We assessed the DNFs for completeness with respect to socio-demographic details of the deceased, as well as health and administrative information. The level of completeness of the DNFs in our study was compared with corresponding data from the NHIS/SA study (2001).<sup>1</sup> We report the proportion of omissions as percentages and compared proportions using the chi-squared test.

The study was approved by the relevant research ethics committees of the Universities of Stellenbosch and Cape Town as well as the Health Departments of the City of Cape Town and the Provincial Government of the Western Cape.

## Results

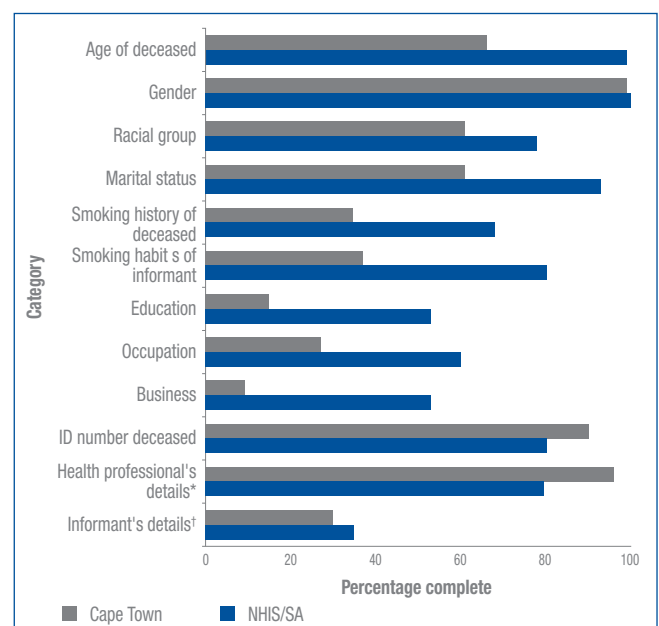
We evaluated a total of 844 DNFs (331 from Bonteheuwel and 513 from Langa) that had been completed by healthcare professionals at 30 different public sector healthcare facilities, at three medico-legal mortuaries, and by various private practitioners.

Figure 1 shows the extent of completeness of information of our DNFs and that of the NHIS/SA study.

In each category the difference in percentage of completeness in our study (n = 844) and the NHIS/SA study (n = 16230) was statistically significant, with  $p < 0.001$

Although the gender of the deceased was entered in almost all DNFs (98.7%), the age at death and racial group were completed in less than two thirds of cases. The questions concerning education, occupation and the industry/business involved in during life were rarely completed, with the occupation faring best at 27.1%. The smoking history of the deceased was completed in only one-third of the DNFs and marital status in less than two-thirds. While the attending health professional's details and the ID number of the deceased (on the first page of DNF) were completed in a large percentage of cases, contact details of the informant (the family member or acquaintance providing information about the deceased) were provided in only 30% of DNFs.

**Figure 1: Completeness of information on DNFs and comparison with NHIS/SA study. In each category the difference in percentage of completeness in our study (n = 844) and the NHIS/SA study (n = 16230) was statistically significant, with  $p < 0.001$**



\* Initials, surname, signature and Cape Town address. Address excluded from NHIS/SA data.

† Name and full telephone number.



REPUBLIC OF SOUTH AFRICA  
DEPARTMENT OF HOME AFFAIRS

83/BI - 1663

**NOTIFICATION / REGISTER OF DEATH / STILLBIRTH**  
In terms of the Births and Deaths Registration Act,  
1992 (Act No. 51 of 1992)

Must be completed in black ink (please tick  where applicable) **SEXUAL No.** [redacted]

FILE No. [redacted] DATE: [redacted]

**A PARTICULARS OF DECEASED INDIVIDUAL / STILLBORN CHILD**

Identity number of deceased: [redacted] Date of birth: [redacted]

Surname: [redacted] Age at last birthday: [redacted] years

Maiden Name (if female): [redacted] Sex: [redacted]

Forenames: [redacted] If death occurred within 24 hours after birth number of hours alive: [redacted]

**MARITAL STATUS OF DECEASED** Single  Civil Marriage  Living as married  Widowed   
Religious Law Marriage  Divorced  Customary Marriage

PLACE OF BIRTH (Municipal district or country if abroad): [redacted]

PLACE OF DEATH (City / Town / Village): [redacted]

PLACE REGISTRATION OF DEATH: [redacted]

CITIZENSHIP OF DECEASED: [redacted]

**B PARTICULARS OF INFORMANT**

Identity number: [redacted]

Initials and Surname: [redacted]

Relationship to deceased: Parent  Spouse  Child  Other kin  Other (specify): [redacted]

Postal address: [redacted] Postal Code: [redacted] Dialect Code: [redacted]

Was the next of kin of the deceased a smoker\* during the past five years? Yes  No  Refuse to answer

Date: [redacted] Signature: [redacted] Telephone No.: [redacted]

**C PARTICULARS OF FUNERAL UNDERTAKER**

Initials and Surname: [redacted] Office Stamp of Funeral Undertaker: [redacted]

Designation No.: [redacted] Place of burial / cremation: [redacted]

Date: [redacted] Signature: [redacted]

**D1. CERTIFICATE BY ATTENDING MEDICAL PRACTITIONER / PROFESSIONAL NURSE**

I, the undersigned, hereby certify that the deceased named in Section A, to the best of my knowledge and belief, died solely and exclusively due to NATURAL CAUSES, as specified in Section G.

I, the undersigned, am not in the position to certify that the deceased died exclusively due to natural causes.

Initials and Surname: [redacted] Postal address: [redacted] Postal Code: [redacted]

Date Signed: [redacted] Signature: [redacted] SAMDC / SANCC Reg. No.: [redacted]

**D2. CERTIFICATE BY DISTRICT SURGEON / FORENSIC PATHOLOGIST**

I, the undersigned, hereby certify that a medicolegal post-mortem examination has been conducted on the body of the person whose particulars are given in Section A and that the body is no longer required for the purposes of the Inquest Act, 1959 (Act No. 58 of 1959) and that the cause of death is:

Natural (Cause of Death as indicated in Section G)  Unnatural  Under investigation

Initials and Surname: [redacted] Postal address: [redacted] Postal Code: [redacted]

Place of post-mortem: [redacted] Date: [redacted] Signature: [redacted] SAMDC Reg. No.: [redacted]

Mortuary reference: [redacted]

**E FOR OFFICIAL USE ONLY**

Registration of Death approved and Initial Order issued: [redacted]

Postal address: [redacted] Place No. / Designation No.: [redacted]

Postal Code: [redacted] Postal No.: [redacted]

Date: [redacted] Signature: [redacted]

\* Someone who smokes tobacco on most days

**NOTIFICATION / REGISTER OF DEATH / STILLBIRTH**  
INFORMATION FOR MEDICAL AND HEALTH USE ONLY  
(After completion seal to ensure confidentiality)

83/BI - 1663  
Page 2

Must be completed in black ink (please tick  where applicable) **SEXUAL No.** [redacted]

FILE No. [redacted] DATE: [redacted]

**F DEMOGRAPHIC DETAILS**

Initials and Surname of deceased: [redacted]

Identity number: [redacted]

PLACE OF DEATH: 1. Hospital (Inpatient  ER / Outpatient  DOA  2. Nursing Home  3. Home   
4. Other (Specify): [redacted]

FACILITY NAME: (If not an institution, give street name and number)

USUAL RESIDENTIAL ADDRESS OF DECEASED (Where someone lived on most days)

Street name and number: [redacted]

Name of Plot, Farm, etc.: [redacted]

Suburb / Village: [redacted]

Town / City: [redacted]

Province / Country: [redacted]

Postal Code: [redacted]

Municipal district: [redacted]

Census enumeration area: [redacted]

DECEASED'S EDUCATION (Specify  only highest class completed / achieved)

Name	Gr1	Gr2	Gr3	Gr4	Gr5	Gr6	Gr7	Gr8	Gr9	Gr10	Gr11	Gr12	Univ	COOE

USUAL OCCUPATION OF DECEASED (give type of work done during most of working life. Do not use "retired") TYPE OF BUSINESS / INDUSTRY (e.g. Mining, Farming etc.) Refer to instructions.

Was the deceased a smoker\* five years prior to death? Yes  No  Do not know  Not applicable (males)

**G MEDICAL CERTIFICATE OF CAUSE OF DEATH**

**PART 1** Enter the diagnosis, degrees 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.

IMMEDIATE CAUSE (final disease or condition resulting in death) (a) \_\_\_\_\_ Due to (or a consequence of) \_\_\_\_\_ (b) \_\_\_\_\_  
Sequentially list conditions, if any, leading to immediate cause. Enter UNDERLYING CAUSE last (c) \_\_\_\_\_ Due to (or a consequence of) \_\_\_\_\_ (d) \_\_\_\_\_ Due to (or a consequence of) \_\_\_\_\_

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

If a female, was she pregnant 42 days prior to death? (  ) Yes  No

If stillborn, please write mass in grams: [redacted]

Do you consider the deceased to be: African  White  Indian  Coloured  Other (Specify) \_\_\_\_\_

Method of ascertainment of cause of death:

1. Autopsy  2. Opinion of attending medical practitioner  2. Opinion of attending medical practitioner on duty   
3. Opinion of registered professional nurse  4. Opinion of registered professional nurse  5. Interview of family member   
6. Other  (Specify) \_\_\_\_\_

\* Someone who smokes tobacco on most days

**FOR OFFICE USE ONLY**

ICD-10: [redacted]

Completion of DNFs in our study was markedly poorer than in the NHIS/SA study.<sup>1</sup> In general, the DNFs from Bonteheuwel residents contained more information than those from Langa residents (data not shown).

**Discussion**

We found that the majority of forms were incomplete with respect to key items of information. The level of completeness of information in our study compared poorly with that of the NHIS/SA study,<sup>1</sup> especially in relation to questions on education, occupation and usual business. For instance, information on the level of education, which was previously reported as missing in less than half of the cases, was not provided in 85% of our sample. It has been suggested that provision should be made for answering these questions more simply, by including a tick box, and moving them to the first page of the form, so that the informant rather than the practitioner can answer them.<sup>1</sup> This suggestion has however not yet been implemented, which means that in the foreseeable future these data will continue to be of little use (D Kielkowski, personal communication).

Questions on smoking habits of the deceased and the informant have been included in the BI-1663 form, in an effort to monitor trends in tobacco use and tobacco-related deaths in South Africa.<sup>3</sup> There were however no information on smoking habits of the deceased in about two-thirds of the DNFs. This is twice as high as the proportion found earlier in the NHIS/SA study. Remarkably, the smoking habits of the informant (37%) were recorded more frequently than the smoking habits of the deceased (35%). If question about smoking habits, education and occupation are to be retained, we believe they should be moved to the

front page of the form.

**Recommendations**

Consideration should be given to modifying the current DNF by reformatting, rephrasing or even removing some items (like the educational status and business of the deceased). These decisions should follow discussions with all relevant stakeholders, including health professionals in active practice and epidemiologists.

Healthcare managers should motivate doctors and administrative staff to pay more attention to the completion of DNFs. Medical educators and policy makers should also stress the importance of the DNF as an instrument for collecting vital statistics in South Africa and for guiding future decisions about healthcare in the country.

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**References**

- National Health Information System of South Africa Technical. Committee on Vital Registration. Final report: Evaluation of the new Death Notification Form (BI-1663). January 2001. (cited 8 November 2006) Available from: <http://www.doh.gov.za/nhis/vital/docs/evaluation/contents.html>
- Burger EH, Van der Merwe L, Volmink J. Errors in the completion of the Death Notification Form. S Afr Med J 2007;97(11):1077-81.
- Bradshaw D, Kielkowski D, Sitas F. New birth and death registration forms – a foundation for the future, a challenge for health workers? S Afr Med J 1998;88(8):971-4.