

Guidance for doctors certifying cause of death

From the Office for National Statistics' Death Certification Advisory Group,
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1 The purposes of death certification

Death certification serves a number of functions. A medical certificate of cause of death (MCCD) enables the deceased's family to register the death. This provides a permanent legal record of the fact of death and enables the family to arrange disposal of the body, and to settle the deceased's estate.

Information from death certificates is used to measure the relative contributions of different diseases to mortality. Statistical information on deaths by **underlying cause** is important for monitoring the health of the population, designing and evaluating public health interventions, recognising priorities for medical research and health services, planning health services and assessing the effectiveness of those services. Death certificate data are extensively used in research into the health effects of exposure to a wide range of risk factors through the environment, work, medical and surgical care, and other sources.

After registering the death, the family gets a certified copy of the register entry, which includes an exact copy of the cause of death information that you give. This provides them with an explanation of how and why their relative died. It also gives them a permanent record of information about their family medical history, which may be important for their own health and that of future generations. For all of these reasons it is extremely important that you provide clear, accurate and complete information about the diseases or conditions that caused your patient's death.

2 Planned changes to death certification

The Government has announced plans to change the laws on death investigation; certification and the coroner service (*Reforming the Coroner and Death Certification Service: A position paper*: March 2004, Home Office, Cm 6159). These changes will address the issues raised by the Shipman Inquiry and the Fundamental Review of Death Certification. However, the law has not changed yet. When new legislation is passed, doctors will receive instructions on the changes and the date from which they should be implemented. Changes are not likely to take effect before 2008/2009. This guidance is to remind you of the duties on medical practitioners under **current** legislation, and to clarify best practice.

3 Who should certify the death?

When a patient dies it is the statutory duty of the doctor who had attended in the last illness to issue the MCCD. There is no clear legal definition of "attended", but it is generally accepted to mean a doctor who has cared for the patient during the illness that led to death and so is familiar with the patient's medical history, investigations and treatment. The certifying doctor should also have access to relevant medical records and the results of investigations. There is no provision under current legislation to delegate this statutory duty to any non-medical staff.

In hospital, there may be several doctors in a team caring for the patient. It is ultimately the responsibility of the consultant in charge of the patient's care to ensure that the death is properly certified. Any subsequent enquiries, such as for the results of post-mortem or ante-mortem investigations, will be addressed to the consultant.

In general practice, more than one GP may have been involved in the patient's care and so be able to certify the death. If no doctor who cared for the patient can be found, the death must be referred to the coroner to investigate and certify the cause.

If the attending doctor had not seen the patient within the 14 days preceding death, and had not seen the body after death either, the registrar is obliged to refer the death to the coroner before it can be registered. In these circumstances, the coroner may instruct the registrar to accept the doctor's MCCD for registration, despite the prolonged interval. A doctor who had not been directly involved in the patient's care at any time during the illness from which they died cannot certify under current legislation, but he should provide the coroner with any information that may help to determine the cause of death. The coroner may then provide this information to the registrar of deaths. It will be used for mortality statistics, but the death will be legally "uncertified" if the coroner does not investigate through an autopsy, an inquest, or both.

4 Referring deaths to the coroner

Registrars of births and deaths are under a legal duty to report certain categories of deaths to the coroner before they can be registered. These include deaths which may be due to accident, suicide, violence, neglect (by self or others) or industrial disease and deaths for which the cause is not known. Deaths occurring during an operation, or before full recovery from an anaesthetic, as well as deaths occurring in, or shortly after release from, police or prison custody, should also be reported. In practice, doctors usually report such deaths themselves and seek the advice of the coroner. The Office for National Statistics (ONS) encourages doctors to do this and to explain to the family why the death is being referred, as well as how and when they will learn the outcome of the referral. The coroner should also be informed if there is no doctor who had attended the deceased available to certify, or if the certifying doctor did attend the deceased, but had not seen them either within 14 days before death, or after death.

Strictly speaking, the law requires that the doctor should complete an MCCD even when a death has been referred to the coroner. In practice, if the coroner has decided to order a post-mortem and/or to hold an inquest, he may tell the doctor not to complete the MCCD. However, the coroner can only legally certify the cause of death if he has investigated it through autopsy, inquest or both. This means that, if the coroner decides not to investigate, the registrar will need to obtain an MCCD from a doctor who attended the deceased before the death can be registered. This may cause inconvenience to you and the family, if you have not already provided one.

When a death is referred, it is up to the coroner to decide whether or not it should be further investigated. It is very important that the coroner is given all of the facts relevant

to this decision. The doctor should discuss the case with the coroner before issuing an MCCD if at all uncertain whether he or she should certify. This allows the coroner to make enquiries and decide whether or not any further investigation is needed, before the family tries to register the death. The coroner may decide that the death can be registered from the doctor's MCCD. For example, 75% of deaths with fractured neck of femur mentioned on the certificate are registered from the original MCCD following referral to the coroner, while only about 15% go to inquest, and 10% are registered after a coroner's autopsy. Omitting to mention on the certificate conditions or events that contributed to the death, in order to avoid referral to the coroner, is unacceptable. If these come to light when the family registers the death, the registrar will be obliged to refer it to the coroner. If the fact emerges after the death is registered, an inquest may still be held.

In Scotland, deaths that may have been related to adverse effects of medical or surgical treatment, or to standards of care, or about which there has been any complaint, are reportable to the procurator fiscal. While this is not a requirement in England and Wales, it is anyway advisable to refer such deaths to the coroner.

5 How to complete the cause of death section

Doctors are expected to state the cause of death to the best of their knowledge and belief; they are not expected to be infallible. Even before any changes to the law, it is likely that there will be increased scrutiny of death certification and patterns of mortality by local and national agencies as a result of the Shipman Inquiry. Suspicions may be raised if death certificates appear to give inadequate or vague causes of death. For example, if a patient dies under the care of an orthopaedic surgeon, it might be expected that some orthopaedic condition contributed to the death and so would be mentioned in part I or part II of the certificate. Similarly, it would be surprising if a patient was being treated in an acute hospital, but no significant disease or injury at all was mentioned on their death certificate.

The level of certainty as to the cause of death varies. What to do, depending on the degree of certainty or uncertainty about the exact cause of death, is discussed below.

5.1 Sequence leading to death, underlying cause and contributory causes

The MCCD is set out in two parts, in accordance with World Health Organisation (WHO) recommendations in the International Statistical Classification of Diseases and Related Health Problems (ICD). You are asked to start with the immediate, direct cause of death on line Ia, then to go back through the sequence of events or conditions that led to death on subsequent lines, until you reach the one that initiated the fatal sequence. If the certificate has been completed properly, the condition on the lowest completed line of part I will have caused all of the conditions on the lines above it. This initiating condition, on the lowest line of part I will usually be selected as the **underlying cause of death**, following the ICD coding rules. Most routine mortality statistics are based on the underlying cause. Underlying cause statistics are widely used to determine priorities for

health service and public health programmes and for resource allocation. Remember that the underlying cause may be a longstanding, chronic disease or disorder that predisposed the patient to later fatal complications.

You should also enter any other diseases, injuries, conditions, or events that contributed to the death, but were not part of the direct sequence, in part two of the certificate.

Examples of cause of death section from MCCDs:

| Cause of death <i>the disease or condition thought to be the underlying cause should appear in the lowest completed line of part I</i> | |
|---|---|
| I | (a) <i>Disease or condition leading directly to death</i> Intraperitoneal heamorrhage |
| | (b) <i>other disease or condition, if any, leading to I(a)</i> Ruptured metastatic deposit in liver |
| | (c) <i>other disease or condition, if any, leading to I(b)</i> From primary adenocarcinoma of ascending colon |
| II | <i>Other significant conditions</i> Non-insulin dependent diabetes mellitus |
| | Contributing to death <i>but not related to the disease or condition causing it</i> |

| Cause of death <i>the disease or condition thought to be the underlying cause should appear in the lowest completed line of part I</i> | |
|---|--|
| I | (a) <i>Disease or condition leading directly to death</i> Cerebral infarction |
| | (b) <i>other disease or condition, if any, leading to I(a)</i> Thrombosis of basilar artery |
| | (c) <i>other disease or condition, if any, leading to I(b)</i> Cerebrovascular atherosclerosis |
| II | <i>Other significant conditions</i> |
| | Contributing to death <i>but not related to the disease or condition causing it</i> |

(In subsequent examples, to save space, the layout of the MCCD has not been reproduced. All examples are taken from MCCDs of recent deaths in England and Wales).

In some cases, a single disease may be wholly responsible for the death. In this case, it should be entered on line Ia.

Example:

Ia. Meningococcal septicaemia

5.1.1 More than three conditions in the sequence

The MCCD in use in England and Wales currently has 3 lines in part I for the sequence leading directly to death. If you want to include more than 3 steps in the sequence, you can do so by writing more than one condition on a line, indicating clearly that one is due to the next.

Example:

- Ia. Post-transplant lymphoma*
- Ib. Immunosuppression following renal transplant*
- Ic. Glomerulonephrosis due to insulin dependent diabetes mellitus*
- II. Recurrent urinary tract infections*

5.1.2 More than one disease may have led to death

If you know that your patient had more than one disease or condition that was compatible with the way in which he or she died, but you cannot say which the most likely cause of death was, you should include them all on the certificate. They should be written on the same line and you can indicate that you think they contributed equally by writing “joint causes of death” in brackets.

Examples:

- Ia. Cardiorespiratory failure*
- Ib. Ischaemic heart disease and chronic obstructive airways disease
(joint causes of death)*
- II. Osteoarthritis*

- Ia. Hepatic failure*
- Ib. liver cirrhosis*
- Ic. Chronic hepatitis C infection and alcoholism*

Where more than one condition is given on the lowest used line of part one, ONS will use the internationally agreed mortality coding rules in ICD-10 to select the underlying cause for routine mortality statistics. Since 1993, ONS also code all the other conditions mentioned on the certificate. These multiple cause of death data are used by ONS in a variety of routine and *ad hoc* analyses, and are made available for research. This provides useful additional information on the mortality burden associated with diseases that are not often selected as the main cause of death. For example, diabetes mellitus is mentioned on death certificates four times as often as it is selected as the underlying cause of death.

In contrast to the above, if you do not know that your patient actually had any specific disease compatible with the mode and circumstances of death, you must refer the death to the coroner. For example, if your patient died after the sudden onset of chest pain that lasted several hours and you have no way of knowing whether he or she may have had a myocardial infarct, a pulmonary embolus, a thoracic aortic dissection, or another pathology, it is up to the coroner to decide what investigations to pursue.

5.2 Results of investigations awaited

If in broad terms you know the disease that caused your patient's death, but you are awaiting the results of laboratory investigation for further detail, you need not delay completing the MCCD. For example, a death can be certified as bacterial meningitis once the diagnosis is firmly established, even though the organism may not yet have been identified. Similarly, a death from cancer can be certified as such while still awaiting detailed histopathology. This allows the family to register the death and arrange the funeral. However, you should indicate clearly on the MCCD that information from investigations might be available later. You can do this by circling '2' on the front of the MCCD for autopsy information, or by ticking box 'B' on the back of the certificate for results of investigations initiated ante-mortem. It is important for public health surveillance to have this information on a national basis; for example, to know how many meningitis and septicaemia deaths are due to meningococcus, or to other bacterial infections. The registrar will write to the certifying doctor if a GP, or to the patient's consultant if in hospital, with a form requesting further details to be returned to ONS.

5.3 Avoid 'old age' alone

Old age should only be given as the **sole** cause of death in very limited circumstances. These are that:

- You have personally cared for the deceased over a long period (years, or many months)
- You have observed a gradual decline in your patient's general health and functioning
- You are not aware of any identifiable disease or injury that contributed to the death
- You are certain that there is no reason that the death should be reported to the coroner

You should bear in mind that coroners, crematorium referees, registrars and organisations that regulate standards in health and social care, may ask you to support your statement with information from the patient's medical records and any investigations that might have a bearing on the cause of death. You should also be aware that the patient's family may not regard old age as an adequate explanation for their relative's death and may request further investigation.

It is unlikely that patients would be admitted to an acute hospital if they had no apparent disease or injury. It follows that deaths in acute hospitals are unlikely to fulfill the conditions above. You can specify old age as the underlying cause of death, but you should also mention in part one or part two, as appropriate, any medical or surgical conditions that may have contributed to the death.

Examples:

- Ia. Pathological fractures of femoral neck and thoracic vertebrae*
- Ib. Severe osteoporosis*
- Ic. Old age*
- II. Fibrosing alveolitis*

- Ia. Old age*
- II. Non-insulin dependent diabetes mellitus, essential hypertension and diverticular disease*

- Ia. Hypostatic pneumonia*
- Ib. Dementia*
- Ic. Old age*

When the Chief Medical Statistician first advised, in 1985, that old age or senility would be accepted as the sole cause of death in some circumstances, he recommended a lower age limit of 70 years. There is no statutory basis for this limit and some crematorium referees have set higher limits for accepting applications for cremation when the only cause of death is old age. Some coroners ask registrars to report to them all deaths under the age of 75 or 80, or at any age, certified as due to old age alone. The average life expectancy at birth for men is now about 76 years and for women it is 80 years. After much discussion, the ONS Death Certification Advisory Group has recommended that deaths certified as due to old age or senility alone should be referred to the coroner unless the deceased was aged 80 or older, the conditions listed above are all fulfilled and there is no other reason that the death should be referred.

5.4 Never use ‘natural causes’ alone

The term “natural causes” alone, with no specification of any disease on a doctor's MCCD, is not sufficient to allow the death to be registered without referral to the coroner. If you do not have any idea what disease caused your patient's death, it is up to the coroner to decide what investigations may be needed.

5.5 Avoid organ failure alone

Do not certify deaths as due to the failure of any organ, without specifying the disease or condition that led to the organ failure. Failure of most organs can be due to unnatural causes, such as poisoning, injury or industrial disease. This means that the death will have to be referred to the coroner if no natural disease responsible for organ failure is specified.

Examples:

- Ia. Renal failure*
- Ib. Necrotising-proliferative nephropathy*
- Ic. Systemic lupus erythematosus*
- II. Raynaud's phenomenon and vasculitis*

- Ia. Liver failure*
- Ib. Hepatocellular carcinoma*
- Ic. Chronic Hepatitis B infection*

- Ia. Congestive cardiac failure*
- Ib. Essential hypertension*

Conditions such as renal failure may come to medical attention for the first time in frail, elderly patients in whom vigorous investigation and treatment may be contraindicated, even though the cause is not known. When such a patient dies, you are advised to discuss the case with the coroner before certifying. If the coroner is satisfied that no further investigation is warranted, the registrar can be instructed to register the death based on the information available on the MCCD. The registrar cannot accept an MCCD that gives only organ failure as the cause of death, without instruction from the coroner.

5.6 *Avoid terminal events, modes of dying and other vague terms*

Terms that do not identify a disease or pathological process clearly are not acceptable as the only cause of death. This includes terminal events, or modes of dying such as cardiac or respiratory arrest, syncope or shock. Very vague statements such as cardiovascular event or incident, debility or frailty are equally unacceptable. ‘Cardiovascular event’ could be intended to mean a stroke or myocardial infarction. It could, however, also include cardiac arrest or fainting, or a surgical or radiological procedure. If no clear disease can be identified as the cause of death, referral to the coroner will be necessary.

5.7 *Never use abbreviations or symbols*

Do not use abbreviations on death certificates. Their meaning may seem obvious to you in the context of your patient and their medical history, but it may not be clear to others. For example, does a death from “MI” refer to myocardial infarction or mitral incompetence? Is “RTI” a respiratory or reproductive tract infection, or a road traffic incident? The registrar **should not accept a certificate that includes any abbreviations.** (The only exceptions, which the registrar can accept, are HIV and AIDS for human immunodeficiency virus infection and acquired immune deficiency syndrome). You, or the patient's consultant, may be required to complete a new certificate with the conditions written out in full, before the death can be registered. This is inconvenient for you and for the family of the deceased. The same applies to medical symbols.

6 Specific causes of death

6.1 *Stroke and cerebrovascular disorders*

Give as much detail about the nature and site of the lesion as is available to you. For example, specify whether the cause was haemorrhage, thrombosis or embolism, and the specific artery involved, if known. Remember to include any antecedent conditions or treatments, such as atrial fibrillation, artificial heart valves, or anticoagulants that may have led to cerebral emboli or haemorrhage. Avoid the term “cerebrovascular accident” and consider using terms such as “stroke” or “cerebral infarction” if no more specific description can be given.

Examples:

- Ia. Subarachnoid haemorrhage*
- Ib. Ruptured aneurysm of anterior communicating artery*

- Ia. Intraventricular haemorrhage*
- Ib. Warfarin anticoagulation*
- Ic. Pulmonary embolism following hysterectomy for uterine fibroids with menorrhagia*

6.2 Neoplasms

Malignant neoplasms (cancers) remain a major cause of death. Accurate statistics are important for planning care and assessing the effects of changes in policy or practice. Where applicable, you should indicate whether a neoplasm was benign, malignant, or of uncertain behaviour. Please remember to specify the histological type and anatomical site of the cancer.

Example:

- Ia. Carcinomatosis*
- Ib. Small cell carcinoma of left main bronchus*
- Ic. Heavy smoker for 40 years*
- II. Hypertension, cerebral arteriosclerosis, ischaemic heart disease.*

You should make sure that there is no ambiguity about the primary site if primary and secondary cancer sites are mentioned. Do not use the terms “metastatic” or “metastases” unless you specify whether you mean metastasis to, or metastasis from, the named site.

Examples:

- Ia. Intraperitoneal haemorrhage*
- Ib. Widespread metastases in liver*
- Ic. From primary adenocarcinoma of ascending colon*
- II. Non-insulin dependent diabetes mellitus*

- Ia. Pathological fractures of left shoulder, spine and shaft of right femur*
- Ib. Widespread skeletal metastases*
- Ic. From adenocarcinoma of breast*
- II. Hypercalcaemia*

- Ia. Lung metastases*
- Ib. From testicular teratoma*

If you mention two sites that are independent primary malignant neoplasms, make that clear.

Example:

- Ia. Massive haemoptysis*
- Ib. Primary small cell carcinoma of left main bronchus*
- II. Primary adenocarcinoma of prostate*

If a patient has widespread metastases, but the primary site could not be determined, you should state this clearly.

Example:

Ia. multiple organ failure

Ib. Poorly differentiated metastases throughout abdominal cavity

Ic. from unknown primary site

If you do not yet know the cancer type and are expecting the result of histopathology, indicate that this information may be available later by initialing box 'B' on the back of the certificate. You, or the consultant responsible for the patient's care, will be sent a letter requesting this information at a later date.

In the case of leukaemia, specify whether it is acute, sub-acute or chronic, and the cell type involved.

Examples:

Ia. Neutropenic sepsis

Ib. Acute myeloid leukaemia

Ia. Haemorrhagic gastritis

Ib. Chronic lymphatic leukaemia

II. Myocardial ischaemia, valvular heart disease

6.3 Diabetes mellitus

Always remember to specify whether your patient's diabetes was insulin dependent / Type I, or non-insulin dependent / Type II. If diabetes is the underlying cause of death, specify the complication or consequence that led to death, such as ketoacidosis.

Examples:

Ia. End-stage renal failure

Ib. Diabetic nephropathy

Ic. Insulin dependent diabetes mellitus

Ia. Septicaemia - fully sensitive staphylococcus aureus

Ib. Gangrene of both feet due to peripheral vascular disease

Ic. Non-insulin dependent diabetes mellitus

II. Ischaemic heart disease

6.4 Deaths involving infections and communicable diseases

Mortality data is important in the surveillance of infectious diseases, as well as monitoring the effectiveness of immunisation and other prevention programmes. If the patient's death involved a notifiable disease, you should inform your local Health Protection Unit (HPU) about the case, unless you have already done so. If you are not sure whether a case is notifiable, or what investigations are needed, you can get advice from your local HPU or Consultant in Communicable Disease Control (CCDC).

In deaths from infectious disease, you should state the manifestation or body site, e.g. pneumonia, pyelonephritis, hepatitis, meningitis, septicaemia, or wound infection. You should also specify:

- The infecting organism, e.g. pneumococcus, influenza A virus, meningococcus
- Antibiotic resistance, if relevant, e.g. methicillin resistant *Staph aureus* (MRSA), or multiple drug resistant mycobacterium tuberculosis
- The source and/or route of infection, if known, e.g. food poisoning, needle sharing, contaminated blood products, post-operative, community or hospital acquired, or health care associated infection.

Example:

Ia. Bilateral pneumothoraces

Ib. Multiple bronchopulmonary fistulae

Ic. Extensive, cavitating pulmonary tuberculosis (smear and culture positive)

II. Iron deficiency anaemia; ventilator associated staphylococcal pneumonia

You need not delay completing the certificate until laboratory results are available, provided you are satisfied that the death need not be referred to the coroner. You should indicate, by ticking box 'B' on the back of the certificate, that further information may be available later. A letter will then be sent to you, or to the patient's consultant, requesting this information. The coded cause of death will then be amended for statistical purposes.

Failure to specify the infecting organism can lead to unnecessary investigation. For example, every year deaths are certified as being due to spinal or paraspinal abscess, without stating the organism(s) involved. These are then coded as tuberculosis following the ICD index rules. Unless ONS can establish that the abscess was due to another organism, the local CCDC will then have to investigate whether or not it was TB. Remember to specify any underlying disease or treatment, such as chemotherapy, radiotherapy, autoimmune disease or organ transplant, that may have suppressed the patient's immunity and so led to death from infection.

6.4.1 Health care associated infections

It is a matter for your clinical judgment whether a condition the patient had at death, or in the preceding period, contributed to their death, and so whether it should be included in part one or part two of the MCCD. However, families may be surprised if you do not include something that they believe contributed to their relative's death. ONS receives frequent queries from a wide range of sources about mortality related to health care associated infections, and complaints about the quality of information given about them on death certificates.

Examples:

*Ia. Methicillin resistant *Staph aureus* septicaemia*

Ib. Immunosuppression

Ic. Bone marrow transplant for non-Hodgkin's lymphoma

- Ia. Carcinomatosis*
- Ib. Adenocarcinoma of the prostate*
- II. Chronic obstructive airways disease and catheter associated E.coli urinary tract infection*

6.4.2 Pneumonia

Pneumonia may present in previously fit adults, but often it occurs as a complication of another disease affecting the lungs, mobility, immunity, or swallowing. Pneumonia may also follow other infections and may be associated with treatment for disease, injury or poisoning, especially when ventilatory assistance is required. Remember to specify, where possible, whether it was lobar or bronchopneumonia and whether primarily hypostatic, or related to aspiration. You should include the whole sequence of conditions and events leading up to it. If known, specify whether the pneumonia was hospital or community acquired. If it was associated with mechanical ventilation, or invasive treatment, this should be clearly stated.

Examples:

- Ia. Pneumococcal lobar pneumonia*
- Ib. Influenza A*
- II. Ischaemic heart disease*

- Ia. Aspiration pneumonia*
- Ib. Motor neurone disease*
- II. Pressure ulcers on sacrum and heels*

For many years, bronchopneumonia was given as the immediate cause of death on a large proportion of certificates in England and Wales. This may have reflected common terminal chest signs and symptoms, rather than significant infection in many cases. The proportion of certificates that mention bronchopneumonia has been steadily falling for 20 years. If you do report bronchopneumonia, remember to include any predisposing conditions, especially those that may have led to paralysis, immobility, depressed immunity or wasting, as well as chronic respiratory conditions such as chronic bronchitis.

6.5 Injuries and external causes

All deaths involving any form of injury or poisoning must be referred to the coroner. If the death is not one for which an inquest is mandatory and the coroner instructs you to certify, remember to include details as to how the injury occurred and where it happened, such as at home, in the street, or at work.

Example:

- Ia. Pulmonary embolism*
- Ib. Fractured neck of femur*
- Ic. Tripped on loose floor rug at home*
- II. Moderate left sided weakness and difficulty with balance since haemorrhagic stroke 5 years ago; hemiarthroplasty 2 days after fracture*

Remember to state clearly if a fracture was pathological, that is due to an underlying disease process such as a metastasis from a malignant neoplasm or osteoporosis.

6.6 Substance misuse

Deaths from diseases related to chronic alcohol or tobacco use need not be referred to the coroner, provided the disease is clearly stated on the MCCD.

Example:

- Ia. Carcinomatosis*
- Ib. Bronchogenic carcinoma upper lobe left lung*
- Ic. Smoked 30 cigarettes a day*
- II. Chronic bronchitis and ischaemic heart disease.*

Deaths due to acute or chronic poisoning, by **any** substance, and deaths involving drug dependence or misuse of substances other than alcohol and tobacco must be referred.

This guidance is intended to complement the notes for doctors in the front of every book of MCCDs. Those instructions remain current, except for the change in lower age limit at which ‘old age’ is thought to be acceptable as the sole cause of death (now 80 instead of 70, as covered in detail above). Doctors should familiarise themselves with the MCCD notes, and consult them if they are in any doubt about whether, or how, to certify a death.

ONS includes the General Register Office for England and Wales, responsible for legislation on registration of births, marriages and deaths (www.gro.gov.uk/). ONS collects and processes information from all registered deaths and publishes a wide range of mortality statistics (www.statistics.gov.uk) as well as supplying data to the Department of Health, other government departments, WHO and other international organisations, the NHS, local authorities and academics (E-mail: mortality@ons.gov.uk). Members of the ONS Death Certification Advisory Group (DCAG) include coroners, forensic and general pathologists, general practitioners and medical specialists, epidemiologists and public health specialists, crematorium referees, the Coroner’s Society, the Home Office, Department for Constitutional Affairs, and the Department of Health.