Dear Colleague

GUIDANCE ON COMPLETION OF MEDICAL CERTIFICATES OF THE CAUSE OF DEATH

Background

1. I wrote to you on 19 June highlighting that the independent review of *Clostridium difficile* Associated Disease at the Vale of Leven, published in August 2008, recommended that a consistent approach to death certification for Healthcare Associated Infection should be introduced across NHS Scotland.

2. I provided, with my letter, a draft version of national guidance on the Completion of Medical Certificates of the Cause of Death that had been produced following consultation with the Crown Office Procurator Fiscal Service (COPFS) and the General Register Office for Scotland (GROS); and asked for your comments on content. All comments received have now been considered and incorporated, where appropriate.

Action

3. I should be grateful if you would now ensure the attached national guidance is widely circulated amongst medical staff within your NHS Board area; and that all necessary steps are taken at local level to ensure its implementation.

Many thanks.

Yours sincerely

Harry Burns

HARRY BURNS

www.scotland.gov.uk
GUIDANCE FOR MEDICAL STAFF COMPLETING MEDICAL CERTIFICATES OF THE CAUSE OF DEATH

ADVICE FROM THE CHIEF MEDICAL OFFICER

THE SCOTTISH GOVERNMENT

SEPTEMBER 2009
<table>
<thead>
<tr>
<th>Section</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The Purposes of Death Certification</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>Who Should Certify the Death</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>Reporting a Death to the Procurator Fiscal</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>Sequence Leading to Death, Underlying Cause &amp; Contributory Causes</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>4.1 More than four conditions in the sequence</td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>4.2 More than one disease may have led to death</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>4.3 Results of investigations awaited</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>4.4 Avoid “old age” alone</td>
<td>11</td>
</tr>
<tr>
<td></td>
<td>4.5 Never use “natural causes” alone</td>
<td>12</td>
</tr>
<tr>
<td></td>
<td>4.6 Avoid organ failure alone</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>4.7 Avoid terminal events, modes of dying &amp; other vague terms</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>4.8 Never use abbreviations or symbols.</td>
<td>14</td>
</tr>
<tr>
<td>5</td>
<td>Specific Causes of Death</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>5.1 Stroke and cerebrovascular disorders</td>
<td>15</td>
</tr>
<tr>
<td></td>
<td>5.2 Neoplasms</td>
<td>16</td>
</tr>
<tr>
<td></td>
<td>5.3 Diabetes Mellitus</td>
<td>18</td>
</tr>
<tr>
<td></td>
<td>5.4 Deaths involving infections and communicable diseases</td>
<td>19</td>
</tr>
<tr>
<td></td>
<td>5.4.1 Healthcare Associated Infections</td>
<td>21</td>
</tr>
<tr>
<td></td>
<td>5.4.2 Pneumonia</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>5.5 Injuries and external causes</td>
<td>24</td>
</tr>
<tr>
<td></td>
<td>5.6 Substance misuse</td>
<td>25</td>
</tr>
</tbody>
</table>
GUIDANCE FOR MEDICAL STAFF COMPLETING MEDICAL CERTIFICATES OF THE CAUSE OF DEATH

1. THE PURPOSES OF DEATH CERTIFICATION

Death certification serves a number of functions. A medical certificate of cause of death (MCCD), provided to the best of the medical practitioner’s knowledge and belief, is a statutory requirement. 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. Timely completion of death certificates is therefore helpful to families, especially those from faith groups that place high importance on prompt burial.

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 ("death certificate"), which includes an exact copy of the cause of death information given by the certifying doctor. 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.

Currently the process is paper based – the intention is to move in the future to electronic certification and registration.

This guidance supplements that from the General Register Office for Scotland (see appendix for guidance and MCCD form 11) and provides more detail.

Further guidance is available from the General Register Office for Scotland

the General Medical Council
http://www.gmc-uk.org/guidance/good_medical_practice/index.asp

and the Registration of Births, Deaths and Marriages (Scotland) Act 1965
http://www.opsi.gov.uk/RevisedStatutes/Acts/ukpga/1965/cukpga_1965_0049_en_1
2. WHO SHOULD CERTIFY THE DEATH?

When a patient dies it is the statutory duty of the doctor who has 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.

If no registered medical practitioner attended during the deceased’s last illness, or if a registered medical practitioner attended but is unable to provide a certificate, any registered medical practitioner may fill in the form. In this case the relevant box A2 or A3 should be ticked, taking note of the value of timeliness in completion of relevant certificates.

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

3. REPORTING A DEATH TO THE PROCURATOR FISCAL

Please ensure you are familiar with the guidance “Death and the Procurator Fiscal”, October 2008.

4. SEQUENCE LEADING TO DEATH, UNDERLYING CAUSE AND CONTRIBUTORY CAUSES

The MCCD is set out in two parts. You are asked to start with the immediate, direct cause of death on line I (a), then to go back through the sequence of events or conditions that led to death on subsequent lines, until you reach the one that started 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**. WHO defines the **underlying cause of death** as “a) the disease or injury which initiated the train of morbid events leading directly to death, or b) the circumstances of the accident or violence which produced the fatal injury”. From a public health point of view, preventing this first disease or injury will result in the greatest health gain.

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 - the disease or condition thought to be the underlying cause should appear in the lowest completed line of part I**

I (a) *Disease or condition leading directly to death* - Intraperitoneal haemorrhage

(b) Other *disease or condition, if any, leading to I(a)* - Ruptured metastatic deposit in liver

(c) Other *disease or condition, if any, leading to I(b)* - primary adenocarcinoma of ascending colon

*Other significant conditions* - Non-insulin dependent diabetes mellitus contributing to death but not related to the disease or condition causing it

The colon cancer on line 1(c) led directly to the liver metastases on line 1(b), which ruptured, causing the fatal haemorrhage on 1(a). Adenocarcinoma of the colon is the underlying cause of death.

**Cause of death - the disease or condition thought to be the underlying cause should appear in the lowest completed line of part I**

I (a) *Disease or condition leading directly to death* - Cerebral infarction

(b) Other *disease or condition, if any, leading to I(a)* - Thrombosis of basilar artery

(c) Other *disease or condition, if any, leading to I(b)* - Cerebrovascular atherosclerosis
(d) Other disease or condition, if any, leading to I (c) - Hypertension

Other significant conditions contributing to death but not related to the disease or condition causing it. (In subsequent examples, to save space, the layout of the MCCD has not been reproduced.)

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

Example:

I (a) Meningococcal septicaemia
Meningococcal septicaemia is the cause of death.

4.1 More than four conditions in the sequence

The MCCD in Scotland currently has four lines in part I for the sequence leading directly to death (cf three lines in England). If you want to include more than four 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:

I (a) Post-transplant lymphoma
I (b) Immunosuppression
I (c) Renal transplant
I (d) Glomerulonephrosis due to insulin dependent diabetes mellitus

II. Recurrent urinary tract infections
Insulin dependent diabetes with renal complications is the underlying cause.
4.2 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 was the most likely cause of death, 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.

Example:

I (a) Cardiorespiratory failure  
I (b) Ischaemic heart disease and chronic obstructive airways disease

II. Osteoarthritis

I (a) Hepatic failure  
I (b) Liver cirrhosis  
I (c) Chronic hepatitis C infection and alcoholism (joint causes 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 Procurator Fiscal. 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 Procurator Fiscal to decide whether to investigate.
4.3 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 ticking box PM2 for post mortem information and/or box X 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 for hospital deaths, with a form requesting further details.
4.4 Avoid ‘old age’ alone

Old age should only be given as the sole cause of death in very limited circumstances.

These are:-

- 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 Procurator Fiscal
- The patient is 80 years or older

You should bear in mind that Procurators Fiscal, 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 fulfil 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.
Example:

I (a) Pathological fractures of femoral neck and thoracic vertebrae
I (b) Severe osteoporosis
I (c) Old age

II. Fibrosing alveolitis

I (a) Old age

II. Non-insulin dependent diabetes mellitus, essential hypertension and diverticular disease

I (a) Hypostatic pneumonia
I (b) Dementia
I (c) Old age

4.5 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 Procurator Fiscal. If you do not have any idea what disease caused your patient's death, it is up to the Procurator Fiscal to decide what investigations may be needed.
4.6 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 Procurator Fiscal if no natural disease responsible for organ failure is specified.

Example:

I (a) Renal failure
I (b) Necrotising-proliferative nephropathy
I (c) Systemic lupus erythematosus

II. Raynaud's phenomenon and vasculitis

I (a) Liver failure
I (b) Hepatocellular carcinoma
I (c) Chronic hepatitis B infection

I (a) Congestive cardiac failure
I (b) 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 Procurator Fiscal before certifying. If the Procurator Fiscal 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.
4.7 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 Procurator Fiscal will be necessary.

4.8 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.
5. SPECIFIC CAUSES OF DEATH

5.1 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.

Example:

I (a) Subarachnoid haemorrhage
I (b) Ruptured aneurysm of anterior communicating artery

I (a) Intraventricular haemorrhage
I (b) Warfarin anticoagulation
I (c) Atrial fibrillation
I (d) Ischaemic heart disease
5.2 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:

I (a) Carcinomatosis
I (b) Small cell carcinoma of left main bronchus
I (c) 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 both 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.

Example:

I (a) Intraperitoneal haemorrhage
I (b) Metastases in liver
I (c) From primary adenocarcinoma of ascending colon

II. Non-insulin dependent diabetes mellitus
I (a) Pathological fractures of left shoulder, spine and shaft of right femur
I (b) Widespread skeletal secondaries
I (c) From Primary adenocarcinoma of breast

II. Hypercalcaemia

I (a) Lung metastases
I (b) From testicular teratoma

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

Example:

I (a) Massive haemoptysis
I (b) 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:

I (a) Multiple organ failure
I (b) Poorly differentiated metastases throughout abdominal cavity
I (c) 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 ticking box X on 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.

Example:

I (a) Neutropenic sepsis
I (b) Acute myeloid leukaemia

I (a) Haemorrhagic gastritis
I (b) Chronic lymphatic leukaemia

II. Myocardial ischaemia, valvular heart disease

5.3 Diabetes Mellitus

Always remember to specify whether your patient’s diabetes was insulin dependent or non-insulin dependent and Type 1 or Type 2. If diabetes is the underlying cause of death, specify the complication or consequence that led to death, such as ketoacidosis.

Example:

I (a) End-stage renal failure
I (b) Diabetic nephropathy
I (c) Insulin dependent diabetes mellitus, Type 2

I (a) Septicaemia - fully sensitive Staphylococcus aureus
I (b) Gangrene of both feet due to peripheral vascular disease
I (c) Non-insulin-dependent diabetes mellitus, Type 2

II. Ischaemic heart disease
5.4 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 you have a reasonable suspicion that the patient had a notifiable disease, either as a cause of death or not, you have a statutory duty to notify the local health board (in practice the local Health Protection Team within the Public Health Department), unless the case has already been notified. If you are in any doubt about whether a case is notifiable, you should contact your local Health Protection Team for advice. The list of notifiable diseases is contained in Schedule 1, part 1 of the Public Health etc. (Scotland) Act 2008


The Health Protection Team will also wish to ensure that those handling the body know the nature of any risk to public health and any precautions which should be taken, as this is a statutory duty placed on the health board.

The General Medical Council guidance Confidentiality (most recent edition of September 2009) makes clear that if a serious communicable disease has contributed to the cause of death, doctors must record this on the death certificate.


The GMC guidance Good Medical Practice reminds doctors of their duty to be honest and trustworthy when completing or signing forms and their legal duty to compete death certificates honestly and fully including for serious communicable diseases.

http://www.gmc-uk.org/guidance/good_medical_practice/index.asp
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, if known:

- The infecting organism, e.g. pneumococcus, influenza A virus, meningococcus
- Antibiotic resistance, if relevant, e.g. meticillin resistant *Staphylococcus 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:

I (a) Bilateral pneumothoraces  
I (b) Multiple bronchopulmonary fistulae  
I (c) Extensive, cavitating pulmonary tuberculosis (smear and culture positive)

II. Iron deficiency anaemia; ventilator associated *pseudomonas 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 Procurator Fiscal. You should indicate, by ticking box X on 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 be amended for statistical purposes.

Remember to specify any underlying disease that may have suppressed the patient's immunity or made them more susceptible to the infection that led to the death.
5.4.1 Healthcare 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 if so, whether it should be included on the MCCD. While families may be surprised if you do not include something that they believe contributed to their relative's death, it is your clinical judgment that must be recorded.

Where infection does follow treatment, including surgery, radiotherapy, antineoplastic, immunosuppressive, antibiotic or other drug treatment for another disease, remember to specify the treatment and the disease for which it was given.

If a Healthcare Associated Infection was part of the sequence leading to death, it should be in part I of the certificate, and you should include all the conditions in the sequence of events back to the original disease being treated.

It is important to emphasise that all deaths where an HAI is recorded as the underlying or contributory cause must be reported to the Procurator Fiscal (section 9 of the guidance “Death and the Procurator Fiscal”, October 2008 www.copfs.gov.uk/Publications/1998/11/DeathandthePF refers).

Reporting of an HAI related death will not necessarily lead to action on the part of the Procurator Fiscal; but will allow local Area Procurator Fiscal offices to identify any clusters of HAI related deaths that may imply an acute serious public health risk in addition to the monitoring undertaken by Health Boards, supported by Health Protection Scotland (HPS), General Register Office for Scotland (GROS) and Information Services Division (ISD).
Example:

I (a) *Clostridium difficile pseudomembranous colitis*
I (b) *Multiple antibiotic therapy*
I (c) *Community acquired pneumonia with severe sepsis*

II *Immobility, Polymyalgia Rheumatica, Osteoporosis*

1(a) *Bronchopneumonia (hospital acquired meticillin resistant Staphylococcus aureus)*
1 (b) *Multiple myeloma*

II *Chronic obstructive airways disease*

If your patient had an HAI which was not part of the direct sequence, but which you think contributed at all to their death, it should be mentioned in part II

I (a) *Carcinomatosis and renal failure*
I (b) *Adenocarcinoma of the prostate*

II. *Chronic obstructive airways disease and catheter associated Escherichia coli urinary tract infection*
5.4.2 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 and the organism involved. 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.

Example:

I (a) Lobar pneumococcal pneumonia
I (b) Influenza A
II. Ischaemic heart disease

For many years, bronchopneumonia was given as the immediate cause of death on a large proportion of certificates. 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 in the sequence in part I 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.

Example:

I (a) Bronchopneumonia
I (b) Immobility and wasting
I (c) Alzheimer’s disease
5.5 *Injuries and external causes*

All deaths involving any form of injury or poisoning **must** be referred to the Procurator Fiscal. If the death is not one that must be certified by the Procurator Fiscal and she/he instructs you as the patient’s clinician 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. You must also mention that the PF has been consulted and his/her advice recorded.

*Example:*

1 (a) Pulmonary embolism
1 (b) Hemiarthroplasty two days after Fractured neck of femur
1 (c) Tripped on loose floor rug at home

II. Left sided weakness and difficulty with balance since haemorrhagic stroke five years ago

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.
5.6 Substance misuse

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

Example:

I (a) Carcinomatosis
I (b) Bronchogenic carcinoma upper lobe left lung
I (c) Smoked 30 cigarettes a day for 20 years

II. Chronic bronchitis and ischaemic heart disease.

I (a) Hepatic encephalopathy
I (b) Alcoholic liver cirrhosis

II. Difficult to control insulin dependent diabetes

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.
Notes on how to fill in the medical certificate of cause of death

1. Introduction

This pad contains:

- information about filling in the medical certificate of cause of death;
- a summary of that information; and
- 20 serially numbered certificates.

When completing certificates please print or write clearly.

The certificate provides legal evidence that the person has died, and states the cause of death. This means that the death can be formally registered and this needs to be done promptly. The person’s family will wish to make funeral arrangements. It is essential that the information on the certificate is accurate. It is used to compile statistics about death. These are needed for monitoring public health, planning in the National Health Service and research, and so for improving the health of the population. Information from the certificate will be included in a register of deaths open to public scrutiny.

2. Your duties as a medical practitioner

2.1 Under the Registration of Births, Deaths and Marriages (Scotland) Act 1965, if you are a registered medical practitioner and attended during the last illness of the deceased, you have to fill in the medical certificate of cause of death. On the certificate, you must certify the cause or causes of death to the best of your knowledge and belief. On occasion you may need to include sensitive information.

2.2 If no registered medical practitioner attended during the deceased’s last illness, or if a registered medical practitioner attended the deceased’s last illness but is unable to provide a certificate, any registered medical practitioner may fill in the form.

2.3 It is best if a consultant, general practitioner or other experienced clinician certifies the death. For a death in hospital, a doctor with provisional or limited registration should certify the death only if he or she is closely supervised and the experienced clinician is content that the causes of death are accurately recorded. It is important that the certificate be completed by the doctor most fully informed about the last illness of the deceased so that he or she can fill in the certificate as fully and accurately as possible. You will wish to ensure that under the terms of the legislation governing medical registration, and if appropriate according to the terms of your employment, you are qualified to complete the certificate.
2.4 Use the certificates in this book for all deaths. Use a certificate of stillbirth (Form 6) for a child that was born after the 24th week of pregnancy and did not breathe or show any other signs of life at any time after being completely expelled from the mother.

2.5 You, as the doctor who completed the certificate, are legally responsible for giving it to any person who is qualified to tell the local registrar of births, deaths and marriages about the death, or to the local registrar. The people who are qualified to tell the local registrar about the death are listed on the back of the certificate. Tell the qualified person to take the certificate to:

- the local registrar of the district in which the person died; or
- the local registrar of the district in which the deceased usually lived (if the district is in Scotland).

In the special circumstance where a body has been found, and the place of death is not known, the local registrar will advise the qualified person on where to register the death.

2.6 Always fill in the counterfoil for your records.

3. **Time and place of death**

3.1 **Time of death** - you should record the time of death as accurately as possible. This can be needed for legal reasons. Please do not use instead the time when life was pronounced extinct. If a nurse or relative was present when the person died, you may record reliable information they give you about the time of death. Otherwise, give your best estimate based on all the information available to you.

3.2 **Place of death** - you should record, to the best of your knowledge, exactly where the person died (for example, the name of the hospital or the address of a private house). If the person did not die in a place that can be identified by an address give the location (for example, a particular stretch of motorway or a specific area of countryside). This may not be the same as the place where you are filling in the certificate.

4. **The cause of death statement**

This section of the certificate is divided into two parts. In part I you should first state the immediate cause of death. You should then work back logically to the disease or condition that started the process. **The last statement that you write in part I should be the main disease that led to death.** This is also known as the underlying cause of death and it is important information for epidemiological purposes. In part II you should state any significant condition or disease or accident that contributed to the death but which was not part of the sequence leading directly to death.

**Part I**

4.1 **Underlying cause of death** - you need to consider the main sequence of conditions leading to the death. You should state the disease or condition that led directly to death on line 1(a), and work your way back in time through what led to this condition (the antecedents) until you reach the underlying cause of death. It is the underlying cause of death which started the chain of events leading to death. **The lowest completed line in part I should contain the underlying cause of death.**
Example 1 - a sequence of conditions leading to death

A patient died from bronchopneumonia following an intracerebral haemorrhage caused by cerebral metastases from a primary malignant neoplasm of the left main bronchus.

You should fill in part I of the certificate as follows:

- **Disease or condition that led directly to death**: I (a) Bronchopneumonia
- **Intermediate cause of death**: (b) Intracerebral haemorrhage
- **Intermediate cause of death**: (c) Cerebral metastases
- **Underlying cause of death**: (d) Squamous cell carcinoma of left main bronchus

4.2 Your statement of the cause of death should be as specific as your information allows. For example, if you are recording a neoplasm you should state the following:

- the histopathological variety of the neoplasm;
- where the neoplasm was;
- if it was secondary, where the primary neoplasm was (even though it may have been removed).

In Example 1, instead of stating lung cancer as the underlying cause of death, the information is more specific (cerebral metastases resulting from squamous cell carcinoma of the left main bronchus).

4.3 **Joint causes of death** - sometimes there are apparently two separate conditions leading to death. If there is no way of choosing between them, you should put them on the same line and explain that they were jointly responsible for death, using the words “combined effects of” or “(joint causes of death)”. In these cases, for statistics, the first condition will be taken as the underlying cause of death.

Example 2 - joint causes of death

- **Disease or condition that led directly to death, also underlying cause of death**: (a) Ischaemic heart disease and chronic bronchitis

4.4 For some deaths there may be only one condition which led directly to death and no antecedents, for example diabetic ketoacidosis. If this is the case, you need to fill in only line I(a).
4.5 If the person died because of injuries from some external cause, please give the external cause (such as a fall or a road traffic collision) as the underlying cause of death.

Example 3 - external cause of death

| Disease or condition that led directly to death | (a) Ruptured Liver |
| Underlying cause of death | (b) Pedestrian knocked over by car |
| (c) | (d) |

4.6 You should not use words which imply an intention or a circumstance like “suicide”, “murder” or “accident”. It is the responsibility of the legal authorities to give such information to the Registrar General in due course. However, you should include the external cause of death.

Example 4 - suicide, murder or accident

| Disease or condition that led directly to death | (a) Compound fracture of skull |
| Underlying cause of death | (b) Gun shot wound |
| (c) | (d) |

4.7 A statement describing any modes of dying, such as “cardiac failure” or “respiratory failure” which are non specific terms, should not be used. More specific terms relating to major organ failures, such as “congestive cardiac failure” or “arteriosclerotic renal failure”, are acceptable as an immediate cause of death in line 1(a), provided that adequate explanation is given of the pathological reason as the underlying cause of death on the last completed line in part I. Other general terms such as “asthenia” or “cachexia” should not be used at all on the death certificate.

4.8 Old age, senility - do not use “old age” or “senility” as the only cause of death in part I unless the deceased was 80 or over and you cannot give a more specific cause of death. You should however seek to avoid such ill defined terms.

Part II

4.9 You should fill in part II when one or more conditions have contributed to death but are not part of the main sequence leading to death. You should not list all the conditions present at death in part II. For example, the person in example 5 may have died sooner because they also had diabetes mellitus. However, if they had osteoarthritis it is unlikely to have contributed to the death. You should fill in the certificate as follows.
Example 5 - other conditions contributing to death

| Disease or condition that led directly to death | I (a) Bronchopneumonia |
| Intermediate cause of death | (b) Intracerebral haemorrhage |
| Intermediate cause of death | (c) Cerebral metastases |
| Underlying cause of death | (d) Squamous cell carcinoma of left main bronchus |
| Other conditions contributing to death | II Diabetes mellitus |

4.10 **The time between each condition starting and the person dying** - if possible, for parts I and II, you should state the approximate time between each condition starting and the person dying. This is particularly useful for accurate compilation of statistics and you should make every effort to complete this section of the death certificate.

Example 6 - time between each condition starting and the person dying

| Disease or condition that led directly to death | I (a) Bronchopneumonia | 3 days |
| Intermediate cause of death | (b) Intracerebral haemorrhage | 7 days |
| Intermediate cause of death | (c) Cerebral metastases | 3 months |
| Underlying cause of death | (d) Squamous cell carcinoma of left main bronchus | 2 years |
| Other conditions contributing to death | II Diabetes mellitus | 10 years |

**General Points**

4.11 Where appropriate, in parts I and II, you should give information about clinical interventions, procedures or drugs that may have led to adverse effects.

4.12 Do not use abbreviations such as “CVA”, “MI” or “PE” or medical symbols such as “#” for fracture on the certificate. If you use these ambiguous terms it may delay the death being registered.

4.13 Do not use the words “natural causes” on the death certificate; this merely implies that the death was not the result of an external cause.

4.14 Do not use terms such as “cerebrovascular accident”. Relatives may think they imply violence. In this example “cerebrovascular event” or “leftsided stroke” are in any case preferable terms.

4.15 Bronchopneumonia is a common terminal event leading directly to death when people with a major chronic illness die. However, you should not only write bronchopneumonia as the sole cause of death if there is another condition which you can also state as the underlying cause of death.
4.16 You can include the term “smoking” as long as you also give a medical cause of death.

4.17 When causes of death such as self neglect or self injury are due to psychiatric illness, psychiatric illness should be mentioned as a contributory factor or underlying cause of death, as appropriate.

4.18 If a certificate is issued prior to completion of histological or toxicological tests, the words “unascertained pending test results” may be used in line I(a). You will be asked to provide more detail later.

5. Other information required on certificate

5.1 Information from a post mortem examination - tick the relevant box:
- if a post mortem has been done, tick box PM1;
- if information from a post mortem may be available later, tick box PM2. Do not delay issuing your certificate. The General Register Office will send you a form. Fill it in giving the results of the post mortem and send it back;
- if a post mortem is not being held, tick box PM3.

5.2 When to report a death to the procurator fiscal - the procurator fiscal has a duty to investigate certain deaths. The categories of deaths concerned may change from time to time and you are advised to refer to the booklet “Death and the Procurator Fiscal” and any supplementary guidance issued for fuller details and advice. Generally the procurator fiscal will enquire into any sudden, suspicious, accidental, unexpected and unexplained death. However the procurator fiscal may enquire into any death brought to his or her notice if he or she thinks it necessary to do so. In particular, the procurator fiscal will want to know from you of any death where the circumstances or evidence suggest that the death may fall into one or more of the following categories:
- any death due to violent, suspicious or unexplained cause;
- any death involving fault or neglect on the part of another;
- possible or suspected suicide;
- any death resulting from an accident;
- any death arising out of the use of a vehicle including an aircraft, ship or train;
- any death by drowning;
- any death by burning or scalding, or as a result of a fire or explosion;
- certain deaths of children - any death of a newborn child whose body is found, any sudden death in infancy, any death due to suffocation including overlaying, any death of a foster child;
- any death at work, whether or not as a result of an accident;
- any death related to occupation, for example industrial disease or poisoning;
- any death as a result of abortion or attempted abortion;
- any death as a result of medical mishap, and any death where a complaint is received which suggests that medical treatment or the absence of treatment may have contributed to the death;
- any death due to poisoning or suspected poisoning, including by prescription or non-prescription drugs, other substances, gas or solvent fumes;
- any death due to a notifiable infectious disease, or food poisoning;
- any death in legal custody;
- any death of a person of residence unknown, who died other than in a house;
- any death where a doctor has been unable to certify a cause.
If you do not know whether to report a death, please ask the local procurator fiscal for advice.

Tick box PF if you or a colleague have reported the death to the procurator fiscal. Do not tick the box if you have consulted the procurator fiscal for advice and the procurator fiscal has told you not to report the death.

5.3 Attendance during last illness of the deceased - you should tick box A1, A2 or A3. Pathologists completing the certificate should tick box A2 or A3 as appropriate.

5.4 Extra information - tick box X if there is any other information which might become available later (for example histology or toxicology reports) and which might help to make the cause of death clearer. The General Register Office will contact you to obtain this information for statistical purposes only.

5.5 Maternal death - you should consider if the deceased could have been pregnant within the year before she died. Tick box M1 or M2 where appropriate.

6. Signature of doctor and consultant’s name

Please sign the certificate and add your medical qualifications and the date. You should also print your name clearly in BLOCK CAPITAL LETTERS. You may use a stamp with your name and address, if one is available. You should not use your domestic address but the address of the hospital or surgery. If the person died in hospital, you should also give the name of the consultant who was responsible for looking after the patient.

The registrar of births, deaths and marriages may ask you to clarify the information you have provided. Please be as helpful as you can.

Books of medical certificate of cause of death forms (Form 11) may be obtained from the registrar of births, deaths and marriages of the registration district in which you practise (see “Registration of Births, Deaths and Marriages” in the telephone book).

General Register Office for Scotland
New Register House
Edinburgh
EH1 3YT
January 1999
Summary guidance notes

Below is a summary of the guidance given in the previous pages and the relevant paragraph numbers are shown in brackets.

If you attended the deceased’s last illness you have to fill in a medical certificate of cause of death. It is best if a consultant, general practitioner or other experienced clinician certifies the death. In hospital, a doctor with provisional or limited registration should certify the death only if he or she is closely supervised (see paragraph 2).

Time and place of death (see paragraph 3)
- You may know the time of death, or you can base your estimate on reliable information from nursing staff or relatives. Otherwise use your best estimate. Please do not use the time when life was pronounced extinct.
- Give the address of the place where the person died. If the death occurred outside give the location.

The cause of death statement (see paragraph 4)

Part I
- Write the disease or condition that led directly to death on line I(a).
- Write any intermediate causes of death next.
- Write the underlying cause of death on the last completed line of part I.
- The disease or condition that led directly to death and the underlying cause of death may be the same. If this is the case, fill in only line I(a).
- If death is due to an external cause such as a fall, give details of the external cause as the underlying cause of death.

Part II
- If there is some other condition or disease that contributed to the death, but which is not part of the sequence which led to death, write it in part II, for example diabetes mellitus that is difficult to control in a patient with a widely disseminated malignancy. Do not use part II to list all the conditions present at death, but which did not contribute to death.

Intervals
- Give the time between each condition starting and the person dying.

Do not use the following
- Modes of dying such as “cardiac failure” (a non specific term).
- Major organ failures such as “congestive cardiac failure” as underlying causes of death.
- Terms such as “asthenia” or “cachexia”.
- “Old age” or “senility” unless the deceased was aged 80 or over and you cannot give a more specific cause of death.
- Abbreviations or medical symbols, such as “#” for fracture.
- The term “natural causes”.
- Terms that may be misinterpreted, for example “cerebrovascular accident”.

Reporting to the procurator fiscal (see paragraph 5.2)
- Report to the procurator fiscal a death falling into any of the categories listed in paragraph 5.2.
- Tick box PF if this has been done.
- Do not tick box PF if the procurator fiscal has been consulted and does not wish the death reported.

Extra information (see paragraph 5.4)
- Tick box X if you think you may be able to supply more information later (for example, from histology or toxicology).

Maternal death (see paragraph 5.5)
- If the deceased had been pregnant within the year before she died, tick box M1 or M2.

Signature and other information (see paragraph 6)
- Please print your name in BLOCK CAPITALS below your signature, and add your medical qualifications. Use your hospital or surgery address.
- If the person died in hospital, please give the name of the consultant responsible for the care of the patient.
Medical certificate of cause of death

Form II

The completed certificate is to be taken to the Registrar of Births, Deaths and Marriages

<table>
<thead>
<tr>
<th>Name of deceased</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
</tbody>
</table>

Date of death:  Day  Month  Year

Time of death:  Hour  Minute

Place of death:

Cause of death:

I

Disease or condition directly leading to death*:

(a) due to (or as a consequence of)

Antecedent causes:

Morbid conditions, if any, giving rise to the above cause, stating the underlying condition last:

(b) due to (or as a consequence of)

(c) due to (or as a consequence of)

(d) due to (or as a consequence of)

II

Other significant conditions contributing to the death, but not related to the disease or condition causing it:

Please tick the relevant box:

Post mortem:

PM1  □  Post mortem has been done and information is included above

PM2  □  Post mortem information may be available later

PM3  □  No post mortem is being done

Procurator fiscal:

PF  □  This death has been reported to the procurator fiscal

Extra information for statistical purposes:

X  □  I may later be able to supply the Registrar General with additional information

Attendance on deceased:

A1  □  I was in attendance upon the deceased during last illness

A2  □  I was not in attendance upon the deceased during last illness: the doctor who was is unable to provide the certificate

A3  □  No doctor was in attendance on the deceased

Maternal deaths:

M1  □  Death during pregnancy or within 42 days of the pregnancy ending

M2  □  Death between 43 days and 12 months after the end of pregnancy

Signature:

Date:

Name in BLOCK CAPITALS:

Official address:

Registered medical qualifications:

For a death in hospital

Name of the consultant responsible for deceased as a patient:

Counterfoil – Medical certificate of cause of death

Name of deceased:

Date of death:

Place of death:

Please circle the appropriate letters and figures using the information above:

Post mortem:  PM1  or  PM2  or  PM3

Procurator fiscal:  PF

Extra information:  X

Attendance on deceased:  A1  A2  A3

Maternal deaths:  M1  M2

Date of certificate:
The doctor has given you this form so that you can arrange for the death to be registered. Once the death is registered, the local registrar will keep this form, but can advise you what other documents you may need and can issue extracts of the entry in the register of deaths.

Who should tell the local registrar about the death

One of the following people must go to the registration office and tell the local registrar about the death.

- Any relative of the deceased, or
- any person present when the person died, or
- the deceased’s executor or other legal representative, or
- the occupier of the property where the person died,
  or if there is no such person,
- anyone else who knows the information to be registered.

Where to take the form

In Scotland, a death may be registered

- either in the registration district where the person died
- or in the registration district where the deceased lived (the district of “usual residence”) if that was in Scotland.

Usual residence means the deceased’s permanent home, not at an address such as a holiday address where he or she may have been staying at the time of death.

If you need advice about what to do with the form, please telephone any local registrar in Scotland (see ‘Registration of Births, Deaths and Marriages’ in the telephone book).