

Introduction to Death Certification

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Learning outcomes

At the end of this session, students are expected to:

- Know the examination required to ascertain fact of death
- Know who is qualified to issue a death certificate
- Understand what is meant by *attending physician*
- Understand what is meant by underlying cause of death and where you should write it on the medical certificate of cause of death.
- Know the circumstances that you are required to report a case to the coroner
- Understand the difference between a hospital post-mortem and a coroner's post-mortem.
- Understand proposed changes

Why certify death?

- **Personal**
 - family have permanent record of cause & can arrange funeral
- **Legal**
 - probate
 - “unnatural” causes are excluded
 - foul play
 - self harm
 - accident
 - industrial disease
- **Public Health**
 - surveillance, resource allocation & research

Why is death certification important to you?

- relatives will be spared the distress of delay in funeral arrangements caused by unexpected referral of the death to the coroner
- doctors will avoid being asked to clarify their certificate by the Registrar of Birth and Deaths or by the Coroner
- everyone will benefit from more reliable information on mortality

How to ascertain death

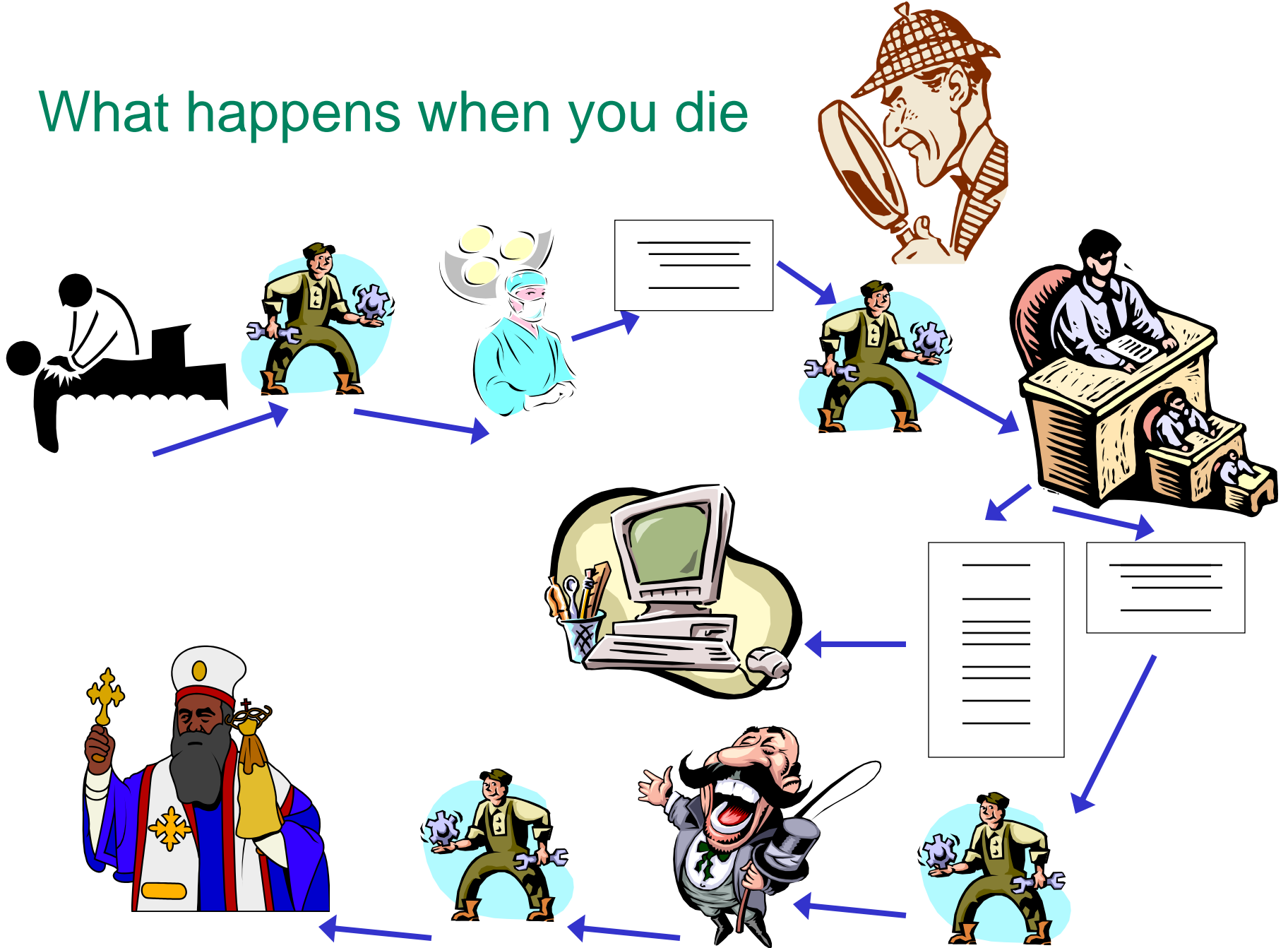
- Pulse
- Breath sounds
- Heartbeat
 - *Check for at least 2 minutes*
- Reflexes (eg light reflex or corneal)

- You do NOT need to carry out ECG or EEG.
- *Write clearly in the notes the time of death and the time of your examination*

Who should issue a medical certificate of death?

- If you are a registered medical practitioner and were in attendance during the deceased's last illness, you are required under the Births and Deaths Registration Act 1953 to certify the cause of death.

What happens when you die



3 Medical Certificates of Cause of Death

- Medical Certificate of Cause of Death - any death after 28 days of life
- Neonatal Death Certificate - within 28 days if child breathed regardless of gestation
- Certificate of Still-birth if child born dead after 24 weeks gestation

BIRTHS AND DEATHS REGISTRATION ACT 1953

(Form prescribed by the Registration of Births and Deaths Regulations 1987)

MEDICAL CERTIFICATE OF CAUSE OF DEATH

For use only by a Registered Medical Practitioner WHO HAS BEEN IN ATTENDANCE during the deceased's last illness, and to be delivered by him forthwith to the Registrar of Births and Deaths.

Registrar to enter No. of Death Entry

COUNTERFOIL

For use of Medical Practitioner, who should complete in all cases.

Name of deceased

Date of death

Age

Place of death

Last seen alive by me

Post-mortem/Coroner

Whether seen after death

Cause of death

I (a) (b) (c)

II

Employment? Please tick where applicable

B. Further information offered?

Signature

Date

*Ring appropriate digit(s) and letter.

Name of deceased Date of death as stated to me Place of death Last seen alive by me

- 1 The certified cause of death takes account of information obtained from post-mortem. 2 Information from post-mortem may be available later. 3 Post-mortem not being held. 4 I have reported this death to the Coroner for further action. a Seen after death by me. b Seen after death by another medical practitioner but not by me. c Not seen after death by a medical practitioner.

[See overleaf]

CAUSE OF DEATH The condition thought to be the 'Underlying Cause of Death' should appear in the lowest completed line of Part I. I (a) Disease or condition directly leading to death. (b) Other disease or condition, if any, leading to I(a). (c) Other disease or condition, if any, leading to I(b). II Other significant conditions CONTRIBUTING TO THE DEATH but not related to the disease or condition causing it.

These particulars not to be entered in death register Approximate interval between onset and death

The death might have been due to or contributed to by the employment followed at some time by the deceased. Please tick where applicable

†This does not mean the mode of dying, such as heart failure, asphyxia, asthma, etc: it means the disease, injury, or complication which caused death.

I hereby certify that I was in medical attendance during the above named deceased's last illness, and that the particulars and cause of death above written are true to the best of my knowledge and belief.

Signature Qualifications as registered by General Medical Council

Residence Date

For deaths in hospital: Please give the name of the consultant responsible for the above-named as a patient

(Form prescribed by the Registration of Births and Deaths Regulations 1987)

NOTICE TO INFORMANT

I hereby give notice that I have this day signed a medical certificate of cause of death of

Signature Date

This notice is to be delivered by the informant to the registrar of births and deaths for the sub-district in which the death occurred.

The certifying medical practitioner must give this notice to the person who is qualified and liable to act as informant for the registration of death (see list overleaf). Where the informant intends giving information for the registration outside of the area where the death occurred, this notice may be handed to the informant's agent.

DUTIES OF INFORMANT

Failure to deliver this notice to the registrar renders the informant liable to prosecution. The death cannot be registered until the medical certificate has reached the registrar.

When the death is registered the informant must be prepared to give to the registrar the following particulars relating to the deceased:

- 1. The date and place of death. 2. The full name and surname (and the maiden surname if the deceased was a woman who had married). 3. The date and place of birth. 4. The occupation (and if the deceased was a married woman or a widow the name and occupation of her husband). 5. The usual address. 6. Whether the deceased was in receipt of a pension or allowance from public funds. 7. If the deceased was married, the date of birth of the surviving widow or widower.

THE DECEASED'S MEDICAL CARD SHOULD BE DELIVERED TO THE REGISTRAR

SPED

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Registrar to enter
No. of Death Entry

Name of deceased
Date of death as stated to me day of Age as stated to me
Place of death
Last seen alive by me day of

- 1 The certified cause of death takes account of information obtained from post-mortem.
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- [See overleaf]

CAUSE OF DEATH

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II Other significant conditions CONTRIBUTING TO THE DEATH but not related to the disease or condition causing it

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SPECIMENS

Sections on Certificate

- Personal details about deceased
- Circumstances of certification
- Referral to coroner or hospital PM

- Cause of Death Statement
 - Underlying cause of death - part 1 SEQUENCE!
 - Other contributing conditions - part 2

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SPECIALIST

Video clip

- How not to determine cause of death
- How to determine underlying cause of death

Underlying cause of death *sequence*

Part 1

Disease or condition that
lead directly to death



Intermediate cause



Underlying cause

Part 2

Other conditions
contributing to death

Part 1a

avoid mode of dying as sole cause

Part 1

a. Disease or condition
that lead directly to death

b. Intermediate cause

c. Underlying cause

Part 2

Other conditions
contributing to death

Modes

Heart failure,
respiratory
arrest, coma,
asphyxia etc.

Mary

- 84 year old retired midwife. Admitted with a community-acquired pneumonia, improves but a suspicious shadow is reported on her chest X-ray.
- The bronchial biopsy proves a Squamous Cell bronchial carcinoma – which is not curable.
- Mary goes home. One week later readmitted with a DVT and refuses investigation & treatment. She dies later that day.
 - *what would you write on the death certificate?*

Paul

- 17 year old man brought into A&E after driving his moped into the side of a bus. Becomes unconscious after the first 45 minutes. He has head, chest and abdominal injuries.
- Paul has a CT scan which shows no intracranial bleed but he needs an emergency laparotomy.
- Paul's intra-abdominal injuries are severe and he dies on the operating table.
 - *What would you write on the death certificate?*

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| 4 | have reported this death to the Coroner for further action.
[See overleaf] | | | |

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SPECIALLY PRINTED

Video

- Referral to coroner

Cases which must be referred to the Coroner

- Unnatural
 - Violence
 - Accident
 - Abortion
 - Occupation
 - Surgical procedures
 - Actions of the deceased
- Unknown cause
- Occurred in custody

Coroner's Cases

- If the cause of death is unknown
- the deceased was not seen by the certifying doctor either after death or within the 14 days before death
- the death was violent or unnatural or was suspicious
- the death may be due to an accident (whenever it occurred)
- the death may be due to self-neglect or neglect by others

Coroner's Cases

- the death may be due to an industrial disease or related to the deceased's employment
- the death may be due to an abortion
- the death occurred during an operation or before recovery from the effects of an anaesthetic
- the death may be a suicide
- the death occurred during or shortly after detention in police or prison custody

Getting it wrong

- Deceased can't be buried
- Case referred to coroner
- You look stupid
- Make more work for yourself or your boss
- Mess up national statistics

Getting it right

- *Read* the instructions !
- get the *sequencing* right
- seek *advice* from senior
- discuss with the *coroner's officer*
- consider need for *hospital PM*
- *explain* clearly to relatives - “the informant”

Recent controversies

- Shipman - responsibilities of doctors, cremation forms, & coroners
- Bristol - whistle blowing
- Alder Hey Children's hospital - consent for PM & tissue retention
- Falling hospital PM rates
- Poor quality control death certificates

Reforms to be introduced in 2014

- Medical Examiner (employed by LA) to provide advice and to scrutinise non-coroner death certificates
- Criteria to refer to coroner will be clarified
- Medical examiner can refer death to coroner
- Medical examiner can identify clinical governance issues
- Medical Examiner issues ME-2 to attending doctor to issue confirmed MCCD

Video

- Summary

Further reading

- Death Certification: All you need to know about forms and family
 - Student BMJ
- Death Certification Reforms
 - The Death Certification Sub Group
 - e-Learning
- Post Mortem Codes of Practice
 - The Human Tissue Authority

Example case

- Mr Smith, aged 88 years suffered sudden loss of the use of his right arm and leg. Following a neurological examination by you (as the attending doctor) a clinical diagnosis of stroke was made.
- Subsequently confined to bed for 7 days, and lay there showing few signs of improvement. He began to cough, became feverish, and additional sounds could be heard on auscultation of his chest indicating that he had developed pneumonia.
- He died 48 hours later. His medical history showed that he also suffered from benign prostatic hyperplasia.

Example case

- Vera, a frail 83 year old woman was admitted with a fractured hip on the left side after a fall at home. Her fracture was fixed internally by an orthopaedic surgeon. Six days post-operatively, while under your care, she developed a UTI, then became septicaemic, and 12 days post-operatively she died.
- Her medical history also revealed that she suffered from ischaemic heart disease.

Vera - Cause of death statement

I.(a) Septicaemia

(b) Urinary tract infection

(c) Left fractured neck of femur

II. Ischaemic heart disease

Example case

- Stanley, a man aged 73 years, living on his own, is admitted to hospital with severe lower abdominal pain under the care of a urological team (not your own). Abdominal examination revealed a large, tense, fluid-filled swelling. An enlarged prostate was found on rectal examination. A diagnosis of urinary retention resulting from benign prostatic hyperplasia is made. Despite treatment, the man developed uraemia and died one night several days later. You are on-call and are asked to complete a death certificate on the basis of the above information, which you have been given by the ward nursing staff. The deceased's body has already been removed to the mortuary.

Give the underlying cause of death

CAUSE OF DEATH

I(a) Disease or condition directly

leading to death*cardio-respiratory failure*.....

(b) Other disease or condition, if any,

leading to **I(a)***carcinomatosis*.....

(c) Other disease or condition, if any,

leading to **I(b)***carcinoma of breast*.....

II Other significant conditions

CONTRIBUTING TO THE DEATH but*chronic airways disease*.....

not related to the disease or condition

causing it

CAUSE OF DEATH

I(a) Disease or condition directly

leading to death*primary postcricoid laryngeal carcinoma*.....

(b) Other disease or condition, if any,

leading to **I(a)***dysphagia*.....

(c) Other disease or condition, if any,

leading to **I(b)***extension of carcinoma to upper third of oesophagus*...

II Other significant conditions

CONTRIBUTING TO THE DEATH but*dysphagia and dyspnoea*.....

not related to the disease or condition

causing it

In your opinion, should this case be referred to the Coroner?

- A 29 year-old man was admitted in cardiopulmonary arrest. His medical history included supervision by the psychiatric services with prescribed diazepam (a treatment for anxiety), mianserin (a treatment for depression), and chlorpromazine (a tranquilliser); he was also known to be a user of amphetamines.
- A provisional diagnosis of drug overdose was made. He was resuscitated and transferred to an intensive care unit where he was mechanically ventilated. Blood tests confirmed an overdose of amphetamines. His condition deteriorated despite treatment and he died two days later.

In your opinion, should this case be referred to the Coroner?

- A 46 year-old man was admitted to hospital from a spinal injuries unit with severe pressure sores on his sacrum. He had been paralysed from the neck down since a fall on a building site where he worked as a steel erector.
- He had recurrent problems with infected pressure sores. Septicaemia was confirmed by a blood test and he was given appropriate antibiotics. He subsequently developed a chest infection and gradually deteriorated and died 10 days later.

In your opinion, should this case be referred to the Coroner?

- A 75 year-old man suddenly became ill while watching football on television and complained of severe chest pain to his wife. He collapsed and was found to have no pulse and fixed dilated pupils when his general practitioner (GP) arrived to attend to him.
- Efforts at resuscitation failed. His medical history included a myocardial infarction 2 years previously, and he was being treated for angina by his GP. The GP made a clinical diagnosis of myocardial infarction due to ischaemic heart disease.

In your opinion, should this case be referred to the Coroner?

- You would like a post-mortem on a 67 year old man who suffered an acute MI, despite appropriate treatment including administration of a thrombolytic drug. He had a previous history of ischaemic heart disease.

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At the end of this session, students are expected to:

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