

OMI AND DEATH CERTIFICATION

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DEATH CERTIFICATES

- Legal documentation that the person has died
- Demographic information about the deceased
- Evaluate the cause, manner, and circumstances of death
- Necessary for the settling of the deceased's estate
- Information about disposition of the remains
- Information that may be used by the government, public health agencies, other state or federal agencies or researchers

DEATH CERTIFICATES

- Death certificate information is forwarded to the National Center for Health Statistics (NCHS) which keeps data for the death of every person in the US

NM OFFICE OF THE MEDICAL INVESTIGATOR

The Office of the Medical Investigator (OMI) investigates any death occurring in the State of New Mexico that is sudden, violent, untimely, unexpected, or where a person is found dead and the cause of death is unknown



NM OFFICE OF THE MEDICAL INVESTIGATOR

- Jurisdiction
 - It is determined by the investigator and the pathologist that an autopsy must be performed OR we investigate the death
 - Infants/children
 - Unattended deaths (no physician)
 - Identification issues
 - Homicide/accident/suicide
- Consented autopsies
 - Hospital consults
 - Family consults
- We sign all of the death certificates for patients who die IN the hospital at UNMH and SRMC
- When a natural death at home has been investigated; and we have ruled out any unnatural events, or the suspicion of such, we terminate jurisdiction and have the PCP sign out the DC

NM OFFICE OF THE MEDICAL INVESTIGATOR OR

- Please have your staff return our calls!
- You will not be asked to sign the DC on a case that has not been investigated and deemed to be a natural death
- IF you have information to the contrary – once you provide that it will bounce back to the OMI
 - Suspect acute alcohol or drug intoxication
 - Believe trauma played a role in the death (hip fractures, head trauma, etc.)

DEATH INVESTIGATION

- We do a full body CT scan on all decedents
 - Can often use the CT and other ancillary information
 - Not all cases get an autopsy
- Determining the cause and manner of death takes much more than an autopsy:
 - Scene investigation
 - Blood tests
 - Microscopes
 - Cultures
 - Medical records
 - Law enforcement reports



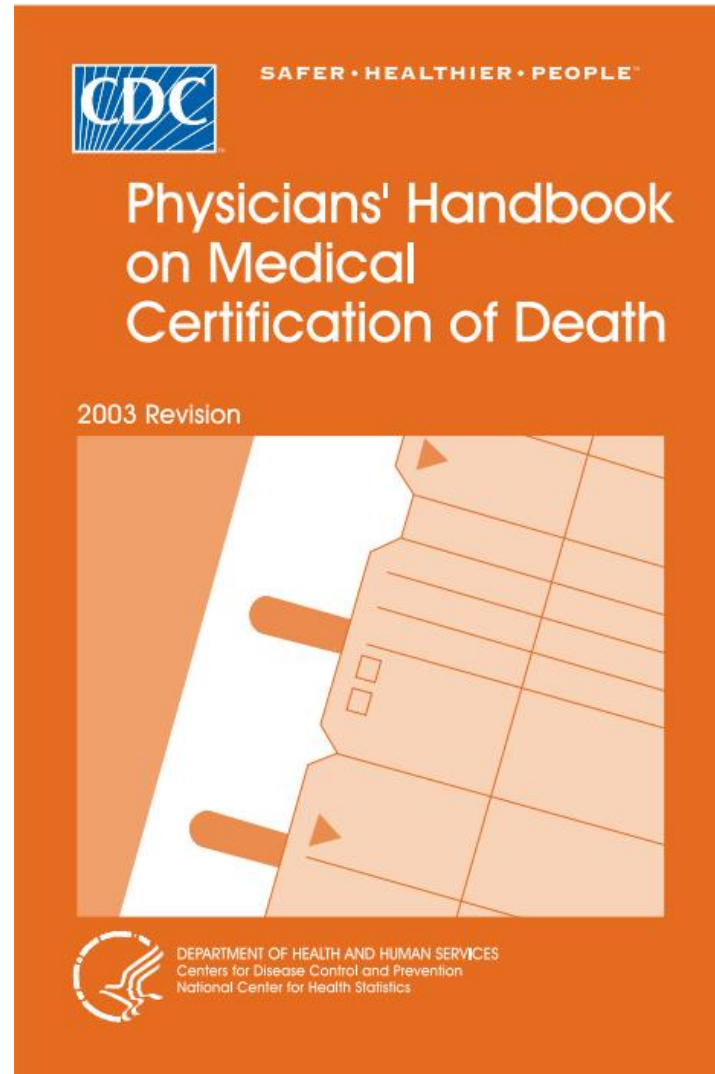
DEATH INVESTIGATION

- DO NOT SIGN A DC WITH:
 - **Trauma**: hip fracture, traumatic brain injury, seizure due to remote trauma, etc.
 - **Drugs**: acute alcohol, methamphetamine intoxication, cocaine use, etc.
 - Anything related to a remote **suicide, assault, motor vehicle accident**, etc.
 - Vital statistics will reject it and send it to us for correction – that means a lot of lost time for the family

CONSENT D AUTOPSIES - UNMH

- Death packets
 - Contain important information about the death for vital statistics and our office
- Death note
 - This is SO IMPORTANT
 - We rely on this as a summary of the hospital course – so copied and pasted information is not very useful as we can find that elsewhere
 - Your narrative about what happened is our best resource as we sign out a death certificate
 - Should not report future follow up, plans, etc.
- Consents
 - MUST be signed by the LEGAL NEXT OF KIN
 - Spouse, adult children, siblings.....
 - All of the sections have to be signed for the consent to be valid and legal

DEATH CERTIFICATION ON FOR CLINICIANS



https://www.cdc.gov/nchs/data/misc/hb_cod.pdf

DEFINITIONS

- Certification
 - Completing the cause and circumstances of death information and having the certificate signed by the physician, ME or coroner who serves as the “certifier” of death
- Registration
 - This is done by the funeral home – they create the DAVE ID, etc.

FUNERAL DIRECTOR ROLE

- Obtains personal facts about the decedent
- Obtains certification of the cause of death from the certifying physician, ME/C
- Obtains authorization for final disposition of the body
- Completes the personal and disposition sections of the DC
- Files the completed certificate with BVS

ROLE OF THE CERTIFIER

- Completes the cause of death section of the DC and signs the certificate
- Completes information on decedent name, and date, time and place of death

U.S. STANDARD CERTIFICATE OF DEATH

LOCAL FILE NO. _____ STATE FILE NO. _____

1. DECEDENT'S LEGAL NAME (Include AKA's if any) (First, Middle, Last) _____ 2. SEX _____ 3. SOCIAL SECURITY NUMBER _____

4a. AGE-Last Birthday (Years) _____ 4b. UNDER 1 YEAR _____ 4c. UNDER 1 DAY _____ 5. DATE OF BIRTH (Mo/Day/Yr) _____ 6. BIRTHPLACE (City and State or Foreign Country) _____

7a. RESIDENCE-STATE _____ 7b. COUNTY _____ 7c. CITY OR TOWN _____

7d. STREET AND NUMBER _____ 7e. APT. NO. _____ 7f. ZIP CODE _____ 7g. INSIDE CITY LIMITS? Yes No

8. EVER IN US ARMED FORCES? Yes No 9. MARITAL STATUS AT TIME OF DEATH Married Married, but separated Widowed Divorced Never Married Unknown 10. SURVIVING SPOUSE'S NAME (If wife, give name prior to first marriage) _____

11. FATHER'S NAME (First, Middle, Last) _____ 12. MOTHER'S NAME PRIOR TO FIRST MARRIAGE (First, Middle, Last) _____

13a. INFORMANT'S NAME _____ 13b. RELATIONSHIP TO DECEDENT _____ 13c. MAILING ADDRESS (Street and Number, City, State, Zip Code) _____

14. PLACE OF DEATH (Check only one; see instructions)

IF DEATH OCCURRED IN A HOSPITAL: Inpatient Emergency Room/Outpatient Dead on Arrival Hospice facility Nursing home/Long term care facility Decedent's home Other (Specify): _____

15. FACILITY NAME (If not institution, give street & number) _____ 16. CITY OR TOWN, STATE, AND ZIP CODE _____ 17. COUNTY OF DEATH _____

18. METHOD OF DISPOSITION: Burial Cremation Donation Entombment Removal from State Other (Specify): _____ 19. PLACE OF DISPOSITION (Name of cemetery, crematory, other place) _____

20. LOCATION-CITY, TOWN, AND STATE _____ 21. NAME AND COMPLETE ADDRESS OF FUNERAL FACILITY _____

22. SIGNATURE OF FUNERAL SERVICE LICENSEE OR OTHER AGENT _____ 23. LICENSE NUMBER (Of Licensee) _____

ITEMS 24-28 MUST BE COMPLETED BY PERSON WHO PRONOUNCES OR CERTIFIES DEATH

24. DATE PRONOUNCED DEAD (Mo/Day/Yr) _____ 25. TIME PRONOUNCED DEAD _____

26. SIGNATURE OF PERSON PRONOUNCING DEATH (Only when applicable) _____ 27. LICENSE NUMBER _____ 28. DATE SIGNED (Mo/Day/Yr) _____

29. ACTUAL OR PRESUMED DATE OF DEATH (Mo/Day/Yr) (Spell Month) _____ 30. ACTUAL OR PRESUMED TIME OF DEATH _____ 31. WAS MEDICAL EXAMINER OR CORONER CONTACTED? Yes No

CAUSE OF DEATH (See instructions and examples)

32. **PART I.** Enter the chain of events—disease, injuries, or complications—that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.

IMMEDIATE CAUSE (Final disease, or condition resulting in death) _____ a. _____ Due to (or as a consequence of) _____

Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST _____ b. _____ Due to (or as a consequence of) _____

_____ c. _____ Due to (or as a consequence of) _____

_____ d. _____

33. WAS AN AUTOPSY PERFORMED? Yes No

34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? Yes No

PART II. Enter other significant conditions contributing to death but not resulting in the underlying cause given in PART I

35. DID TOBACCO USE CONTRIBUTE TO DEATH? Yes Probably No Unknown 36. IF FEMALE: Not pregnant within past year Pregnant at time of death Not pregnant, but pregnant within 42 days of death Not pregnant, but pregnant 43 days to 1 year before death Unknown if pregnant within the past year 37. MANNER OF DEATH Natural Homicide Accident Pending Investigation Suicide Could not be determined

38. DATE OF INJURY (Mo/Day/Yr) (Spell Month) _____ 39. TIME OF INJURY _____ 40. PLACE OF INJURY (e.g., Decedent's home, construction site, restaurant, wooded area) _____ 41. INJURY AT WORK? Yes No

42. LOCATION OF INJURY: State: _____ City or Town: _____ Street & Number: _____ Apartment No.: _____ Zip Code: _____

43. DESCRIBE HOW INJURY OCCURRED: _____ 44. IF TRANSPORTATION INJURY, SPECIFY: Driver/Operator Passenger Pedestrian Other (Specify) _____

45. CERTIFIER (Check only one): Certifying physician—To the best of my knowledge, death occurred due to the cause(s) and manner stated. Pronouncing & Certifying physician—To the best of my knowledge, death occurred at the time, date, and place, and due to the cause(s) and manner stated. Medical Examiner/Coroner—On the basis of examination, and/or investigation, in my opinion, death occurred at the time, date, and place, and due to the cause(s) and manner stated. Signature of certifier: _____

46. NAME, ADDRESS, AND ZIP CODE OF PERSON COMPLETING CAUSE OF DEATH (Item 32) _____

47. TITLE OF CERTIFIER _____ 48. LICENSE NUMBER _____ 49. DATE CERTIFIED (Mo/Day/Yr) _____ 50. FOR REGISTRAR ONLY- DATE FILED (Mo/Day/Yr) _____

51. DECEDENT'S EDUCATION—Check the box that best describes the highest degree or level of school completed at the time of death. 8th grade or less 9th - 12th grade, no diploma High school graduate or GED completed Some college credit, but no degree Associate degree (e.g., A.A., A.S.) Bachelor's degree (e.g., BA, AB, BS) Master's degree (e.g., MA, MS, MEng, MEd, MSW, MBA) Doctorate (e.g., PhD, EdD) or Professional degree (e.g., MD, DDS, DVM, LLB, JD) 52. DECEDENT OF HISPANIC ORIGIN? Check the box that best describes whether the decedent is Spanish/Hispanic/Latino. Check the "No" box if decedent is not Spanish/Hispanic/Latino. No, not Spanish/Hispanic/Latino Yes, Mexican, Mexican American, Chicano Yes, Puerto Rican Yes, Cuban Yes, other Spanish/Hispanic/Latino (Specify) _____ 53. DECEDENT'S RACE (Check one or more races to indicate what the decedent considered himself or herself to be) White Black or African American American Indian or Alaska Native (Name of the enrolled or principal tribe) _____ Asian Indian Chinese Filipino Japanese Korean Vietnamese Other Asian (Specify) _____ Native Hawaiian Guamanian or Chamorro Samoan Other Pacific Islander (Specify) _____ Other (Specify) _____

54. DECEDENT'S USUAL OCCUPATION (Indicate type of work done during most of working life; DO NOT USE RETIRED). _____

55. KIND OF BUSINESS/INDUSTRY _____

REV. 11/2003

DEFINITIONS

- Cause of death
 - Disease or injury that initiated the chain of events that resulted in a physiological derangement that led directly and inevitably to death
- Mechanism of death
 - The physiological derangement
- Manner of death
 - The circumstances surrounding the death

DEFINITION S

- ONLY the cause and manner of death are on a death certificate
- The ONLY manner of death you will use is NATURAL

CAUSE VERSUS MECHANISM OF DEATH

CAUSE OF DEATH (See instructions and examples)		Approximate interval: Onset to death
<p>32. PART I. Enter the <u>chain of events</u>—diseases, injuries, or complications—that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.</p> <p>IMMEDIATE CAUSE (Final disease or condition -----> resulting in death) a. _____ Due to (or as a consequence of):</p> <p>Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST b. _____ Due to (or as a consequence of):</p> <p>c. _____ Due to (or as a consequence of):</p> <p>d. _____</p>		<hr/> <hr/> <hr/> <hr/>
<p>PART II. Enter other <u>significant conditions contributing to death</u> but not resulting in the underlying cause given in PART I</p>		<p>33. WAS AN AUTOPSY PERFORMED? <input type="checkbox"/> Yes <input type="checkbox"/> No</p> <p>34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

CAUSE OF DEATH

- EXAMPLES:
 - Gunshot wound of chest
 - Multiple blunt force injuries
 - Atherosclerotic and hypertensive cardiovascular disease
 - Chronic alcohol abuse
 - Metastatic prostate cancer

MECHANISM OF DEATH

- Should not really be the CAUSE of death
- Examples of unhelpful or inaccurate causes of death that are truly mechanisms
 - Arrhythmia
 - Cardiac arrest
 - Hypotension
 - Respiratory failure
 - Cardiopulmonary arrest
 - Ventricular fibrillation

CAUSE OF DEATH

CAUSE OF DEATH (See instructions and examples)		Approximate interval: Onset to death
<p>32. PART I. Enter the <u>chain of events</u>—diseases, injuries, or complications—that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.</p>		
<p>IMMEDIATE CAUSE (Final disease or condition resulting in death) -----></p>	<p>a. <u>Gastrointestinal hemorrhage</u> Due to (or as a consequence of):</p>	_____
<p>Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST</p>	<p>b. <u>Esophageal varices</u> Due to (or as a consequence of):</p>	_____
	<p>c. <u>Cirrhosis of the liver</u> Due to (or as a consequence of):</p>	_____
	<p>d. <u>Chronic alcohol abuse</u></p>	_____
<p>PART II. Enter other <u>significant conditions contributing to death</u> but not resulting in the underlying cause given in PART I</p>		<p>33. WAS AN AUTOPSY PERFORMED? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
		<p>34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

CAUSE VERSUS MECHANISM OF DEATH

CAUSE OF DEATH (See instructions and examples)		Approximate interval: Onset to death
<p>32. PART I. Enter the <u>chain of events</u>—diseases, injuries, or complications—that directly caused the death. DO NOT enter terminal events such as cardiac arrest, respiratory arrest, or ventricular fibrillation without showing the etiology. DO NOT ABBREVIATE. Enter only one cause on a line. Add additional lines if necessary.</p>		
<p>IMMEDIATE CAUSE (Final disease or condition resulting in death) -----></p>	<p>a. <u>Chronic alcohol abuse</u> Due to (or as a consequence of):</p>	<p>_____</p>
<p>Sequentially list conditions, if any, leading to the cause listed on line a. Enter the UNDERLYING CAUSE (disease or injury that initiated the events resulting in death) LAST</p>	<p>b. _____ Due to (or as a consequence of):</p>	<p>_____</p>
	<p>c. _____ Due to (or as a consequence of):</p>	<p>_____</p>
	<p>d. _____</p>	<p>_____</p>
<p>PART II. Enter other <u>significant conditions contributing to death</u> but not resulting in the underlying cause given in PART I</p>		<p>33. WAS AN AUTOPSY PERFORMED? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>
		<p>34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No</p>

CAUSE AND MECHANISM OF DEATH

- EXAMPLE (not so great DC)
 - COD:
 - Pulseless electrical activity due to septic shock due to alcoholic pancreatitis due to bowel ischemia
 - OSC:
 - Alcohol abuse, cocaine abuse, alcoholic ketoacidosis
 - MOD: natural

Was he acutely intoxicated with cocaine?
Was he acutely intoxicated with alcohol?

CAUSE AND MECHANISM

- EXAMPLE (not so great DC)
 - COD:
 - Pulseless electrical activity due to septic shock due to alcoholic pancreatitis due to bowel ischemia
 - OSC:
 - Alcohol abuse, cocaine abuse, alcoholic ketoacidosis
 - MOD: natural
- Better DC
 - COD: Toxic effects of cocaine and alcohol
 - OSC: Chronic alcohol abuse
 - MOD: ACCIDENT

Other Significant Contributing Conditions (Part II on the DC)

- Pre-existing or coexisting diseases or injuries that mechanistically contributed to death but did not result in the underlying cause of death
- Examples:
 - COD: ASHCVD
 - OSC: diabetes mellitus, morbid obesity
 - COD: Pneumonia
 - OSC: chronic alcohol abuse
 - COD: Urinary tract infection
 - OSC: dementia, diabetes mellitus

CASE EXAMPLES

CASE #1 HISTORY

- A 60-year-old man is found dead at home
 - History of hypertension and hyperlipidemia
 - Last seen by his physician 3 months prior
 - Somewhat compliant with meds but obese and sedentary
 - Collapsed in the bathroom
 - Home is clean – no evidence of drugs or alcohol and no history of abuse of substances other than cigarette smoking
 - Scene will have been investigated by an OMI investigator and law enforcement, as they are called to the scene on all deaths out of a health care setting
 - If you are called – we know they weren't stabbed, shot, etc. 😊

CASE #1 POSSIBLE MECHANISMS

- Acute myocardial infarction
- Arrhythmia due to cardiomegaly due to long-standing hypertension
- Aortic dissection
- Ruptured AAA
- Hypertensive intracranial hemorrhage
- Ruptured berry aneurysm

CASE #1 DEATH CERTIFICATE

- CAUSE OF DEATH: Hypertensive and atherosclerotic cardiovascular disease
- OSC: Obesity
- MOD: Natural
- ALCOHOL? No
- TOBACCO? Yes

CASE #1

- If the PCP refuses to sign the DC:
 - No autopsy will be performed – they are over the age cut-off and there is significant history of natural disease
 - May come into OMI to have a CT scan and an external examination
 - The pathologist will need to review your medical records to determine the history
 - This process involved subpoenas, etc. and can take weeks/months
 - Eventually sign out as:
 - COD: Atherosclerotic and hypertensive cardiovascular disease
 - OSC: Obesity
 - MOD: Natural

CASE #2 HISTORY

- A 98-year-old woman is found dead in bed at home
 - She had a long history of moderate-severe dementia
 - Other medical conditions included mild hypertension, hyperlipidemia, chronic protein-calorie malnutrition, frequent urinary tract infections, and GERD
 - Family had been taking care of her in the home
 - She had a single small and very superficial decubitus ulcer on her sacrum
 - Investigation found no concerns of drug or alcohol abuse or tobacco use

CASE #2 POSSIBLE MECHANISMS

- Urosepsis
- Sepsis from the decubitus ulcer
- Pneumonia (CAP or aspiration)
- Acute myocardial infarction
- Arrhythmia due to hypertensive changes
- AAA or aortic dissection
- Intracranial hemorrhage
- Inanition

CASE #2 DEATH CERTIFICATE

- CAUSE OF DEATH:
Atherosclerotic and
hypertensive
cardiovascular disease
- OSC: Dementia
- MOD: Natural
- ALCOHOL? No
- TOBACCO? No

- CAUSE OF DEATH:
Dementia
- OSC: Atherosclerotic and
hypertensive
cardiovascular disease
- MOD: Natural
- ALCOHOL? No
- TOBACCO? No

CASE #3 HISTORY

- 73 year-old man with history of osteoarthritis with chronic shoulder pain and remote left knee replacement
 - Also seen for BPH and urinary retention
 - Has high cholesterol and mild type II diabetes
 - You also know he is a heavy drinker and smoker
 - Obese
 - Is not compliant with medications or health maintenance

CASE #3 POSSIBLE MECHANISM S

CASE #3 DEATH CERTIFICATE

- COD: AHCVD...or Chronic Alcohol Abuse
- OSC: Obesity, Diabetes Mellitus (whichever one above you didn't use)
- MOD: Natural
- Alcohol: Yes
- Tobacco: Yes

IF YOU THINK HE MAY HAVE DIED OF ACUTE ALCOHOL INTOXICATION (RARE, ACTUALLY IN CHRONIC ALCOHOLICS) LET OMI KNOW AND WE WOULD PICK UP THE CASE

QUESTIONS?