KIND OF BUSINESS/INDUSTR

# MEDICAL CERTIFIER INSTRUCTIONS for selected items on U.S. Standard Certificate of Death (See Physicians' Handbook or Medical Examiner/Coroner Handbook on Death Registration for instructions on all items)

#### ITEMS ON WHEN DEATH OCCURRED

Items 24-25 and 29-31 should always be completed. If the facility uses a separate pronouncer or other person to indicate that death has taken place with another person more familiar with the case completing the remainder of the medical portion of the death certificate, the pronouncer completes Items 24-28. If a certifier completes Items 24-25 as well as items 29-49, Items 26-28 may be left blank.

#### ITEMS 24-25, 29-30 - DATE AND TIME OF DEATH

Spell out the name of the month. If the exact date of death is unknown, enter the approximate date. If the date cannot be approximated, enter the date the body is found and identify as **date found**. Date pronounced and actual date may be the same. Enter the exact hour and minutes according to a 24-hour clock; estimates may be provided with "Approx." placed before the time.

ITEM 32 – CAUSE OF DEATH (See attached examples)
Take care to make the entry legible. Use a computer printer with high resolution, typewriter with good black ribbon and clean keys, or print legibly using permanent black ink in completing the CAUSE OF DEATH Section. Do not abbreviate conditions entered in section.

# Part I (Chain of events leading directly to death)

- •Only one cause should be entered on each line. Line (a) MUST ALWAYS have an entry. DO NOT leave blank. Additional lines may be added

- •Only one cause should be entered on each line. Line (a) most activate an entry.

  •If necessary.

  •If the condition on Line (a) resulted from an underlying condition, put the underlying condition on Line (b), and so on, until the full sequence is reported. ALWAYS enter the underlying cause of death on the lowest used line in Part I.

  •For each cause indicate the best estimate of the interval between the presumed onset and the date of death. The terms "unknown" or "approximately" may be used. General terms, such as minutes, hours, or days, are acceptable, if necessary. DO NOT leave blank.

  •The terminal event (for example, cardiac arrest or respiratory arrest) should not be used. If a mechanism of death seems most appropriate to you for line (a), then you must always list its cause(s) on the line(s) below it (for example, cardiac arrest due to coronary artery atherosclerosis or cordiac arrest due to blunt impact to chest)
- you for line (a), then you must always list its cause(s) on the line(s) below it (for example, cardiac arrest **due to** coronary artery atherosclerosis *or* cardiac arrest **due to** blunt impact to chest).

   If an organ system failure such as congestive heart failure, hepatic failure, renal failure, or respiratory failure is listed as a cause of death, always report its etiology on the line(s) beneath it (for example, renal failure **due to** Type I diabetes mellitus).

  •When indicating neoplasms as a cause of death, include the following: 1) primary site *or* that the primary site is unknown, 2) benign or malignant, 3) cell type *or* that the cell type is unknown, 4) grade of neoplasm, and 5) part or lobe of organ affected. (For example, a primary well-differentiated squamous cell carcinoma, lung, left upper lobe.)

  •Always report the fatal injury (for example, stab wound of chest), the trauma (for example, transection of subclavian vein), and impairment of function (for example, air embolism).

PART II (Other significant conditions)

•Enter all diseases or conditions contributing to death that were not reported in the chain of events in Part I and that did not result in the underlying cause of death. See attached examples.

•If two or more possible sequences resulted in death, or if two conditions seem to have added together, report in Part I the one that, in your opinion, most directly caused death. Report in Part II the other conditions or diseases.

### **CHANGES TO CAUSE OF DEATH**

Should additional medical information or autopsy findings become available that would change the cause of death originally reported, the original death certificate should be amended by the certifying physician by **immediately** reporting the revised cause of death to the State Vital Records Office.

#### **ITEMS 33-34 - AUTOPSY**

•33 - Enter "Yes" if either a partial or full autopsy was performed. Otherwise enter "No."
•34 - Enter "Yes" if autopsy findings were available to complete the cause of death; otherwise enter "No". Leave item blank if no autopsy was performed.

ITEM 35 - DID TOBACCO USE CONTRIBUTE TO DEATH?

Check "yes" if, in your opinion, the use of tobacco contributed to death. Tobacco use may contribute to deaths due to a wide variety of diseases; for example, tobacco use contributes to many deaths due to emphysema or lung cancer and some heart disease and cancers of the head and neck. Check "no" if, in your clinical judgment, tobacco use did not contribute to this particular death.

# ITEM 36 - IF FEMALE, WAS DECEDENT PREGNANT AT TIME OF DEATH OR WITHIN PAST YEAR?

This information is important in determining pregnancy-related mortality.

# **ITEM 37 - MANNER OF DEATH**

•Always check Manner of Death, which is important: 1) in determining accurate causes of death; 2) in processing insurance claims; and 3) in statistical studies of injuries and death.

•Indicate "Pending investigation" if the manner of death cannot be determined whether due to an accident, suicide, or homicide within the statutory time limit for filing the death certificate. This should be changed later to one of the other terms.
•Indicate "Could not be Determined" **ONLY** when it is impossible to determine the manner of death.

ITEMS 38-44 - ACCIDENT OR INJURY – to be filled out in all cases of deaths due to injury or poisoning.

•38 - Enter the exact month, day, and year of injury. Spell out the name of the month. DO NOT use a number for the month. (Remember, the date of injury may differ from the date of death.) Estimates may be provided with "Approx." placed before the date.

•39 - Enter the exact hour and minutes of injury or use your best estimate. Use a 24-hour clock.

•40 - Enter the general place (such as restaurant, vacant lot, or home) where the injury occurred. **DO NOT** enter firm or organization names. (For example, enter "factory", **not** "Standard Manufacturing, Inc.")
•41 - Complete if anything other than natural disease is mentioned in Part I or Part II of the medical certification, including homicides, suicides,

and accidents. This includes all motor vehicle deaths. The item <u>must</u> be completed for decedents ages 14 years or over and may be completed for those less than 14 years of age if warranted. Enter "Yes" if the injury occurred at work. Otherwise enter "No". An injury may occur at work regardless of whether the injury occurred in the course of the decedent's "usual" occupation. Examples of injury at work and injury not at work

# Injury at work

Injury at work
Injury while working or in vocational training on job premises
Injury while on break or at lunch or in parking lot on job premises
Injury while working for pay or compensation, including at home
Injury while working as a volunteer law enforcement official etc.
Injury while traveling on business, including to/from business contacts

# Injury not at work

Injury while engaged in personal recreational activity on job premises Injury while a visitor (not on official work business) to job premises Homemaker working at homemaking activities Student in school

Working for self for no profit (mowing yard, repairing own roof, hobby) Commuting to or from work

•42 - Enter the complete address where the injury occurred including zip code.
•43 - Enter a brief but specific and clear description of how the injury occurred. Explain the circumstances or cause of the injury. Specify type of gun or type of vehicle (e.g., car, bulldozer, train, etc.) when relevant to circumstances. Indicate if more than one vehicle involved; specify type of vehicle decedent was in.
•44 -Specify role of decedent (e.g. driver, passenger). Driver/operator and passenger should be designated for modes other than motor vehicles such as bicycles. Other applies to watercraft, aircraft, animal, or people attached to outside of vehicles (e.g. surfers).

Rationale: Motor vehicle accidents are a major cause of unintentional deaths; details will help determine effectiveness of current safety features and laws.

# **REFERENCES**

For more information on how to complete the medical certification section of the death certificate, refer to tutorial at http://www.TheNAME.org and resources including instructions and handbooks available by request from NCHS, Room 7318, 3311 Toledo Road, Hyattsville, Maryland 20782-2003 or at www.cdc.gov/nchs/about/major/dvs/handbk.htm

# Cause-of-death – Background, Examples, and Common Problems

Accurate cause of death information is important

to the public health community in evaluating and improving the health of all citizens, and

often to the family, now and in the future, and to the person settling the decedent's estate.

The cause-of-death section consists of two parts. Part I is for reporting a chain of events leading directly to death, with the immediate cause of death (the final disease, injury, or complication directly causing death) on line a and the underlying cause of death (the disease or injury that initiated the chain of events that led directly and inevitably to death) on the lowest used line. Part II is for reporting all other significant diseases, conditions, or injuries that contributed to death but which did not result in the underlying cause of death given in Part I. The cause-of-death information should be YOUR best medical OPINION. A condition can be listed as "probable" even if it has not been definitively diagnosed.

Examples of properly completed medical certifications

32. <b>PART I.</b> Enter the <u>chain of</u> arrest, respiratory arrest, o lines if necessary.	events-diseases, injuries	, or con	H (See Instructions and examples)  pplicationsthat directly caused the death. DO NOT enter  wing the etiology. DO NOT ABBREVIATE. Enter only on	terminal eve e cause on a	nts such as cardiac line. Add additional	Onset to death
IMMEDIATE CAUSE (Final disease or condition						<u>Minutes</u>
resulting in death)	Due to (or as a cons	Due to (or as a consequence of):				
Sequentially list conditions, b. Acute myocardial infarction  if any, leading to the cause Due to (or as a consequence of):						6 days
listed on line a. Enter the  UNDERLYING CAUSE c. Coronary artery thrombosis						5 years
(disease or injury that initiated the events resulting						_
in death) LAST d. Atherosclerotic coronary artery disease						7 years
PART II. Enter other significant of	conditions contributing to	eath bu	not resulting in the underlying cause given in PART I		33. WAS AN AUTOPSY PER	FORMED?
Diabetes, Chronic obstructive pulmonary disease, smoking  34. WERE AUTOPSY FINDIN COMPLETE THE CAUSE OF						
35. DID TOBACCO USE CONT	RIBUTE TO DEATH?	6. IF FE		37. MANNE	R OF DEATH	DEATH! # 165   NO
■ Yes □ Probably			pregnant within past year gnant at time of death	■ Natura	I □ Homicide	
□ No □ Unknown		□ Not	pregnant, but pregnant within 42 days of death pregnant, but pregnant 43 days to 1 year before death nown if pregnant within the past year		nt □ Pending Investigation	
	•			•		
CAUSE OF DEATH (See instructions and examples)  32. PART I. Enter the <a href="mailto:chain of events">chain of events</a> —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.						Approximate interval: Onset to death
IMMEDIATE CAUSE (Final disease or condition> resulting in death)	a. Aspiration pneumonia     Due to (or as a consequence of):					2 Days
,						7 weeks
Sequentially list conditions, b. Complications of coma if any, leading to the cause listed on line a. Enter the						7 weeks
UNDERLYING CAUSE (disease or injury that						
in death) LAST	d. Motor vehicle accident					7 weeks
PART II. Enter other <u>significant conditions contributing to death</u> but not resulting in the underlying cause given in PART I  33. WAS AN AUTOPSY PERFORMET  ■ Yes □ No						FORMED?
34. WERE AUTOPSY FINDINGS						
35. DID TOBACCO USE CONTRIBUTE TO DEATH? 36. IF FEMALE: 37. MANNER OF DEATH						DEATH? ■ Yes □ No
□ Yes □ Probably			Not pregnant within past year Pregnant at time of death		Natural   Homicide	
■ No □ Unknown			□ 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			
38. DATE OF INJURY (Mo/Day/Yr) (Spell Month)	39. TIME OF INJURY	A-si	40. PLACE OF INJURY (e.g., Decedent's home; construc	ction site; res	taurant; wooded area)	41. INJURY AT WORK?
August 15, 2003	Approx. 2320	Approx. 2320 road side near state highway				□ Yes ■ No
42. LOCATION OF INJURY: S	tate: Missouri		City or Town: near Alexandria			
Street & Number: mile marker 43. DESCRIBE HOW INJURY O			Apartment No.:	Zip Code: 44. IF TRANSPORTATION INJU		INJURY, SPECIFY:
Decedent driver of van, ran off road into tree  Driver/Operator Passenger Pedestrian Other (Specify)						
mmon problems in death c elderly decedent should have a		al sequ	ence for cause of death, if possible. Terms such as senes	scence, infirm	ity, old age, and advanced age	have little value for public health or

Con The cresea death research. Age is recorded elsewhere on the certificate. When a number of conditions resulted in death, the physician should choose the single sequence that, in his or her opinion, best describes the process leading to death, and place any other pertinent conditions in Part II. If after careful consideration the physician cannot determine a sequence that ends in death, then the medical examiner or coroner should be consulted about conducting an investigation or providing assistance in completing the cause of death.

The **infant decedent** should have a clear and distinct etiological sequence for cause of death, if possible. "Prematurity" should not be entered without explaining the etiology of prematurity. Maternal conditions may have initiated or affected the sequence that resulted in infant death, and such maternal causes should be reported in addition to the infant causes on the infant's death certificate (e.g., Hyaline membrane disease **due to** prematurity, 28 weeks **due to** placental abruption **due to** blunt trauma to mother's abdomen).

When SIDS is suspected, a complete investigation should be conducted, typically by a medical examiner or coroner. If the infant is under 1 year of age, no cause of death is determined after scene investigation, clinical history is reviewed, and a complete autopsy is performed, then the death can be reported as Sudden Infant Death Syndrome.

When processes such as the following are reported, additional information about the etiology should be reported: Carcinomatosis Dissem ated intra vascular

Abdominal hemorrhage Adhesions Adhesions
Adult respiratory distress syndrome
Acute myocardial infarction
Altered mental status
Anemia
Anoxia
Anoxic encephalopathy
Arrhythmia
Ascites Ascites Aspiration Atrial fibrillation Bacteremia Bedridden Biliary obstruction Bowel obstruction Brain injury Brain stem herniation

Cardiac arrest Cardiac dysrhythmia Cardiou dysmy ....... Cardiomyopathy Cardiopulmonary arrest Cardiopulmonary arrest
Cellulitis
Cerebral edema
Cerebrovascular accident
Cerebellar tonsillar hemiation
Chronic bedridden state
Cirrhosis
Coagulopathy Congulopathy
Compression fracture
Congestive heart failure Convulsions Decubiti Dehydration Dementia (when not otherwise specified)

coagulopathy Dysrhythmia
End-stage liver disease
End-stage renal disease
Epidural hematoma
Exsanguination
Failure to thrive
Fracture
Gangrene
Gastrointestinal hemorrhage
Heant failure
Hemothorax
Hepatic failure Dysrhythmia Hepatic failure Hepatitis Hepatorenal syndrome Hyperglycemia Hyperkalemia Hypovolemic shock

Hyponatremia Hyponatremia
Hypotension
Immunosuppression
Increased intra cranial pressure
Intra cranial hemorrhage
Malnutrition
Metabolic encephalopathy
Multi-organ failure
Multi-system organ failure
Myocardial infarction
Necrotizing soft-tissue infection
Old age
Open (or closed) head injury
Paralysis Paralysis Paralysis
Pancytopenia
Perforated gallbladder

Pulmonary embolism
Pulmonary insufficiency
Renal failure Renal failure
Respiratory arrest
Seizures
Sepsis
Septic shock
Shock
Starvation
Subdural hematoma
Subarachnoid hemorrhage
Sudden death Sudden death Thrombocytopenia Uncal herniation Urinary tract infection Ventricular fibrillation

Pulmonary arrest

Pulmonary edema

If the certifier is unable to determine the etiology of a process such as those shown above, the process must be qualified as being of an unknown, undetermined, probable, presumed, or unspecified etiology so it is clear that a distinct etiology was not inadvertently or carelessly omitted.

The following conditions and types of death might seem to be specific or natural but when the medical history is examined further may be found to be complications of an injury or poisoning (possibly occurring long ago). Such cases should be reported to the medical examiner/coroner.

Asphyxia Epidural hematoma Hip fracture Pulmonary emboli Subdural hematoma Seizure disorder Surgery

Choking Fall Hypothermia Sepsis Thermal burns/chemical burns

Drug or alcohol abuse

alcohol abuse

Diarrhea

Peritonitis
Pleural effusions

Pneumonia

Ventricular tachycardia

Volume depletion

Carcinogenesis

# FUNERAL DIRECTOR INSTRUCTIONS for selected items on U.S.

**Standard Certificate of Death** (For additional information concerning all items on certificate see Funeral Directors' Handbook on Death Registration)

#### ITEM 1. DECEDENT'S LEGAL NAME

Include any other names used by decedent, if substantially different from the legal name, after the abbreviation AKA (also known as) e.g. Samuel Langhorne Clemens AKA Mark Twain, **but not** Jonathon Doe AKA John Doe

# ITEM 5. DATE OF BIRTH

Enter the full name of the month (January, February, March etc.) Do not use a number or abbreviation to designate the month.

# ITEM 7A-G. RESIDENCE OF DECEDENT (information divided into seven categories)

Residence of decedent is the place where the decedent actually resided. The place of residence is not necessarily the same as "home state" or "legal residence". Never enter a temporary residence such as one used during a visit, business trip, or vacation. Place of residence during a tour of military duty or during attendance at college is considered permanent and should be entered as the place of residence. If the decedent had been living in a facility where an individual usually resides for a long period of time, such as a group home, mental institution, nursing home, penitentiary, or hospital for the chronically ill, report the location of that facility in item 7. If the decedent was an infant who never resided at home, the place of residence is that of the parent(s) or legal guardian. **Never** use an acute care hospital's location as the place of residence for any infant. If Canadian residence, please specify Province instead of State.

### ITEM 10. SURVIVING SPOUSE'S NAME

If the decedent was married at the time of death, enter the full name of the surviving spouse. If the surviving spouse is the wife, enter her name prior to first marriage. This item is used in establishing proper insurance settlements and other survivor benefits.

### ITEM 12. MOTHER'S NAME PRIOR TO FIRST MARRIAGE

Enter the name used prior to first marriage, commonly known as the maiden name. This name is useful because it remains constant throughout life.

#### ITEM 14. PLACE OF DEATH

The place where death is pronounced should be considered the place where death occurred. If the place of death is unknown but the body is found in your State, the certificate of death should be completed and filed in accordance with the laws of your State. Enter the place where the body is found as the place of death.

## ITEM 51. DECEDENT'S EDUCATION (Check appropriate box on death certificate)

Check the box that corresponds to the highest level of education that the decedent completed. Information in this section will not appear on the certified copy of the death certificate. This information is used to study the relationship between mortality and education (which roughly corresponds with socioeconomic status). This information is valuable in medical studies of causes of death and in programs to prevent illness and death.

# ITEM 52. WAS DECEDENT OF HISPANIC ORIGIN? (Check "No" or appropriate "Yes" box)

Check "No" or check the "Yes" box that best corresponds with the decedent's ethnic Spanish identity as given by the informant. Note that "Hispanic" is not a race and item 53 must also be completed. Do not leave this item blank. With respect to this item, "Hispanic" refers to people whose origins are from Spain, Mexico, or the Spanish-speaking Caribbean Islands or countries of Central or South America. Origin includes ancestry, nationality, and lineage. There is no set rule about how many generations are to be taken into account in determining Hispanic origin; it may be based on the country of origin of a parent, grandparent, or some far-removed ancestor. Although the prompts include the major Hispanic groups, other groups may be specified under "other". "Other" may also be used for decedents of multiple Hispanic origin (e.g. Mexican-Puerto Rican). Information in this section will not appear on the certified copy of the death certificate. This information is needed to identify health problems in a large minority population in the United States. Identifying health problems will make it possible to target public health resources to this important segment of our population.

# ITEM 53. RACE (Check appropriate box or boxes on death certificate)

Enter the race of the decedent as stated by the informant. Hispanic is not a race; information on Hispanic ethnicity is collected separately in item 52. American Indian and Alaska Native refer only to those native to North and South America (including Central America) and does not include Asian Indian. Please specify the name of enrolled or principal tribe (e.g., Navajo, Cheyenne, etc.) for the American Indian or Alaska Native. For Asians check Asian Indian, Chinese, Filipino, Japanese, Korean, Vietnamese, or specify other Asian group; for Pacific Islanders check Guamanian or Chamorro, Samoan, or specify other Pacific Island group. If the decedent was of mixed race, enter each race (e.g., Samoan-Chinese-Filipino or White, American Indian). Information in this section will not appear on the certified copy of the death certificate. Race is essential for identifying specific mortality patterns and leading causes of death among different racial groups. It is also used to determine if specific health programs are needed in particular areas and to make population estimates.

# ITEMS 54 AND 55. OCCUPATION AND INDUSTRY

Questions concerning occupation and industry must be completed for all decedents 14 years of age or older. This information is useful in studying deaths related to jobs and in identifying any new risks. For example, the link between lung disease and lung cancer and asbestos exposure in jobs such as shipbuilding or construction was made possible by this sort of information on death certificates. **Information in this section will not appear on the certified copy of the death certificate.** 

## ITEM 54. DECEDENT'S USUAL OCCUPATION

Enter the usual occupation of the decedent. This is not necessarily the last occupation of the decedent. Never enter "retired". Give kind of work decedent did during most of his or her working life, such as claim adjuster, farmhand, coal miner, janitor, store manager, college professor, or civil engineer. If the decedent was a homemaker at the time of death but had worked outside the household during his or her working life, enter that occupation. If the decedent was a homemaker during most of his or her working life, and never worked outside the household, enter "homemaker". Enter "student" if the decedent was a student at the time of death and was never regularly employed or employed full time during his or her working life. Information in this section will not appear on the certified copy of the death certificate.

### ITEM 55. KIND OF BUSINESS/INDUSTRY

Kind of business to which occupation in item 54 is related, such as insurance, farming, coal mining, hardware store, retail clothing, university, or government. DO NOT enter firm or organization names. If decedent was a homemaker as indicated in item 54, then enter either "own home" or "someone else's home" as appropriate. If decedent was a student as indicated in item 54, then enter type of school, such as high school or college, in item 55. **Information in this section will not appear on the certified copy of the death certificate.** 

**NOTE**: This recommended standard death certificate is the result of an extensive evaluation process. Information on the process and resulting recommendations as well as plans for future activities is available on the Internet at: http://www.cdc.gov/nchs/vital\_certs\_rev.htm.