

SECTION 30 – CERTIFICATION OF DEATH

I. General Considerations

Death certificates are the source of data for regional, state, and national mortality statistics and are used to allocate funding for scientific research, direct public health efforts, and assess the efficacy of preventative initiatives. In addition, a completed death certificate is required before a body can be buried or cremated, and is necessary for survivors to collect insurance benefits, transfer property, and the like. Erroneously completed death certificates may result in denial of payments to the decedent's heirs. Certification of death by the county coroner and treating physicians should follow the guidelines established by the Alabama Department of Health and the National Center for Health Statistics (NCHS). The NCHS keeps statistics on all deaths that occur in the United States.

The medical certification of death is to be completed within 48 hours of pronouncement of death.

Coroners are responsible for completing the medical certification of death for cases falling under medical examiner jurisdiction, as well as for natural deaths in which the treating physician refuses to sign a death certificate.

In Alabama the date and time of death are determined by the date and time in which death is pronounced. That is, if a person is discovered in a state of advanced decomposition, the official date and time of death will be when death is officially pronounced and should not be estimated or otherwise approximated based on postmortem changes. Similarly, the place in which a body is found dead is to be listed as the place of death, even if the fatal injury or event occurred elsewhere. In cases in which a person is pronounced brain dead, the date and time of brain death is the official date and time of death.

Before certification, the standard protocol should be followed (Autopsy, toxicology, scene investigation - if warranted), case review by coroner completed (picture, med record review, case completed by DC) and any outstanding results obtained.

II. Cause of Death versus Mechanism of Death

The cause of death statement is used to indicate the medical cause of death and should list the anatomic disease(s), injury or injuries that caused death. The cause of death and the mechanism of death, the physiologic process leading to death, are often incorrectly used interchangeably on the death certificate. Mechanisms of death are not specific to any given disease process. For example, the *mechanism* of death for a person who is shot in the head may be exsanguination or hypoxic brain injury or ventricular dysrhythmia; the *cause* of death is simply gunshot wound of the head. A middle-aged cystic fibrosis patient may die with septic shock or right heart failure or a mucus plug; however, the underlying cause of death is correctly listed as cystic fibrosis. Many, if not most or all, cases of “aspiration pneumonia” occur in neurologically compromised patients; in this population, the disease process causing the neurologic impairment should be listed as the underlying cause of death (e.g., dementia, Alzheimer’s type; amyotrophic lateral sclerosis; cerebrovascular accident due to atherosclerotic cardiovascular disease).

III. Appeals To Cause and Manner/Family Complaints

Family Complaints to performance, actions, investigation -- Coroner must review and decide to take any action if any family makes a complaint against performance or actions taken by a deputy coroner. If any inappropriate behavior was conducted, the Coroner shall handle that internally.

Complaints against investigations will be heard by the Coroner. The Coroner will sit with the family and discuss the actions taken by the office.

Appeals to Cause and Manner -- The Coroner shall sit with the family and discuss why the Cause and Manner of Death was ruled as such. If the family has evidence to support otherwise, the family and Coroner will meet with the appropriate law enforcement agency, if appropriate.

Abscess	Chronic bedridden state
Abdominal hemorrhage	Cirrhosis
Adhesions	Coagulopathy
Adult respiratory distress syndrome	Compression fracture
Acute myocardial infarction	Congestive heart failure
Altered mental status	Convulsions
Anemia	Decubiti
Anoxia/anoxic encephalopathy	Dehydration
Arrhythmia	Dementia (when not otherwise specified)
Ascites	Diarrhea
Aspiration	Disseminated intravascular coagulopathy
Atrial fibrillation	Dysrhythmia
Bacteremia	End stage liver disease
Bedridden	End stage renal disease
Biliary obstruction	Epidural hematoma
Bowel obstruction	Exsanguination
Brain injury	Failure to thrive
Brain stem herniation	Fracture
Carcinogenesis	Gangrene
Carcinomatosis	Gastrointestinal hemorrhage
Cardiac arrest	Heart failure
Cardiac dysrhythmia	Hemothorax
Cardiomyopathy	Hepatic failure
Cardiopulmonary arrest	Hepatitis
Cellulitis	Hepatorenal syndrome
Cerebral edema	Hyperglycemia
Cerebrovascular accident	Hyperkalemia
Cerebellar tonsillar herniation	Hypovolemic shock

Hyponatremia	Subdural hematoma
Hypotension Immunosuppression	Subarachnoid hemorrhage
Increase intracranial pressure	Sudden death
Intracranial hemorrhage	Thrombocytopenia
Malnutrition	Uncal herniation
Metabolic encephalopathy	Urinary tract infection
Multi-organ failure	Ventricular fibrillation
Multisystem organ failure	Ventricular tachycardia
Myocardial infarction	Volume depletion
Necrotizing soft tissue infection	
Old age	
Open (or closed) head injury	
Pancytopenia	
Paralysis	
Perforated gallbladder	
Peritonitis	
Pleural effusions	
Pneumonia	
Pulmonary arrest	
Pulmonary edema	
Pulmonary embolism Pulmonary	
insufficiency	
Renal failure	
Respiratory arrest	
Seizures	
Septic shock	
Shock	
Starvation	

ALABAMA Death Certificate: Medical Certification of Death

26. CERTIFIER (Check only one):			
26a. <input type="checkbox"/> PHYSICIAN - To the best of my knowledge, death occurred at the date and place, and due to the cause(s) and manner stated.			
26b. <input type="checkbox"/> MEDICAL EXAMINER - On the basis of examination, and/or investigation, in my opinion, death occurred at the date, and place, and due to the cause(s) and manner stated.			
27a. SIGNATURE OF CERTIFIER		27b. LICENSE NUMBER	27c. DATE SIGNED (Month, Day, Year)
▶		27d. NAME AND ADDRESS	
28. 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. Enter only one cause on a line.			Approximate interval: Onset to death
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. _____ Due to (or as a consequence of) _____			
PART II. <u>Other significant conditions contributing to death but not resulting in the underlying cause given in PART I.</u>			29a. WAS AN AUTOPSY PERFORMED? <input type="checkbox"/> Yes <input type="checkbox"/> No
			29b. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No
30. MANNER OF DEATH <input type="checkbox"/> Natural <input type="checkbox"/> Homicide <input type="checkbox"/> Accident <input type="checkbox"/> Pending Investigation <input type="checkbox"/> Suicide <input type="checkbox"/> Could not be determined	31. DID TOBACCO USE CONTRIBUTE TO DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> Probably <input type="checkbox"/> No <input type="checkbox"/> Unknown	32. IF FEMALE: <input type="checkbox"/> Not pregnant within past year <input type="checkbox"/> Not pregnant, but pregnant 43 days to 1 year before death <input type="checkbox"/> Pregnant at time of death <input type="checkbox"/> Unknown if pregnant within the past year <input type="checkbox"/> Not pregnant, but pregnant within 42 days of death	
33. IF TRANSPORTATION INJURY, SPECIFY: <input type="checkbox"/> Driver/Operator <input type="checkbox"/> Passenger <input type="checkbox"/> Pedestrian <input type="checkbox"/> Other (Specify) _____	34a. DATE OF INJURY (Month, Day, Year)	34b. TIME OF INJURY	34c. INJURY AT WORK? <input type="checkbox"/> Yes <input type="checkbox"/> No
		34d. PLACE OF INJURY –at home, farm, street, factory, office, building, etc. (Specify)	
34e. DESCRIBE HOW INJURY OCCURRED		34f. LOCATION OF INJURY (Street and Number, City or Town, State)	

III. Manner of Death

The manner of death represents the county coroner's opinion as to which category the death best fits into and is based on the circumstances surrounding the death. The manner of death is an objective assessment of the event(s) leading to death based upon facts of the individual case and the professional experience of the county coroner and should not be construed as a moral or ethical judgement of the decedent by the certifier. The coroner should follow consistent policies rather than change them to fit individual case circumstances. The five options for completion of the manner of death in Alabama are Natural, Accident, Suicide, Homicide, and Undetermined. Pending Investigation, a sixth option on the Alabama death certificate, should be considered only a temporary assignment of manner and should be changed as soon as the case investigation is complete. It is not necessary or appropriate to choose "Pending investigation" if the only information unavailable at the time of certification is whether criminal charges will be brought in a given case. That is, if death is due to injuries clearly inflicted by another person, even if in a case of self-defense or justifiable homicide, the death should be classified as Homicide regardless of prosecutorial intent. All deaths should be classified as to manner, and only one manner of death is to be chosen.

Natural

Natural deaths are those due *exclusively* (100%) to disease and/or the aging process. A death in which a discrete, unnatural act contributes in any way towards the death, regardless of the interval elapsed between the event and demise, cannot be considered a natural death. In general, if death is a result of a combination of natural disease and non-natural factors, preference is given to the non-natural factors in determining manner of death (e.g. cerebral hemorrhage associated with acute cocaine abuse).

Deaths due to chronic substance abuse (e.g. endocarditis in an intravenous drug abuser; cirrhosis in an alcoholic) in which a single or discrete intoxication event cannot be identified as directly leading to death are classified as natural.

Accident

Accident is defined as an unnatural death resulting from an inadvertent chance happening. Motor vehicle fatalities are considered an accident unless the driver deliberately uses the vehicle as a weapon or as a means to commit suicide. Classification of motor vehicle fatalities as accidents is done in the interest of uniformity for vital statistical purposes and bears no relation to the presence or absence of criminal charges arising from the motor vehicle fatality. Specifically, even in instances of driving while intoxicated, reckless driving, or hit-and-run fatalities, when the driver bears criminal responsibility, the county medical examiner should still classify such deaths as accidents in the interest of uniformity. Such a classification will not preclude criminal prosecution or civil charges.

Deaths due to acute drug intoxication or alcohol poisoning, in the absence of evidence specifically supporting the conclusion of the manner of death being homicide or suicide, should be classified as an accident. This is done as the presumed common intent to become intoxicated is not the same as having intent to die. The fatal outcome was unintentional.

The National Center for Health Statistics assigns ICD-10 codes to death certificates for vital statistics. As such, it is important to list each drug felt to be contributory to death on the death certificate [e.g., “acute combined drug toxicity (heroin, alprazolam, and ethanol)"] for improved data collection. Use of the terms “toxicity”, “intoxication”, “overdose”, “ingested”, “injected” or “inhaled” will be assigned a statistical code indicating that the event was non-natural. In contradistinction, the terms “abuse”, “addiction”, “dependence”, or “use” without other indication of an acute poisoning event on the certificate will be coded as natural.

Suicide

Suicide is defined for medical examiner purposes as a death from self-inflicted injury with some form of explicit or implicit evidence of intent to harm oneself. The burden of proof need not be “beyond any reasonable doubt” but should be “more likely than not”.

Death cases involving so called “games”, such as “Russian Roulette” can be highly controversial as the legal view of intent may differ from that of the coroner. The Merriam-Webster Dictionary defines “Russian Roulette” as “a dangerous game consisting of spinning the cylinder of a revolver loaded with one cartridge, pointing the muzzle at one’s own head, and pulling the trigger”. These types of “games” are ruled suicide because the act of placing a loaded gun to the head and pulling the trigger is a volitional act that carries a high risk of death and implies

“subintent,” an understanding of the probable consequences.

Homicide

Homicide, for the purposes of the coroner, is simply “death at the hands of another” that may or may not have criminal liability attached to it. In other words, homicide does not equal murder. The intent to cause death need not be present or be proven for the medical examiner to rule as homicide. While all murders are homicides, not all homicides are murders. At controversy are deaths at the hands of law enforcement which may result from the discharge of a firearm or physical restraint used to subdue. These cases as should be classified as homicides.

Undetermined

Undetermined should be a category that is rarely used and reserved for those cases in which an exhaustive investigation, including forensic autopsy, has been performed. An effort to develop sufficient information to classify an unnatural death as homicide, suicide, or accident should be made in every death case. If there is little available information about the circumstances surrounding the death, or the known information equally supports more than one manner of death, then it can be appropriate to use could not be determined. This category should not be used for cases that are controversial in an attempt to avoid a dispute or publicity caused by a more appropriate ruling on manner.

Pending Investigation

This temporary category should be used for cases where the results of the investigation, autopsy, and/or laboratory studies are not quickly available. After completion of the investigation, a Delayed Report of Diagnosis – Death, with the actual cause and manner of death, should be promptly completed and filed with the health department of the county in which death occurred.

IV. Standard Language for Cause of Death: Examples

Accidental

Acute drug/mixed drug (names of drug(s)) intoxication

Asphyxia due to ...
Aspiration of (food bolus, foreign object)
Blunt force injuries of (head, chest, etc.)
Carbon monoxide poisoning
Drowning
Electrocution
Entrapment
Ethanol intoxication
Exsanguination due to...
Gunshot wound of ...
Hanging
Head and neck injuries
Hyperthermia due to ...
Hypothermia due to exposure
Multiple blunt force injuries
Pulmonary embolus due to deep venous thrombosis
Smoke and soot inhalation
Stab wound
Subdural hematoma
Thermal injuries
Thermal injuries and smoke inhalation

Homicide

Acute drug/mixed drug (type of drug(s)) intoxication
Asphyxia due to (manual strangulation, ligature strangulation, smothering, etc.)
Aspiration of (food bolus, foreign object)
Blunt force injuries of (head, chest, etc.)
Carbon monoxide poisoning
Dehydration
Drowning
Electrocution
Ethanol intoxication
Exsanguination due to (stab wounds, gunshot wounds)
Gunshot wound of ...
Hanging
Head and neck injuries
Hyperthermia due to ...
Hypothermia due to exposure
Multiple blunt force injuries
Smoke and soot inhalation / Thermal injuries
Stab wound
Subdural hematoma

Natural

Aortic dissection
Aortic aneurysm
Abdominal aortic aneurysm
Acquired Immune Deficiency Syndrome
Alzheimer's
Amyotrophic lateral sclerosis
Arteriosclerotic cardiovascular disease
Asthma
Blood disorders
Cancer of ... (be as specific as possible as to tumor type, stage, grade, and primary site)
Carcinoma
Cardiomegaly
Chronic alcohol abuse
Chronic obstructive pulmonary disease
Complications of ... (pre-existing condition)
Complications of premature birth due to placental abruption, etc.
Congenital defect (be as specific as possible, e.g., DiGeorge's syndrome)
Diabetes
Diabetic ketoacidosis
Emphysema
Hepatic failure due to ...
Hodgkin's disease
Hypertension
Hypertensive heart disease
Influenza
Leukemia
Meningitis
Multiple organ failure due to ...
Myocardial infarction
Myocarditis
Obesity
Obstruction of ...
Pancreatitis
Parkinson's disease
Plague
Pulmonary edema
Pulmonary embolus due to deep venous thrombosis
Renal failure due to...
Reye's syndrome
Spontaneous hemorrhage due to ...
Tuberculosis

Other

Non-human remains
Skeletal remains

Pending

Pending Anthropology
Pending Histology
Pending Investigation
Pending Receipt and Review of Medical Records
Pending Microbiology
Pending Neuropathology
Pending Odontology
Pending Other
Pending Police Report
Pending Radiology
Pending Toxicology

Suicide

Acute drug/mixed drug (type of drug(s)) intoxication
Asphyxia due to (suffocation, positional, etc.) Aspiration
of (foreign object)
Blunt force injuries of (head, chest, etc.)
Carbon monoxide poisoning
Drowning
Electrocution
Ethanol intoxication
Exsanguination due to...
Gunshot wound of ...
Hanging OR Ligature hanging
Head and neck injuries
Hyperthermia due to ...
Hypothermia due to exposure
Multiple blunt force injuries
Self-immolation
Smoke and soot inhalation
Stab wound
Subdural hematoma
Thermal injuries
Thermal injuries and smoke inhalation

Undetermined

Note: Sudden infant death syndrome or “SIDS” is not to be listed as the cause of death in the absence of a thorough case investigation, including performance of a complete autopsy, examination of the death scene, and review of the child’s clinical history, or if a child is older than one year of age

Skeletal/mummified remains
Sudden death in infancy
Sudden unexplained infant death/sudden unexpected death in infancy
Undetermined
Undetermined after autopsy and/or toxicology

V. Standard Language for How Injury Occurred

These phrases should satisfy the purposes of item 34 on death certificate in the majority of non-natural deaths, but is not an exhaustive list. In natural deaths, there is by definition no injury, and so this section should be left blank.

Accident

Accidental discharge of (firearm type)
Accidental ligature strangulation
Accident-specify
Bitten/mauled/stung/kicked by (name agent)
Choked on (identify item)
Contacted electrical current via (identify source of current)
Crushed/suffocated by (identify mechanism)
Cut self with (name agent)
Cyclist (explain circumstances briefly)
Cyclist struck by (motor vehicle type)
Drowned in (non-recreational water accidents)
Drowned while swimming (recreational and rescue attempts) in (Center Hill Lake, family pool)
Fall from (identify origin of fall and approximate distance of fall)
Fall from back of pickup
Fall from standing height
Farm or Industrial machinery accident
Fell/thrown from (riding animal)
Ingested alcohol
Ingested and/or injected illicit drug(s)
Ingested and/or injected prescription medications
Inhaled (Name of product/Name of toxic agent) (Substance abused)
Inhaled (Name of product; Name of toxic agent) (Substances inhaled accidentally)

Medical treatment
Pedestrian struck by ...
Pilot of (aircraft type) that crashed
Poisoning (name agent)
Received blow/collided with ...
Remained outdoors exposed to (cold, heat)
Restrained/Unrestrained/Unknown restraint driver of (auto/truck/motorcycle) in single vehicle collision
Restrained/Unrestrained/Unknown restraint driver of (auto/truck/motorcycle), struck by train
Restrained/Unrestrained/Unknown restraint driver of auto in collision with (other fixed object)
Restrained/Unrestrained/Unknown restraint driver of auto in collision with ...(motor vehicle type OR object)
Restrained/Unrestrained/Unknown restraint driver of auto that left roadway
Helmeted/Unhelmeted/Unknown if helmeted driver of motorcycle (explain circumstances briefly)
Helmeted/Unhelmeted/Unknown if helmeted driver of motorcycle in collision with (motor vehicle type)
Restrained/Unrestrained/Unknown restraint driver of pickup in collision with (fixed object) Restrained/Unrestrained/Unknown restraint driver of pickup in collision with (motor vehicle type)
Restrained/Unrestrained/Unknown restraint driver of pickup that left roadway Restrained/Unrestrained/Unknown restraint driver of truck in collision with (other fixed object)
Restrained/Unrestrained/Unknown restraint driver of truck in collision with ...(motor vehicle type OR object)
Restrained/Unrestrained/Unknown restraint driver of truck that left roadway
Restrained/Unrestrained/Unknown restraint passenger of (auto/truck/motorcycle) in single vehicle collision
Restrained/Unrestrained/Unknown restraint passenger in (aircraft type) that crashed Restrained/Unrestrained/Unknown restraint passenger in (motor vehicle type) struck by train
Restrained/Unrestrained/Unknown restraint passenger in auto in collision with (other fixed object)
Restrained/Unrestrained/Unknown restraint passenger in auto in collision with ...(motor vehicle type OR object)
Restrained/Unrestrained/Unknown restraint passenger in auto that left roadway Restrained/Unrestrained/Unknown restraint passenger in pickup in collision with (fixed object)
Restrained/Unrestrained/Unknown restraint passenger in pickup in collision with (motor vehicle type)
Restrained/Unrestrained/Unknown restraint passenger in pickup that left roadway

Restrained/Unrestrained/Unknown restraint passenger in truck in collision with (other fixed object)
Restrained/Unrestrained/Unknown restraint passenger in truck in collision with ...(motor vehicle type OR object)
Restrained/Unrestrained/Unknown restraint passenger in truck that left roadway Helmeted/Unhelmeted/Unknown if helmeted passenger on motorcycle
Helmeted/Unhelmeted/Unknown if helmeted passenger on motorcycle in collision with (motor vehicle type)
Restrained/Unrestrained/Unknown restraint passenger who fell from moving (motor vehicle type)
Scalded by (name agent)
Struck by flying/falling (identify moving object)
Struck by lightning
Victim of (type of device) explosion
Victim of (house, car, brush, etc) fire

Homicide

Assaulted by another person(s)
Beaten by assailant(s)
Ingested/injected/inhaled drugs/poisons
Neglect/Starvation
Pedestrian struck by (vehicle type)
Shot by other person(s) with firearm (specify type, if known)
Stabbed by another person
Strangled by another person
Victim of drowning
Victim of intentionally set fire

Suicide

As pedestrian stepped in front of (truck/car)
Burned self with
Driver of motor vehicle
Drowned self in (lake, swimming pool, etc.)
Hanged self
Ingested or injected medication
Ingested, injected or inhaled non-prescription medication
Inhaled (vehicle exhaust, etc.)
Jumped from (building, bridge)
Shot self with firearm (type if known)
Stabbed self with ...
Suffocated self with ...