



Arkansas Department of Health

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Guidance for Certifying COVID-19 Deaths

The National Vital Statistics System (NCHS) has released a guidance for certifying deaths due to Coronavirus Disease 2019 (COVID-19) at <https://www.cdc.gov/nchs/data/nvss/vsrg/vsrg03-508.pdf>. Coronavirus Disease 2019 or COVID-19 should be reported on the death certificate for all decedents where the disease caused or is assumed to have caused or contributed to death. Specification of the casual pathway leading to death in Part I of the certificate is also important. For example, in cases when COVID-19 causes pneumonia and fatal respiratory distress, both pneumonia and respiratory distress should be included along with COVID-19 in Part I. Certifiers should include as much detail as possible based on their knowledge of the case, medical records, laboratory testing, etc. If the decedent had other chronic conditions such as COPD or asthma that may have contributed, these conditions can be reported in Part II. Below are several examples.

Scenario I: A 77-year-old male a 10-year history of hypertension and chronic obstructive pulmonary disease (COPD) presented to a local emergency department complaining of 4 days of fever, cough, and increasing shortness of breath. He reported recent exposure to a neighbor with flu-like symptoms. He stated that his wheezing was not improving with his usual bronchodilator therapy. Upon examination, he was febrile, hypoxic, and in moderate respiratory distress. His chest x-ray demonstrated hyperinflation and his arterial blood gas was consistent with severe respiratory acidosis. Testing of respiratory specimens indicated COVID-19. He was admitted to the ICU and despite aggressive treatment, he developed worsening respiratory acidosis and sustained a cardiac arrest on day 3 of admission.

CAUSE OF DEATH (See instructions and examples)		Approximate interval: Onset to death
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.		
IMMEDIATE CAUSE (Final disease or condition resulting in death)	a. Acute respiratory acidosis Due to (or as a consequence of):	3 days
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. COVID-19 Due to (or as a consequence of):	1 week
	c. _____ Due to (or as a consequence of):	
	d. _____ Due to (or as a consequence of):	
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 PERFORMED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Chronic obstructive pulmonary disease, hypertension		34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No
35. DID TOBACCO USE CONTRIBUTE TO DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> Probably <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	36. IF FEMALE: <input type="checkbox"/> Not pregnant within past year <input type="checkbox"/> Pregnant at time of death <input type="checkbox"/> Not pregnant, but pregnant within 42 days of death <input type="checkbox"/> Not pregnant, but pregnant 43 days to 1 year before death <input type="checkbox"/> Unknown if pregnant within the past year	37. MANNER OF DEATH <input checked="" 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

Comment: In this case, the acute respiratory acidosis was the immediate cause of death, so it was reported on line a. Acute respiratory acidosis was precipitated by the COVID-19 infection, which was reported below it on line b. in Part I. The COPD and hypertension were contributing causes but were not a part of the causal sequence in Part I, so those conditions were reported in Part II.

Scenario II: A 34-year-old female with no significant past medical history presented to her primary physician complaining of 6 days of fever, cough, and myalgias. She found to be febrile, hypotensive, and hypoxic. She was admitted to the hospital and underwent a CT scan of the chest, which revealed diffuse ground-glass opacification indicative of viral pneumonia. Respiratory specimens were sent for testing and rRT-PCR confirmed COVID-19. Her condition deteriorated over the next 2 days and she developed acute respiratory distress syndrome. She was transferred to the ICU and started on positive pressure ventilation. Despite aggressive resuscitation, the patient expired on hospital day 4.

CAUSE OF DEATH (See instructions and examples)		Approximate interval: Onset to death
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.		
IMMEDIATE CAUSE (Final disease or condition resulting in death)	a. <u>Acute respiratory distress syndrome</u> Due to (or as a consequence of):	<u>2 days</u>
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. <u>Pneumonia</u> Due to (or as a consequence of):	<u>10 days</u>
	c. <u>COVID-19</u> Due to (or as a consequence of):	<u>10 days</u>
	d. _____ Due to (or as a consequence of):	_____
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 PERFORMED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
		34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> No
35. DID TOBACCO USE CONTRIBUTE TO DEATH? <input type="checkbox"/> Yes <input type="checkbox"/> Probably <input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown	36. IF FEMALE: <input checked="" type="checkbox"/> Not pregnant within past year <input type="checkbox"/> Pregnant at time of death <input type="checkbox"/> Not pregnant, but pregnant within 42 days of death <input type="checkbox"/> Not pregnant, but pregnant 43 days to 1 year before death <input type="checkbox"/> Unknown if pregnant within the past year	37. MANNER OF DEATH <input checked="" 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

Comment: In this case, the immediate cause of death was acute respiratory distress syndrome, so it was reported on line a. as a consequence of pneumonia which was reported on line b. The underlying cause was COVID-19 so it was reported on line c., the lowest line in Part 1.

For more general guidance and training on cause-of-death reporting, certifiers can be referred to the Cause of Death mobile app available through <https://www.cdc.gov/nchs/nvss/mobile-app.htm> and the Improving Cause of Death Reporting online training module, which can be found at https://www.cdc.gov/nchs/nvss/improving_cause_of_death_reporting.htm.