

Appendix B: Death Certificate Imagery

The CDC provides guidance for reporting deaths on a death certificate. The first image below from the CDC shows Part I (the four primary causes of death) and also part II (other significant conditions). This guidance applies to all death certificates, regardless of the COVID-19 pandemic. However, the CDC recommends that states classify all death certificates where COVID-19 is present as a death related to the virus. While this information may be appropriate for monitoring the on-going pandemic, it may present marginally inflated death data to the general public. (See [R5](#)).

The WHO provides guidance on completing a death certificate for COVID-19 as well as guidance for what is not a COVID-19 death. The second and third images from the WHO shows both of these examples, respectively. The third image shows that deaths with COVID-19 as an "other significant condition" is not a COVID-19 death.

CDC Death Certificate

CAUSE OF DEATH (See instructions and examples)		
<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. <u>Acute renal failure</u></p> <p>Due to (or as a consequence of):</p> <p>b. <u>Hyperosmolar nonketotic coma</u></p> <p>Due to (or as a consequence of):</p> <p>c. <u>Diabetes mellitus, noninsulin dependent</u></p> <p>Due to (or as a consequence of):</p> <p>d. _____</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>Approximate interval: Onset to death</p> <p><u>5 days</u></p> <p><u>8 weeks</u></p> <p><u>15 years</u></p>
<p>PART II. Enter other significant conditions contributing to death, but not resulting in the underlying cause given in PART I.</p>		<p>33. WAS AN AUTOPSY PERFORMED? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>34. WERE AUTOPSY FINDINGS AVAILABLE TO COMPLETE THE CAUSE OF DEATH? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p>
<p>35. DID TOBACCO USE CONTRIBUTE TO DEATH? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Probably <input type="checkbox"/> Unknown</p>	<p>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</p>	<p>37. MANNER OF DEATH</p> <p><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</p>

ITEM 32 - CAUSE OF DEATH

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 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 (e.g., 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 (e.g., 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 (e.g., 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. Example: a primary well-differentiated squamous cell carcinoma, lung, left upper lobe.

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 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.

Source: CDC

WHO Death Certificates

Frame A: Medical data: Part 1 and 2			
1 Report disease or condition directly leading to death on line a Report chain of events in due to order (if applicable) State the underlying cause on the lowest used line		Cause of death	Time interval from onset to death
	a	Acute respiratory distress syndrome	2 days
	b	Due to: Pneumonia	10 days
	c	Due to: COVID-19 (test positive)	14 days
	d	Due to:	
2 Other significant conditions contributing to death (time intervals can be included in brackets after the condition)		Underlying cause of death	
Manner of death:			
<input type="checkbox"/> Disease	<input type="checkbox"/> Assault	<input type="checkbox"/> Could not be determined	
<input type="checkbox"/> Accident	<input type="checkbox"/> Legal intervention	<input type="checkbox"/> Pending investigation	
<input type="checkbox"/> Intentional self harm	<input type="checkbox"/> War	<input type="checkbox"/> Unknown	

Note: This is a typical course with a certificate that has been filled in correctly. Please remember to indicate whether the virus causing COVID-19 had been identified in the decedent.

Frame A: Medical data: Part 1 and 2			
1 Report disease or condition directly leading to death on line a Report chain of events in due to order (if applicable) State the underlying cause on the lowest used line		Cause of death	Time interval from onset to death
	a	Hypovolemic shock	T79.4 1 day
	b	Due to: Aortic dissection	S25.0 1 day
	c	Due to: Motor vehicle accident	V89.2 2 days
	d	Due to:	
2 Other significant conditions contributing to death (time intervals can be included in brackets after the condition)		COVID-19	U07.1
Manner of death:			
<input type="checkbox"/> Disease	<input type="checkbox"/> Assault	<input type="checkbox"/> Could not be determined	
<input type="checkbox"/> Accident	<input type="checkbox"/> Legal intervention	<input type="checkbox"/> Pending investigation	
<input type="checkbox"/> Intentional self harm	<input type="checkbox"/> War	<input type="checkbox"/> Unknown	

NOT COVID-19 DEATH

Note: Code all entries in Part 1 and 2, and in this example select motor vehicle accident (V89.2) as underlying cause of death. Step SP3 applies as causes have been reported on more than one line in Part 1 and the condition reported first on the lowest used line, motor vehicle accident (V89.2), can cause all the conditions, traumatic aortic dissection (S25.0) and traumatic hypovolemic shock (T79.4), mentioned on the lines above. [See ICD-10 2016 and later, Volume 2, Section 4.2.1].

Source: WHO