

The purpose of this guide is to aid in resolving issues that may prevent the medical certifier from being able to complete and affirm the certification of the medical portion of a record.

The procedures spelled out here are also touched-on in part in the video training guides and the text document guides found on the resources page:

<https://www.in.gov/isdh/28076.htm>

Under the heading **DRIVE Training and Online Demonstrations**, the recorded videos of user training are available.

In the DRIVE Medical Certifier Recorded Training the Cause of Death section roughly occurs between minutes 22:41 and 29:35.

In the DRIVE Coroner Recorded Training the Cause of Death section roughly occurs at minute 17:43 but is more fully covered in the DRIVE Medical Certifier Recorded Training.

Under the heading **DRIVE User Guides** are the text documents pertaining to each process.

In the DRIVE User Guide Medical Certifiers, the Cause of Death process begins on page 26.



Table of Contents

I can't access the record through my queue.....	3
I am unable to enter the Date Signed on the certifier tab and it's stopping me from certifying the record.....	3
All the menu tabs are green, but the system won't let me certify the record. It says FIPS Coding Required.....	4
All the menu tabs are green, but the system won't let me certify the record.....	4
All the menu tabs are green, and I've added a late filing reason, but the system won't let me certify the record.....	8
Coroners must complete the Coroner Review to complete certification.....	16

Cause of Death issues

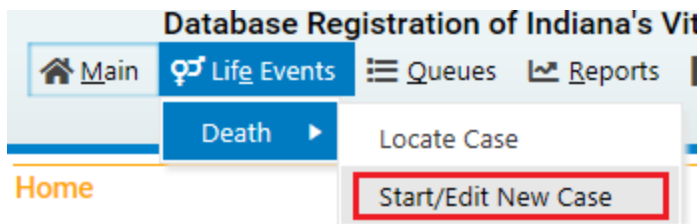
Best estimate of the interval	page 8
Abbreviations	page 8
Listing conditions	page 8
Etiology keywords	page 9
Ill-defined terms	Page 9
Cause of Death field icons	page 10
Validation Results	Page 11
Overrides	Page 12
Recording neoplasms	Page 13
Ill-defined term without Validation Results	Page 14
Examples of neoplasm grading schemes	Page 14
Fatal injuries issues	Page 15



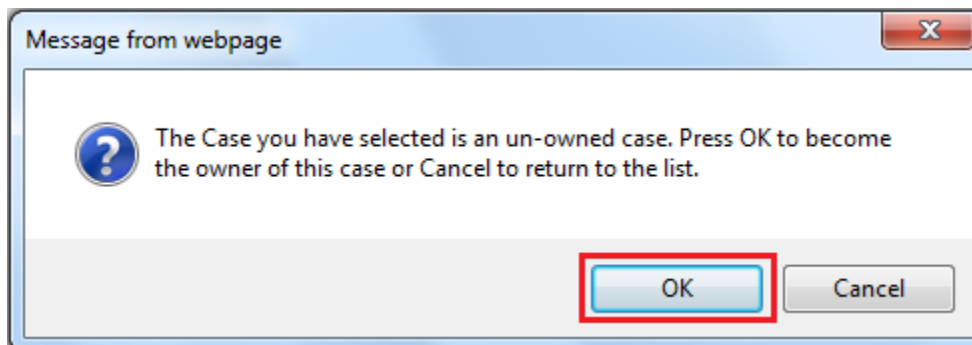
There are several factors that can prevent a medical certifier from completing certification of a record. If all the tabs under the Medical Certification heading of the menu are green but the Certify tab does not appear under the Certifier tab when the Validate Page button is used, then it is most likely due to one of the following reasons.

I can't access the record through my queue.

The first time a medical certifier attempts to retrieve a record, to gain ownership and have write-access to the record, it must be accessed through the Menu tabs Life Events >>> Death >>> Start / Edit New Case. From there you will need to perform a search for the record to ensure against duplication.



Performing a search will allow you retrieve the record and the first time in, the pop-up below will occur. Clicking "OK" will grant ownership of the record.



On the resources page (<https://www.in.gov/isdh/28076.htm>) under the heading **DRIVE Quick Guides** is the document: DRIVE Start/Edit New Case vs. Locate Case Guide. This covers the process in its entirety.

I am unable to enter the Date Signed on the certifier tab and it's stopping me from certifying the record.

The date signed field will auto-populate upon certification of the record. It is **not** a manually filled field. If the Date Signed field won't fill, it's because of one of the reasons covered below.



All the menu tabs are green, but the system won't let me certify the record. It says FIPS Coding Required.

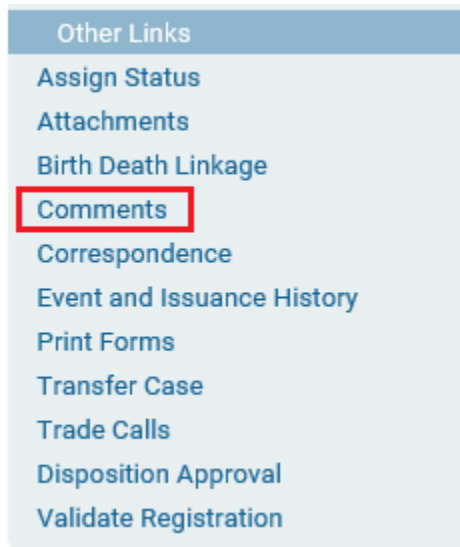
FIPS Coding is for the statisticians reviewing data and irrelevant to the process for Medical Certifiers and Funeral Directors.

All the menu tabs are green, but the system won't let me certify the record.

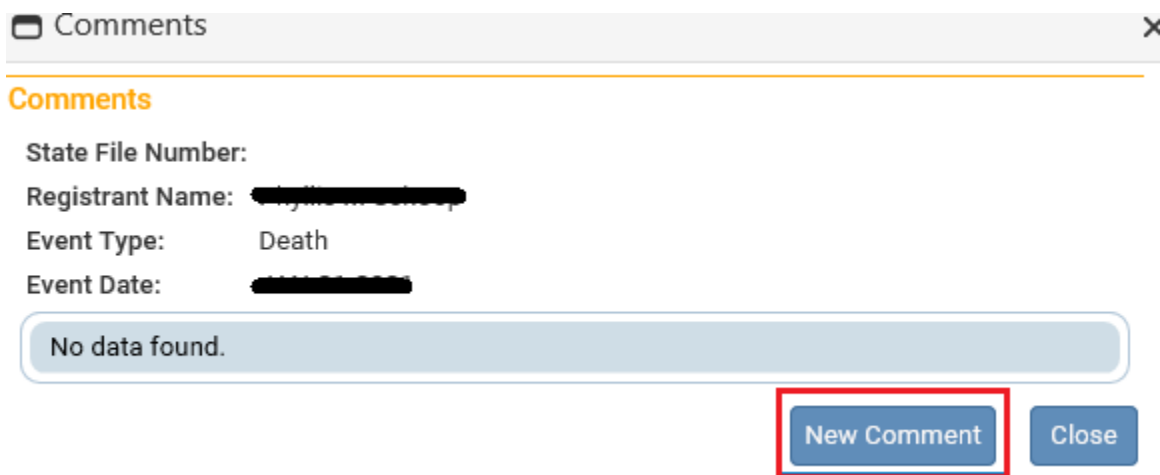
Death Registration Menu	
Personal Information	
✔	Decedent
✔	Resident Address
✔	Family Members
✔	Informant
✔	Disposition
✔	Decedent Attributes
Medical Certification	
✔	Pronouncement
✔	Place of Death
✔	Cause of Death
✔	Other Factors
✔	Certifier



If you are trying to complete the certification later than 5 days after the indicated **Date of Death** (regardless of the reason why) a **Late Filing Reason** must be added through the Comments tab under the Other Links heading.



When you click on Comments a pop-up window will appear. Click on the button New Comment.



A sub-window will open with a drop menu labeled Comment Type. Select *Late filing reason*.

Comments

Comments

State File Number:
Registrant Name: ██████████
Event Type: Death
Event Date: ██████████

No data found.

Enter New Comment

Comment Type:

- Event
- Administrative
- Late filing reason
- Order Processing
- Change history
- General Comments

Comment:

Maximum text length: 4000 Characters left: 4000

Save
Clear
Cancel

New Comment Close



Below the drop menu comments can be typed into the **Comment** field. Upon completion click Save and then Close.

☐ Comments

Comments

State File Number:
Registrant Name: ██████████
Event Type: Death
Event Date: ██████████

No data found.

Enter New Comment

Comment Type: Late filing reason ▼

Comment:

Maximum text length: 4000 Characters left: 3987

New Comment

Save

Clear

Cancel

Close



All the menu tabs are green, and I've added a late filing reason, but the system won't let me certify the record.

This indicates that the Cause of Death is incomplete, even if the tab has a green check on it.

At the top of the [Cause of Death](#) page is an active link labeled [NCHS Recommendations for Entry of Cause of Death](#). This provides general instructions for filing out the fields on Cause of death tab.

The Recommendations indicate that Medical Certifiers should use their *best medical opinion*.

Provide the **best estimate** of the *interval* between the presumed onset of each condition and death. If you don't know you can use *unknown* or *pending*. *Pending* presumes that you will be adding an amendment later with the updated information.

Abbreviations and **parentheses** will prevent the record from being certified (e.g. "gi bleed" must be spelled out *gastrointestinal bleed*; COPD must be spelled out *Chronic Obstructive Pulmonary Disease*).

List only one condition per line in Part I. Additional lines may be added as needed. Each condition in Part I should cause the condition above it.

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.



When processes such as the following are reported, additional information about the etiology must be reported:

Abscess	Cerebrovascular accident	Hyperglycemia	Respiratory arrest
Abdominal hemorrhage	Cerebellar tonsillar herniation	Hyperkalemia	Seizures
Adhesions	Chronic bedridden state	Hypovolemic shock	Sepsis
Adult respiratory distress syndrome	Cirrhosis	Hyponatremia	Septic shock
Acute myocardial infarction	Coagulopathy	Hypotension	Shock
Altered mental status	Compression fracture	Immunosuppression	Starvation
Anemia	Congestive heart failure	Increased intracranial pressure	Subarachnoid hemorrhage
Anoxia	Convulsions	Intracranial hemorrhage	Subdural hematoma
Anoxic encephalopathy	Decubiti	Malnutrition	Sudden death
Arrhythmia	Dehydration	Metabolic encephalopathy	Thrombocytopenia
Ascites	Dementia (when not otherwise specified)	Multi-organ failure	Uncal herniation
Aspiration	Diarrhea	Multi-system organ failure	Urinary tract infection
Atrial fibrillation	Disseminated intravascular coagulopathy	Myocardial infarction	Ventricular fibrillation
Bacteremia	Dysrhythmia	Necrotizing soft-tissue infection	Ventricular tachycardia
Bedridden	End-stage liver disease	Old age	Volume depletion
Biliary obstruction	End-stage renal disease	Open (or closed) head injury	
Bowel obstruction	Epidural hematoma	Pancytopenia	
Brain injury	Exsanguination	Paralysis	
Brain stem herniation	Failure to thrive	Perforated gallbladder	
Carcinogenesis	Fracture	Peritonitis	
Carcinomatosis	Gangrene	Pleural effusions	
Cardiac arrest	Gastrointestinal hemorrhage	Pneumonia	
Cardiac dysrhythmia	Heart failure	Pulmonary arrest	
Cardiomyopathy	Hemothorax	Pulmonary edema	
Cardiopulmonary arrest	Hepatic failure	Pulmonary embolism	
Cellulitis	Hepatitis	Pulmonary insufficiency	
Cerebral edema	Hepatorenal syndrome	Renal failure	

If an organ system failure is listed as a cause of death, you must report its **etiology** on the line(s) beneath it. Examples are as follows:



1. congestive heart failure → congestive heart failure *due to* cardiomyopathy
2. hepatic failure → hepatic failure *due to* cirrhosis
3. renal failure → renal failure *due to* Type I diabetes mellitus
4. respiratory failure → respiratory failure *due to* sepsis

In this vein, the terminal event (e.g., cardiac arrest or respiratory arrest) cannot not be used by itself. You must report the causes of the terminal event (e.g., cardiac arrest *due to* coronary artery atherosclerosis or cardiac arrest *due to* blunt impact to chest).


Keep in mind that if the subsequent term used (after *due to*) is a keyword reported above, more explanation will be required. Moreover, certain terms will generate error sub-notices through the Validate Page option and the Cause of Death fields will have their own icons.




In the following example, after validating the page the term cardiac arrest has been highlighted red. Clicking on the highlighted text will cause a blue explanation box to appear, indicating that the entry is ill defined. Also, the highlighted text cannot be overwritten.

Cause of Death		Approximate Interval
		Onset to Death
Immediate Cause (Final disease or condition resulting in death)		
PART I	cardiac arrest 	weeks
Line a	<div style="border: 1px solid blue; background-color: #e0f0ff; padding: 5px;">Ill Defined term "CARDIAC ARREST" found on Line1a. Please be more specific. Ill-defined or trivial cause</div>	
Due to or as a consequence of		
Line b	coronary artery atherosclerosis 	weeks



Clicking on the pencil icon to the right of the field will allow the text to be overwritten. The pencil icon will change to an alert icon as shown below.

Immediate Cause (Final disease or condition resulting in death)		
PART I	cardiac arrest 	weeks
Line a		

An alternate term can then be entered but must meet the same data standards.

Immediate Cause (Final disease or condition resulting in death)		
PART I	heart failure 	weeks
Line a	<div style="border: 1px solid blue; background-color: #e0f0ff; padding: 5px;">Ill Defined term "HEART FAILURE" found on Line1a. Please be more specific. Ill-defined or trivial cause</div>	
Due to or as a consequence of		

When an acceptable substitute is arrived at the green check will appear to the right of the field.

Cause of Death		Approximate Interval
		Onset to Death
Immediate Cause (Final disease or condition resulting in death)		
PART I	heart attack 	weeks
Line a		
Due to or as a consequence of		
Line b	coronary artery atherosclerosis 	weeks



The following example has generated validation results at the bottom of the page indicating more explanation is needed. Note the yellow backgrounds of the fields.

Cause of Death		Approximate Interval Onset to Death
Immediate Cause (Final disease or condition resulting in death)		
PART I Line a	hepatic failure	weeks
Due to or as a consequence of		
Line b	cirrhosis	weeks

Validation Results
[List All Errors](#)
[Save Overrides](#)
[Hide](#)

Error Message	Override	Goto Field	Popup
DR_3010: The condition reported on the lowest line of the cause of death statement needs more explanation before it can be accepted as a cause of death. Provide an Underlying Cause for the last condition in the "Due to" or "As a consequence of" field. If you cannot determine the underlying cause, use a term such as "unknown cause" or "undetermined etiology" to show that you have not accidentally omitted the information.	<input type="checkbox"/>	Fix	Fix
DR_3027: The last cause reported is unacceptable. Please enter the medical conditions that led to this terminal event. Mechanistic terminal events such as the last entry preferably should not be either the only cause or underlying cause in a cause-of-death statement. Please enter the medical conditions that led to this terminal event.	<input type="checkbox"/>	Fix	Fix



Yellow backgrounds are indicative of soft edits (which appear as yellow dots in the left-hand menu). A soft edit will not prevent you from certifying a record as a hard edit (red X) would do. However, you must check the Override box in the **Validation Results** and click the Save Overrides button to proceed. Note: The status bar below the subject's name at the top of the record will now read *Medical Valid With Exceptions* and the yellow dot will remain. This is not considered best practice and you may be called upon to amend the record at a later date.

Validation Results List All Errors **Save Overrides** Hide

Error Message	Override	Goto Field	Popup
DR_3010: The condition reported on the lowest line of the cause of death statement needs more explanation before it can be accepted as a cause of death. Provide an Underlying Cause for the last condition in the "Due to" or "As a consequence of" field. If you cannot determine the underlying cause, use a term such as "unknown cause" or "undetermined etiology" to show that you have not accidentally omitted the information.	<input checked="" type="checkbox"/>	<input type="button" value="Fix"/>	<input type="button" value="Fix"/>
DR_3027: The last cause reported is unacceptable. Please enter the medical conditions that led to this terminal event. Mechanistic terminal events such as the last entry preferably should not be either the only cause or underlying cause in a cause-of-death statement. Please enter the medical conditions that led to this terminal event.	<input checked="" type="checkbox"/>	<input type="button" value="Fix"/>	<input type="button" value="Fix"/>

Death Registration Menu

- Medical Certification
- ✔ Pronouncement
- ✔ Place of Death
- Cause of Death
- ✔ Other Factors
- ✔ Certifier

Sometimes expanding on the ill-defined term will resolve the validation issue as in the example below.

Immediate Cause (Final disease or condition resulting in death)

PART I Line a

Ill Defined term "HYPOXIA" found on Line1a. Please be more specific. Ill-defined or trivial cause

Immediate Cause (Final disease or condition resulting in death)

PART I Line a



When indicating **neoplasms** as a cause of death, you must 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

The example below has generated both highlighted text and an **Error Message** in the **Validation Results**. Though the Override button appears, this entry could not be overridden as a soft edit. The **Validation Results** explain what is lacking.

Cause of Death Approximate Interval
Onset to Death

Immediate Cause (Final disease or condition resulting in death)

PART I

Line a

The term "SQUAMOUS CELL CARCINOMA" lacks a specified site.

Due to or as a consequence of

Validation Results List All Errors Save Overrides Hide

Error Message	Override	Goto Field	Popup
DR_3006: A cancer term has been listed in line A. Please specify the primary site of the cancer, whether it is benign or malignant, the cell type (if known), the grade of the neoplasm, and the part (or lobe) of the affected organ.	<input type="checkbox"/>	<input type="button" value="Fix"/>	<input type="button" value="Fix"/>

Only by spelling out the *primary site*, whether it is *benign* or *malignant*, the *cell type* (*unknown* if it is not available), the *grade*, and the *part* (or *lobe*) *affected* can the entry be resolved.

Immediate Cause (Final disease or condition resulting in death)

PART I

Line a



The below entry does not generate an **Error Message** in the **Validation Results**. It does generate red highlighted text which produces a blue explanation box (and will prevent certification).

Immediate Cause (Final disease or condition resulting in death)

PART I Line a malignant multiple myeloma

The term "MAL MYELOMA" lacks a specified site.

2 months

The issue is resolved by updating the entry to read: *Malignant multiple myeloma of the vertebral column, pelvis, femur, skull. Moderately differentiated.*

Immediate Cause (Final disease or condition resulting in death)

PART I Line a Malignant multiple myeloma of the vertebral column, pelvis, femur, skull. Moderately differentiated.

2 months

Note: You may get a green check without noting the grade of the neoplasm, but this is not considered best practice. While you may be able to certify the record, it runs the risk of being rejected by the Local Health Department (LHD). If this occurs, the status bar below the subject's name will read: *Medical rejected by LHD*. An amendment will then be necessary.

While it is not necessary to note the *stage* of the neoplasm, the *grade* is expected. Below are some examples of grading schemes that would be accepted.

Examples of grading schemes

Four-tier grading scheme		
Grade 1	Low grade	Well-differentiated
Grade 2	Intermediate grade	Moderately differentiated
Grade 3	High grade	Poorly differentiated
Grade 4	Anaplastic	Anaplastic
Three-tier grading scheme		
Grade 1	Low grade	Well-differentiated
Grade 2	Intermediate grade	
Grade 3	High grade	Poorly differentiated
Two-tier grading scheme		
Grade 1	Low grade	Well-differentiated
Grade 2	High grade	Poorly differentiated



When it comes to injuries, you will need to report the **fatal injury** (e.g., stab wound of chest), the **trauma** (e.g., transection of subclavian vein), and **impairment of function** (e.g., air embolism).

Immediate Cause (Final disease or condition resulting in death)

PART I Line a	stab wound of chest	✔	immediate
	Due to or as a consequence of		
Line b	transection of subclavian vein	✔	immediate
	Due to or as a consequence of		
Line c	air embolism	✔	immediate

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).

- | | |
|---|--|
| <ul style="list-style-type: none"> Asphyxia Bolus Choking Drug or alcohol overdose/drug or alcohol abuse Epidural hematoma Exsanguination Fall Fracture Hip fracture Hyperthermia | <ul style="list-style-type: none"> Hypothermia Open reduction of fracture Pulmonary emboli Seizure disorder Sepsis Subarachnoid hemorrhage Subdural hematoma Surgery Thermal burns/chemical burns |
|---|--|

Such cases should be reported to the medical examiner/coroner.



Coroners **must** complete the Coroner Review to complete certification.

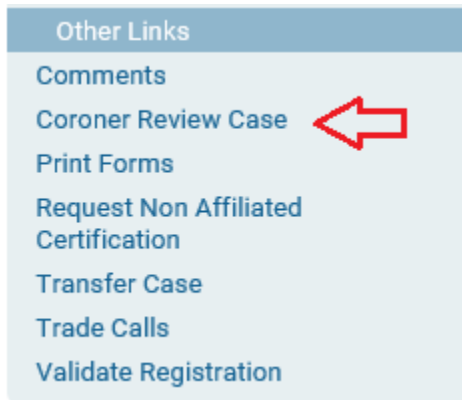
In some cases, coroners may be able to complete certification without completing the coroner review. However, when this happens the status bar at the top of the page will read *Coroner Review Required*:

/Personal Valid With Exceptions/Medical Valid/Not Registered/Signed/Certified/Registration Approval Required/Coroner Review Required/Local Registrar Filed

In this case the Local Health Department (LHD) will not be able to print the certificates.

In most cases the coroner will be able to access the case but will be unable to complete the cause of death.

In the blue menu at left, under the Other Links heading will be the active link: Coroner Review Case



When Coroner Review Case is accessed a window with three fields will appear. The first will be a drop menu asking to *Accept* or *Decline* the case or note that it is *Pending*.

4875183 :John Bunyan MAR-02-2021

/Personal Valid/Medical Invalid/Not Registered/Signed/Uncertified/Referred to Coroner/Coroner Review Required/Medical Pending/FIPS Coding Required

Coroner Review Case

Referral Action

Coroner Case Number

Message

Once accepted the Coroner Case Number can be entered. Also, an auto-populated message will appear with case information. This message can be overwritten, or simply added onto.

4875183 :John Bunyan MAR-02-2021

/Personal Valid/Medical Invalid/Not Registered/Signed/Uncertified/Referred to Coroner/Coroner Review Required/Medical Pending/FIPS Coding Required

Coroner Review Case

Referral Action

Coroner Case Number

Message

Case Id: 4875183 - John Bunyan, Date of Death:Mar-02-2021 has been reviewed. This referral action for this case was: Accept Referral.

Once the Save button is clicked the status bar will change to indicate that the case is *Under Coroner Review*.

4875183 :John Bunyan MAR-02-2021

/Personal Valid/Medical Invalid/Not Registered/Signed/Under Coroner Review/Medical Pending/FIPS Coding Required

The Cause of Death can now be completed so that the case can be certified.

