

Ministry of Government and Consumer Services
Office of the Registrar General

Handbook on Medical Certification of Death & Stillbirth

Prepared for:

Physicians and Coroners

Acknowledgements

Canadian Centre for Health Information, Statistics Canada
Canadian Medical Association
Office of the Chief Coroner of Ontario

Sources

This handbook is modeled on a number of other handbooks, including the 1947 Edition of the Dominion Bureau of Statistics' Vital Statistics Handbook, the U.S. Department of Health and Human Services' 1987 Physicians' Handbook on Medical Certification of Death, the Australian Bureau of Statistics booklet Cause of Death Certification, the World Health Organization's 1979 handbook Medical Certification of Death, and the British Columbia Ministry of Health and Ministry Responsible for Seniors' Physicians' and Coroners' Handbook on Medical Certification of Death.

If you have any comments, suggestions or questions regarding the content, format or distribution of this handbook, or require this handbook in another format, you may contact:

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Thunder Bay Production & Verification Services Branch
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To obtain the Medical Certificate of Death – Form 16

- Fax a request to (807) 343-7459
- Email a request to ORGID@ontario.ca
- Call the Medical Coding Division at (807) 343-7458

“It may truthfully be said that virtually every large-scale problem in preventive medicine has been brought to light – in part at least – by statistics of death, and further that the adequacy of remedial or curative action is, in the last analysis, reflected in these same statistics.”

United Nations Handbook of Vital Statistics Methods, 1955

Preface

Physicians and coroners share the responsibility for completing and certifying medical certificates of death and stillbirth. This handbook was prepared specifically to guide physicians and coroners in completing the Medical Certificate of Death, Form 16 (medical certificate) and the Medical Certificate of Stillbirth, Form 8¹ as prescribed under the Vital Statistics Act, R.S.O. 1990, c.V.4 (VSA).

The medical certificate forms part of the death registration and is an important legal document detailing the fact and circumstance of death. This handbook explains the principles and concepts involved in medical certification and the nature and uses of the information.

The quality and value of the statistical data derived from death registration forms has been for many decades, and continues to be, dependent on the certifier’s care and judgment in providing complete and accurate information on the medical certificate and is the source of information used in Canada, and most other countries, for the preparation of statistics on causes of death². These statistics are indispensable, locally and nationally, in public health surveillance, health education and promotion, in medical research, and health planning.

This handbook was developed under the auspices of the Vital Statistics Council for Canada to promote the reporting of reliable information on the medical certificate, with particular emphasis on the medical details of cause and circumstance. This handbook has been adapted for use in Ontario to meet the particular needs of this province, international standards, principles and concepts put forward by the World Health Organization (WHO).

¹ Forms required by the Office of the Registrar General under the authority of the VSA are the Medical Certificate of Death, Form 16 and the Medical Certificate of Stillbirth, Form 8.

² Causes of death required by the Office of the Registrar General are from the International Statistical Classification of Diseases and Related Health Problems published by the World Health Organization, adopted by reference in section 70 of the VSA.

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1. Introduction

Purpose of Handbook

The purpose of this handbook is to provide a useful tool and some guidance to physicians, coroners and medical trainees when certifying a death or stillbirth in Ontario. This handbook gives an overview of the uses and value of the information collected, the responsibility of the certifier, and most importantly, provides instructions on the completion of the cause of death section and the cause of stillbirth section on the medical certificate and provides examples of medical certification to facilitate understanding. This handbook also provides guidance and instructions on completing all other elements contained on the form.

This handbook, specifically designed for this user group, is intended as a reference for physicians and coroners. It is expected that this handbook will be studied and used as an aide to assist in the proper completion and signing of medical certificates.

Training and instruction in the proper completion of medical certificates has been something that has not historically received a lot of attention in many medical undergraduate and postgraduate training programs. As a result, completion of a medical certificate often has been a challenging task faced with great trepidation and anxiety by a number of physicians, both experienced and inexperienced, in clinical practice.

Registered Nurses, Extended Class

Note: *An instructional handbook has also been prepared to guide registered nurses who hold and extended certificate of registration (RN(EC)) under the Nursing Act, 1991 who will be able to complete and sign a medical certificate, in the form approved by the Registrar General and stating the cause of death, in circumstances as prescribed in the VSA. Examples of the prescribed circumstances are:*

- the RN(EC) has had the primary responsibility for the care of the deceased during the last illness of the deceased;
- the death was expected during the last illness of the deceased;
- there was a documented medical diagnosis of a terminal disease for the deceased made by a legally qualified medical practitioner during the last illness of the deceased;
- there was a predictable pattern of decline for the deceased during the last illness of the deceased; and
- there were no unexpected events or unexpected complications during the last illness of the deceased.

The Value of Complete & Detailed Information

The attending physician is the best person to complete and sign the medical certificate based on a documented medical history and diagnosis during the last illness of the deceased. The certifier thus has both the responsibility and the opportunity, by using care and attention in the completion of the medical certificate, to ensure mortality statistics reflect accurately, both the multiple causes of death and a comprehensive underlying cause of death.

The cause of death section is designed to record information on all diseases or conditions that led to death and other significant conditions. An important concept in classifying causes of death is the underlying cause of death or the starting point. Multiple conditions on the medical certificate are also important in studying diseases or conditions that are rarely the underlying causes of death, but often contribute to death, such as pneumonia or diabetes.

Research based on mortality statistics is much more meaningful if all details in the deceased person's medical records regarding the precise diagnoses are incorporated in the medical certificate. Although routinely published mortality statistics often list only broad classes of diseases, the statistical databases contain detailed information about the disease or injury. These detailed data are valuable for research into particular conditions and for special analytical studies. For statistical and research purposes it is important that the causes of death, particularly the underlying cause of death (starting point), be reported as specifically and precisely as the information permits, incorporating relevant details from histological reports.

Death Registration

Many people view the medical certificate as unimportant and just another piece of paper that must be completed when a death or stillbirth occurs. Nothing is further from the truth. Statistics derived from the medical certificate are indispensable and provide provincial and national health statistics.

Death Registration serves two purposes. First, the completed death registration form is a permanent legal record of the fact of death of an individual and records the personal information about the deceased and details of the circumstances of death that are, in most jurisdictions, legally required to issue a burial permit. Death certificates and certified copies of death registrations are commonly required to settle an estate and for insurance and pension purposes. Second, death registration forms, specifically the medical certificate, are the source of mortality statistics which form the basis of the oldest and most extensive public health surveillance system. They provide information on characteristics of the deceased and the vitally important information on the cause of death.

It is important that all physicians who are tasked with certifying deaths and stillbirths be properly oriented to the principles of medical certification; the way the statements are to be entered; and the importance of completeness, accuracy, and specificity in listing the causes of death or stillbirth.



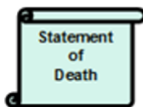
These statistical data are used by federal, provincial and local governments, researchers and clinicians, educational institutions and many others for many purposes including:

- to assess the health status of the population and determine changes in status over time;
- to identify regional differences in death rates and investigate reasons for these differences;
- to monitor trends in public health issues such as infant and maternal mortality, infectious diseases, accidents and suicides;
- to identify risks associated with environmental and occupational factors and lifestyle;
- to determine health research and health care priorities in order to allocate resources;
- to plan health facilities, services and manpower;
- to plan prevention and screening programs and assess the results of these programs; and
- to develop health promotion programs and evaluating their results.

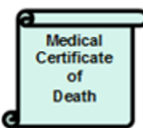
Registering a Death in Ontario

The forms for registering a death in Canada's provinces and territories vary somewhat to meet particular needs. However, each jurisdiction closely follows the mutually agreed upon "Model Registration Forms" in support of a uniform national vital registration and statistics system. This system allows for comparison of national and provincial/territorial data.

In Ontario **the following documents are required** to be completed, signed, and submitted to the Office of the Registrar General **to register a death**:



The funeral director and/or a family member will complete the statement of death with information about the deceased. The funeral home supplies this form which forms part of the death registration



It is the responsibility of a physician who has been in attendance during the last illness of a deceased person to complete the medical certificate immediately after the death and ensure it is made available to the funeral director. The medical certificate is supplied by the Office of the Registrar General

Note: If the coroner cannot provide the cause of death, the coroner (or in some cases a coroner's investigator) may complete and issue a **Warrant to Bury the Body of a Deceased Person** in place of a medical certificate, for the death to be registered and a burial permit to be issued. The coroner supplies this form which forms part of the death registration. The coroner is responsible for submitting a medical certificate as soon as the medical cause of death is known.

Where do these forms go?

- The funeral home forwards the statement of death together with the medical certificate and/or coroner's warrant to the Division Registrar (city clerk's office) of the municipality where the death occurred and obtains a burial permit.
- The Division Registrar registers the event, issues a burial permit to the funeral home, and forwards the documents to the Office of the Registrar General.
- The Office of the Registrar General finalizes the death registration which becomes a permanent, legal record of the death of an individual.
- The Office of the Registrar General codes the causes of death.
- The Office of the Registrar General forwards all cause of death data and other vital statistics data contained on death registrations to Statistics Canada for national publication.



Once the death is registered with the Office of the Registrar General, a person may apply to ServiceOntario for a **death certificate** and pay the required fee.

There are two (2) types of death certificates:

1. File Size Death Certificate

Any person can apply to obtain a file size death certificate for a person which contains the deceased's name, age, marital status, date of death, place of death, sex, date of registration, and registration number.

2. Certified Copy of a Death Registration

The deceased's next of kin, executor, or estate administrator may apply for a certified copy of a death registration. A certified copy will have a raised seal, the signature of the Deputy Registrar General, and will be printed on special paper with security features. The certified copy of a death registration may come (upon request) with cause of death information.

Note: There are some organizations that may require a certified copy of a death registration with cause of death information to settle an estate, access insurance benefits, or access or cancel government services. If the cause of death information is requested by the applicant, a copy of the medical certificate will form part of a certified copy of a death registration. Check with the Ministry, government agency or person requesting the document before you order. See [Ontario.ca](https://www.ontario.ca) for further information on death certificates.

Confidentiality of Vital Records

The personal information on vital event records is protected against unwarranted or indiscriminate disclosure under the VSA, the Freedom of Information and Protection of Privacy Act, R.S.O. 1990, c.F.31 and, the Statistics Act, R.S.C., 1985, c. S-19.

International Classification of Diseases (ICD)

The WHO, as part of its mission, develops standards for the collection and classification of mortality data so that international comparisons may be made. Causes of death are classified using the **International Statistical Classification of Diseases and Related Health Problems**, usually called by the short-form name International Classification of Diseases (ICD). The ICD is the global health information standard for mortality and morbidity statistics and is used in more than 100 countries around the world. The ICD makes it possible to identify very precisely many varieties or sites of diseases and injuries. Although routinely published mortality statistics often list only broad classes of diseases, the statistical databases contain detailed information which is valuable for research into particular conditions and for special analytical studies. For a closer look at this classification system please visit [World Health Organization](http://www.who.int/classifications/icd/).

Medical Coding

The medical certificate provides space for the certifier to record all relevant information pertaining to the deceased such as cause of death statements, age and duration. Medical classification is the process of transforming descriptions of medical diagnoses, surgical/medical procedures, a wide variety of signs, symptoms, abnormal findings, complaints, social circumstances, injuries, and external causes, etc. from death registrations into standardized codes using the rules and conventions inherent to a classification system.

Mortality Classification Specialists of the Office of the Registrar General are trained and certified by Statistics Canada to analyze any clinical statements of death and assign standardized codes using the International Classification of Diseases (ICD). This classification system provides thousands of codes to classify most diseases, external causes and injuries or poisonings, and instructions for the assignment and selection of the underlying cause of death (starting point). The underlying cause of death is most often used for primary mortality tabulation. The medical certificate provides space for the certifier to record all relevant cause of death statements which are transformed into comprehensive codes.

Example:

Cause of Death		Approximate interval between onset and death	
Cause of Death	11. Part I		
	Immediate cause of death (a)	Respiratory failure	2 days
	Antecedent causes, if any, (b)	Pleural effusion	1 week
	Underlying cause of death (Stated last) (c)	Pneumonia	3 weeks
	(d)	Chronic pulmonary obstructive disease	25 years
	Part II		
	Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	Smoking (>50 yrs), Hypertension (25 yrs)	I10
		Coronary artery disease (15 yrs), Obesity (yrs)	E66.9
		I25.1	

Underlying Cause

- Using the international rules for selection J44.0 was selected as the underlying cause of death. J44.0 is a combination code of J44.9 (COPD) and J18.9 (pneumonia).

Multiple Causes

- Multiple causes include the selected underlying cause of death as well as the immediate, antecedent and contributory causes of death (J44.0, J96.9, J18.9, J44.9, F17.9, F10.1, I10, I25.1, E66.9).



The certifier who completed the medical certificate may be contacted by the Office of the Registrar General to seek clarification or further information regarding the cause(s) of death reported. This is one of the most important ways to improve the quality of cause-of-death data.

The purpose of an inquiry is two-fold: (1) to obtain information needed to properly code and classify the underlying cause of death and (2) to provide guidance to the certifier on the proper method of completing medical certificates. If the cause of death is substantially changed as a result of an inquiry, the certifier will be requested to complete a revised medical certificate.

2. Medical Certificate of Death

Certifier's Responsibility

It is the legal responsibility of a legally qualified medical practitioner to complete and sign the medical certificate (Appendix I), which forms part of the death registration. The act of completing and signing a medical certificate constitutes “certifying” the death. The person who signs the medical certificate is known as the “certifier”. The certifier needs to be someone who had been in attendance during the last illness of a deceased person, or who has sufficient knowledge of the last illness.

The certifier must:

- complete and sign a current version of the medical certificate required by the Office of the Registrar General;
- be familiar with and fully understand section 21 of the VSA and sections 20, 35, 36 and 38 of Regulation 1094 and section 10 of the Coroners Act;
- ensure no copies or duplicates are made of the completed medical certificate;
- ensure the medical certificate is prepared legibly, accurately and in its entirety according to the instructions in this handbook;
- ensure no unwarranted or indiscriminate disclosure of information under the VSA;
- ensure that the completed and signed medical certificate or warrant to bury is provided to the funeral service provider or person taking responsibility for the remains;
- submit to the Office of the Registrar General a medical certificate as soon as the medical cause of death is known where a warrant to bury was initially submitted; and
- submit to the Office of the Registrar General a supplemental medical certificate in cases where autopsy findings or further investigation reveals the cause to be different from the one originally reported.

Uniform principles must be applied in the reporting of causes of death and the use of this standard form places the responsibility on the certifier³.

³ Instructions on completing the Medical Certificate of Death are printed on the reverse of the form. Questions about completing this form that are not covered in this handbook should be referred to the Office of the Registrar General, P.O. Box 4600, Thunder Bay, ON P7B 6L8 or by telephone at 1-807-343-7458.

Reporting a Death to the Coroner



Deaths Except by Disease

If there is reason to believe that a person has died as a result of any cause other than disease, or has died as a result of negligence, malpractice, or misconduct on the part of others or under such circumstances as require investigation, do not complete the medical certificate; the death must be referred to a coroner.

Coroner's Investigation

Coroners in Ontario investigate certain deaths in order to determine the facts surrounding the death, to advance public safety and to make recommendations to prevent future deaths in similar circumstances. All health care professionals have a legal and professional responsibility to notify the coroner of cases that may require investigation. This responsibility to report is not restricted to physicians, as the Coroners Act says “...every person who has reason to believe....”



If the answer to any of the following questions is “**Yes**”, the death should be reported to the coroner. The Coroners Act allows the coroner some discretion in certain circumstances as to whether he/she will investigate the death. In other cases, an investigation and possibly an inquest may be mandatory.

Ask yourself the following:

- ? Is the **death due to a non-natural cause** such as an accident, homicide, or suicide? For example, an injury (e.g., hip fracture) that precedes a terminal medical event (e.g., pneumonia) may be non-natural, and therefore a coroner must be notified to determine if the death may be attributable to the initial injury. It may be helpful to consider why the person was initially admitted to hospital, rather than the immediate terminal event. If an accidental injury precipitated admission, then the coroner must be notified.
- ? Was the **death sudden and unexpected** (e.g., not reasonably foreseeable)? The sudden death of a terminally ill patient, a palliative patient, a “do not resuscitate” (DNR) patient, or a person with multiple/complex medical diseases would generally not fit this category. The threshold for calling the coroner, however, should be relatively low. The coroner may determine that an investigation is not required, but this should be his/her decision, not the decision of the health care facility staff person. If in doubt, discuss with the coroner.
- ? Are the events leading to the **death the subject of investigation** by police, the hospital, Children’s Aid Society, Ministry of Labour, or any other investigative agency?

- ? Is **trauma**, including a fall in hospital, fracture, etc., **overdose, poisoning, or intoxication** involved in the death?
- ? Have there been any **allegations of malpractice, negligence, foul play, or any treatment/medication errors**? This may include concerns voiced by other health care professionals, family members of the patient, or an attorney appointed under a Power of Attorney for Personal Care.
- ? Is the deceased a **prisoner in custody** from a jail or under police guard? Custody deaths will require a coroner's investigation and may involve a mandatory inquest.
- ? Is this a **pregnancy-related maternal death**? This may include a death following an abortion, therapeutic or otherwise, or may include deaths in the post-partum period or even death of a pregnant woman from causes unrelated to her pregnancy.
- ? Is this a **neonatal death or stillbirth** where there are issues regarding care or injury? Neonatal deaths should generally be reported to the coroner. Stillbirths require reporting only where birth occurred outside the hospital or where concerns have been raised about antenatal care or management of labour and delivery.
- ? Have **family members expressed concerns or have there been controversies about treatment decisions**? Where family dynamics have created difficulties or concerns for hospital/health care facility staff, a coroner might be the appropriate independent "third party" to assist in diffusing contentious issues and volatile situations after the death.

As a general rule for physicians, where the death is likely not due to natural causes or where injury (fracture) or poisoning, even if remote, may be a contributing factor, a medical certificate should not be completed, and the death should be reported to a coroner.



Where a death has been reported to the coroner and has been accepted for investigation, the coroner will have the legal obligation to complete and sign the medical certificate and where a medical certificate has already been completed by a physician, the coroner will replace it with a revised medical certificate.

Information About the Deceased

Information About the Deceased							
1. Last name or single name Brown, Jane				First and middle names		2. Date of death (yyyy/mm/dd) 2019/01/27	
3. Sex F	4. Age / 83	5. If under 1 year Months Days		6. If under 1 day Hours Minutes		7. Gestation age	
9. Place of death (name of facility or location) 100-1234 Smith Street						<input type="checkbox"/> Hospital <input type="checkbox"/> Long term care <input checked="" type="checkbox"/> Private Residence <input type="checkbox"/> Other (specify)	
10. City, town, village or township Pembroke				Regional municipality, county or district Renfrew			

Name of Deceased

Enter the deceased's full legal name including last name and all given names or single name, if only one name. Do not report alias, abbreviations or "also known as". In our multi-cultural society, it is important to clearly distinguish last name from given name(s). Accuracy of the legal name may be important for estate, insurance, legal and pension purposes. Accurate sources of a person's legal name can include their birth certificate, citizenship card, health card or passport.

Date of Death

Enter the exact month, day and year that death occurred (e.g., 2019/01/27). Pay attention to the entry when the death occurs at midnight or on December 31. For unwitnessed deaths and coroner cases, in accordance with policies of the Office of the Chief Coroner, record the date of death as the date on which the death was pronounced. If further investigation or new information reliably shows the date of death to be different than that originally recorded, an amendment to the record may be made and a revised medical certificate issued.

Sex

F for female and M for male. If the sex is unknown enter "unknown".

Age

Calculate an accurate age at time of death from the date of birth. If under one (1) year it is necessary to provide age in months and days; if under one (1) day it is necessary to provide age in hours and minutes; and for perinatal deaths (< than twenty-eight (28) days), provide gestation age and birth weight in either pounds or kilograms.

Place of Death

Enter the name of the hospital, long-term care facility, nursing home, hospice or other location where the deceased died. If the deceased died in a private residence, provide a street address or, in a rural area without a street address, the lot and concession number. **It is not necessary to record a postal code or "Ontario"**. Check off the appropriate corresponding box. Enter the name of the city, town, village or township and the regional municipality, county or district.

Note: Municipal restructuring has occurred over the years. Where restructuring has occurred use the current municipal name (e.g., North York amalgamated and is now known as Toronto).

The Cause of Death Section

Cause of Death		Approximate interval between onset and death
11. Part I I Immediate cause of death (a) <small>due to, or as a consequence of</small> Antecedent causes, if any, (b) <small>due to, or as a consequence of</small> (c) <small>due to, or as a consequence of</small> Underlying cause of death (Stated last) (d) II		
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		
12. If deceased was a female, did the death occur: <input type="checkbox"/> during pregnancy <input type="checkbox"/> within 42 days following the end of pregnancy* <input type="checkbox"/> between 43 days and 365 days following the end of pregnancy* <input type="checkbox"/> not pregnant within the past year <input type="checkbox"/> unknown if pregnant within the past year <small>*(induced abortion, miscarriage, ectopic pregnancy, stillbirth, or live birth)</small>		
13. Was the deceased dead on arrival at the hospital? <input type="checkbox"/> Yes <input type="checkbox"/> No		14. Was there a surgical procedure within 28 days of death? <input type="checkbox"/> Yes <input type="checkbox"/> No
		15. Date of surgery (yyyy/mm/dd)
16. Condition necessitating surgery.		

General

The Cause of Death section on Ontario's medical certificate is based on the recommendation of the WHO and is identical worldwide on death certificates. The Cause of Death section provides space for the certifier to record pertinent information pertaining to diseases, morbid conditions, injuries, or poisoning which either resulted in or contributed to death and the circumstances of the accident or violence which produced any such injuries.

It is important to understand that causes of the death recorded are not required to be a fact, proven beyond a reasonable doubt, but is merely **the best opinion of the certifier**. It is a conclusion based on the certifier's knowledge of the patient, discussion with other professionals involved in the care, and/or a review of documentation such as the medical record and represents what is believed to be the most likely cause. The certifier should ensure all relevant information is recorded without including symptoms and modes of dying.

The **MEDICAL CERTIFICATE** consists of five (5) sections:

- Information About the Deceased
- **Cause of Death**
- Autopsy Particulars
- Traumatic or Violent Death
- Certification

The **CAUSE OF DEATH** section consists of two (2) main parts:

- **Part I**
- **Part II**

In addition, there are questions designed to capture information regarding:

- **pregnancy** status in the case of a maternal death; whether the deceased was **dead upon arrival** at the hospital; and recent **surgical and medical procedures**.

Additionally, there are questions designed to capture information for:

- **Autopsy particulars** and **Traumatic or Violent Deaths**.

Cause of Death Section

Definitions

- i. A **cause of death** is the morbid condition or disease process, abnormality, injury, or poisoning leading directly or indirectly to death. It consists of a diagnostic entity, which is a single term or a composite term that is used to describe a disease, nature of injury, or other morbid condition.

Note: “*Natural Causes*” is not a cause of death; it is a manner (classification) of death and should not be reported in Part I or Part II or used as the underlying cause of death.

Note: “*Old Age*” should not be recorded as a cause of death. The certifier should make efforts to determine, if possible, through a review of medical records, a clear and distinct etiological basis for cause of death. The age of the deceased person is already captured on the medical certificate for statistical databases.

- ii. The **immediate cause of death** is the condition leading directly to death and is reported on line (a) in Part I.

Note: Do not report a **mechanism or mode of death** such as cardiac arrest, respiratory arrest, hypoxia, asphyxia shock, etc. A mode of dying is a statement not specifically related to the disease process; it merely attests to the fact of death and provides no additional information on the cause of death.

- iii. An **antecedent cause of death** is any intervening cause of death occurring between the immediate and the underlying cause of death.

- iv. The **underlying cause of death** (the starting point) is the disease or condition that began the sequence of events leading to death.

- v. A **sequence** is two or more conditions entered on successive lines in Part I, each condition being an acceptable cause of the condition on the line above it.

- vi. The words “**due to, or as a consequence of**” printed between the lines of Part I apply to sequences with an etiological or pathological basis and to sequences where an antecedent condition is believed to have prepared the way for the more direct cause.

Example: Formatting of the immediate, antecedent and underlying causes of death:

Part I		Approximate interval between onset and death
Immediate cause of death (a)	Immediate cause of death due to, or as a consequence of	shortest duration
Antecedent causes, if any, (b)	Antecedent cause of death due to, or as a consequence of	longer duration
(c)	Antecedent cause of death due to, or as a consequence of	longer duration
Underlying cause of death (Stated last) (d)	Underlying cause of death	longest duration

Cause of Death Section

Completing Part I

Part I is designed for the certifier to record a chronological chain of events leading to death in ascending causal order. Each event in the sequence is recorded on a separate line.

The **immediate** cause of death is recorded on line (a); **antecedent** conditions are recorded in chronological order on lines (b) and (c); and the **underlying** cause is recorded on line (d).

Only **one** cause is to be entered on each line.

This format is recommended by the WHO to obtain the opinion of the certifier as to the relationship and relative significance of the causes of death reported and to facilitate the selection of the underlying cause of death (the starting point) for vital statistics.

Part I	
Immediate cause of death	(a) Immediate cause of death due to, or as a consequence of
Antecedent causes, if any,	(b) Antecedent cause of death due to, or as a consequence of
Underlying cause of death (Stated last)	(c) Antecedent cause of death due to, or as a consequence of
	(d) Underlying cause of death

In Part I the certifier may report a **single cause** of death or **multiple causes** of death. Usually a death results from the combined effect of two or more conditions (i.e., one cause may lead to another, etc.).

If there is a **single cause** of death to report, a comprehensive entry on line (a) which describes completely the sequence of events is sufficient. The mode of dying should not be recorded.

Part I	
Immediate cause of death	(a) Prostatic hypertrophy due to, or as a consequence of
Antecedent causes, if any,	(b) due to, or as a consequence of
Underlying cause of death (Stated last)	(c) due to, or as a consequence of

If there are **multiple causes** of death to report, an entry on multiple lines is required, in sequence, recording the immediate cause first and the underlying cause last. The mode of dying should not be recorded.

Part I	
Immediate cause of death	(a) Uremia due to, or as a consequence of
Antecedent causes, if any,	(b) Hydronephrosis due to, or as a consequence of
Underlying cause of death (Stated last)	(c) Urinary retention due to, or as a consequence of
	(d) Prostatic hypertrophy

Cause of Death Section

Reporting the Underlying Cause of Death

Regardless of how many conditions are reported on the medical certificate, the single cause for primary tabulation is the **underlying cause** of death.

The **underlying cause** is an extremely important concept in medical certification and is defined by the WHO as **the disease or injury which initiated the train of morbid events leading directly to death, or the circumstances of the accident or violence which produced the fatal injury.**

The order in which the certifier is requested to arrange the causes of death facilitates the selection of the **underlying cause** when two or more causes are reported. It is the responsibility of the certifier to indicate which conditions led directly to death, to state any antecedent conditions and provide the condition or event that started the sequence of events.

In a correctly completed medical certificate the certifier will:

- ✓ Record the immediate (direct) cause of death on line (a);
- ✓ Record antecedent causes of death on lines (b) and (c) and;
- ✓ Record the underlying (starting point) cause of death alone on line (d).

Example: Congenital heart disease gave rise to atrial fibrillation which in turn led to congestive heart failure and a myocardial infarction. Congenital heart disease was the starting point.

Part I	
Immediate cause of death	(a) Myocardial infarction due to, or as a consequence of
Antecedent causes, if any,	(b) Congestive heart failure due to, or as a consequence of
Underlying cause of death (Stated last)	(c) Atrial Fibrillation due to, or as a consequence of
	(d) Congenital heart disease

Note: Do not enter more than one condition (i.e., cause of death) on the lowest used line of Part I, or a condition that could not have caused all the conditions entered above it. Clarification will be sought from the certifier on his/her opinion about the conditions leading to death and their interrelationships.

Note: A common error or oversight frequently made by a certifier is recording the underlying cause of death in Part II or not at all. The certifier should strive to record the underlying cause of the death in Part I on the lowest line on each medical certificate.

Cause of Death Section

Reporting a Sequence

Part I is designed for the certifier to record the **chronological chain of** events leading to death.

When more than one cause of death is needed in Part I the certifier is requested to report the chain of medical events. A death often results from the combined effect of two (2) or more conditions; that is, one cause may lead to another which in turn leads to a third cause, etc.

The words “**due to, or as a consequence of**” printed between lines, apply to the condition on the lower line. This condition is “**due to**” any condition entered above it.

Ask yourself the following: which out of multiple conditions should be included in the chronological chain; which conditions should be recorded as the **immediate** cause and the **antecedent** cause of death; and lastly, and most importantly, which condition should be recorded as the starting point or **underlying cause**. The certifier, through a review of the medical records, should determine and record a clear and distinct etiological sequence for the deceased.

I. How Many Conditions to Report in a Sequence

It is up to the certifier to decide how many conditions to report of the train of events leading to death. Sometimes certifiers have a difficult time distinguishing between those conditions that should be included in the causal chain and those not in the chain but medically important and relevant. The certifier must strive to achieve a reasonable balance/compromise between providing minimal and providing too much information that adds little value to an understanding of the terminal sequence of events.

Example: Part I has four lines (a), (b), (c), and (d); however, all lines need not be used.

Part I	
Immediate cause of death	(a) Dementia due to, or as a consequence of
Antecedent causes, if any,	(b) Alzheimers Disease due to, or as a consequence of
Underlying cause of death (Stated last)	(c) due to, or as a consequence of
	(d)

Example: The certifier is also not limited to four lines. Additional lines may be necessary to enter the complete sequence of events and the certifier may add lines (e) and even (f) etc. so all conditions related to the death are entered in Part I, one condition to a line.

Part I	
Immediate cause of death	(a) Hypernatremia due to, or as a consequence of
Antecedent causes, if any,	(b) Dehydration due to, or as a consequence of
Underlying cause of death (Stated last)	(c) Not eating or drinking due to, or as a consequence of
	(d) Dementia
	(e) Alzheimers Disease

II. Acceptable Sequence or Highly Improbable Sequence

An “**acceptable sequence**” is when two or more conditions are placed in appropriate order to form a sequence of events. Each condition is an acceptable cause of the one on the line immediately above it, the sequence is both etiologically and pathologically correct, and the condition reported on the lowest line will have caused all the conditions reported on the lines above it.

Example:

Part I	
Immediate cause of death	(a) Esophageal varices due to, or as a consequence of
Antecedent causes, if any,	(b) Portal hypertension due to, or as a consequence of
Underlying cause of death (Stated last)	(c) Liver cirrhosis due to, or as a consequence of
	(d) Hepatitis B

An “**improbable sequence**” refers to two or more conditions reported on successive lines in Part where each condition is not an acceptable cause of the one on the line immediately above it (an unacceptable causal relationship), the sequence is clearly etiologically and pathologically improbable, and the condition reported on the lowest line could not have caused all of the conditions reported on the lines above it.

Example:

Part I	
Immediate cause of death	(a) Hepatitis B due to, or as a consequence of
Antecedent causes, if any,	(b) Liver cirrhosis due to, or as a consequence of
Underlying cause of death (Stated last)	(c) Esophageal varices due to, or as a consequence of
	(d) Portal hypertension

****the sequence is clearly improbable**

Note: A common error or oversight frequently made by a certifier is recording a shopping “**LIST**” of diseases or conditions in Part I. The certifier should strive to record a comprehensive sequence of events in Part I on each medical certificate.

III. Two or More Competing Sequences

At times there may appear to be two or more possible sequences resulting in death (e.g., multiple complex medical conditions in an elderly patient). The certifier must choose and report in Part I the sequence he/she thinks had the greatest impact resulting in the death, and report conditions from the other sequence(s) in Part II. Remember that the certifier is providing his/her best opinion only. Where an episode of health care concerns a number of related conditions, the one that is clearly more severe and demanding of resources than the others should be recorded as the “main condition” in Part I and “other significant conditions” should be recorded in Part II.

Cause of Death Section

Reporting Interval Between Onset and Death (Duration)

Each condition reported should also include information about duration. At the extreme right portion of Part I is the area designated for the certifier to indicate his/her best estimate of the **interval between the onset of a disease or injury and death** (note that the form requests the “approximate interval” between onset & death). This is also sometimes referred to as the **duration** of a condition, disease or injury. Noting the approximate interval between the presumed onset of each condition and the date of death helps the certifying doctor to establish the chain of events that led to the death.

I. Instructions

- Specify or estimate the interval between onset & death for each condition reported.
- Approximate intervals could be recorded (e.g., years, months, days, hours, even minutes or seconds) or, if known, specific intervals could be recorded (e.g., 30 minutes, 4 days, 6 weeks, 27 years, since birth, congenital, acute or chronic, etc.).
- Do not omit intervals. It is important to approximate or enter “**unknown**” rather than leave it blank.
- Durations should **increase progressively** through lines (a) through (d). The cause reported on line (a) should have the **shortest interval** between onset & death and the cause reported on the lowest line should have the **longest interval** between onset & death.

Part I		Approximate interval between onset and death
Immediate cause of death (a)	Upper gastrointestinal hemorrhage <small>due to, or as a consequence of</small>	3 days
Antecedent causes, if any, (b)	Esophageal varices <small>due to, or as a consequence of</small>	2 months
(c)	Liver cirrhosis <small>due to, or as a consequence of</small>	10 years
Underlying cause of death (Stated last) (d)	Alcoholism	30 years

II. Why are Intervals important?

- Cause of death codes for many conditions are **dependent upon duration** (e.g., the code for an MI which occurred within 4 weeks of death is I21.9; whereas the code for an MI which occurred 1 month or more before death is I25.8).
- Certain **conditions originating in the perinatal period** are assigned special codes even though death or morbidity may occur later (e.g., fetus or newborn affected by maternal factors, complications of pregnancy, infections specific to the perinatal period, etc.).
- Congenital conditions** can be identified and coded accordingly if the age and duration are the instructions manuals same.
- The interval between onset & death may also indicate that a death resulted from **the residual effects rather than the active phase of a disease, injury, or poisoning**.

Cause of Death Section

Reporting Other Causes of Death

Organ Failure

Failure of most organs (e.g., renal failure, hepatic failure, cardiac failure) must be due to an underlying disease or condition. If an organ or system failure is listed as a cause of death always report its etiology on the line(s) beneath.

Part I		Approximate interval between onset and death
Immediate cause of death (a) Renal failure <small>due to, or as a consequence of</small>		6 months
Antecedent causes, if any, (b) Hypertension <small>due to, or as a consequence of</small>		many years
(c) _____ <small>due to, or as a consequence of</small>		
Underlying cause of death (Stated last) (d) _____		

Etiology

Provide additional information about the underlying etiology when processes such as the following are reported: abscess, anoxia/hypoxia, anoxic encephalopathy, ascites, aspiration, brain injury, carcinomatosis, dehydration, developmental delay, embolism, hemorrhage, hypotension, infarction, malnutrition, metastases, pleural effusions, seizures, sepsis, shock, wounds (specify type and site), etc.

Part I		Approximate interval between onset and death
Immediate cause of death (a) Multiorgan failure <small>due to, or as a consequence of</small>		2 days
Antecedent causes, if any, (b) Sepsis <small>due to, or as a consequence of</small>		2 weeks
(c) Urinary tract infection <small>due to, or as a consequence of</small>		3 weeks
Underlying cause of death (Stated last) (d) _____		

Note: If the etiology of a process is unknown the certifier is requested to record “**cause unknown**”, or some similar term, so the sequence appears complete.

Alcohol Related Diseases

Clearly indicate the presence of alcohol. Report conditions as due to alcohol, alcohol induced, etc. as many conditions may be alcoholic or non-alcoholic in nature (e.g., cardiomyopathy, delirium, dementia, cirrhosis, hepatitis, liver failure or damage, Laennec’s or Korsakoff’s syndrome, seizures, etc.).

Part I		Approximate interval between onset and death
Immediate cause of death (a) Hepatic encephalopathy <small>due to, or as a consequence of</small>		6 months
Antecedent causes, if any, (b) Liver failure <small>due to, or as a consequence of</small>		5 years
(c) Liver cirrhosis <small>due to, or as a consequence of</small>		15 years
Underlying cause of death (Stated last) (d) Alcohol abuse		40 years

HIV and AIDS

Specify when HIV has progressed to AIDS. Report infectious or inflammatory conditions as “due to” AIDS or HIV. Because of improved treatment, survival after a diagnosis of HIV has become longer, allowing a greater proportion of deaths to result from other causes. The actual cause of death for persons with AIDS may be from causes unrelated to HIV such as cancer or motor vehicle accidents. For these cases, report AIDS, HIV, or HIV positive in Part II as a significant condition which contributed to the death.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a) <i>Pneumocystis carinii pneumonia</i> <small>due to, or as a consequence of</small>		3 weeks
Antecedent causes, if any, (b) <i>AIDS</i> <small>due to, or as a consequence of</small>		4 years
(c) <i>HIV</i> <small>due to, or as a consequence of</small>		17 years
Underlying cause of death (Stated last) (d)		

Note: *HIV positive is not synonymous with HIV and AIDS.*

Newborn or Neonatal Deaths

Newborn categories are provided for infant deaths (less than 28 days of age at time of death). In Part I record a comprehensive sequence of events in ascending causal order. Provide durations for each condition to indicate which conditions may have their origin in the perinatal period even though death or morbidity occurred later. Provide gestation and birth weight as this may prove useful. Indicate if conditions were congenital or acquired.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a) <i>Pulmonary hypoplasia</i> <small>due to, or as a consequence of</small>		3 weeks
Antecedent causes, if any, (b) <i>Congenital diaphragmatic hernia</i> <small>due to, or as a consequence of</small>		since birth
(c)		
Underlying cause of death (Stated last) (d)		

Infant and Childhood Deaths

Categories are provided for infant deaths (less than one (1) year of age at the time of death), childhood deaths (less than 18 years of age at the time of death) and deaths from congenital anomalies. Record a clear sequence of events leading to death. Include durations to indicate conditions which may have their origin in infancy (e.g., infantile scoliosis) or childhood (e.g., childhood asthma) even though death or morbidity occurred later. Indicate if conditions are congenital or acquired and include maternal conditions which may have initiated or affect the sequence that resulted in infant death.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a) <i>Respiratory failure</i> <small>due to, or as a consequence of</small>		hours
Antecedent causes, if any, (b) <i>Pneumonia</i> <small>due to, or as a consequence of</small>		3 days
(c) <i>Spinal muscular atrophy</i> <small>due to, or as a consequence of</small>		6 months
Underlying cause of death (Stated last) (d)		

Medical Assistance in Dying

Medical Assistance in Dying (MAID) is defined in federal legislation as:

- (a) the administering by a medical practitioner (i.e., a physician) or nurse practitioner of a substance to a person, at their request, that causes their death; or
- (b) the prescribing or providing by a medical practitioner or nurse practitioner of a substance to a person, at their request, so that they may self-administer the substance and in doing so cause their own death.

Physicians who provide MAID will notify the coroner of the death and provide the coroner with any information about the facts and circumstances relating to the death as required. If the coroner is of the opinion that the death is to be investigated, the coroner is required to complete and sign the medical certificate. If the coroner is of the opinion that the death does not require an investigation, the physician will complete and sign the medical certificate.

For deaths involving MAID, **the illness, disease, or disability leading to the request for assistance is to be recorded as the underlying cause of death.** This condition will be selected as the cause of death for vital statistics.

Part I		Approximate interval between onset and death
Immediate cause of death (a)	<i>Amyotrophic lateral sclerosis (ALS)</i> <small>due to, or as a consequence of</small>	5 years
Antecedent causes, if any, (b)	 <small>due to, or as a consequence of</small>	
(c)	 <small>due to, or as a consequence of</small>	
Underlying cause of death (Stated last) (d)		

Note: There should be no mention of the injection or ingestion of drugs in the Traumatic or Violent Death section.

Note: All prescribed circumstances as set out in subsections 35(3) of Regulation 1094 of the VSA must be met for the RN(EC) to complete and sign the medical certificate. If any of the criteria do not exist, a physician or coroner must complete the medical certificate.

Late Effects (Sequela)

Certain conditions (e.g., tuberculosis, polio, cerebrovascular and rheumatic diseases, infectious conditions, etc.) should be fully described and its origin stated. Specify if death resulted from the residual effects of the disease rather than the active phase (e.g., active rheumatic heart disease or inactive rheumatic heart disease). Use terms such as healed, history of, old, remote, inactive, arrested, etc. (e.g., old polio, healed MI, remote CVA, etc.). Duration itself does not signify sequela.

Part I		Approximate interval between onset and death
Immediate cause of death (a)	<i>Respiratory failure</i> <small>due to, or as a consequence of</small>	hours
Antecedent causes, if any, (b)	<i>Pneumonia</i> <small>due to, or as a consequence of</small>	3 days
(c)	<i>Lung damage</i> <small>due to, or as a consequence of</small>	years
Underlying cause of death (Stated last) (d)	<i>History of Pulmonary Tuberculosis</i>	40 years

Neoplasms

It is important to include **morphology, behavior, and site** when a neoplasm is the underlying cause of death. A neoplasm can be malignant (primary or secondary), in situ, benign, or of uncertain or unknown behaviour (tumors).

Malignant Neoplasms

When a malignant neoplasm of a site is reported it is important for the certifier to specify it as the organ or anatomic location first affected or a secondary site. The organ or anatomic location first affected is important for vital statistics.

Use the term primary to specify the organ, anatomic location, or part FIRST affected. This avoids confusion when reporting multiple sites. When the certifier is vague in reporting the “primary site” every effort is made to obtain the primary site.

Part I	I	Approximate interval between onset and death
Immediate cause of death (a) <i>due to, or as a consequence of</i>	Multiple metastases	6 months
Antecedent causes, if any, (b) <i>due to, or as a consequence of</i>	Primary non small cell lung carcinoma	5 years
(c) <i>due to, or as a consequence of</i>		
Underlying cause of death (Stated last) (d)		

Use the term **primary unknown** or some other similar expression where there was no clear indication of the organ or anatomic part FIRST affected.

Part I	I	Approximate interval between onset and death
Immediate cause of death (a) <i>due to, or as a consequence of</i>	Metastatic liver cancer	6 month
Antecedent causes, if any, (b) <i>due to, or as a consequence of</i>	Primary unknown	1 year
(c) <i>due to, or as a consequence of</i>		
Underlying cause of death (Stated last) (d)		

Use the term **secondary, metastases , spread, carcinomatosis**, etc. to indicate a secondary neoplasm; **indicate the primary site as well.**

Part I	I	Approximate interval between onset and death
Immediate cause of death (a) <i>due to, or as a consequence of</i>	Lymph node metastases	months
Antecedent causes, if any, (b) <i>due to, or as a consequence of</i>	Primary adenocarcinoma of prostate	10 years
(c) <i>due to, or as a consequence of</i>		
Underlying cause of death (Stated last) (d)		

The term **metastatic** can be used in two ways: i) meaning a secondary neoplasm from a primary elsewhere, and ii) denoting a primary that has given rise to metastases. To avoid confusion, use the term primary to specify the organ or anatomic part FIRST affected as well.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a) Metastatic liver cancer <small>due to, or as a consequence of</small>		9 months
Antecedent causes, if any, (b) Metastatic breast cancer (primary) <small>due to, or as a consequence of</small>		4 years
(c) <small>due to, or as a consequence of</small>		
Underlying cause of death (Stated last) (d)		

Show the presence of **more than one primary** neoplasm by recording the primary cancer responsible for the death in Part I and reporting any other primary cancers which may have contributed to the death in Part II. Use the term “primary” with each entry to avoid confusion or ambiguity.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a) Primary bladder cancer <small>due to, or as a consequence of</small>		6 month
Antecedent causes, if any, (b) <small>due to, or as a consequence of</small>		
(c) <small>due to, or as a consequence of</small>		
Underlying cause of death (Stated last) (d)		
II		
Part II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I Primary prostate cancer		10 year

Tumors (Neoplasms of uncertain or unknown behaviour)

The term tumor is commonly used as a synonym for a neoplasm; however, a tumor is not considered synonymous with cancer. As tumors may be cancerous (malignant) or noncancerous (benign) it is important to specify the morphological nature of the tumor or to report “not yet determined”, “not investigated”, or some other similar expression if its nature is unknown or has not yet been identified (e.g., brain tumor NYD). Clearly indicate if a tumor is malignant as well as reporting if it is the primary site or a secondary site (e.g., metastatic neuroendocrine tumor of pancreas; malignant brain tumor, probably secondary).

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a) Terminal Delirium <small>due to, or as a consequence of</small>		48 hours
Antecedent causes, if any, (b) Acute Kidney injury <small>due to, or as a consequence of</small>		6 weeks
(c) Bilateral hydronephrosis <small>due to, or as a consequence of</small>		6 weeks
Underlying cause of death (Stated last) (d) Bladder tumors (most likely malignant)		4 years

Benign Neoplasms

Report benign tumors such as a lipoma, chondroma, adenoma, teratoma, etc. Benign tumors usually lack the ability to invade neighboring tissue or metastasize and therefore are categorized non-cancerous. It is important to specify morphology and site (e.g., lipoma of face).

Mass and Lesions

The definition of a mass and/or lesion is very broad, and the varieties are virtually endless. These terms are therefore very nonspecific, and an attempt must be made to specify the type and/or nature of the mass or lesion being reported. If the exact etiology of a mass or lesion is unknown, state this (e.g., lung lesions, investigation declined). If the mass or lesion was (possibly) malignant specify this (e.g., brain lesions, probably malignant), and attempt to specify the primary site as well.

Part I		Approximate interval between onset and death
Immediate cause of death (a)	Sepsis <small>due to, or as a consequence of</small>	2 days
Antecedent causes, if any, (b)	Pneumonia <small>due to, or as a consequence of</small>	1 week
(c)	Lung Mass (not investigated) <small>due to, or as a consequence of</small>	2 weeks
Underlying cause of death (Stated last) (d)		

Leukemia and Lymphoma

Report malignant neoplasms of lymphoid, hematopoietic and related tissue by morphological type as they are not categorized by site (e.g., B cell lymphoma, plasma cell leukemia, chronic lymphocytic leukemia, etc.).

Cause of Death Section

Completing Part II

Record in Part II other significant conditions which unfavorably influenced the course of the morbid process and thus contributed to the fatal outcome. These conditions were not part of the sequence reported in Part I and would be conditions that pre-existed or co-existed prior to death. In this section, more than one condition can be reported per line.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a) <i>due to, or as a consequence of</i>	Cerebrovascular accident	
Antecedent causes, if any, (b) <i>due to, or as a consequence of</i>	Cerebral hemorrhage	
	(c) Cerebral arteriosclerosis	1 week
Underlying cause of death (Stated last) (d)		1 week
		years
II		
Part II	Hypercholesterolemia (years), CVA (5 years)	
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	Smoking (50 years)	

Reporting Interval between Onset and Death (Duration)

Duration (approximate) is required for each condition reported in Part II. It is important to enter an (approximate) interval or to enter “unknown” rather than leave this item blank. Do not record one duration (e.g., years) to encompass a whole section. This is incorrect.

Reporting Multiple Conditions

Record only those conditions that you believe were contributory to death in Part II. The purpose is not to include the patient’s entire medical history as it is of no benefit to record numerous or multiple medical diagnoses that have no direct relationship to the death, have not contributed to the death, or were not significant to the death. Record the most significant condition first.

Any disease, abnormality, injury, or late effects of poisoning, believed to have adversely affected the decedent should be reported in Part II, including:

- use of alcohol and/or other substances; especially if ingestion, intoxication, toxicity, etc., contributed to death;
- history of drug abuse, alcohol abuse, addiction, etc.;
- smoking history; especially for ischemic heart disease, cancers, etc.;
- environmental factors, such as exposure to toxic fumes, history of working in the mining industry, etc.;
- recent pregnancy, if believed to have contributed to the death;
- effects of remote injury or poisoning;
- surgical information, if applicable.

Note: A common error or oversight made by a certifier is recording the underlying disease or condition (starting point) in Part II. The certifier is requested to record the underlying disease (starting point) on the lowest used line in Part I on each medical certificate completed and signed.

Pregnancy Related Maternal Death

Maternal death is defined by the WHO as “the death of a woman while pregnant or within 42 days of termination of pregnancy, irrespective of the duration and site of the pregnancy, from any cause related to or aggravated by the pregnancy or its management but not from accidental causes”.

Notifying the Coroner

A pregnancy-related maternal death, regardless of cause or whether directly related to the pregnancy, should be reported to the coroner. This includes a death following an abortion, therapeutic or otherwise, a death in the post-partum period and includes the death of a pregnant woman from causes unrelated to her pregnancy.

Where a maternal death has been reported to the coroner and has been accepted for investigation, the coroner will complete and sign the medical certificate and where a medical certificate has already been completed by another certifier, the coroner will replace it with a revised medical certificate. If, after consultation, the coroner does not accept the case, the physician will be responsible for completing and signing the medical certificate.

The certifier is responsible for completing section 12 for a pregnancy related maternal death.

Example:

Part I		Approximate interval between onset and death
Immediate cause of death (a).....	Subarachnoid hemorrhage	minutes
due to, or as a consequence of		
Antecedent causes, if any, (b).....	Ruptured berry aneurysm	minutes
due to, or as a consequence of		
(c).....		
due to, or as a consequence of		
Underlying cause of death (Stated last) (d).....		

12. If deceased was a female, did the death occur:	<input type="checkbox"/> during pregnancy	<input checked="" type="checkbox"/> within 42 days following the end of pregnancy*	<input type="checkbox"/> between 43 days and 365 days following the end of pregnancy*	<input type="checkbox"/> not pregnant within the past year	<input type="checkbox"/> unknown if pregnant within the past year
*(induced abortion, miscarriage, ectopic pregnancy, stillbirth, or live birth)					

Dead on Arrival at the Hospital

13. Was the deceased dead on arrival at the hospital?	<input type="checkbox"/> Yes	<input type="checkbox"/> No
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Determine if the deceased was dead on arrival at the hospital and check off the appropriate box.

Note: If the deceased was dead on arrival at the hospital, ensure the hospital is reported as the place of death.

Surgical and Medical Care

i. Surgical and Medical Procedures

If the deceased had undergone a surgical or a medical procedure within twenty-eight (28) days of death or if one of the causes of death was a complication of surgery (regardless of date of surgery) the certifier is required to complete sections 14, 15, and 16.

Complications may either be general in nature or specific to the type of surgery performed including abnormal reactions, misadventures and adverse effects that occur as a result of or during the surgical or medical procedure. It is important to record **the underlying medical condition that necessitated the surgical or medical procedure.**

Example:

- (a) record any complications and describe them as “postoperative”;
- (b) record the surgical or medical procedure;
- (c) record the condition necessitating the surgery or medical procedure;
- Box 14 - check ☒ Yes, a surgical procedure occurred within 28 days of death;
- Box 15 - record the date of surgery (e.g., 2019/01/15);
- Box 16 - record the medical or surgical procedure by name, the reason for surgery and operative findings.

11. Part I Immediate cause of death (a) <u>Postoperative sepsis</u> <small>due to, or as a consequence of</small> Antecedent causes, if any, (b) <u>Cholecystectomy</u> <small>due to, or as a consequence of</small> (c) <u>Chronic Cholecystitis</u> <small>due to, or as a consequence of</small> Underlying cause of death (Stated last) (d) _____		Approximate interval between onset and death <u>hours</u> <u>5 days</u> <u>years</u>
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I <u>Uremia and Renal failure (10 years)</u> <u>Jaundice (weeks)</u>		
12. If deceased was a female, did the death occur: <input type="checkbox"/> during pregnancy <input type="checkbox"/> within 42 days following the end of pregnancy* <input type="checkbox"/> between 43 days and 365 days following the end of pregnancy* <input type="checkbox"/> not pregnant within the past year <input type="checkbox"/> unknown if pregnant within the past year <small>*(induced abortion, miscarriage, ectopic pregnancy, stillbirth, or live birth)</small>		
13. Was the deceased dead on arrival at the hospital? <input type="checkbox"/> Yes <input type="checkbox"/> No		14. Was there a surgical procedure within 28 days of death? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
		15. Date of surgery (mm/dd/yyyy) 2019/01/15
16. Reason for surgery and operative findings Removed gallstones		

Note: Complications of surgery may be current or late effects. It is important that the condition which necessitated a surgical or medical procedure is reported.

Note: If a surgical procedure was performed due to an injury or fracture (e.g., ORIF femur fracture) the mechanism of the fracture should be reported (e.g., fall, MVA, etc.) and the case would be reported to a coroner.

ii. An Error or Accident in Surgical or Medical Care

If the deceased had **undergone a surgical or a medical procedure within twenty-eight (28) days** which resulted in an error or accident in medical care the certifier is required to complete sections 14, 15, and 16 on the medical certificate.

In accordance with the WHO guidelines, **any error or accident which occurs during medical or surgical care is referred to as a “misadventure”**. This may include intraoperative hemorrhage or rupture of a site; a cut, perforation, puncture or laceration of a site during surgery; a burn from local application of heat or irradiation; serum hepatitis from blood transfusion and fractures of the ribs from CPR or Heimlich maneuver. When an error or accident in medical care is reported on the medical certificate, it is important **to record the underlying medical condition which necessitated the surgical or medical procedure**.

Notifying the Coroner - If the circumstances surrounding a death suggest that an error or accident in medical care may be responsible or a contributing factor, refer the case to a coroner and the coroner will decide whether an investigation is required. If, after consultation, the coroner does not accept the case, the physician will be the person responsible for completing and signing the medical certificate. Where a death has been reported to the coroner and has been accepted for investigation, the coroner will have the legal obligation to complete and sign the medical certificate. Where a medical certificate has already been completed by another certifier, the coroner will replace it with a revised medical certificate.

Example:

- (a) record any complications;
- (b) record the error or accident which occurred during the surgery or procedure;
- (c) record the surgery or procedure by name (e.g., organ transplant, resection, excision, reconstruction, amputation, bypass/graft, mastectomy, cholecystectomy, etc.);
- (d) record the condition which necessitated the surgical or medical procedure.
 - Box 14 - ☒ Yes;
 - Box 15 - Record the date of surgical or medical or procedure;
 - Box 16 - Record the condition which necessitated the surgical or medical procedure.

11. Part I		Approximate interval between onset and death
Immediate cause of death (a)	Peritonitis <small>due to, or as a consequence of</small>	hours
Antecedent causes, if any, (b)	Perforated bowel <small>due to, or as a consequence of</small>	1 day
(c)	Colonoscopy <small>due to, or as a consequence of</small>	2 days
Underlying cause of death (Stated last) (d)	Primary small intestine adenocarcinoma	8 months
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		
Lymph node metastases (mths)		
Crohns disease (yrs)		
12. If deceased was a female, did the death occur: <input type="checkbox"/> during pregnancy <input type="checkbox"/> within 42 days following the end of pregnancy* <input type="checkbox"/> between 43 days and 365 days following the end of pregnancy* <input type="checkbox"/> not pregnant within the past year <input type="checkbox"/> unknown if pregnant within the past year <small>*(induced abortion, miscarriage, ectopic pregnancy, stillbirth, or live birth)</small>		
13. Was the deceased dead on arrival at the hospital? <input type="checkbox"/> Yes <input type="checkbox"/> No	14. Was there a surgical procedure within 28 days of death? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	15. Date of surgery (yyyy/mm/dd) Jan 5, 2019
16. Condition necessitating surgery. Perforated bowel during colonoscopy for staging		

Note: Commonly recognized complications of medical or surgical procedures may not require a coroner's investigation and would be categorized as natural causes.

iii. Adverse Effect of Drug Therapy

A serious adverse drug reaction is defined as a noxious and unintended response to a drug, medicament or biological substance that occurs at any dose in therapeutic use and requires inpatient hospitalization or prolongation of existing hospitalization, results in persistent or significant disability or incapacity, is life threatening or results in death.

When an adverse effect of drug therapy is reported as a cause of death on the medical certificate, it is important to record **the underlying medical condition which necessitated the drug therapy**.

Example:

Record a sequence of events and the condition for which the drug was administered.

- (a) record **the complication(s)** or adverse effect which occurred as a result of drug therapy (e.g., respiratory arrest, pulmonary embolism; hemorrhage, cerebral anoxia, gastric ulceration, acute renal failure, etc.). You could also describe the complication as “drug induced” or a “drug reaction”;
- (b) record **the drug given** (specify the name or type of drug);
- (c) record **the underlying medical condition** for which the drug was administered.

Provide approximate interval between the onset & death for each condition reported.

Part I		Approximate interval between onset and death
Immediate cause of death (a) <i>Intracerebral hemorrhage</i>	<i>due to, or as a consequence of</i>	<i>hours</i>
Antecedent causes, if any, (b) <i>Warfarin</i>	<i>due to, or as a consequence of</i>	<i>years</i>
(c) <i>Atrial fibrillation</i>	<i>due to, or as a consequence of</i>	<i>10 years</i>
Underlying cause of death (Stated last) (d)		

Note: The certifier does not have to record drug therapy (e.g., anticoagulation, chemotherapy, etc.) on the medical certificate when there are no complications to report.

Autopsy Particulars

Autopsy particulars	17. Autopsy being held?	18. Does the cause of death stated above take account of autopsy findings?	19. May further information relating to the cause of death be available later?
	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

It should be noted that this is a **three-part question**; the second and third part is dependent on the answer to the first part. Information from this section is collected for statistical purposes.

Autopsy being held?

Autopsy particulars	17. Autopsy being held?	18. Does the cause of death stated above take account of autopsy findings?	19. May further information relating to the cause of death be available later?
	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input type="checkbox"/> No

- If an autopsy is not being held, **check No**. No further entries are required in this section.
- If an autopsy is needed, **check Yes** and **proceed to the next question**.

Does the cause of death stated above take into account autopsy findings?

- If autopsy findings are not available **check No** and **proceed to the final question**.
- If autopsy findings are available **check Yes** and **record the autopsy findings** in the cause of death section and proceed to the final question.

May further information relating to the cause of death be available later?

- If further information is not anticipated regarding the cause of death **check No**.
- If further information (e.g., toxicology results, autopsy, or biopsy results, etc.) may be available later **check Yes**.

Autopsy particulars	17. Autopsy being held?	18. Does the cause of death stated above take account of autopsy findings?	19. May further information relating to the cause of death be available later?
	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

Note: It is the certifying **physician's responsibility** to submit a supplemental medical certificate in cases where autopsy findings reveal the cause of death to be different from the one originally reported. It is the certifying **coroner's responsibility** to submit a supplemental medical certificate in cases where autopsy findings and/or toxicology reveal the cause of death to be different from the one originally reported or if a change to manner of death has been determined.

Further Information or Cause of Death Clarification

The certifier who completed the medical certificate may be contacted by the Office of the Registrar General to seek clarification or further information regarding the cause(s) of death reported. This is one of the most important ways to improve the quality of cause-of-death data.

The purpose of an inquiry is two-fold: (1) to obtain information needed to properly code and classify the underlying cause of death (starting point) and (2) to provide guidance to the certifier on the proper method of completing medical certificates. If the cause of death is substantially changed as a result of an inquiry, the certifier will be requested to complete a revised medical certificate.

Reporting Do's and Don'ts

Do's

- ✓ Use only medical certificates supplied by the Office of the Registrar General. Do not photocopy or create your own medical certificate.
- ✓ Record all information in a neat and legible manner.
- ✓ Record a comprehensive sequence of events in Part I.
- ✓ Record only one condition per line in Part I.
- ✓ Record duration for each condition reported in Part I and in Part II.
- ✓ Record the underlying cause (starting point) on the lowest line in Part I.
- ✓ Record the primary site of a neoplasm (e.g., the organ or anatomic part first affected).
- ✓ Correct minor errors by striking through the error and initialing.
- ✓ Correct major errors or multiple errors by completing a new medical certificate.

Don'ts

- ✗ Don't record more than one condition per line.
- ✗ Don't record a diagnostic list of conditions in Part I (record a sequence).
- ✗ Don't record conditions out of sequential order in Part I (record a sequence).
- ✗ Don't record multiple sequences in Part I (record one comprehensive sequence).
- ✗ Don't record the underlying cause (starting point) in Part II.
- ✗ Don't record all possible diagnoses in Part II, record only significant conditions which contributed to the death.
- ✗ Don't record superfluous information (e.g., palliative care, oxygen-dependent, DNR).
- ✗ Don't use medical abbreviations. Some abbreviations can have multiple meanings and may be misinterpreted (e.g., "ARF" could denote "acute respiratory failure" or "acute renal failure").
- ✗ Don't use terms such as death, decomposition, multiple medical problems, palliative care, noncompliance, sudden death, etc. These terms are not considered disease conditions and are not assigned cause of death codes for vital statistics.
- ✗ Don't record "N/A" or slashes in sections that are not applicable to your case. Record information, check a box, or leave blank.

Examples of Certification (Natural)

Remember to write legibly.

It is essential that the entries on the medical certificate can be clearly read.

Example 1

A 68-year-old patient was diagnosed with non small cell lung carcinoma which has spread to her bones, abdomen and pleura. She has a 45-year history of smoking two (2) packs per day, a five (5) year history of chronic obstructive pulmonary disease with frequent bouts of pneumonia and bronchitis.

I		Approximate interval between onset and death
Part I Immediate cause of death (a) Pneumonia <small>due to, or as a consequence of</small>		1 week
Antecedent causes, if any, (b) Bone, abdomen, pleura metastases <small>due to, or as a consequence of</small>		4 months
(c) Primary non small cell lung carcinoma <small>due to, or as a consequence of</small>		2 years
Underlying cause of death (Stated last) (d)		
II		
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	Smoking COPD	45 years 5 years

Example 2

A 79-year-old patient has suffered a pathological hip fracture four months previous. Since the fracture her health declined to the point that it rendered her bedridden and immobile. She has a long history of osteoporosis.

I		Approximate interval between onset and death
Part I Immediate cause of death (a) Pneumonia <small>due to, or as a consequence of</small>		6 days
Antecedent causes, if any, (b) Immobility <small>due to, or as a consequence of</small>		4 months
(c) Pathological hip fracture <small>due to, or as a consequence of</small>		4 months
Underlying cause of death (Stated last) (d) Osteoporosis		30 years
II		
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	non healing sacral ulcers	months

Example 3

A 52-year-old patient suffering from end-stage liver failure dies. He has a well-known history of alcoholism and substance abuse, was diagnosed with cirrhosis two (2) years ago and Hepatitis B ten (10) years ago.

I		Approximate interval between onset and death
Part I Immediate cause of death (a) End stage liver failure <small>due to, or as a consequence of</small>		2 weeks
Antecedent causes, if any, (b) Cirrhosis of liver <small>due to, or as a consequence of</small>		2 years
(c) Hepatitis B <small>due to, or as a consequence of</small>		10 years
Underlying cause of death (Stated last) (d)		
II		
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	Alcoholism Substance abuse	30 years 10 years

Example 4

An 80-year-old patient who was diagnosed with Alzheimer's disease seven (7) years ago is undergoing palliative care in a long-term care facility. One of the hallmarks of her dementia is her refusal to eat, which is especially pronounced in the last month. All attempts to feed her have failed and she dies of cardiac arrest.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a)	Malnutrition <small>due to, or as a consequence of</small>	2 weeks
Antecedent causes, if any, (b)	Refused to eat and drink <small>due to, or as a consequence of</small>	1 month
(c)	Dementia Alzheimer's type <small>due to, or as a consequence of</small>	7 years
Underlying cause of death (Stated last) (d)		
II		
Part II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	Hypertension	45 years
	Congestive heart failure	10 years

Note: The terms palliative or palliative care are not a cause of death and should not be reported; cardiac arrest is a mode of death and should not be reported.

Example 5

This example shows an accurate and complete cause-of-death statement which provides comprehensive information and is of great potential use for research, statistics, public health decision-making and policy setting.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a)	Gram-negative pseudomonas sepsis <small>due to, or as a consequence of</small>	4 days
Antecedent causes, if any, (b)	Bladder infection <small>due to, or as a consequence of</small>	2 weeks
(c)	Indwelling catheter for neurogenic bladder <small>due to, or as a consequence of</small>	5 years
Underlying cause of death (Stated last) (d)	Multiple Sclerosis	35 years
II		
Part II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	Depression (5 yrs), pressure sore (2 yrs)	
	Dysphagia (months)	

Example 6

Part II may be used to report "Other significant conditions" that co-existed or pre-existed and contributed to death. Careful thought should be given to listing in order of significance as this may influence the interpretation of cause of death in Part I.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a)	Gangrene left lower leg <small>due to, or as a consequence of</small>	6 weeks
Antecedent causes, if any, (b)	Peripheral Vascular Disease <small>due to, or as a consequence of</small>	10 years
(c)	Type II Diabetes Mellitus <small>due to, or as a consequence of</small>	25 years
Underlying cause of death (Stated last) (d)		
II		
Part II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	Smoking (50 yrs), Hypertension (20 yrs)	
	Myocardial Infarction (2 yrs)	

Example 7

A diabetic patient, who had been under insulin control for many years, develops ischemic heart disease and dies from a myocardial infarction. The following illustrates the importance of accurately stating the sequence of morbid conditions in order to allow selection of the “underlying” cause of death for vital statistics. Each of the following certifications is possible and would be acceptable:

- i. If the certifier considered that the heart condition resulted from the long-standing diabetes, the sequence would be:

Part I		Approximate interval between onset and death
Immediate cause of death (a)	Myocardial infarction	1 hour
Antecedent causes, if any, (b) Chronic Ischemic Heart Disease		5 years
(c) Type II Diabetes Mellitus		25 years
Underlying cause of death (Stated last) (d)		
Part II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		

- ii. If the certifier considered that the heart condition developed independently of the diabetes, the certification would be:

Part I		Approximate interval between onset and death
Immediate cause of death (a)	Myocardial infarction	1 hour
Antecedent causes, if any, (b) Chronic Ischemic Heart Disease		5 years
(c)		
Underlying cause of death (Stated last) (d)		
Part II		
Type II Diabetes Mellitus		25 years
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		

- iii. If the patient had instead died from some other expected complication of the diabetes, such as nephropathy, the heart condition playing only a subsidiary part in the death, the physician being uncertain that it arose from the diabetes at all, the sequence would be:

Part I		Approximate interval between onset and death
Immediate cause of death (a)	Acute renal failure	1 week
Antecedent causes, if any, (b) Nephropathy		4 years
(c) Type II Diabetes Mellitus		25 years
Underlying cause of death (Stated last) (d)		
Part II		
Chronic Ischemic Heart Disease		5 years
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		

Example 8

The medical certificate below has **NOT** been completed according to the instructions in this Handbook.

I		Approximate interval between onset and death
Part I		
Immediate cause of death (a)	Prostate cancer <small>due to, or as a consequence of</small>	Years
Antecedent causes, if any, (b)	Dementia <small>due to, or as a consequence of</small>	Years
	(c) Diabetes <small>due to, or as a consequence of</small>	Years
Underlying cause of death (Stated last) (d)	Renal failure	Years
II		
Part II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I	HTN, AF, CHF, Smoker, COPD, Emphysema, Breast Cancer PVD, OA, Hypothyroid, Obesity, Mitral & Aortic Insufficiency	

- ✗ A common error or oversight frequently made by a certifier are recording a shopping “LIST” of diseases or conditions in Part I and Part II. This is incorrect.

Please note:

- The causes reported in Part I should form a comprehensive sequence of conditions which is pathologically and etiologically correct.
- The causes reported in Part II should be conditions which unfavorably influenced the course of the morbid process and thus contributed to the fatal outcome.
- Duration (approximate) is required for each condition reported in Part I and in Part II.

Traumatic or Violent Death (Non-natural)

General

The “**cause of death**” will be either attributed to:

- an **internal cause** (natural disease process)
- an **external cause** (non-natural force or agent)

If a death appears to be the result of an **external cause** refer the case to a coroner and the coroner will decide whether an investigation is required.

- If, after consultation, the coroner does not accept the case, the physician will be the person responsible for completing and signing the medical certificate.
- If the coroner accepts the case, the coroner will be the person responsible for completing and signing the medical certificate.

****Any person who is not a coroner shall consult with a coroner before completing this section****

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify)	21. Place of injury (e.g. home, farm, highway, etc.)	22. Date of injury (yyyy/mm/dd)
	23. How did injury occur? (describe circumstances)		

The Traumatic or Violent Death section is to be **completed exclusively for deaths that are a result of an external cause**. When an injury or poisoning has been determined to be the primary cause of the death and is recorded in Part I the Traumatic or Violent Death section provides a specific space for recording pertinent information concerning the external cause of the injury or poisoning. The certifier is required to complete the entire section. This information is used to assign comprehensive cause of death codes and this data is collected for statistical purposes.

Note: If the coroner has determined that an injury or poisoning was not causally related or contributory to the death, the certifier should leave it off the medical certificate completely.

Note: For example, a person who sustained a fractured hip in 2010, had a near-full recovery with good function but still required a mobility aid and then died of coronary artery disease in 2012. The fractured hip should not be included on the medical certificate because it had no direct contribution to the underlying cause of death.

Note: Refer to **Reporting a Death to the Coroner** for further explanation on the requirements for reporting a death to a coroner as mandated by Section 10 of the Coroners Act. If uncertain, discuss the case with a coroner before proceeding.

Note: It is important to note that when an injury or poisoning has been recorded in Part I and the Traumatic or Violent Death section has not been completed by the coroner, the manner of death will always be regarded by medical coders as **accidental** (rather than suicide or homicide) until further information is supplied.

Deaths Involving More Than One External Cause

When more than one external cause has occurred, report on the medical certificate each cause and the order in which they occurred. If known, indicate that one of the external causes led to the condition that terminated in death. It is important that certifiers carefully consider the order of the recorded external causes as this will affect how the medical coder interprets and assigns the most specific external cause code. A clear and careful delineation of events leading to death ensures that the intent of the certifier is understood (e.g., drowning from hypothermia from fall out of canoe).

Deaths Involving Competing Manners (Natural & Non-Natural)

For deaths where the certifier cannot make a determination between a natural sequence and an external cause, the terms “unknown”, “or” or some similar expression could be used (e.g., subdural hematoma (cause unknown) or subdural hematoma “due to” anticoagulation or fall). Serious consideration should be given to choosing the most likely cause and if the certifier is not certain, the Traumatic or Violent Death section should be left blank.

No Definitive Anatomic or Toxicological Cause Identified

In some circumstances the autopsy findings and/or toxicology results are negative or unclear and a full investigation still does not allow a definitive conclusion for cause of death. In these cases, the cause should be stated in Part I on line (a) as “**No definitive anatomic or toxicological cause identified**” or some similar term. You are not required to report further conditions in Part II or complete the Traumatic or Violent Death section.

Note: The Traumatic or Violent Death section is to be used exclusively for deaths that are **completely non-natural**. It should be noted that in this section “undetermined” is not synonymous with “unknown” (per WHO definition).

Note: In a traumatic or violent death the injury or poisoning is reported in Part I and the external cause of the injury or poisoning is reported in the Traumatic or Violent Death section.

Definitions of Manner of Death (per ICD-10 Volume 1 Tabular List)

The external cause of an injury or poisoning may be classified as one of the following **Manners of Death**:

Accident	Homicide	Suicide	Undetermined*
<ul style="list-style-type: none"> • Injury or poisoning due to an occurrence, incident or event happening in an unexpected or unintentional manner without foresight. 	<ul style="list-style-type: none"> • Injury or poisoning inflicted by another person with intent to injure or kill, by any means. 	<ul style="list-style-type: none"> • Purposely self-inflicted injury or poisoning. 	<ul style="list-style-type: none"> • When an investigation has <u>not</u> determined whether an injury or poisoning sustained was by accident, purposely self-inflicted or homicidal

Note: *Undetermined includes; if unable to determine whether accidental or intentional; whether accidentally or purposely inflicted; whether or not with intent to injure or kill; and stated as undetermined circumstances or an event of undetermined intent.

Box 20. Accident, suicide, homicide or undetermined (specify)

Record the manner of death which best describes the external cause of the injury or poisoning reported in Part I. Please note that “natural” is not a manner of death to be included in this section. If the manner of death cannot be determined, the certifier should indicate “undetermined” as this can be changed later when/if determined.

Box 21. Place of Injury

Record the appropriate designation or category of the place where the injury or poisoning occurred. The place of injury or poisoning designation recorded should clarify where the incident occurred, and the certifier should be specific. Due to potential privacy issues, do not enter the name of a company, firm or organization (e.g., use hotel for Days Inn). Avoid vague references such as urban outdoors, public place, etc.

Box 22. Date of Injury

Record the exact month, day and year that the injury or poisoning occurred (e.g., 2019/01/27). The date of injury or poisoning may not necessarily be the same as the date of death if there was a survival interval and may include past and/or present events. Efforts should be made to estimate a date if remote in time instead of leaving the space blank.

Box 23. How did the Injury Occur?

Record a detailed description of the external cause of the injury or poisoning reported in Part I. A brief description of the external cause may have been reported in Part I, however as space is limited, it may be more effective to describe the circumstances in a succinct manner using this larger section. Use precise statements to describe concisely the circumstances of death using enough detail for clarity. If “MVC” is reported in Part I with the injury then specify here “Driver of car, lost control and struck a tree” to enhance statistical information.

Detail Required for Descriptions of External Cause

The ICD External Causes of Injury Index provides a double axis of indexing which includes a description of the circumstances and the agent involved (e.g., fall involving a bed, MVA involving a car, overdose involving cocaine, etc.). The following are examples of the amount of detail required for a comprehensive statement:

Description	Agent Involved
Asphyxia Suffocation Choking	Specify threats to breathing as choking on vomit, food, foreign body etc.; asphyxia or suffocation by plastic bag, bed, blankets, overlay, smothering, positional, sexual, etc.
Bitten	Specify the animal, mammal, insect (e.g., snakes, lizard, spider, scorpion, hornet, wasp, bees, etc.,) and if non-venomous or venomous, specify if bite by a person.
Burn	Specify from fire (see fire, flames and smoke) or hot substance such as drinks, food, fats and cooking oils, steam, vapors, hot household appliances, radiators, pipes, etc.
Drowning	Specify drowning in bathtub, pool, lake, river or stream; specify whether deceased fell or jumped into water; specify if from a MV, boat, plane, etc.
Electrocution	Specify by transmission or power lines, domestic wiring, welding, etc.
Explosion	Specify from boiler, aerosol, air tank, tire, pipe, hose, gas, propane, fireworks, etc., specify if subsequent fire.
Exposure	Specify from cold weather or heat, etc.
Fall	Specify falls as slip, trip or stumble; on ice or snow; from wheelchair, bed, chair or other furniture; from a building, ladder, scaffolding, balcony, bridge or tree; on, up or down stairs; from skiing, skateboarding, skating, etc.
Firearm	Specify type as rifle, shotgun, handgun, pellet, BB, air gun, etc.
Fire Flames	Specify fire in home, other building or outside; from stove, brush fire, flammable material, etc.
Machinery	Specify types of machinery as household, recreational, agricultural, industrial, powered or non-powered.
Poisoning Toxicity Overdose	Specify the drug, alcohol, solvent, gas, vapor, pesticide, chemical, noxious substance, etc. Poisoning includes toxicity, intoxication, ingestion and overdose.
Stabbing Cutting Laceration	Specify by glass, knife, dagger, hand tools, lawnmower, etc.
Starvation	Specify lack of food, water, deprivation, self-imposed (neglect) or voluntary; if from a medical condition, disease, neoplasm, neglect or abandonment.
Transport Accident	<ul style="list-style-type: none"> ➤ Air - Specify <u>type</u> of aircraft and describe the circumstances. ➤ Land - Specify the <u>type</u> of land transport, <u>designation</u> (e.g., driver, passenger, pedestrian, etc.) and describe the circumstances. ➤ Water - Specify <u>type</u> of water transport and describe the circumstance.

Examples of Certification (Non Natural)

The Traumatic or Violent Death section must be completed by the investigating coroner if an injury or poisoning is reported in the cause of death section. Under current WHO coding rules, deaths due to an external cause that are unspecified as to whether accident, suicide, homicide or of undetermined intent (e.g., the section was not completed) are classified as accident until further information is provided.

Transport Accidents (land, water and air)

A transport accident is any accident involving a device designed primarily for, or being used at the time primarily for, conveying persons or goods from one place to another on land, on water or in the air (includes any object being towed at the time). Under current WHO coding rules and guidelines, the vehicle of which the injured person is an occupant is seen as the most important factor to identify for prevention purposes.



Land Transport Accidents

1. Specify type of vehicle(s) involved:

- car (*jeep, minivan, SUV, etc.*)
- pick-up truck or van
- heavy transport vehicle (*dump, fire or tow truck, semi, tractor trailer, etc.*)
- bus (*occupant, boarding/alighting*)
- animal-drawn vehicle or animal rider
- railway train
- streetcar
- industrial, agriculture or construction vehicle
- all-terrain vehicle (*ATV, dirt bike, snowmobile, golf cart, etc.*)
- pedestrian
- bicycle (*struck by (specify vehicle)*)

2. Specify designation as driver, passenger, or pedestrian.

3. Specify circumstance as ran off road, collision with a vehicle (specify vehicle), struck an object such as tree, guardrail, pole, bridge, etc., overturning, ran off road, lost control, etc.

4. Specify place of injury as either occurring on the highway, street or road (traffic), or off the highway such as residence, parking lot, etc. (non traffic).

11. Part I		Approximate interval between onset and death	
Immediate cause of death (a)	Massive brain injury <small>due to, or as a consequence of</small>	5 days	
Antecedent causes, if any, (b)	Basal skull fracture <small>due to, or as a consequence of</small>	5 days	
(c)	Blunt force craniocerebral trauma <small>due to, or as a consequence of</small>	5 days	
Underlying cause of death (Stated last) (d)			
Part II			
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I			

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Accident	21. Place of injury (e.g. home, farm, highway, etc.) Highway	22. Date of injury (yyyy/mm/dd) Jan 5, 2019
	23. How did injury occur? (describe circumstances) Passenger in car struck a transport truck		

Note: The deceased is assumed to be a passenger if less than 14 years of age.



Water Transport Accidents

1. **Specify type of watercraft involved** as powered or non-powered, ship, ferry, sailboat, canoe, kayak, raft, fishing boat, inflatable raft, water-skis, surf board, windsurfer, etc.
2. **Specify circumstances** as thrown from, fall or jump overboard; watercraft which overturned, capsized, sinking, crashing; fall on board, struck by object, fire, etc.
3. **Specify body of water** as pool in residence, river, lake, sea, stream, reservoir, pond, etc.

11. Part I		Approximate interval between onset and death	
Immediate cause of death (a) Drowning <small>due to, or as a consequence of</small>		minutes	
Antecedent causes, if any, (b) _____ <small>due to, or as a consequence of</small>			
(c) _____ <small>due to, or as a consequence of</small>			
Underlying cause of death (Stated last) (d) _____			
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I			
Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Accident	21. Place of injury (e.g. home, farm, highway, etc.) Lake	22. Date of injury (yyyy/mm/dd) Jan 5, 2019
	23. How did injury occur? (describe circumstances) Fishing from a canoe and fell overboard		



Air Transport Accidents

1. **Specify type of aircraft involved** as powered or non-powered, private or commercial, airplane, helicopter, (hang) glider, balloon, kite, parachute, etc.
2. **Specify circumstance** as crash, explosion, collision, a fall in, on or from the aircraft, while boarding or alighting, injury to a person on the ground hit, etc.

11. Part I		Approximate interval between onset and death	
Immediate cause of death (a) Multiple trauma and burns <small>due to, or as a consequence of</small>		minutes	
Antecedent causes, if any, (b) _____ <small>due to, or as a consequence of</small>			
(c) _____ <small>due to, or as a consequence of</small>			
Underlying cause of death (Stated last) (d) _____			
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I			
Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Accident	21. Place of injury (e.g. home, farm, highway, etc.) Airport	22. Date of injury (yyyy/mm/dd) Jan 5, 2019
	23. How did injury occur? (describe circumstances) Private plane crashed in field shortly after takeoff		



Record a brief description of the circumstances of the Fall.

- from a building, ladder, scaffolding, balcony, bridge, tree, cliff, etc.
- slip, trip or stumbling
- from a vehicle, watercraft, bike, train or animal
- into water (e.g., bathtub, pool, lake, river, etc.)
- into pit, quarry, shaft, well, etc.
- involving a bed, chair or any other furniture
- involving a wheelchair
- on ice or snow
- on stairs
- on skis, skates, sled, etc.
- same-level (from standing, while walking, or being transferred)

11. Part I		Approximate interval between onset and death	
Immediate cause of death (a)	Subdural hematoma <small>due to, or as a consequence of</small>	3 days	
Antecedent causes, if any, (b)	Blunt force head trauma <small>due to, or as a consequence of</small>	3 days	
(c)	<small>due to, or as a consequence of</small>		
Underlying cause of death (Stated last) (d)			
Part II		10 years	
Alzheimer's Dementia			
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I			

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Accident	21. Place of injury (e.g. home, farm, highway, etc.) Nursing home	22. Date of injury (yyyy/mm/dd) Jan 5, 2019
	23. How did injury occur? (describe circumstances) Fall from bed		

Note: When “homicide” is reported as the manner of death, **the certifier should include a statement which clearly establishes an intentional act of homicide occurred (e.g., pushed, struck, crash of MV, poisoning by someone, etc.).**

Note: When “undetermined” is reported as the manner of death **the certifier should include a statement which clearly establishes an investigation has not determined whether accident, homicide or suicide.**



Poisoning

Identify the drug or type of drug, combination of drugs, alcohol, solvent, gas, liquid, solid, vapor, pesticide, chemical or caustic substance ingested. The ICD include the following with **poisoning**.

- ingestion, intoxication, overdose
- toxic effects of a drug, drug toxicity
- wrong dose taken
- lethal dose, lethal quantity of a drug
- wrong drug given in error

Note: Alcohol intoxication is assumed when intoxication is reported **

11. Part I Immediate cause of death (a) <u>Fentanyl and cocaine toxicity</u> <small>due to, or as a consequence of</small> Antecedent causes, if any, (b) _____ <small>due to, or as a consequence of</small> (c) _____ <small>due to, or as a consequence of</small> Underlying cause of death (Stated last) (d) _____ Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		Approximate interval between onset and death <u>minutes</u>
Part II <u>Alcohol and drug abuse</u>		<u>years</u>

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Accident	21. Place of injury (e.g. home, farm, highway, etc.) Motel	22. Date of injury (yyyy/mm/dd) Jan 5, 2019
	23. How did injury occur? (describe circumstances) Recreational drug use		

11. Part I Immediate cause of death (a) <u>Arteriosclerotic heart disease</u> <small>due to, or as a consequence of</small> Antecedent causes, if any, (b) <u>Cocaine use</u> X <small>due to, or as a consequence of</small> (c) _____ <small>due to, or as a consequence of</small> Underlying cause of death (Stated last) (d) _____ Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		Approximate interval between onset and death <u>8 years</u> <u>1 hour</u>	<u>8 years cannot be due to cocaine use.</u> <u>8 years cannot be due to 1 hour</u>
(d) <u>Cocaine use does not support an Accidental manner of death</u>			

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Accident	21. Place of injury (e.g. home, farm, highway, etc.)	22. Date of injury (yyyy/mm/dd)
	23. How did injury occur? (describe circumstances)		

Note: Information reported in Part I must be in chronological order to support the manner of death.

Note: Information reported in Part I must only contain conditions that can be caused by an external cause (e.g., statements such as toxicity, poisoning or overdose of a drug or an injury or fracture).

Note: Cocaine use does not support an accidental mechanism of death.

Note: This example could be written as **Cardiac event due to cocaine overdose** in Part I with arteriosclerotic heart disease reported in Part II as a contributing factor.



Suicide

Record the injury or poisoning in Part I and provide a comprehensive statement of intentional self-harm in the Traumatic or Violent Death section.

11. Part I		Approximate interval between onset and death
Immediate cause of death (a)	Carbon monoxide poisoning	minutes
due to, or as a consequence of		
Antecedent causes, if any, (b)	Inhalation of car exhaust fumes	minutes
due to, or as a consequence of		
(c)		
due to, or as a consequence of		
Underlying cause of death (Stated last) (d)		
Part II		Years
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		
Depression		

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Suicide	21. Place of injury (e.g. home, farm, highway, etc.) Home	22. Date of injury (yyyy/mm/dd) Jan 5, 2019
	23. How did injury occur? (describe circumstances) Ran car in garage		

Note: Other statements could include crashing of a vehicle, lying in front of a vehicle or train, discharge of firearm (specify type), drowning, electrocution, jumping from a high place, hanging, strangulation or suffocation, poisoning or overdose (specify substance) smoke, fire or flames



Homicide

Record the injury or poisoning in Part I and provide a comprehensive statement of the assault in the Traumatic or Violent Death section.

11. Part I		Approximate interval between onset and death
Immediate cause of death (a)	Gunshot wound chest	minutes
due to, or as a consequence of		
Antecedent causes, if any, (b)		
due to, or as a consequence of		
(c)		
due to, or as a consequence of		
Underlying cause of death (Stated last) (d)		
Part II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify) Homicide	21. Place of injury (e.g. home, farm, highway, etc.) Nightclub	22. Date of injury (yyyy/mm/dd) Jan 5, 2019
	23. How did injury occur? (describe circumstances) Shot with handgun		

Note: Other statements could include injury from a blunt object or weapon, brawl, fight, altercation or beating, crashing of MV, drowning, discharge of a firearm (specify type), neglect, abandonment or maltreatment (specify by whom), poisoning, pushed from a high place, before a train or car, sexual assault, arson, fire (smoke inhalation), stabbing, etc.



Late Effects

The ICD provides a **late effect or sequela classification** when the interval between the **date of an injury, poisoning, adverse effects caused by drugs, medicaments or biological substances, misadventures, and by complications arising from surgical or medical procedures and date of death is one (1) year or more**. This includes sustained by accident, suicide (attempt), homicide (attempt), and by any event of undetermined intent which eventually causes the death.

Record the injury or poisoning sustained in Part I (e.g., describe as healed, history of, late effect of, old, remote, etc.) or provide an approximate duration and complete the Traumatic or Violent Death section. Provide a brief description of the circumstances and the approximate date if known.

11. Part I		Approximate interval between onset and death	
Immediate cause of death (a)	Pulmonary embolism <small>due to, or as a consequence of</small>	1 week	
Antecedent causes, if any, (b)	Remote spinal cord injury from MVA <small>due to, or as a consequence of</small>	9 years	
(c)	<small>due to, or as a consequence of</small>		
Underlying cause of death (Stated last) (d)			
Part II			
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I			
Alcohol abuse (yrs), Depression (yrs)			
Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify)	21. Place of injury (e.g. home, farm, highway, etc.)	22. Date of injury (yyyy/mm/dd)
	Accident	Road	2008
23. How did injury occur? (describe circumstances) His car and struck a tree			



Undetermined

Under WHO classification guidelines, “undetermined” as a manner of death is used to identify deaths where the injury, pathology and circumstances are known but the intent cannot be determined as to whether accident, suicide or homicide after a full investigation. Record a comprehensive statement of facts to describe fully the circumstances and results of investigation. Deaths for which no cause has been determined after autopsy should be reported in Part I as “No Definitive Anatomic or Toxicological Cause of Death”.

11. Part I		Approximate interval between onset and death	
Immediate cause of death (a)	Cerebral hemorrhage <small>due to, or as a consequence of</small>	1 hour	
Antecedent causes, if any, (b)	Blunt force trauma to head <small>due to, or as a consequence of</small>	1 day	
(c)	<small>due to, or as a consequence of</small>		
Underlying cause of death (Stated last) (d)			
Part II			
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I			
Dementia		years	
Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify)	21. Place of injury (e.g. home, farm, highway, etc.)	22. Date of injury (yyyy/mm/dd)
	Undetermined	Shelter	Jan 5, 2019
23. How did injury occur? (describe circumstances) Could not determine if injury sustained by accident (fall) or from an assault			

**Unknown**

Deaths where it cannot be determined between a natural sequence and an external cause are classified as “Unknown” (e.g., *natural versus non-natural*). The certifier should not complete the Traumatic or Violent Death section as “**natural**” if a manner of death is not included here. The Traumatic or Violent Death section is to be used exclusively for “**non-natural**” deaths.

11. Part I		I		Approximate interval between onset and death
Immediate cause of death (a)	<u>Subdural hematoma</u>			<u>1 day</u>
due to, or as a consequence of				
Antecedent causes, if any, (b)	<u>Unascertained, possible stroke or fall</u>			
due to, or as a consequence of				
(c)				
due to, or as a consequence of				
Underlying cause of death (Stated last) (d)				
Part II		II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		<u>Dementia (yrs) Osteoporosis (yrs)</u>		
		<u>Previous Stroke (5 yrs)</u>		

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify)	21. Place of injury (e.g. home, farm, highway, etc.)	22. Date of injury (yyyy/mm/dd)
	23. How did injury occur? (describe circumstances)		

11. Part I		I		Approximate interval between onset and death
Immediate cause of death (a)	<u>Hypertensive heart disease or cocaine toxicity</u>			
due to, or as a consequence of				
Antecedent causes, if any, (b)				
due to, or as a consequence of				
(c)				
due to, or as a consequence of				
Underlying cause of death (Stated last) (d)				
Part II		II		
Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I		Use the term “or” for deaths where you cannot decide between a natural cause (disease) and a non natural cause (external). The Traumatic or violent death section should not be completed.		

Traumatic or Violent Death (if applicable)	20. If accident, suicide, homicide or undetermined (specify)	21. Place of injury (e.g. home, farm, highway, etc.)	22. Date of injury (yyyy/mm/dd)
	23. How did injury occur? (describe circumstances)		

Note: It is suggested that the certifier review the case carefully to determine whether the natural or non-natural cause listed was more likely to have caused the death. Serious consideration should be given to choosing the most likely cause. **No Definitive Anatomic or Toxicological Cause** should be reported for which no cause has been determined after autopsy.

Note: The starting point is the condition or event that started the sequence of acceptable causal relationships ending with the terminal event.

Certification

Certification		
By signing below, you certify that the information provided is correct to the best of your knowledge, according to instructions and requirements.		
24. Your signature (physician, coroner, RN(EC))	<i>K. A. Smith</i>	25. Date (yyyy/mm/dd) 2019/01/27
26. Your name (last, first and middle names or single name) Smith, Kelly Anne	27. Your title: <input checked="" type="checkbox"/> Physician <input type="checkbox"/> Coroner <input type="checkbox"/> RN(EC)	If RN(EC), Registration number
28. Your address (street number and name, city, province, postal code) 101 Water Street, Thunder Bay, ON P1B 2A3		

All parts of this section must be completed and signed at the time the death is certified. Do not pre-sign this legal document in advance with the expectation that another individual will fill in the date after death has been pronounced. By signing you certify the information on this form is correct to the best of your knowledge.

Your Signature

The legally qualified medical practitioner (physician or coroner) will complete and sign the medical certificate after the death, investigation, or inquest. Do not use a signature stamp as an alternative to your signature.

Date (Month, Day, Year)

Record the date on which you complete and sign the medical certificate.

Your Name

Record your name clearly; last name first, followed by given name(s), or single name, if only one name.

Your Title

Indicate if you, as the certifier, were the physician or coroner. Coroners are reminded to check “physician” for patients who they were attending whose deaths were not coroner cases.

Your Address

Record your complete mailing address including facility name, street number and name, city, province, and postal code. An address stamp may be used. If required, information contained in this section will facilitate correspondence with the certifier by the Office of the Registrar General.

*****End of medical Certificate of Death*****

3. Medical Certificate of Stillbirth

Certifier's Responsibility

A Stillbirth is defined under the *Vital Statistics Act* as “the complete expulsion or extraction from a person of a product of conception either after the twentieth week of pregnancy or after the product of conception has attained the weight of 500 grams or more, and where after such expulsion or extraction there is no breathing, beating of the heart, pulsation of the umbilical cord or movement of voluntary muscle”.

Under the definition, twenty full weeks of gestation must have been completed from last menstrual period, or a weight of 500 grams or more achieved to be classified as a stillbirth in Ontario.

Therapeutic abortions that meet either criteria are classified as a stillbirth in Ontario.

If neither of these criteria is met, a medical certificate of stillbirth is not required.

Upon the occurrence of a still-birth in Ontario, a legally qualified medical practitioner in attendance at the stillbirth shall complete and sign a Medical Certificate of Stillbirth ⁴ (medical certificate), in the form approved by the Office of the Registrar General, setting out the cause of the stillbirth⁵ and deliver it to the funeral director. Currently only physicians and coroners are authorized with certifying stillbirths in Ontario. No other persons currently are authorized. This act of completing and signing a medical certificate constitutes “certifying” the stillbirth, and the person signing is the “certifier”.

The Office of the Registrar forwards cause of stillbirth data and other vital statistics contained on the records to Statistics Canada for national publication.

General

A stillbirth is simultaneously a birth and a death event. In Ontario the documents required to register a stillbirth are:

1. Statement of Stillbirth
2. Medical Certificate of Stillbirth or
 - *Warrant to Bury the Body of a Deceased Person**
3. The Notice of Live Birth or Stillbirth

Note: If the coroner cannot provide the cause of stillbirth, the coroner may complete and issue a **Warrant to Bury the Body of a Deceased Person** in place of a medical certificate for the stillbirth to be registered and a burial permit to be issued. The coroner will supply this form and is responsible for submitting a medical certificate as soon as the medical cause is known.

⁴ Form required by the Office of the Registrar General under the authority of the VSA is the Medical Certificate of Stillbirth, Form 8.

⁵ The causes of stillbirth required by the Office of the Registrar General are from the International Statistical Classification of Diseases and Related Health Problems published by the World Health Organization adopted by reference in section 70 of the VSA.

The medical certificate consists of five (5) sections for the certifier to complete:

Section A	Deceased Child's Information
Section B	Birth Information
Section C	Cause of Stillbirth
Section D	Other Information
Section E	Certification

Section A - Deceased Child's Information

Section A – Deceased Child's Information			
Child's last name or single name Smith			Sex of child F
Child's first name Jane		Child's middle name(s) Anne	
Stillbirth date (yyyy/mm/dd) 2019/01/27	Name of hospital (if not hospital, give exact location where birth occurred) Thunder Bay Regional Health Sciences Centre		
Place of stillbirth (City, town, village, township) Thunder Bay		Regional municipality, county, or district Thunder Bay	

Child's Last Name or Single Name

Enter the legal surname or single name if only one name of the child. It is acceptable for the surname to be different from the mother's (e.g., fathers' surname if different).

Childs First Name and Middle Name(s)

Enter the first and middle name (if given) of the child. A given name may be determined later, reporting "baby girl" or "baby boy" is acceptable.

Sex of child

Provide F for female and M for male. Enter Unknown if sex is not apparent.

Stillbirth Date

Enter the exact year, month and day that stillbirth occurred (e.g., 2016/12/15). Pay attention to the entry of year, month or day when the stillbirth occurs at midnight or on December 31. For example, a stillbirth that occurs at midnight on December 31 should be recorded as Dec 31st not January 1st. For unwitnessed stillbirths the date of stillbirth is the date on which the stillbirth is pronounced.

Name of Hospital

Enter the name of the hospital where the stillbirth occurred. If the stillbirth occurred at home provide a complete street address including street number and name or, in a rural area without a street address, include the lot and concession.

Place of Stillbirth

Enter the name of the city, town, village or township and the regional municipality, county or district.

Section B - Birth Information

Section B – Birth Information				
Last name or single name of parent who gave birth Smith	Gestation period 36	Weight of child at birth Grams _____	Kind of birth <input checked="" type="checkbox"/> Single <input type="checkbox"/> Twin	If multiple birth, state whether this child was born 1 st , 2 nd , 3 rd , etc.
First and middle names of parent who gave birth Jennifer Anne	_____ weeks	or 5 lb. 8 oz.	<input type="checkbox"/> Triplet <input type="checkbox"/> Other	

Mother's Surname Record mother's legal last name or single name.

Mother's Given Name Record the mother's given name(s).

Weight of Stillborn Record the weight of child in grams or pounds & ounces.

Kind of Birth Record the kind of birth, and if child was born 1st, 2nd, 3rd, etc.

Section C - Cause of Stillbirth

Section C – Cause of Stillbirth	
Part I Immediate Cause (Not a mode of dying, the disease or condition leading to stillbirth) Antecedent causes (if any, giving rise to the above cause) Stating the underlying cause last (the initiating disease, injury, or complication which caused stillbirth)	(a) <u>Extreme prematurity</u> ^I due to, or as a consequence of (b) <u>Cord compression</u> due to, or as a consequence of (c) <u>Oligohydramnios</u> due to, or as a consequence of
Part II Other significant conditions of foetus or mother which may have contributed to the stillbirth	Twin to twin transfusion,^{II} PROM @ 19 weeks

The **CAUSE OF STILLBIRTH** section on Ontario's medical certificate is based on recommendation of the WHO. It provides spaces for the certifier to record pertinent information pertaining to the cause of fetal death (e.g., the disease, injury or complications which either resulted in or contributed to death of the foetus or the circumstances of the accident or violence which produced any such injuries).

The underlying cause of fetal death is the disease, injury, or complication which **initiated** the chain of morbid events leading directly to the death of the foetus.

The Cause of Stillbirth section consists of two (2) main parts:

Part I

Part II

Cause of Stillbirth Section

Completing Part I and Part II

Part I

The decision-making process and principals applied are identical to those used for completing the medical certificate of death. It is designed to obtain the opinion of the certifier as to the initiating cause and underlying cause of the death of the foetus and prompts the certifier to report specific conditions.

A fetal death may result from the combined effect of two or more conditions. These conditions may be completely unrelated, arising independently of each other, or they may be causally related to each other; that is, one cause may lead to another which in turn, leads to a third cause, etc. In some cases, it is not possible to tell why the foetus died. In most cases a statement of cause in Part I will suffice.

Please note:

- use accepted terms for morbid conditions; never record mere symptoms;
- record a sequence of events if possible;
- record complications of placenta, cord or membranes, fetal anomaly, fetal infection, fetal growth restriction and any other fetal conditions and disorders;
- record maternal conditions and diseases affecting the foetus, any obstetrical or pregnancy complications;
- record “cause unknown” when it is not possible to tell why the foetus dies;
- time durations (interval between onset & death) are unnecessary.

Part II

Report other significant conditions contributing to the stillbirth in Part II. Include maternal conditions that may be unrelated to present pregnancy such as hypertensive disorders, renal and urinary tract disease, infections, circulatory and respiratory disease, nutritional disorders, maternal injury, surgery or other medical procedures. Include maternal complications of pregnancy such as gestational diabetes, maternal drug or alcohol abuse, hypertension, etc.

Note: Record one condition per line.

Note: A coroner must be notified when a stillbirth appears to be **non-natural** (e.g., injury to foetus, maternal injury or poisoning, etc.). The coroner will decide whether an investigation is required. Most stillbirths are due to natural causes.

Maternal Factors & Complications of Pregnancy

Specify maternal factors and complications of pregnancy affecting the foetus which may be related or unrelated to the present pregnancy (e.g., maternal conditions, pre-existing conditions or diseases, maternal injury, surgery or medical procedure, maternal use of medication, tobacco, alcohol or drugs of addiction). For conditions such as infectious and parasitic diseases, specify if the infection was acquired in utero, during birth or if it was a maternal infectious or parasitic disease as the cause of the stillbirth.

Termination of Pregnancy

Per the VSA a **medical certificate of stillbirth** must be completed by the attending physician if a termination of pregnancy procedure resulted in *the complete expulsion or extraction from a person a product of conception either after 20 weeks of pregnancy or after the product of conception has attained the weight of 500 grams or more*. When completing the medical certificate, it is important to include the termination procedure.

Section C – Cause of Stillbirth	
Part I Immediate Cause (Not a mode of dying, the disease or condition leading to stillbirth)	(a) <u>Extreme prematurity</u> due to, or as a consequence of
Antecedent causes (If any, giving rise to the above cause)	(b) <u>Termination of pregnancy</u> due to, or as a consequence of
Stating the underlying cause last (the initiating disease, injury, or complication which caused stillbirth)	(c) <u>Trisomy 21</u> due to, or as a consequence of

Section D - Other Information

Section D – Other Information			
a) Was there manipulative, instrumental or operative procedure for delivery? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	b) If so, was foetus dead before the procedure? <input type="checkbox"/> Yes <input type="checkbox"/> No	State nature of procedure (Such as forceps version and extraction, Caesarian section, termination of pregnancy.)	
Did death occur before labour? <input type="checkbox"/> Yes <input type="checkbox"/> No	During labour? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Was labour induced? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Was labour induced to terminate pregnancy? <input type="checkbox"/> Yes <input type="checkbox"/> No
Was there an autopsy? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Does the Cause of Stillbirth (stated above) reflect autopsy findings? <input type="checkbox"/> Yes <input type="checkbox"/> No	May Further information be available later? <input type="checkbox"/> Yes <input type="checkbox"/> No	

There are multiple sections to complete. This information will be used to facilitate the selection of comprehensive stillbirth vital statistics.

- Was there manipulative, instrumental or other operative procedure for delivery?
 - If so, was foetus death before the procedure?
 - State nature of procedure
- Did death occur before labor? During labor? Was labor induced?
- Was labour induce to terminate the pregnancy?
- Was there an autopsy?
 - Does the cause of stillbirth reflect autopsy findings?
 - May further information be available later?

Section E - Certification

Section E – Certification (Attending Physician, Coroner, etc.)		
Signature (attending physician, coroner, etc.) I certify that I <input checked="" type="checkbox"/> was in attendance at this stillbirth and that the statements herein are true and correct to the best of my knowledge and belief. <input type="checkbox"/> was not		
<i>B. J. Brown</i>		
Name of physician or coroner (print or type) Brad J. Brown	Designation <input checked="" type="checkbox"/> Attending Physician <input type="checkbox"/> Coroner	Date signed (yyyy/mm/dd) 2019/01/27
Address 189 Red River Road, Thunder Bay, ON P7B 6L8		

Note: The certifier is required to complete the entire section.

Signature

Specify if you were or were not in attendance at the time of stillbirth and affix your signature. An original signature is required. Do not use a signature stamp.

Designation

Check the appropriate box for attending physician or coroner. For attending physicians who are also coroners, determine the correct designation for each case.

Name

Record your full name. A name stamp is acceptable.

Date Signed

Record the date the medical certificate was completed and signed.

Address


Record your complete mailing address.

*****End of Medical Certificate of Stillbirth*****

I. Medical Certificate of Death (Blank)

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I.I Medical Certificate of Death (Complete)

		ServiceOntario		Office of the Registrar General		Medical Certificate of Death - Form 16	
Note: Form 8 must be completed for stillbirths. This form must be completed by the attending physician, coroner or RN(EC) before a burial permit can be issued. Please PRINT clearly in blue or black ink as it is a permanent legal record.						Office Use Only	
Information About the Deceased							
1. Last name or single name Brown, Jane Anne				2. Date of death (yyyy/mm/dd) 2019/01/27			
3. Sex F	4. Age 83	5. If under 1 year Months 	6. If under 1 day Hours 	7. Gestation age 	8. Birth weight 		
9. Place of death (name of facility or location) 100-1234 John Street					<input type="checkbox"/> Hospital <input type="checkbox"/> Long term care <input checked="" type="checkbox"/> Private Residence <input type="checkbox"/> Other (specify)		
10. City, town, village or township Pembroke					Regional municipality, county or district Renfrew		
Cause of Death							
11. Part I Immediate cause of death (a) Respiratory failure <small>due to, or as a consequence of</small>						Approximate interval between onset and death 72 hours	
Antecedent causes, if any, (b) Pneumonia <small>due to, or as a consequence of</small>						1 week	
Underlying cause of death (c) COPD <small>due to, or as a consequence of</small>						3 weeks	
Underlying cause of death (Stated last) (d) Smoking						50 years	
Part II Other significant conditions contributing to the death but not resulting in the underlying cause given in Part I							
12. If deceased was a female, did the death occur: <input type="checkbox"/> during pregnancy <input type="checkbox"/> within 42 days following the end of pregnancy* <input type="checkbox"/> between 43 days and 365 days following the end of pregnancy* <input type="checkbox"/> not pregnant within the past year <input type="checkbox"/> unknown if pregnant within the past year <small>*(induced abortion, miscarriage, ectopic pregnancy, stillbirth, or live birth)</small>							
13. Was the deceased dead on arrival at the hospital? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No				14. Was there a surgical procedure within 28 days of death? <input type="checkbox"/> Yes <input type="checkbox"/> No		15. Date of surgery (yyyy/mm/dd)	
16. Condition necessitating surgery:							
Autopsy Particulars		17. Autopsy being held? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		18. Does the cause of death stated above take account of autopsy findings? <input type="checkbox"/> Yes <input type="checkbox"/> No		19. May further information relating to the cause of death be available later? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Traumatic or Violent Death (if applicable)		20. If accident, suicide, homicide or undetermined (specify)		21. Place of injury (e.g. home, farm, highway, etc.)		22. Date of injury (yyyy/mm/dd)	
		23. How did injury occur? (describe circumstances)					
Certification							
By signing below, you certify that the information provided is correct to the best of your knowledge, according to instructions and requirements.							
24. Your signature (physician, coroner, RN(EC)) L. A. Smith						25. Date (yyyy/mm/dd) 2019/01/27	
26. Your name (last, first and middle names or single name) Smith, Larry A.						27. Your title: <input checked="" type="checkbox"/> Physician <input type="checkbox"/> Coroner <input type="checkbox"/> RN(EC)	
28. Your address (street number and name, city, province, postal code) 321 Brown St., Pembroke, ON P7K 1L8							
To be Completed by the Division Registrar							
By signing below, I am satisfied that the information in this Medical Certificate of Death and in the corresponding Statement of Death is correct and sufficient and I agree to register the death.							
Signature				Date (yyyy/mm/dd)		Registration number	
For the use of the Office of the Registrar General only							

II. Medical Certificate of Stillbirth (Blank)

		Ministry of Government and Consumer Services Office of the Registrar General		Medical Certificate of Stillbirth Form 8 Vital Statistics Act 1990	
This Form and Form 7 (Statement of Stillbirth) must be filed with a Division Registrar before a burial permit can be issued. This is a permanent legal record. Please read all instructions before completing this form. Type or print plainly in blue or black ink and complete all items.				Office Use Only	
Section A – Deceased Child's Information					
Child's last name or single name				Sex of child	
Child's first name		Child's middle name(s)			
Stillbirth date (yyyy/mm/dd)		Name of hospital (if not hospital, give exact location where birth occurred)			
Place of stillbirth (City, town, village, township)			Regional municipality, county, or district		
Section B – Birth Information					
Last name or single name of parent who gave birth		Gestation period	Weight of child at birth	Kind of birth	If multiple birth, state whether this child was born 1 st , 2 nd , 3 rd , etc.
First and middle names of parent who gave birth		_____ weeks	Grams _____ or _____ lb. _____ oz.	<input type="checkbox"/> Single <input type="checkbox"/> Twin <input type="checkbox"/> Triplet <input type="checkbox"/> Other	
Section C – Cause of Stillbirth					
Part I Immediate Cause (Not a mode of dying, the disease or condition leading to stillbirth) Antecedent causes (if any, giving rise to the above cause) Stating the underlying cause last (the initiating disease, injury, or complication which caused stillbirth)		I (a) _____ due to, or as a consequence of (b) _____ due to, or as a consequence of (c) _____ due to, or as a consequence of			
Part II Other significant conditions of foetus or mother which may have contributed to the stillbirth		II			
Section D – Other Information					
a) Was there manipulative, instrumental or operative procedure for delivery? <input type="checkbox"/> Yes <input type="checkbox"/> No		b) If so, was foetus dead before the procedure? <input type="checkbox"/> Yes <input type="checkbox"/> No		State nature of procedure _____ (Such as forceps version and extraction, Caesarian section, termination of pregnancy.)	
Did death occur before labour? <input type="checkbox"/> Yes <input type="checkbox"/> No		During labour? <input type="checkbox"/> Yes <input type="checkbox"/> No		Was labour induced? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Was there an autopsy? <input type="checkbox"/> Yes <input type="checkbox"/> No		Does the Cause of Stillbirth (stated above) reflect autopsy findings? <input type="checkbox"/> Yes <input type="checkbox"/> No		May Further information be available later? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Section E – Certification (Attending Physician, Coroner, etc.)					
Signature (attending physician, coroner, etc.) I certify that I <input type="checkbox"/> was in attendance at this stillbirth and that the statements herein are true and correct to the best of my knowledge and belief. <input type="checkbox"/> was not					
Name of physician or coroner (print or type)			Designation <input type="checkbox"/> Attending Physician <input type="checkbox"/> Coroner		Date signed (yyyy/mm/dd)
Address					
Section F – To be Completed by the Division Registrar					
By signing below, I am satisfied that the information in this Medical Certificate of Stillbirth and in the corresponding Statement of Stillbirth is correct and sufficient and agree to register the stillbirth.					
Signature		Date (yyyy/mm/dd)	Registration number	Div. Reg. code number	
For use of the Office of the Registrar General only					

II.I Medical Certificate of Stillbirth (Complete)

		Ministry of Government and Consumer Services Office of the Registrar General		Medical Certificate of Stillbirth Form 8 Vital Statistics Act 1990	
This Form and Form 7 (Statement of Stillbirth) must be filed with a Division Registrar before a burial permit can be issued. This is a permanent legal record. Please read all instructions before completing this form. Type or print plainly in blue or black ink and complete all items.				Office Use Only	
Section A – Deceased Child's Information					
Child's last name or single name Smith				Sex of child F	
Child's first name Jane		Child's middle name(s) Anne			
Stillbirth date (yyyy/mm/dd) 2019/01/27		Name of hospital (if not hospital, give exact location where birth occurred) Thunder Bay Regional Health Sciences Centre			
Place of stillbirth (City, town, village, township) Thunder Bay			Regional municipality, county, or district Thunder Bay		
Section B – Birth Information					
Last name or single name of parent who gave birth Smith		Gestation period 36 weeks	Weight of child at birth Grams _____ or 5 lb. 8 oz.	Kind of birth <input checked="" type="checkbox"/> Single <input type="checkbox"/> Twin <input type="checkbox"/> Triplet <input type="checkbox"/> Other	If multiple birth, state whether this child was born 1 st , 2 nd , 3 rd , etc.
First and middle names of parent who gave birth Jennifer Anne					
Section C – Cause of Stillbirth					
Part I Immediate Cause (Not a mode of dying, the disease or condition leading to stillbirth) Antecedent causes (if any, giving rise to the above cause) Stating the underlying cause last (the initiating disease, injury, or complication which caused stillbirth)		(a) <u>Extreme prematurity</u> due to, or as a consequence of (b) <u>Cord compression</u> due to, or as a consequence of (c) <u>Oligohydramnios</u> due to, or as a consequence of			
Part II Other significant conditions of foetus or mother which may have contributed to the stillbirth		<u>Twin to twin transfusion, PROM @ 19 weeks</u>			
Section D – Other Information					
a) Was there manipulative, instrumental or operative procedure for delivery? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		b) If so, was foetus dead before the procedure? <input type="checkbox"/> Yes <input type="checkbox"/> No		State nature of procedure (Such as forceps version and extraction, Caesarian section, termination of pregnancy.)	
Did death occur before labour? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		During labour? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		Was labour induced? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Was there an autopsy? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		Does the Cause of Stillbirth (stated above) reflect autopsy findings? <input type="checkbox"/> Yes <input type="checkbox"/> No		May Further information be available later? <input type="checkbox"/> Yes <input type="checkbox"/> No	
Section E – Certification (Attending Physician, Coroner, etc.)					
Signature (attending physician, coroner, etc.) I certify that I <input checked="" type="checkbox"/> was in attendance at this stillbirth and that the statements herein are true and correct to the best of my knowledge and belief. <input type="checkbox"/> was not					
Name of physician or coroner (print or type) Brad J. Brown		Designation <input checked="" type="checkbox"/> Attending Physician <input type="checkbox"/> Coroner		Date signed (yyyy/mm/dd) 2019/01/27	
Address 189 Red River Road, Thunder Bay, ON P7B 6L8					
Section F – To be Completed by the Division Registrar					
By signing below, I am satisfied that the information in this Medical Certificate of Stillbirth and in the corresponding Statement of Stillbirth is correct and sufficient and agree to register the stillbirth.					
Signature		Date (yyyy/mm/dd)		Registration number	
				Div. Reg. code number	
For use of the Office of the Registrar General only					