

Handbook on Medical Certification of Death

Prepared for: Registered Nurses (Extended Class)

"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

Preamble

The purpose of this guide is to provide a useful tool to registered nurses holding an extended certificate of registration [RN(EC)] who, in prescribed circumstances, may be permitted to certify deaths in Ontario. It has been designed to provide instruction for the accurate completion of the Medical Certificate of Death and to serve as a reference.

The handbook is specifically designed for this limited user group. It is expected that this handbook will be studied by a RN(EC) before completing and signing Medical Certificates of Death in the prescribed circumstances.

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

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Revised handbook will be printed periodically.

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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*.

Preface

This handbook was prepared to guide registered nurses, who hold an extended certificate of registration under the *Nursing Act*,1991, in completing the medical certificate of death – form 16 as prescribed under the *Vital Statistics Act*. It explains the principles and concepts involved in medical certification and the nature and uses of the information.

Physicians and coroners share the responsibility for completing the medical certificate of death. By extending this role to the RN(EC)¹ in certain circumstances, it is expected that they will be able to ease the burden on families where a person receiving palliative care dies at home, in a long term care facility or in other circumstances where the deceased's physician is not available.

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¹ According to the College of Nurses of Ontario RN(EC)s are Nurse Practitioners (NPs), and the titles "RN(EC)" and "NP" are legally protected under Ontario Regulation 275/94 and they can *only* be used by nurses registered in the extended class. Registered Nurses and Registered Practical Nurses are not legally authorized to complete and sign medical certificates of death.

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 of Death.

The Medical Certificate of Death is a part of the death registration form and is an important legal document detailing the fact and circumstance of death. It is the source of information used in Canada, and most other countries, for the preparation of statistics on causes of death. These statistics are indispensable, locally and nationally, in public health surveillance, health education and promotion, in medical research and health planning.

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I. INTRODUCTION

Purpose of Handbook

This handbook was developed under the auspices of the Vital Statistics Council for Ontario to promote the reporting of reliable information on the Medical Certificate of Death, with particular emphasis on the medical details of cause and circumstances of death.

Intended as a reference for registered nurses, who hold an extended certificate of registration under the *Nursing Act, 1991*, the handbook gives an overview of the uses and value of the information on medical certificates of death and provides guidelines for completing the certificates. This handbook has been adapted for use in Ontario to meet the particular needs of this province.

For the purposes of this handbook, registered nurses who hold an extended certificate of registration will be referred to as RN(EC)s. According to the *Nursing Act, 1991* a RN who holds an extended certificate of registration will be able to complete and sign a medical certificate of death <u>only</u> where *all* of the five (5) following circumstances are met:

- (a) the RN(EC) has had the primary responsibility for the care of the deceased during the last illness of the deceased;
- (b) the death was expected during the last illness of the deceased;
- (c) 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;
- (d) there was a predictable pattern of decline for the deceased during the last illness of the deceased; and
- (e) there were no unexpected events or unexpected complications during the last illness of the deceased.

If any one of the above circumstances was not met, then the RN(EC) <u>must</u> contact the physician or a coroner to complete the medical certificate

The *Vital Statistics Act* has an expectation that deaths due to causes other than natural disease must be reported to a coroner for investigation:

Death except by disease

(5) 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

- **Is the death due to non-natural causes** (such as **accident, homicide, or suicide**)? For example, an injury (e.g. hip fracture) that precedes a terminal medical event (e.g. pneumonia) is considered to be non-natural, and therefore a coroner must be notified to determine if the death may be attributable to the initial injury.
- Was the death sudden and unexpected (i.e. not reasonably foreseeable)? The sudden death of a terminally ill patient, or DNR patient would generally not fit this category. The threshold for calling the coroner should be relatively low. The coroner may determine that an investigation is not required, but this should be his/her decision, not the hospital staff person's.
- Is trauma (including a fall in hospital, fracture etc.), overdose, poisoning, intoxication related to this death?
- If the deceased was from a Long Term Care facility, is this a threshold case (i.e. the tenth death from that institution)?

 The LTC facility should be contacted to determine whether the coroner should be notified.
- Have family members expressed concerns or have there been controversies about treatment decisions?

 Where family dynamics have created difficulties or concerns for hospital staff, a coroner might be the appropriate independent "third party" to assist in diffusing contentious issues and volatile situations after the death.

If the answer to any of these 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.

Where a death has been reported to the coroner, and has been accepted for investigation, the coroner will have the legal obligation to complete the medical certificate. Non-coroner physicians should not complete a medical certificate in these circumstances

Importance of Death Registration

Death registration serves two purposes. First of all, the completed death registration form is a permanent legal record of the fact of death of an individual. To this end, it 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, and to settle the estate, insurance and pensions. Secondly, death registration forms, specifically the Medical Certificate of Death, 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 people who die, and the vitally important information on the cause of death.

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

- 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, and accidents and suicides;
- To identify risks associated with environmental and occupational factors and lifestyle;
- To determine health research and health care priorities and allocate resources;
- To plan health facilities, services and manpower;
- To plan prevention and screening programmes and assess the results of these programs; and
- To develop health promotion programmes and evaluate their results.

Confidentiality of Vital Records

The personal information on vital records is protected against unwarranted or indiscriminate disclosure under the *Vital Statistics Act*, R.S.O. 1990, c.V.4, the *Freedom of Information and Protection of Privacy Act*, R.S.O. 1990, c.F.31 and, at Statistics Canada, under the *Statistics Act*, R.S. 1985, c. S-19.

II. PRINCIPLES OF MEDICAL CERTIFICATION OF DEATH

The RN(EC)'s Responsibility in Death Registration

In accordance with subsection 35 (2) of the *Vital Statistics Act*, it is the legal responsibility of a prescribed individual (prescribed by the regulations under that *Act*) to complete and sign the Medical Certificate of Death, Form 16, which forms part of the complete death registration (Appendix I). This act of completing a medical certificate of death constitutes "certifying" the death, and the person signing is the "certifier".

Uniform principles must be applied in the reporting of cause(s) of death, which then must be recorded on the form recommend by the World Health Organization. The use of this form places the responsibility for indicating the correct sequence or train events on the certifying physician.

In the prescribed circumstances, if a RN(EC) attends the deceased during his or her last illness, he or she must:

- Be familiar with the sections 35 to 38 of the Vital Statistics Act relating to the certification of deaths (Appendix II);
- Be familiar with and fully understand section 35.3 of Regulation 1094 of the *Act* which prescribes the specific circumstances under which a RN(EC) may complete and sign the Medical Certificate of Death (Appendix III);
- Be familiar with the correct method to complete the Medical Certificate of Death, according to the instructions in this handbook; and
- Ensure that the completed and signed death registration form is available to the funeral director promptly.

Instructions on completing the Medical Certificate of Death are also 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**. Questions concerning a RN(EC)s scope of practice should be referred to the College of Nurses of Ontario at **1-800-387-5526**.

The Value of Complete & Detailed Information on Cause of Death

The cause of death section of the Medical Certificate of Death, in use in Canada's provinces and territories, is standardized in accordance with the World Health Organization (WHO) guidelines. From this, the causes of death are classified, according to the World Health Organization's International Classification of Diseases, Injuries and Causes of Death (ICD).

An important concept in classifying causes of death is the *underlying cause of death*. The underlying cause is defined by the World Health Organization as "the disease or injury which initiated the train of morbid events leading directly or indirectly to death, or the circumstances of the accident or violence which produced the fatal injury." However, information on the other diseases or conditions that led to death and the other significant conditions that contributed to death are also important. The cause of death section is thus designed to record information on all significant diseases or conditions of the deceased, whether or not they are the underlying cause. The analysis of all conditions on the Medical Certificate of Death is especially important in studying diseases or conditions that are rarely the underlying causes of death, but often contribute to death, such as pneumonia or diabetes.

Also important is the degree of detail recorded on the cause of death section. 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. The ICD makes it possible to identify very precisely many varieties or sites of diseases and injuries and causal organisms. 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.

The certifying RN(EC) is the best person to complete the Medical Certificate of Death based on a documented medical history and diagnosis made by the deceased's physician. The certifier thus has both the responsibility and the opportunity, by using care and attention in the completion of the certificate, to ensure mortality statistics reflect both the underlying cause of death and multiple causes of death.

III. COMPLETING THE MEDICAL CERTIFICATE

A. GENERAL INSTRUCTIONS

The medical certificate is an important legal document and permanent record detailing the fact and circumstance of death. When completing the medical please bear this in mind regarding accuracy, legibility and completeness. Per the *Vital Statistics Act* you are required to use original forms supplied by the Office of the Registrar General and not a copy. Refer to Appendix I for instructions on obtaining forms.

It is essential that the Medical Certificate of Death:

- Is prepared accurately according to the directions in this handbook;
- Is legible, typed whenever possible or printed clearly using permanent ink;
- Is an original, not a reproduction, of a current version of the Medical Certificate of Death (see Appendix I);
- Any alterations or errors are initialed;
- Abbreviations are to be avoided;
- No copies are made after the medical certificate has been completed and certified and
- The original, not a reproduction, accompany the body of the deceased upon transfer to the funeral home to be provided to the funeral director.

The following criteria <u>must</u> be met for the nurse practitioner to complete the form.

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

If any one of the criterion does not exist then a physician or coroner must complete the medical certificate of death.

B. COMPLETING THE CAUSE OF DEATH SECTION

The cause of death section of Ontario's Medical Certificate of Death is based on recommendations of the World Health Organization.

CAUSE O	F DEATH		
	11. Part I	I	Approximate interval between onset & death
	Immediate cause of death	(a) due to, or as a consequence of	
	Antecedent causes, if any,	(b) due to, or as a consequence of	
	giving rise to the immediate cause (a) above, stating the underlying cause last	(c)	
ł	B 4	(d)	
CAUSE OF	Part II Other significant conditions contributing to the death but not causally related to the immediate cause (a) above	П	
DEATH			
	12. If deceased was a female, did the death occur:	during pregnancy (including abortion and ectopic pregnancy) within 42 days thereafter between and 1 years	43 days ar thereafter
	13. Was the deceased dead on arm at the hospital?	ival 14. Was there a surgical procedure within 28 days of death? Yes No	
	16. Reason for surgery and operation	ive findings	

Definitions

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

The <u>immediate cause of death</u> is the condition leading directly to death and is reported on line (a) in Part I.

The words <u>due to</u>, <u>or as a consequence of</u> printed between the lines of Part I apply to sequences with an etiological or pathological basis and also to sequences where an antecedent condition is believed to have prepared the way for the more direct cause.

A <u>reported sequence</u> is two or more conditions entered on successive lines in Part I, each condition being an acceptable cause of the one on the line above it.

An <u>antecedent cause of death</u> is any intervening cause of death occurring between the immediate and the underlying cause of death.

Completing Part I

Part I is designed so that a sequence of conditions leading to death may be reported in ascending causal order, one cause per line, starting with the most recent condition on the top line and going backward in time on progressively lower lines until reporting the underlying cause on the lowest line. The underlying cause of death reported on the lowest line b), c) or d) depending on the number of antecedent causes reported, must always be the same terminal illness that was previously diagnosed and document by a physician.

(a) the **immediate** cause of death

shortest duration

due to, or as a consequence of

- (b) an **antecedent** cause of death due to, or as a consequence of
- (c) an **antecedent** cause of death due to, or as a consequence of
 - (d) the **underlying cause of death**

longest duration

Report the immediate cause of death on line (a) and the underlying cause of death (terminal illness) on the lowest completed line. If needed, report any antecedent causes of death occurring between the immediate and the underlying cause of death. In some cases a single disease or cause of death which describes completely the sequence of events or may be wholly responsible for the death may be reported alone in Part I.

The <u>underlying cause of death</u> is defined by the World Health Organization (WHO) as the disease or injury which initiated the train of morbid events leading directly or indirectly to death. If the certificate has been completed properly the condition reported alone on the lowest completed line of Part I will:

- > have caused all of the conditions on the lines above it
- have the longest duration
- > is the <u>diagnosis of a terminal illness</u> made by a medical practitioner.

A predictable pattern of decline would be reported as the sequence of conditions leading to death. The certifier has to decide which of several conditions are the immediate, antecedent and underlying causes of death for reporting in Part I and which conditions (out of many) to report in Part II (those conditions which may have contributed to the death, but were not causally related to the death).

Example

A medical diagnosis of a terminal illness made by a medical practitioner of Breast Cancer with metastases for an 87 year old woman who develops pneumonia, leading to respiratory failure.

A reportable sequence:

1a) Respiratory failure (immediate cause on (a))

Due to, or as a consequence of

b) Primary Breast Cancer (underlying cause reported on the lowest completed line)

A reportable sequence including an antecedent cause (any intervening causes occurring between the immediate and the underlying cause of death:

1a) Respiratory failure (immediate cause on (a))

Due to, or as a consequence of

b) Pneumonia (antecedent cause)

Due to, or as a consequence of

c) Primary Breast Cancer (underlying cause reported on the lowest completed line)

A reportable sequence including more than one antecedent cause:

1a) Respiratory failure (immediate cause on (a))

Due to, or as a consequence of

b) Pneumonia (antecedent cause)

Due to, or as a consequence of

c) Metastases to lung (antecedent cause)

Due to, or as a consequence of

d) Primary Breast Cancer (underlying cause reported on the lowest completed line)

It is up to the certifier to decide how many conditions to report of the train of events leading to death. Additional lines (more than the four printed) may be necessary to enter the complete sequence of events leading to death and the certifier is requested to add lines so all conditions related to the immediate cause of death are entered in Part I with only one condition to a line.

There must always be an entry on line (a) and if no clear immediate cause can be identified (i.e. where the death is expected but not witnessed by anyone) enter the medical diagnosis of a terminal illness made by a medical practitioner.

OLD AGE

Avoid using "old age" alone as the sole cause of death, except in extremely limited circumstances. Similar terms such as senescence, senility, senile, asthenia, debility, degeneration, dysfunction, decay, age related debility, deterioration of age, geriatric decline, elderly, exhaustion or infirmities of (old) age should not be used alone. Specify "old age" as the underlying cause of death only if a medical or surgical condition that may have contributed to the death is also mentioned in Part I or Part II

NATURAL CAUSES

Avoid "natural causes" alone with no specification of any disease. Natural causes is not a cause of death, it is a manner (classification) of death. Specify "natural causes, exact cause unknown" only if a medical or surgical condition that may have contributed to the death is also mentioned in Part I or Part II.

ORGAN FAILURE

Avoid reported organ or (multi)system failure **alone** (e.g. congestive heart failure, renal failure, respiratory failure). Failure of most organs must be due to an underlying disease or condition. If an organ or system failure is listed as an immediate cause of death, **always** report its etiology on the line(s) beneath.

MODE OF DYING

Modes of dying should not be entered as the sole entry in Part I or used as the underlying cause of death. These include terms such as cardiac arrest, respiratory arrest, hypoxia, asphyxia, syncope, shock etc. Also avoid very vague statements such as cardiovascular event/incident, asthenia, debility or frailty.

Miscellaneous Instructions:

- Do not use medical abbreviations as abbreviations can have multiple meanings and may be misinterpreted.
- Record all entries in a legible manner. Illegible entries will be disregarded
- Doubtful qualifying expressions such as apparently, presumably, possibly, etc. are disregarded.
- The terms death, complication, palliative care and similar terms are not disease conditions or causes of death and should not be reported.
- Indicate an after effect or residual of a disease and specify conditions as ancient, arrested, cured, healed, history, old and remote.
- The age of the decedent at the time of death is always noted. Some conditions cannot be properly classified unless the age is taken into consideration and/or qualified by terms such as congenital, acquired, newborn, neonatal, infant, infantile and child(hood).

Completing Interval Between Onset and Death (Duration)

For each cause entered in Part I indicate the best estimate of the interval between the presumed onset of the condition and the date/time of death.

The duration of each cause of death should be specified as to the unit of time: years, months, days and hours, even minutes or seconds. Note that the form requests the "approximate interval" between onset and death, It is important to approximate the duration or to enter "unknown" rather than leave it blank.

The duration for the *immediate cause* will not exceed that for an *antecedent cause*; nor will it exceed that for *the underlying cause* entered on the lowest completed line, as these conditions are entered in ascending order. The underlying cause of death reported alone on the lowest used line of Part I should always have the longest duration since it should have caused all the conditions above it, while line (a) should have the shortest duration.

Reporting Causal Relationships

When reporting causal relationships between two or more conditions bear in mind that a <u>reported sequence</u> is two or more conditions entered on successive lines in Part I, each condition being an acceptable cause of the one on the line above it.

Causal relationships apply not only to sequences with an etiological or pathological basis but also to sequences where an antecedent condition is believed to have prepared the way for the more direct cause.

Enter conditions on successive lines in Part I, each condition being an acceptable cause of the one on the line immediately above it.

DO NOT list medical conditions which have no causal relationship to each other on successive lines in Part I.

If there were **unexpected events or complications** during the last illness of the deceased, a RN(EC) must **not** complete the Medical Certificate of Death.

Completing Part II

Any other significant condition which unfavorably influenced the course of the morbid process and thus contributed to the fatal outcome but was not related to the immediate cause of death is entered in Part II.

These conditions are not part of the sequence reported in Part I and would be <u>conditions</u> that pre-existed or co-existed prior to death. In this section, more than one condition can be reported per line.

It is of no benefit to enter in Part II multiple medical conditions that have no direct relationship to the death, have not contributed to the death or were not significant. Limit your entries to those only of appropriate significance which contributed to the death.

- Do not enter a condition that belongs in Part I to Part II because of lack of space. Additional lines may be necessary to enter the complete sequence of events leading to death and the certifier is requested to add these lines as (e), (f) etc.
- When there are two or more possible sequences resulting in death (multiple conditions among the elderly), the certifier must choose and report in Part 1 the sequence he thinks had the greatest impact. Conditions from the other sequence(s) should be reported in Part I.

In certifying the causes of death for Part II, any disease, abnormality, injury or late effects of poisoning, believed to have adversely affected the decedent should be reported, including:

- Use of alcohol and/or other substances;
- Smoking history;
- 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;
- Late effects of injury;
- Surgical information, if applicable; and
- Any iatrogenic underlying cause.

Medical Detail Required

For statistical and research purposes it is important that the causes of death, particularly the underlying cause of death, be reported as specifically and precisely as possible.

Causes of death are classified using the International Classification of Disease (ICD-10). The best way to appreciate the degree of detail that can be stored for statistical analysis is to examine the way conditions are classified in the ICD.

Appendix IV outlines the pertinent details to be specified for the major causes of death, in the sequence of chapters in the ICD.

Record diagnoses as precisely as the information permits, incorporating relevant details from histological reports. Where an important detail is unknown, the fact should be stated, since many statistical offices make a practice of questioning (e.g. correspondence) apparently incomplete or vague diagnoses in case the detail required might be available.

Examples of Certification

In all of the following examples, the RN(EC) must have had the primary responsibility for the care of the deceased during his/her last illness, death was expected, there was a documented medical diagnosis of a terminal illness made by a medical practitioner, a predictable pattern of decline occurred and there were no unexpected events or complications during the last illness. The criteria <u>must</u> be met for the nurse practitioner to complete the form. If any one criterion does not exist a physician or coroner must complete the medical certificate of death.

EXAMPLE 1

The RN(EC) is on-call and receives an update about a 68 year-old female who was diagnosed 6 months ago with carcinoma of the lung. She is cared for by a team of hospice RN(EC)s and they do not "expect her to make it through the weekend". She has a 45-year history of smoking 2 ppd, a 5 year history of COPD with frequent bouts of pneumonia and bronchitis. She stops breathing and dies while the RN(EC) is at her bedside.

Part I (a)	Respiratory Arresthours due to
(b)	metastases to abdomen and pleura2 months due to
(c)	Bone metastases2 months due to
(c)	Carcinoma of lung (primary)6 months
Part II	Smoking, 45 years COPD, 5 years

Smoking is reported in Part II as a contributing factor. When reporting neoplasms always indicate the organ or part <u>FIRST</u> affected (the primary site) and secondary sites if they are known.

EXAMPLE 2

A 79 year-old female has suffered a right hip fracture due to a fall at home four months previous. Since the date of the injury, her health declined to the point that it rendered her bedridden and immobile. She has a long history of osteoporosis.

Part I (a)	Respiratory arrestminutes due to
(b)	Pneumonia10 days due to
(c)	Immobility4 months due to
(d)	Right hip fracture4 months
Part II	Osteoporosisyears

Accidental or Violent death section

Item 20. Accident Item 21. Nursing home Item 22, June 1, 2010 Item 23. Fall down stairs

Where a cause of death is an injury or fracture reported in Part I or in Part II, you are required to complete the accidental or violent death section (Items 20-23). For further explanation, refer to Section C "Injury".

EXAMPLE 3

A 59 year-old female with a history of hypertension for 10 years was admitted to hospital for investigation following complaint of persistent headache for weeks. Exploratory craniotomy on 24 March revealed she was suffering from an inoperable tumor of left temporal lobe. Biopsy showed tumor to be an astrocytoma. Patient wished to die at home. Palliative care was instituted through discussion with family, RN(EC) and physician. Patient died 18 May.

Part I(a) Astrocytoma of left temporal lobeMonths

Part II Hypertension (benign)10 years

Item 14. Was there a surgical procedure within 28 days? NO (do not complete Items 15-16)

In some cases a single disease or cause of death which describes completely the sequence of events or may be wholly responsible for the death may be reported alone in Part I. The death may have been expected and occurred at home but not witnessed by anyone. In such cases line 1(a) can serve as both the underlying and immediate cause of death. Hypertension was thought to have influenced the course of the illness unfavorably but was in no way related to the astrocytoma and, therefore, is reported in Part II.

EXAMPLE 4

A 33 year-old male was diagnosed HIV positive five years ago. He was transferred to a hospice for palliative care after he developed AIDS and diagnosed with Pneumocystis Carinii Pneumonia.

Part I(a)	Pneumocystis carinii pneumonia 1.5 weeks
	due to
(b)	AIDS4 months
	due to
(c)	HIV infection5 years
Part II	Kaposi's sarcoma4 months

This is an accurate and complete cause-of-death statement.

EXAMPLE 5

A 52 year-old male suffering from end-stage liver failure dies while living in a group home. He has a well-known history of alcoholism and substance abuse, and was diagnosed with cirrhosis 2 years ago. He was also diagnosed with chronic hepatitis B 10 years ago.

Part I(a)	End stage liver Failure2 days due to
(b)	Alcohol induced cirrhosis of the liver2 years due to
(c)	Hepatitis B10 years
Part II	History of alcoholism and substance abuse unknown

Part II may be used to report other significant conditions that co-existed or pre-existed and contributed to death.

EXAMPLE 6

An 80 year-old female who was diagnosed with Alzheimer's 7 years ago and is undergoing palliative care in a long-term care facility. One of the hallmarks of her senile 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.

Part I(a)	Cardiac Arrestminutes
	due to
(b)	Malnutrition2 months
	due to
(c)	Refusing to eat or drink2 months
	Due to
(d)	Senile Dementia – Alzheimer type7 years

The term palliative care is not a disease condition or cause of death and should not be reported.

EXAMPLE 7

The RN(EC) is visiting a 70 year-old client with end stage cardiac disease. The RN(EC) is aware that the client is palliative and has a documented medical diagnosis. The RN(EC) has been visiting frequently. The client wishes to receive care at home. She becomes progressively short of breath and is retaining fluids. She is found one morning without vital signs.

Part I(a)	Cardiac Arrestimmediate
	due to
(b)	Congestive Heart Failure 4 years
	due to
(c)	Myocardial Infarction5 years
	due to
(d)	Arteriosclerotic cardiovascular disease18 years
	due to
(e)	Diabetes Type 225 years

Extra lines may be added in Part I to complete the sequence, if required (see Completing Part I). Type II Diabetes could also have been reported in Part II as a significant condition which contributed to the death.

EXAMPLE 8

A 73 year-old man is visited in the home by the RN(EC) because he has no family physician. The client has been diagnosed with end stage renal disease by the RN(EC) and does not wish any further treatment. The client becomes progressively worse and refuses to go to hospital and is supported by his family. The client dies at home. The RN(EC) knows the client best and is asked to go to the home to pronounce the death and complete the Medical Certificate of Death.

In this example, the RN(EC) may <u>not</u> complete and sign the Medical Certificate of Death. Although the RN(EC) may have had the primary responsibility for the care of the deceased during his last illness and death was expected, there is **no documented medical diagnosis of his terminal disease made by a physician.** A physician or coroner must be called to examine the deceased and complete the Medical Certificate of Death.

EXAMPLE 9

The following illustrates the importance of accurately stating the sequence of morbid conditions in order to allow selection of the "underlying" cause of death.

A diabetic man who had been under insulin control for many years developed ischemic heart disease and died suddenly from a myocardial infarction. Depending on the physician's documented medical diagnosis, the following certifications are possible and would be acceptable:

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

Part I (a)	Myocardial infarction1 hour
	due to
(b)	Chronic ischemic heart disease5 years
	due to
(c)	Diabetes mellitus12 years

2. If the physician considered that the heart condition developed independently of the diabetes, the certification would be:

Part I (a)	Myocardial infarction1 hour due to
(b)	Chronic ischemic heart disease5 years
Part II	Diabetes mellitus12 years

3. If the man 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 and the physician being uncertain that it arose from the diabetes at all, the sequence would be:

Part I (a)	Acute renal failure
(b)	Nephropathy 4 years due to
(c)	Diabetes mellitus12 years
Part II	Chronic ischemic heart disease

This Medical Certificate of Death, Part I has NOT been completed according to the instructions in this Handbook – Sometimes certificates are received in this form, which is **incorrect:

Part I (a)	Diabetes12 years
, ,	due to
(b)	Myocardial Infarction 2 days
	due to
(c)	Prostate Cancer4 years

This is an impossible sequence since (a) could not be "due to" (b) or (c) **and** incongruent durations have been reported. This certificate will be returned to the nurse practitioner who should review the handbook and complete a new one.

C. COMPLETING ITEMS OTHER THAN CAUSES OF DEATH

Name of Deceased

Enter the decedent's <u>full</u> legal name including surname and all given names. Do not report alias or abbreviations. Accuracy of the legal name may be very important for estate, insurance and pension purposes. Accurate sources of a person's legal name can be their birth certificate in conjunction with other forms of identification, citizenship card or passport.

Date of Death (Month, Day, Year)

Enter the exact day, month and year that death occurred in item 2. For the month, enter the full or abbreviated name, e.g., "January" or "Jan". Pay particular attention to the entry of day, month or year when the death occurs around midnight or December 31. Consider a death at midnight to have occurred at the end of one day rather than the beginning of the next. For instance, the date for a death that occurs at midnight on December 31 should be recorded as December 31. Do not record time of death

Sex

Provide F for female and M for male clearly and legibly.

Age

Calculate an accurate age at time of death from date of birth

Place of Death

Enter the <u>name</u> of the long term care facility, hospital, nursing home or other location where deceased died. If deceased died at <u>home</u> provide a complete street address including street number and name or, in a rural area without a street address, include the lot and concession. Check off appropriate corresponding box.

Enter the name of the city, town, village or township. Enter the regional municipality, county or district. If an <u>amalgamation</u> has occurred, use the <u>new</u> name and refer to a current provincial map when in doubt. Fundamental changes in responsibilities and the restructuring of many municipalities occurred across Ontario. For more information regarding amalgamations you can contact your local Division Registrar office.

Pregnancy

If the decedent was female of child bearing years, select the appropriate box in item 12 if she was pregnant or had given birth to a child within one year of death, even if the pregnancy is unrelated to the death.

Surgery or Medical Procedure

If the decedent had undergone a surgical procedure within twenty eight days of death or if one of the causes of death was a complication of surgery, enter the appropriate information in items 14, 15, 16. Clearly state any post operative complications (reported anywhere on the certificate) and indicate the surgical or medical procedure by name and the date it was performed. Always report the reason (e.g. the condition necessitating surgery or medical procedure) and operative findings in the appropriate space anytime a complication is mentioned.

Autopsy Particulars

It should be noted that this question is a three-part question.

The second and third part is dependent on the answer to the first part.

Specify if an Autopsy is being held by entering a checkmark in Item 17.

NO - No further entries are required for this section.

YES - It should be noted that if a nurse practitioner has decided an autopsy is required, then he/she <u>must</u> contact the physician or a coroner to complete the Medical Certificate of Death.

Injury - Accidental or Violent Death Section

Complete the Accidental or violent death section (Items 20-23) anytime an injury, fracture or synonymous term which has contributed to the death, reported in Part I or in Part II. Report paralysis, late effects or sequela of an injury as a result of an incident that occurred past or present. If the immediate cause of death is as a result of an external cause, the medical certificate of death must be completed by a physician or coroner. A coroner should be notified when a death appears to be non-natural or natural with significant issues. If uncertain immediately discuss the case with a manager before proceeding.

Certification by RN(EC)

All parts of this section (items 24 to 28) must be completed. By signing you certify the information on this form is correct to the best of your knowledge. You are a nurse practitioner who, in prescribed circumstances, may be permitted to certify deaths in Ontario.

Signature

Signed clearly in ink, followed by "RN(EC)" or "NP" and registration number.

Date (Month, Day, Year)

Enter the exact month, day and year on which the death was certified.

Name

Print your name clearly; surname first, followed by given name(s).

Title

As a nurse practitioner, check of box RN(EC)

Address

Enter your complete work (mailing) address; including facility name, street number and name, city, province and postal code.

MEDICAL CERTIFICATE OF DEATH, FORM 16

Per the Vital Statistics Act you are required to use forms **supplied** by this office. Do not copy blank forms. To obtain this form call your local Division Registrar's Office (City Hall), fax a written request to the Registrar General @ 807-343-7694 or call 807-343-7458 for more information.

	Ontario Ministry of Office of the Government Services Registrar General Medical Certificate of D	eath - Form 16					
You must use the Stillbirth Registration Form 8 when registering stillbirths. This form must be completed by the attending physician, coroner, or designated person before a burial permit can be issued. Please PRINT clearly in blue or black ink as it is a permanent legal record.							
INFORMATION ABOUT THE DECEASED 1. Name of deceased (last, first, middle) 2. Date of death [month - by name, day, year (in full)]							
3. Sex (M or F) 4. Age 5. If under 1 yr. 6. If under 1 day 7. Gestation age 8. Birth weight Hours Minutes							
9. Place of death (name of facility or location) other home residence (specify) 10.City, town, village or township Regional municipality, county or district							
ON OF C	COCATA .	_					
CAUSE O	11. Part I	Approximate interval between onset & death					
	Immediate cause of death (a) due to, or as a consequence of						
	Antecedent causes, if any, giving rise to the immediate cause (a) above, stating the underlying cause last (d)						
CAUSE OF DEATH	Part II Other significant conditions contributing to the death but not causally related to the Immediate cause (s) above						
	12. If deceased was a female, during pregnancy (including abortion and ectopic within 42 days between 43 days and 1 year thereafter						
	13. Was the deceased dead on arrival at the hospital? Yes No Yes No Yes No						
	16. Reason for surgery and operative findings						
Autopsy particulars		res No					
Accidental or	20. If accident, suicide, homicide or undetermined (specify) 21. Place of Injury (e.g. home, farm, highway, etc.) 22. Di	ate of injury (mm/dd/yyyy)					
violent death (23. How did injury occur? (describe circumstances) (if applicable)							
CERTIFIC							
	low, you certify that the information on this form is correct to the best of your knowledge. sture (physician, coroner, RN(EC), other) 25. Date (mm/dd/yyyy)						
X 26. Your name (last, first, middle) 27. Your title:							
Physician Coroner RN(EC) other (specify) 28. Your address (street number and name, city, province, postal code)							
TO BE COMPLETED BY THE DIVISION REGISTRAR. By signing below, I am satisfied that the information in this Medical certificate of death and the Statement of death is correct and sufficient and I agree to register the death.							
Signature Date (mm/dd/yyyy) Registration number Div. reg. code no.							
For the use of the Office of the Registrar General only							
Personal information contained in this form is collected under the authority of the Vital Statistics Act, R.S.O. 1990, c.v.4 and will be used to register and record the births, still-births, deaths, marriages, additions or change of name, corrections or amendments, provide certified copies, extracts, certificates, search notices, photocopies and for statistical, research, medical, law enforcement, adoption and adoption disclosure purposes. Questions about this collection should be directed to the Deputy Registrar General at PO Box 4500, Thunder Bay ON P7B \$1.8. Telephone 1 800 451-2156 or 415 325-8305.							
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EXCERPT FROM ONTARIO'S *VITAL STATISTICS ACT*, R.S.O. 1990 c.V.4

Registration of Deaths

- 35. (1) Upon the request of the funeral director, the applicable one of the following persons shall complete, certify and deliver to the funeral director a statement in the form approved by the Registrar General that contains personal particulars of the deceased:
 - 1. The nearest relative present at the death or last illness, or any relative who may be available.
 - If no relative is available, the occupier of the premises in which the deceased died or, if the occupier is the
 deceased, any adult person residing in the premises who was present at the death or has knowledge of
 the personal particulars.
 - If the death occurred in unoccupied premises and no relative is available, any adult person who was present at the death or has knowledge of the personal particulars.
 - 4. The coroner who has been notified of the death and has made an investigation or held an inquest regarding the death. O. Reg. 68/09, s. 22.
 - (2) Subject to subsections (3) and (4), any legally qualified medical practitioner who has been in attendance during the last illness of a deceased person or who has sufficient knowledge of the last illness shall immediately after the death complete and sign a medical certificate of death in the form approved by the Registrar General, stating the cause of death according to the classification of diseases adopted by reference in section 70, and shall deliver the medical certificate to the funeral director. O. Reg. 68/09, s. 22.
 - (3) A registered nurse who holds an extended certificate of registration under the Nursing Act, 1991 shall, immediately after the death of a person, complete and sign a medical certificate of death in the form approved by the Registrar General, stating the cause of death according to the classification of diseases adopted by reference in section 70 and shall deliver the medical certificate to the funeral director if,
 - a) the nurse has had primary responsibility for the care of the deceased during the last illness of the deceased;
 - b) 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;
 - d) there was a predictable pattern of decline for the deceased during the last illness of the deceased;
 - there were no unexpected events or unexpected complications during the last illness of the deceased. O. Reg. 68/09, s. 22.
 - (4) In the case of a death of which the coroner is required to be notified under section 10 of the Coroners Act, the coroner notified shall, as soon as the cause of death is known, complete and sign a medical certificate of death in the form approved by the Registrar General, stating the cause of death according to the classification of diseases adopted by reference in section 70, and shall deliver the medical certificate to the funeral director. O. Reg. 68/09, s. 22.
 - (5) Upon receiving the statement containing the personal particulars and upon receiving the medical certificate of death or a warrant to bury, the funeral director shall complete the statement containing personal particulars, setting out the proposed date and place of burial, cremation or other disposition or the removal of the body, and shall deliver the documents so received to the division registrar of.
 - a) the registration division within which the death occurs, if the place of death is known; or
 - b) the registration division within which the body is found, if the place of death is not known. O. Reg. 68/09, s. 22.
- 36. (1) If, within one year from the day of the death of a person, the division registrar receives the statement containing the personal particulars and receives the medical certificate of death or a warrant to bury and if the division registrar is satisfied as to the correctness and sufficiency of them, the division registrar shall register the death by signing the documents so received; in that case, the documents so received constitute the registration of the death. O. Reg. 68/09, s. 22.
- (2) A division registrar shall not register any death after one year from the day of the death. O. Reg. 68/09, s. 22.

- (3) Upon registering a death, the division registrar, without the payment of any fee, shall forthwith prepare and deliver to the funeral director.
 - a) an acknowledgment of registration of the death in the form approved by the Registrar General; and
 - b) a burial permit, in the form approved by the Registrar General, for the purpose of the burial, cremation or other disposition or the removal of the body of the deceased. O. Reg. 68/09, s. 22.
- (4) Upon issuing the burial permit, the division registrar shall forward to the Registrar General the statement of death and whichever of the medical certificate of death and the warrant to bury that the division registrar received. O. Reg. 68/09, s. 22.
- 37. If a death has occurred and it is impracticable to register it, by reason of distance, with the division registrar of the proper registration division, registration of the death may be made with the nearest division registrar who shall.
 - a) register the death;
 - b) issue an acknowledgment of registration of death and a burial permit; and
 - c) transmit to the proper division registrar, within two business days, notice of registration of death in the form approved by the Registrar General and keep a record of the notice so transmitted. O. Reg. 68/09, s. 22.
- **38.** (1) A coroner who issues a warrant to bury under subsection 21 (6) of the Act shall,
 - a) forthwith deliver it to the funeral director; and
 - b) complete and deliver or mail the medical certificate of death to the Registrar General as soon as the cause of death is known. O. Reg. 68/09, s. 22.
 - (2) The documentation prescribed for the purpose of clause 21 (5) (b) of the Act is the warrant to bury issued under subsection 21 (6) of the Act or the medical certificate of death. O. Reg. 68/09, s. 22.

SECTION 35.3, REGULATION 1094, VITAL STATISTICS ACT

- 35(3) A registered nurse who holds an extended certificate of registration under the *Nursing Act, 1991* shall, immediately after the death of a person, complete and sign a medical certificate of death in the form approved by the Registrar General, stating the cause of death according to the classification of diseases adopted by reference in section 70 and shall deliver the medical certificate to the funeral director if,
 - a) the nurse has had primary responsibility for the care of the deceased during the last illness of the deceased;
 - b) 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;
 - d) there was a predictable pattern of decline for the deceased during the last illness of the deceased; and
 - e) there were no unexpected events or unexpected complications during the last illness of the deceased. O. Reg. 68/09, s. 22.

MEDICAL DETAIL REQUIRED International Classification of Disease (ICD-10)

Blood Disorders

Nature of disease process; type/nature of deficiency for anemia's; whether hereditary, where relevant; nature of haemoglobinopathy; factor involved for coagulation defects. Circulatory Diseases

Nature of disease process; site, if localized; acute or chronic; for rheumatic fever, whether active; specify rheumatic or other etiology for valvular heart conditions Digestive Diseases

Nature of disease process; site of ulcers, hernias, diverticula, etc.; acute or chronic, where relevant; nature of any complication for ulcers, appendicitis, hernias.

Endocrine Disorders

Nature of disease process or disturbance of function; for thyroid disorders, whether toxic; for diabetes, nature of complication or manifestation in a particular site.

External Cause - (Review criteria for certifying a medical)

State whether accident, suicide, homicide or undetermined; for transport accidents, state vehicle involved (car, van, truck, motorcycle); whether deceased was driver or passenger, and describe circumstances and place of occurrence; for other accidents, describe circumstances (fall from bed, downstairs, same level) place of occurrence and date (past and present).

Genitourinary Disorders

Acute or chronic: clinical syndrome and pathological lesion for glomerulonephritis, etc.; site of calculi; infecting organism and site of infections; nature of complications.

Infections

Acute, subacute or chronic; name of the disease and/or infecting organism, where known; the site, if localized; mode of transmission, where relevant; for syphilis, whether primary or secondary, congenital or acquired, early or late, clinical form.

Injuries - (Review criteria for certifying a medical)

Terms such as injury, laceration, tear, hematoma and other similar conditions, are usually, but not always considered traumatic in origin. If you are reporting such terms always report its etiology on the line(s) beneath and/or qualify them as non traumatic if there is no indication the condition was traumatic. Specify type and site of injury,

fracture or poisoning; any complications and duration (sequela). Where any reported cause of death is an injury due to external cause a concise statement of the circumstances is required. Complete the accidental or violent death section.

Neoplasms

Indicate the organ or part <u>FIRST</u> affected (the primary site), specify sites of secondary growth, morphological type and specify if UNKNOWN (i.e. lung cancer, primary unknown). Report malignant primary and secondary neoplasm, carcinoma in situ, benign neoplasm, neoplasm of uncertain or unknown behaviour and identify sites and/or morphological types.

Nutritional Disorders

Type of deficiency, etc.: severity, where appropriate.

Nervous System Disorders

Nature of the disease process; infecting organism, where relevant; whether hereditary, where relevant.

Musculoskeletal Disorders

Nature of disease process; name of infecting organism; underlying systemic disease, where relevant; site; complication; for deformities, whether congenital or acquired. Congenital Anomalies. Site and type of anomaly; specify congenital; complications.

Perinatal Deaths - (Review criteria for certifying a medical)

Report a sequence of conditions leading to death in ascending causal order with the underlying cause on the lowest line. Report conditions in fetus, infants, and mother or of placenta, cord or membranes. Deaths from birth asphyxia, state severity; deaths associated with immaturity, state length of gestation and/or birth weight; whether light or heavy-for-dates; type of birth trauma; infecting organism; endocrine or metabolic disturbances; congenital anomalies and any complications.

Poisoning - (Review criteria for certifying a medical)

Include drug taken inadvertently, lethal amount/dose/quantity, overdose, toxic effects or reaction, toxicity, wrong dose taken or given and intoxication. Specify the drug, alcohol, organic solvent, gas, vapor, pesticide, chemical, noxious substance, and whether or not the drug was given in treatment, complications and the condition being treated. Complete the accidental or violent death section.

Respiratory Diseases

Nature of disease process; acute or chronic; infecting organism; any external cause.