Medical Assistance in Dying

Interim Medication Protocols for the Northwest Territories

Effective: June 23, 2016
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Section I – Guidance Document for Medical Assistance in Dying

Medication Protocols

Purpose of this Document

This guidance document has been developed by the Department of Health and Social Services (DHSS) and Northwest Territories Health and Social Services Authority (NTHSSA) to assist the prescribing and/or providing Practitioner(s) and the pharmacist in their understanding and application of the Medication Protocols for Medical Assistance in Dying.

This protocol is adapted from Alberta's June 30, 2017 Medical Assistance in Dying Medication Protocols. The DHSS and NTHSSA are grateful to Alberta Health Services for their guidance and support.

For greater certainty, no part of this document compels a Practitioner or pharmacist to provide or assist in providing Medical Assistance in Dying.

For further detail on the application of Medical Assistance in Dying, please refer to the *Medical Assistance in Dying Interim Guidelines for the Northwest Territories*.

Deviation from this protocol is discouraged.

Important Definitions

Medical Assistance in Dying:

(a) the administering by a Practitioner of medication(s) to a patient, at their request, that causes their death; or
(b) the prescribing or providing by a Practitioner of medication(s) to a patient, at their request, so that they may self-administer the substance and in doing so cause their own death.

The *Medical Assistance in Dying Interim Guidelines* include both instances in which the Practitioner provides the patient with the means to end his/her own life ('self-administration'), and voluntary euthanasia, where the Practitioner is directly involved in administering medication(s) to end the patient's life.

Practitioner:

A Practitioner under this Protocol holds the same definition as stated in the *Medical Assistance in Dying Interim Guidelines for the Northwest Territories*.

> **Providing Practitioner:** A Practitioner is considered **providing** if s/he prescribes **OR** administers the medication(s) used in Medical Assistance in Dying either through direct administration (voluntary euthanasia), or through the provision of medications to the patient for self-administration.

Demographic Information

The patient and Providing Practitioner information is collected as is required on all other medical records.

Verification of Request

Providing Practitioner's initials: affirm that the individual has decisional capacity; that the presence of a grievous and irremediable condition has been determined by two practitioners; and that the Providing Practitioner has received consent from the patient authorizing Medical Assistance in Dying, thus satisfying the mandatory eligibility criteria for Medical Assistance in Dying, established when the Act to amend the *Criminal Code* and to make related amendments to other Acts (Medical Assistance in Dying) became law.

Pharmacist's initials: affirm that the pharmacist has verified with the providing practitioner that all assessments have been completed and that the patient has been deemed to satisfy all of these criteria. Verification occurs when the pharmacist asks the providing practitioner whether each criterion has been met and an affirmative response is received for each criterion. The pharmacist shall document verification by initialing beside each criterion. Review of documentation is not required by the pharmacist.

Collaboration

It is important to ensure that the Providing Practitioner and the pharmacist are in agreement on which medications intended to cause the patient's death will be dispensed. The following items must be discussed and confirmed prior to filling out the prescription forms:

- the protocol selected, including a review of the medications and the order of administration;
- additional or alternative medications required to compensate for breakage or additional dosing;
- the scheduled time for the administration of Medical Assistance in Dying;
- the time required to procure and prepare the medications;
- transportation of the medications if necessary;
- arrangements for transfer of medications directly from pharmacist to providing practitioner;
- how to complete the medication administration record;
- procedure for appropriate disposal of used syringes, needles and medication; and
- procedure for returning unused medications to the pharmacy.

Practitioner-provided Intravenous (IV) Protocol

Includes the medications recommended for the Practitioner-provided IV protocol. The medications are listed in the order of administration. It is recommended that Providing Practitioners collaborate with the pharmacist to number the medications in order of administration, where feasible.

Self-administered Oral Protocol

Includes the medications recommended to be prescribed for the patient as part of the self-administered oral protocol. The medications are listed in the order of administration.

Symptom Management Protocol

Includes the medications recommended to manage the symptoms resulting from use of the self-administered oral protocol. Several medication options are listed for consideration by the Providing Practitioner.

Section II – Prescriptions for Medical Assistance in Dying

Prescriptions

Demographic Information	
Patient Name: Date of birth: HCN: Address: Allergies:	Providing Practitioner Name: License Number: Telephone Number: Address

Verification of Request

The Providing Practitioner shall affirm and initial all of the criteria. Prior to processing the prescription, the pharmacist shall verify with the Providing Practitioner that all assessments have been completed and that the patient has been deemed to satisfy all of the criteria. Verification occurs when the pharmacist asks the Providing Practitioner whether each of the criterion listed below have been met and an affirmative response is received for each criterion. The pharmacist shall document verification by initialing beside each criterion. Review of documentation is not required by the pharmacist.

I have:	**Practitioner Initials**	**Pharm Initials**
• affirmed that the patient has been assessed to have decisional capacity;		
• affirmed that the patient has been determined to suffer from a grievous and irremediable medical condition; and		
• affirmed that the patient has provided consent for Medical Assistance in Dying		

Collaboration

The Providing Practitioner and the pharmacist must discuss:	**Practitioner Initials**	**Pharm Initials**
• the protocol selected, including review of all medications and order of administration		
• additional or alternative medications required		
• the scheduled time for the provision of Medical Assistance in Dying		
• the time required to procure, prepare and transport the medications		
• how to complete the medication administration record		
• procedure for returning unused medications to the pharmacy		

It is REQUIRED that the Providing Practitioner be in attendance during self-administration of the oral protocol in the event of medical complications or failure of the medication.

In the event of intolerance to the medications, an extended dying period, or failure to die after self-administration of the oral protocol, the decision may be made to proceed with the IV protocol. Active consent to proceed to the IV protocol will have to be obtained at the time of consent being obtained for Medical Assistance in Dying and will be part of the consent for the procedure. Arrangements must be made with pharmacy in advance to ensure the IV protocol is available to the providing practitioner in the case that conversion is required.

Refer to the Protocol Based Drug Information below for detailed instructions on medication prescribing and preparation.

Pharmacist Initials: _____ Pharmacist signature: _____ Date: _____

Practitioner Initials: _____ Practitioner signature: _____ Date: _____

Medical Assistance in Dying – Prescriptions for IV Protocol

Patient Name:	Providing Practitioner Name:
Date of Birth:	License Number:
HCN:	Telephone Number:
Address:	Address:
Allergies:	

Select orders by placing a (✓) in the associated box. *Note to Practitioner:* **if desired, an additional dose may be prescribed in case of breakage.**

Pharmacy should supply medications in a ready-to-administer format. If not possible, provide vials/ampoules for the Practitioner to prepare prior to the procedure.

☐ IV Start Kit

☐ Provide duplicate doses of the selected medications in section 1, 2, 3, 5 and 7. Provide them in commercially available vials/ampoules in a separate medication box, to be used in the event of breakage of primary kit.

1. Anxiolytic

☐ midazolam 10 mg IV over 2 minutes, a repeat dose may be necessary (Dispense: 20 mg).

2. Local Anesthetic

☐ lidocaine 40 mg IV over 30 seconds, a repeat dose may be necessary (Dispense: 80 mg)

OR if allergic to lidocaine

☐ magnesium sulfate 1000 mg (diluted to 10mL with normal saline) IV over 5 minutes, a repeat dose may be necessary (Dispense: 2000 mg)

3. Coma-inducing Agent (if a deep coma cannot be confirmed, an additional dose may be required)

☐ propofol 1000 mg IV over 5 minutes, if an additional dose is required, give: propofol 500 mg IV over 2.5 minutes (Dispense: 1500 mg)

☐

4. O P T I O N A L - Normal Saline Flush

If IV tubing is of significant length and volume, consider IV flush with 10 mL normal saline. (Dispense: 10 mL normal saline flush syringe)

5. Neuromuscular Blocker

☐ rocuronium 200 mg by rapid IV injection , a repeat dose may be necessary (Dispense: 400 mg)

OR if rocuronium not available

☐ cisatracurium 40 mg by rapid IV injection, a repeat dose may be necessary (Dispense: 80 mg)

6. Normal Saline Flush

Flush IV with 10 mL normal saline to prevent incompatibility and to ensure full dose administered (Dispense: 10 mL normal saline flush syringe)

Providing Practitioner Signature	**Date**

Medical Assistance in Dying – Prescriptions for Oral Protocol

Patient Name:	Providing Practitioner Name:
Date of Birth:	License Number:
HCN:	Telephone Number:
Address:	Address:
Allergies:	

Select orders by placing a (✓) in the associated box. *Note to Practitioner:* **if desired, an additional dose may be prescribed in case of breakage.**

Administration via enteral tube is not recommended due to lack of data and potential for clogging due to the large volume of powder. The IV protocol is the recommended alternative for patients with enteral tubes.

During administration of the oral protocol, it is REQUIRED for the Providing Practitioner to be in attendance to manage medical complications and/or proceed with either the Symptom Management Protocol or conversion to the IV Protocol if necessary.
It is recommended that the Providing Practitioner prepare the suspension.

- ☐ IV Start Kit
- ☐ Provide additional doses of selected medications in following sections 1, and 2

1. Gastric Motility/Nausea Prevention

☐ haloperidol 2 mg PO one hour prior to ingestion of coma-inducing compound (Dispense: 2 mg)

☐ haloperidol 2 mg SC/IV one hour prior to ingestion of coma-inducing compound (Dispense 5 mg)

PLUS

☐ metoclopramide 20 mg PO one hour prior to ingestion of coma-inducing compound (Dispense: 20 mg)

☐ metoclopramide 20 mg SC/IV one hour prior to ingestion of coma-inducing compound (Dispense: 20 mg)

OR if intolerant to metoclopramide

☐ ondansetron 8 mg PO/ODT one hour prior to ingestion of coma-inducing compound (Dispense: 8mg)

☐ ondansetron 8 mg SC/IV one hour prior to ingestion of coma-inducing compound (Dispense: 8mg)

2. Anxiolytic

☐ lorazepam 0.25 – 0.5 mg SL PRN if the patient has significant anxiety (Dispense: 1 x 0.5 mg tab)

Note: if patient is benzodiazepine-naïve, a reduced dose of 0.25 mg is recommended (1/2 of a 0.5 mg tab)

3. Coma-inducing Compound (must include diazepam, digoxin, propranolol)

☐ Compound of: diazepam powder 1 g
digoxin tablets 50 mg (200 x 0.25 mg tablets)
propranolol tablets 2 g (50 x 40 mg tablets)

☐ Include: morphine powder 15 g*

* ***Omit morphine if patient has had a recent opioid rotation from morphine due to neurotoxicity.***

Directions: Mix powder into 100-125 mL of water, clear juice, or alcoholic beverage. Shake or stir well until smoothly mixed and milk-like. Ingest entire contents immediately within 1-2 minutes.

Providing Practitioner Signature	**Date**

Medical Assistance in Dying – Prescriptions for Symptom Management Protocol

Patient Name:	Providing Practitioner Name:
Date of Birth:	License Number:
HCN:	Address:
Address:	Telephone Number:
Allergies:	

Select orders by placing a (✓) in the associated box.

For use in conjunction with the self-administered oral protocol. *Note to Practitioner:* **if desired, an additional dose may be prescribed in case of breakage.**

- ☐ IV Start Kit
- ☐ Provide additional doses of selected medications in following sections 1, 2, 3 and 4

1. Managing Emesis (choose <u>one</u> option as appropriate or depending on availability)

☐ haloperidol 5 mg SC/IV immediately then 0.5 – 1 mg SC/IV every 2 hours PRN (Dispense:_____mg)

☐ metoclopramide 10 mg SC/IV immediately then 10 – 30 mg SC/IV every hour PRN (Dispense:_____mg)

☐ ondansetron 8 mg SC/IV immediately then 8 mg SC/IV every 8 hours PRN (Dispense:_____mg)

2. Managing Respiratory Secretions (choose <u>one</u> option as appropriate or depending on availability)

☐ glycopyrrolate 0.4 mg SC/IV immediately then 0.2 – 0.4 mg SC/IV every 2 hours PRN (Dispense:____mg)

☐ scopolamine 0.4 mg SC/IV immediately then 0.4 mg SC/IV every 2 hours PRN (Dispense:___mg)

☐ atropine 0.6 mg SC/IV immediately then 0.6 mg SC/IV every 4 hours PRN (Dispense:_____mg)

3. Managing Seizures (choose <u>one</u> option as appropriate or depending on availability)

☐ midazolam 5 mg SC/IV immediately and repeat every 10 minutes PRN (Dispense:____mg)

☐ Lorazepam 2 mg SC/IV immediately and repeat every 20 minutes PRN (Dispense:_ mg)

4. Managing Pain or Distress (choose <u>one</u> option as appropriate or depending on availability)
Specify dose and frequency.

☐ morphine_____mg SC/IV_____PRN (Dispense: _____ mg)

☐ HYDROmorphone _____mg SC/IV_____PRN (Dispense:_____mg)

☐ fentanyl_____ mg SC/IV _____PRN (Dispense:_____mcg)

Providing Practitioner Signature	**Date**

Section III – Medical Assistance in Dying Protocol Based Drug Information

WARNING: These drug monographs were prepared for use with the Standardized Prescription Protocols for Medical Assistance in Dying only, and are not intended for other purposes. For complete drug use and safety warnings, please consult other sources.

Due to the special context of Medical Assistance in Dying, shortened beyond use dates (BUD) are assigned in the Intravenous Drug Protocol Monographs to ensure the medications are used promptly. The BUD may vary from those published.

The medications in the Intravenous Drug Protocol should be prepared in a sterile environment whenever possible. If a sterile environment is not available, aseptic technique may be used. In this situation, syringes should be prepared as close as possible to the time of delivery of the medications to the providing practitioner. Regardless, the maximum BUD extended to the prefilled medication syringes is 24 hours.

The medications must be stored safely and securely until such time that they are received by the Providing Practitioner to ensure drug stability and safety of all personnel involved.

Practitioner-provided Intravenous Drug Protocol Monographs

(drugs are listed in order of protocol use)

NOTE: to prevent IV incompatibilities, stop all other infusions and flush the IV line with 10 mL normal saline before proceeding. If this is not feasible, start a second IV line dedicated for administration of medications for Medical Assistance in Dying.

1. Anxiolytic

Midazolam

Administration
Required: midazolam 1 mg/mL or 5 mg/mL (depending on availability)
Directions: withdraw 10 mg into an appropriately sized syringe
Dose: 10 mg IV over 2 minutes

Beyond use date: 24 hours at room temperature in syringe

NOTE: Patient may remain awake or may lose consciousness depending on sensitivity to benzodiazepines.

2. Local Anaesthetic (choose only one option as appropriate)

Lidocaine

Administration
Required: lidocaine 1% (10 mg/mL) or 2% (20 mg/mL) (depending on availability)
Directions: withdraw 40 mg into an appropriately sized syringe
Dose: 40 mg IV over 30 seconds. Wait 2 minutes before administering propofol.

Beyond use date: 24 hours at room temperature in syringe

Dosing Considerations and Options

- Caution: **DO NOT** administer lidocaine **WITH** epiNEPHrine IV.

Magnesium Sulfate (if allergic to lidocaine)

Administration
Required: magnesium sulfate 200 mg/mL
Directions: withdraw 1000 mg (5 mL) into a 20 mL syringe and further dilute with normal saline to a final volume of 10 mL
Dose: 1000 mg IV over 5 minutes

Beyond use date: 24 hours at room temperature in syringe

3. Coma-inducing Agent (choose only one option as appropriate)

Propofol

Do not mix with other drugs prior to administration.

Administration
Required: propofol 10 mg/mL
Directions: withdraw 500 mg (50 mL) into a 60 mL syringe. Prepare 2 syringes of 50 mL each. If an additional dose is prescribed, prepare a third syringe.
Dose: 1000 mg IV (infuse each syringe over 2.5 minutes). May give additional dose of 500 mg if required.

Dosing Considerations and Options

- Storage: Store at room temp, protect from light, do not use if there is evidence of separation of phases of emulsion.

Beyond use date: 24 hours at room temperature in syringe
CAUTION:
Loss of consciousness should occur rapidly during the first minute of propofol administration. Propofol may be painful to inject which is the reason for administration of lidocaine prior to the propofol. Cardiovascular and respiratory depression can occur with this dose of propofol. Even if this occurs, proceed with neuromuscular blocker.

Coma must be confirmed prior to administration of a neuromuscular blocker. If a deep coma (see Artificial Coma Criteria and Richmond Agitation-Sedation Scale below) cannot be confirmed, then the dose must be increased by adding an additional 500 mg of propofol as required.

Artificial Coma Criteria (adapted from Quebec Protocol)

Physiological Criteria	Clinical Signs
Level of consciousness	• Unable to arouse • No response to verbal commands, • No protective reflexes (loss of corneal reflex in particular)

Richmond Agitation–Sedation Scale (RASS)

Score	Term	Description
+4	Combative	Overtly combative or violent; immediate danger to staff
+3	Very agitated	Pulls on or removes tube(s) or catheter(s) or has aggressive behavior toward staff
+2	Agitated	Frequent nonpurposeful movement or patient–ventilator dyssynchrony
+1	Restless	Anxious or apprehensive but movements not aggressive or vigorous
0	Alert and calm	Spontaneously pays attention to caregiver
-1	Drowsy	Not fully alert, but has sustained (more than 10 seconds) awakening, with eye contact, to voice
-2	Light sedation	Briefly (less than 10 seconds) awakens with eye contact to voice
-3	Moderate sedation	Any movement (but no eye contact) to voice
-4	Deep sedation	No response to voice, but any movement to physical stimulation
-5	Unarousable	No response to voice or physical stimulation

4. OPTIONAL - IV Line Flush

If IV tubing is of significant length and volume, consider IV flush with 10 mL normal saline.

5. Neuromuscular Blocker (choose only one option as appropriate)

Rocuronium

Administration
Required: rocuronium 10 mg/mL
Directions: withdraw 200 mg (20 mL) into a 30 mL syringe
Dose: 200 mg by rapid IV injection

Beyond use date: 24 hours at room temperature in syringe

Cisatracurium (if rocuronium is unavailable)

Administration
Required: cisatracurium 2 mg/mL
Directions: withdraw 30 mg (15 mL) into a 20 mL syringe
Dose: 40 mg by rapid IV injection

Beyond use date: 24 hours at room temperature in syringe

Cautions:

- **Intravenous injection of a sufficient dose of neuromuscular blocker causes paralysis of the striate muscles (except the myocardium) within minutes.**
- **The resulting respiratory arrest leads to death by anoxia. Death can come very quickly once the neuromuscular blocker has been injected, if it did not already occur during coma induction.**
- **Respiratory arrest occurs before cardiac arrest. There may sometimes be a delay of up to 20 minutes between respiratory arrest and cardiac arrest, causing cyanosis.**
- **It is advisable to explain to those present, before starting the injections, that death might come relatively quickly and that the heart may keep beating for a long time after breathing has stopped.**

6. IV Line Flush

Ten (10) mL of normal saline must be injected after the neuromuscular blocker to ensure that the full dose has been injected into the vein and to prevent incompatibility.

Self-Administered Oral Drug Protocol Monographs

(drugs are listed in order of protocol use)

1. Gastric Motility/Nausea Prevention

Haloperidol

Contraindications:
Hypersensitivity to haloperidol, Parkinson disease, severe CNS depression, coma.

Administration:
Required: haloperidol (oral and/or injectable as ordered by prescriber)
Dose: 2 mg PO/SC/IV 1 hour prior to coma-inducing compound to promote motility and decrease nausea and vomiting

Metoclopramide

Contraindications:
Hypersensitivity to metoclopramide, GI hemorrhage, mechanical obstruction, perforation, history of seizures, pheochromocytoma (may precipitate hypertensive crisis).

Administration:
Required: metoclopramide (oral and/or injectable as ordered by prescriber)
Dose: 20 mg PO/SC/IV 1 hour prior to coma-inducing compound to promote motility and decrease nausea and vomiting

Dosing Considerations and Options:

- For patients with a history of nausea consider 10 mg PO/SC/IV TID 24 hours prior to procedure.
- If intolerance exists to metoclopramide, ondansetron 8 mg PO/SC/IV can be substituted; noting that it lacks the prokinetic effects of metoclopramide.

2. Anxiolytic

Lorazepam Tablets (PRN)

Administration (optional)
Required: Lorazepam 0.5 mg (2 tablets)
Dose: 0.25-0.5 mg SL PRN if the patient has significant anxiety

Dosing Considerations and Options:

- Over-sedation can prevent the ability to swallow the oral coma-inducing compound.
  - For benzodiazepine-naïve debilitated patients, 0.25 mg (1/2 of 0.5 mg tablet) is recommended.
  - If the patient has a known sensitivity to benzodiazepines then lorazepam should be omitted.
- Initial daily dose in elderly and debilitated patients should not exceed 0.5 mg and should be very carefully and gradually adjusted, depending upon tolerance and response.

3. Coma-inducing Compound

IMPORTANT: must contain diazepam, digoxin, and propranolol.

***Omit* morphine powder if patient has had a recent opioid rotation from morphine due to neurotoxicity.**

The oral coma-inducing compound should not be taken if the patient is vomiting or unable to swallow the suspension. Administration via enteral tube is not recommended due to lack of data and potential for clogging due to the large volume of powder. The IV protocol is recommended for patients with enteral tubes.

Drink mixture as quickly as possible (within 1-2 minutes) to prevent loss of consciousness before complete ingestion.

Oral Coma-inducing Compound Recipe
(Adapted from DDMP2 Mixture, Union Avenue Compounding Pharmacy, Tacoma WA)

diazepam powder USP	1 g
digoxin tablets	50 mg
morphine sulfate powder USP	15 g (if appropriate)
propranolol tablets	2 g

Instructions:

- Prepare in an engineering control that provides adequate mechanical ventilation. An externally vented biological safety cabinet (BSC) or fume hood, or a powder containment hood is recommended to prevent occupational exposure.
- Follow standard processes for personal protective equipment as applicable to the compounding environment.
- Use an enclosed scale to weigh the powders within the engineering control.
- Triturate tablets using a mortar and pestle or a manual or automatic tablet crusher.
- Put all powders in a mortar and pestle and triturate well.
- Using a funnel, transfer powder to a 250 mL amber **glass** bottle for dispensing.
- Label with 'WARNING: Contains lethal dose' auxiliary label.
    - Include mixing instructions on the patient-specific labels: Mix powder into 100-125 mLs of water, clear juice, or alcoholic beverage. Shake or stir well until smoothly mixed and milk-like. Ingest entire contents immediately within 1-2 minutes.
- The beyond use date for the powder mixture is 14 days at room temperature from the time of preparation.
    - When preparing the patient-specific labels, assign a beyond use date of 72 hours from the time of *dispensing*. This is to ensure prompt use of the compound.
- Decontaminate the engineering control after the compounding process is complete.
- Refer to medication MSDS sheets for further information.

Prescription Information for Oral Coma-inducing Compound

Patient Instructions/Information:

a. The patient should not consume lactulose or other laxatives within 24 hours prior to taking the oral coma-inducing compound.
b. Discontinue routine medications 12 hours prior to taking the oral coma-inducing compound except for those used for pain or comfort.
c. The patient should not eat for 4-5 hours prior to ingestion of the oral coma-inducing compound. Drink only water during this period; no carbonated beverages.
d. One hour prior to taking oral coma-inducing compound, take the prescribed anti-nausea medications.
e. Just prior to administration, mix powder into 100 – 125 mLs of water, clear juice, or alcoholic beverage and shake or stir well until smoothly mixed and milk-like.
f. The entire quantity of the coma-inducing compound should be consumed in 1-2 minutes. The patient should say his final farewells prior to consumption as loss of consciousness can occur very rapidly after ingestion. Because this mixture is bitter, a room temperature non-fat liquid such as non-carbonated soda, fruit juice, liqueur, or water can be taken after ingestion.

To reduce the risk of regurgitation, keep the patient in an upright position for at least 20 minutes (even if the person loses consciousness) before lowering him/her to a semi-upright position (with the back at 30 – 45 degrees relative to horizontal) and turning him/her onto his/her right side.
Position is deemed to be very important for rapid absorption in the small intestine. If you are unable to reposition, leave him/her in a seated position.

Less than one percent of persons have awakened after taking this coma-inducing compound. There should be a back-up plan with a practitioner ready to administer medication to keep the patient comfortable in the unlikely event of awakening.

The medications listed in the Symptom Management Protocol should be used to manage complications and symptoms resulting from the Oral Protocol.

It is REQUIRED for the Providing Practitioner to be in attendance during self-administration of the oral protocol in the event of medical complications or failure of the medication.

In the event of intolerance to the medications, an extended dying period, or failure to die after self-administration of the oral protocol, the decision may be made to proceed with the IV protocol. Active consent to proceed to the IV protocol will have to be obtained at the time of consent being obtained for medical assistance in dying and will be part of the consent for the procedure. Arrangements must be made with pharmacy in advance to ensure the IV protocol is available to the providing practitioner in the case that conversion is required.

Diazepam Powder

Contraindications:
Hypersensitivity to diazepam, acute narrow-angle or untreated open-angle glaucoma, myasthenia gravis, severe respiratory or hepatic impairment

Digoxin

Contraindications:
Hypersensitivity, ventricular fibrillation

Propranolol

Contraindications:
Hypersensitivity, uncompensated congestive heart failure, cardiogenic shock, severe sinus bradycardia, heart block greater than first degree, bronchial asthma

Morphine Sulfate Powder

Omit morphine powder if patient has had a recent opioid rotation from morphine due to neurotoxicity.

Contraindications:
Hypersensitivity, significant respiratory depression, acute or severe bronchial asthma, current use of monoamine oxidase inhibitors, GI obstruction

Symptom Management Protocol Drug Monographs

NOTE: medications may be dispensed in syringe or vial/ampoule format

1. Managing Emesis (choose one option as appropriate)

Haloperidol

Administration
Required: haloperidol 5 mg/mL injectable
Dose: 5 mg SC or IV immediately then 0.5 – 1 mg SC or IV every 2 hours PRN

Dosing Considerations and Options:

- The SC route is preferred unless conversion to the IV protocol is warranted. Conversion should be considered if experiencing difficulty managing emesis.
- If intolerance exists to haloperidol, other alternatives (metoclopramide or ondansetron) may be used.

Metoclopramide (if allergic/intolerant to haloperidol)

Administration
Required: metoclopramide 5 mg/mL injectable
Dose: 10 mg SC or IV immediately then 10 – 30 mg SC or IV every hour PRN

Dosing Considerations and Options:

- The SC route is preferred unless conversion to the IV protocol is warranted. Conversion should be considered if experiencing difficulty managing emesis.

Ondansetron (if allergic/intolerant to haloperidol)

Administration
Required: ondansetron 2 mg/mL injectable
Dose: 8 mg SC or IV immediately then 8 mg SC or IV every 8 hours PRN

Dosing Considerations and Options:

- The SC route is preferred unless conversion to the IV protocol is warranted. Conversion should be considered if experiencing difficulty managing emesis.

2. Managing Respiratory Secretions (choose one option as appropriate)

Glycopyrrolate

Administration
Required: glycopyrrolate 0.2 mg/mL injectable
Dose: 0.4 mg SC or IV immediately then 0.2 – 0.4 mg SC or IV every 2 hours PRN

Dosing Considerations and Options:

- Glycopyrrolate is preferred, with fewer CNS side effects in the conscious patient. If not available, scopolamine or atropine is a suitable alternative to manage death rattle.

Scopolamine (if glycopyrrolate is unavailable)

Administration
Required: scopolamine 0.4 mg/mL injectable
Dose: 0.4 mg SC or IV immediately then 0.4 mg SC or IV every 2 hours PRN

Atropine (if glycopyrrolate is unavailable)

Administration
Required: atropine 0.6 mg/mL injectable
Dose: 0.6 mg SC or IV immediately then 0.6 mg SC or IV every 4 hours PRN

3. Managing Seizures (choose one option as appropriate)

Midazolam

Administration
Required: midazolam 1 mg/mL or 5 mg/mL injectable (depending on availability)
Dose: 5 mg SC or IV immediately and repeat every 10 minutes PRN

Lorazepam (if midazolam is unavailable)

Administration
Required: lorazepam 4 mg/mL injectable
Dose: 2 mg SC or IV immediately and repeat every 20 minutes PRN

4. Managing Pain or Distress (choose one option as appropriate)

Note: Doses and frequencies at discretion of Providing Practitioner.

morphine

HYDROmorphone

fentanyl

Dosing Considerations and Options:

- Occurrence of pain after ingesting the oral protocol is unlikely, but could signify incomplete absorption or opioid neurotoxicity resulting from the oral coma-inducing compound.
- Alternative or additional opioids can be considered if:
  - Opioid toxicity is suspected
  - Withdrawal symptoms appear due to prolonged dying times greater than the normal half-life of the morphine

Prescription Information for Symptom Management Protocol

The Symptom Management Protocol is intended for use in conjunction with the Self-administered Oral Protocol. The choice of medications to be prescribed is at the discretion of the Providing Practitioner, recognizing that the decision may be dependent on the clinical presentation of the patient.

Consultation between the Providing Practitioner and the pharmacist is encouraged when determining the type, quantity and format of medications in the Symptom Management Protocol to be dispensed. Dispensing quantities and frequencies (where applicable) must be indicated on the prescription form.

Appendix 1

NTHSSA Consumables Supply List for IV Protocol

Qty	Item Description	Initial
1	Container, Sharps	
2	Dressing, IV Secur Tegaderm 6x5x7cm	
2	Gloves, Small (non-sterile)	
2	Gloves, Medium (non-sterile)	
2	Gloves, Large (non-sterile)	
1	Pre-packaged Kit, IV Start	
2	Needle, Short Cath IV 18g	
4	Needle, Short Cath IV 20g	
2	Needle, Short Cath IV 22g	
4	Pads, Blue	
2	Pads, Sterile Gauze 10cm x 10cm (4x4)	
2	Set, IV Extension Smallbore	
10	Syringe, Posiflush 10mL	
6	Swabs, Alcohol	
1	Tape, Plastic Clear Perforated	
1	Tourniquet	
10	Saline Flush	

Optional Items:

- Garbage bag
- Hand sanitizer
- Clipboard
- Nametags for staff

Appendix 2

Medical Assistance in Dying Medication Administration Records

Medication Administration Record for Medical Assistance in Dying - IV Protocol

Patient Information: Name: DOB: HCN: **Allergies:**	**Date of provision of MAID:** **Time of loss of consciousness:**		
Medication	**Practitioner Administered**		
	Dose/Route	**Time**	**Initial**
1. Anxiolytic			
midazolam 10 mg IV over 2 minutes, a repeat dose may be necessary			
2. Local Anesthetic (choose either option 'a' or 'b' as appropriate)			
a. lidocaine 40 mg IV over 30 seconds, a repeat dose may be necessary			
b. magnesium sulfate 1000 mg (diluted to 10 mL with normal saline) IV over 5 minutes, a repeat dose may be necessary			
3. Coma-inducing Agent			
propofol 1000 mg IV over 5 minutes, if an additional dose is required, give: propofol 500 mg IV over 2.5 minutes			
4. OPTIONAL - **Normal saline flush** –If IV tubing is of significant length and volume, consider IV flush with 10 mL normal saline.			
7. Neuromuscular Blocker (choose either option 'a' or 'b' as appropriate)			
a. rocuronium 200 mg by rapid IV injection, a repeat dose may be necessary			
b. cisatracurium 40 mg by rapid IV injection, a repeat dose may be necessary			

8. Normal saline flush – 10 mL			
9. Additional medications (please specify)			
Practitioner Name:			
Practitioner Signature:			

Medication Administration Record for Medical Assistance in Dying - Oral Protocol

Patient Information: Name: Date of Birth: HCN: Allergies:	**Date of provision of MAID:** **Time of loss of consciousness:**		
Medication	**Self-administered**		
	Dose/Route	**Time**	**Initial**
1. Gastric Motility/Nausea Prevention (administer both metoclopramide and haloperidol, ondansetron is optional)			
haloperidol 2 mg PO/SC/IV one hour prior to ingestion of coma-inducing compound			
metoclopramide 20 mg PO/SC/IV one hour prior to ingestion of coma-inducing compound			
ondansetron 8 mg PO/SC/IV one hour prior to ingestion of coma-inducing compound (if intolerant to metoclopramide)			
2. Anxiolytic			
lorazepam 0.25-0.5 mg SL PRN if the patient has significant anxiety			
3. Coma-inducing Compound			
diazepam powder 1 g digoxin tablets 50 mg propanolol tablets 2 g ☐ morphine sulfate powder 15 g* - included **omit morphine if patient has had a recent opioid rotation from morphine due to neurotoxicity* Mix coma-inducing compound into 100-125 mL of water, clear juice, or alcoholic beverage. Agitate until smoothly mixed and milk-like. Ingest entire contents immediately within 1-2 minutes.			
4. Additional medications (please specify)			
Practitioner Name:			
Practitioner Signature:			

Medication Administration Record for Medical Assistance in Dying - Symptom Management Protocol

Patient Information: Name: Date of Birth: HCN: **Allergies:**	**Date of provision of MAID:**		
Medication	**Administered**		
	Dose/Route	**Time**	**Initial**
1. Managing Emesis (choose option 'a', 'b', or 'c' as appropriate			
a. haloperidol 5 mg SC/IV immediately, then 0.5-1 mg SC/IV every 2 hours PRN			
b. metoclopramide 10 mg SC/IV immediately, then 10-30 mg SC/IV every hour PRN			
c. ondansetron 8 mg SC/IV immediately, then 8 mg SC/IV every 8 hours PRN			
2. Managing Respiratory Secretions (choose option 'a', 'b', or 'c' as appropriate)			
a. glycopyrrolate 0.4 mg SC/IV immediately, then 0.2 – 0.4 mg SC/IV every 2 hours PRN			
b. scopolamine 0.4 mg SC/IV immediately, then 0.4 mg SC/IV every 2 hours PRN			
c. atropine 0.6 mg SC/IV immediately, then 0.6 mg SC/IV every 4 hours PRN			
3. Managing Seizures (choose option 'a' or 'b' as appropriate)			
a. midazolam 5 mg SC/IV immediately and repeat every 10 minutes PRN			

b. lorazepam 2 mg SC/IV immediately and repeat every 20 minutes PRN			
4. Managing Pain or Distress (choose option 'a', 'b', or 'c' as appropriate)			
a. morphine SC/IV _____mg every__hours prn			
b. hydromorphone SC/IV _____mg every__hours prn			
c. fentanyl SC/IV _____mcg every__hours prn			
Practitioner Name:			
Practitioner Signature:			