My name:

__________________________
My Home Parenteral Nutrition
Emergency Plan

As a home parenteral nutrition (HPN) user, it is very important to be prepared for an emergency, such as a weather-related emergency or a natural disaster. It is important to plan before an emergency to make sure you will be able to continue your therapy without any interruptions.

What is an HPN emergency plan?
Your HPN emergency plan should have instructions on what to do in different types of emergencies. To make your plan, ask yourself:

› What will I do if the power goes out?
› What will I do if I can’t get clean water?
› What will I do if deliveries can’t be made to my home?
› How would I respond in different types of emergencies (e.g., flood, power outage, etc.)?

• Make an emergency contact list (e.g., home care provider, family health care provider, Parenteral Nutrition (PN) Clinic).
• Consider buying a MedicAlert® bracelet in case you are injured or not able to talk. The bracelet should include info such as “intravenous nutrition” and that you have a Hickman line in your chest.
• Ask your family health care provider to send a form to Nova Scotia Power to request that you be added to their system as a priority customer.
• Plan to have access to a generator or other power source in case of a long power outage.
• Review ways to do HPN using gravity.
What emergency supplies should I have ready?

***Keep a copy of your current parenteral prescription. A new one will be sent to you by the program coordinator if there are any changes.***

- Make sure you have a large cooler, frozen ice packs (in the freezer), cooling blankets (in the fridge), and a thermometer.
- Make sure you have flashlights, batteries, battery-operated candles, and hand sanitizer.

Home Parenteral Nutrition (HPN) during a power outage

You must keep your Home Parenteral Nutrition (HPN) solution cool if the power goes out.

If you have a generator, use it to power your fridge.

If you don’t have a generator:

- Keep a thermometer in the fridge where you store your HPN solution. The temperature should be around 4°C (40°F), with a range of 2°C to 8°C (35.6°F to 46°F).
- For short power outages, keep the fridge closed as much as possible to keep the cold air in.
- ***If the power is out for more than 12 hours, check your fridge temperature every so often. If the temperature is going up near 8°C, move your HPN to your cooler. The cooler should have ice packs on the bottom that are covered with a cooling blanket to protect the solution from freezing. Put the thermometer in the cooler. Cover the HPN solution with another cooling blanket and place more ice packs on top.***
- If the temperature rises above 8°C, you can use one bag of HPN within the next 30 hours. All other HPN must be discarded (cut the bags and pour the solution out).
- Do not put your HPN outside in the snow to keep it cool. It will get too cold!
Power

- Consider buying a generator. Use it to power only the services you need most, such as your fridge, IV pump, furnace, and certain lights and outlets. Having a generator can give you peace of mind if there is a power emergency.

- Have flashlights and battery-operated candles ready.

- Make sure you have enough light to read clearly. You do not want to use the wrong drug or syringe.

- Clean your hands. If you cannot use soap and water, you may use hand sanitizer, but be extra careful with your technique:
  - Use 1 to 2 pumps from the dispenser and cover all parts of your hands with it.
  - Rub your hands together until they are dry, about 20 to 30 seconds.
  - Once they are completely dry, it’s OK to touch other surfaces.

- If you think there may be a power outage, keep your pump plugged in at all times. When the power goes off, switch to the pump battery to infuse your HPN solution. You may need to administer your HPN by the gravity method once the pump battery is used up, unless you have backup power (e.g., a generator).
  - *See the next page for instructions on infusing by gravity with pump tubing.
Running your Home Parenteral Nutrition (HPN) by gravity with pump tubing

NOTE: *** Only infuse your HPN by gravity as a last resort in an extended power outage/emergency once all other options have been exhausted (e.g., trying to get access to a generator/electricity, taking the pump and HPN solution to a relative/friend’s home with electricity).***

To discontinue fluid flow and set gravity flow:
1. Press [STOP]. If 2 lines were pumping, press [STOP ALL].
2. Press [ON/OFF] to turn off the infuser.
3. Close all clamps.
4. Open the cassette door and remove the cassette.
5. **If only 1 line was pumping**, open all clamps. **If 2 lines were pumping**, you must choose 1 line for gravity flow. Open the clamps on that proximal line and on the distal line. Make sure one proximal line stays clamped.

6. Holding the cassette upright, set gravity flow by turning the flow regulator counter-clockwise.

![Flow regulator illustration]

7. Check the drip chamber to measure the flow rate.
   *Your pump tubing does not have a roller clamp to control flow rate. You must adjust flow using the flow regulator as shown, and count drops per minute.*

***IMPORTANT: You must run your lipids on a separate regular straight line using a port BELOW the filter, and adjust the rate with a roller clamp by counting drops.***

***See the end of this guide for your individual gravity rates.***
Home Parenteral Nutrition (HPN) during an evacuation
If a disaster happens, you may need to leave quickly.

Take the following things with you:

• **Infusion pump:** This may be the only infusion pump you will have access to for days.

• **HPN backpack:** Put your infusion pump and HPN solution (1 to 2 bags of refrigerated HPN solution, or 3 to 5 bags if you have a cooler with frozen ice packs and cooling blankets) in the backpack. Remember: any HPN solution that goes above 8° C must be used within 30 hours or discarded.

• Pump tubings and flushes (normal saline, heparin).

• A list of your current medications. Bring your medications in their original containers.

• A current copy of your HPN solution formula.

**Home Parenteral Nutrition (HPN) emergency pack**

• Have enough HPN supplies for at least 3 to 5 days.

• Regularly rotate supplies from your deliveries with the supplies in your backpack to avoid products expiring.

• Use an orange bag or backpack as an emergency signal.

• Line the backpack with a plastic garbage bag to keep it dry inside.

**We recommend taking these HPN supplies with you:**

› current HPN prescription (or refer to the label on your solution)
› copy of your Nova Scotia health card
› 70% alcohol solution
› paper towels
› pump infusion tubings
› IV hydration bags and infusion tubing (if needed)
› positive pressure cap
› normal saline and heparin flushes
› alcohol swabs
› 3M™ SoluPrep™ swabs
› 3M™ Tegaderm™ dressing
› 3M™ Micropore™ surgical tape
› sterile gloves
› face masks
› accurate thermometer
› foldable IV pole or coat hook to hang your solution from
› cooler with frozen ice packs and cooling blankets—have ready and add ice packs, cooling blankets, and HPN solution at the last minute (layer as described on page 2)
Health Emergency Card

My medical info:
Keep a copy of this sheet in your HPN emergency pack at all times. Print clearly and update it if there are changes.

My name: ___________________________ Date completed: __________________
Reason for HPN: __________________________
HPN start date: __________________________

My medical contacts:
NS HPN Program
Phone: 902-473-2873/Fax: 902-473-3966
Family health care provider: __________________________
Phone: __________________________ Other contact number: _____________
Other: name and title (e.g., nurse practitioner): __________________________
Phone: __________________________ Other contact number: _____________

Type of vascular access and location:
Type:
☐ Tunneled Hickman ☐ PICC
Number of lumens:
☐ 1 ☐ 2 ☐ 3
Insertion site:
☐ Chest ☐ Arm
Insertion side:
☐ Right ☐ Left
Date inserted: _____________ Inserted at: __________________________ (Hospital)

HPN prescription: Check white label on HPN solution for up-to-date HPN prescription.
Infusion volume: _____________ ml

Infusion frequency:
☐ Daily _____ Days per week

Additional hydration:
☐ Yes ☐ No
If Yes, type: __________________________ Volume: _______ ml Frequency: __________
Weight: _______ Date of weight: _______ Height: ________________________

Medications: If you travel, carry 2 to 3 days of medications and HPN supplies in your carry-on bag and keep it with you at all times. Put your name on the bag.
Individual flow rates for pump tubing via gravity

HPN

Lipids
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Contact your local public library for books, videos, magazines, and other resources.
For more information, go to http://library.novascotia.ca
Connect with a registered nurse in Nova Scotia any time: call 811 or visit https://811.novascotia.ca
Learn about other programs and services in your community: call 211 or visit http://ns.211.ca

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