

## Module 14 – Disaster Preparedness

For the purpose of this workbook, a disaster is a major event that directly affects your dialysis care. Disasters generally strike quickly and without warning, so being prepared to deal with such events is vital for minimizing their impact.

Hemodialysis requires a reliable supply of power and water, which makes people on dialysis particularly vulnerable to disasters. In a serious disaster situation, power and water services could be unavailable for several days. Telephone service may also be cut and roads and bridges could be impassable. At the hospital, emergency rooms could be overcrowded to deal with seriously injured victims.

This section provides helpful ideas for people on independent dialysis about how to manage through the first few critical days following a disaster, until normal conditions can be restored. Additional information can be found in the **Individual & Neighbourhood All Hazard Emergency Preparedness Workbook** available from the BC Provincial Emergency Program.

You can find this at: <https://www2.gov.bc.ca/> → Public Safety and Emergency Services → Emergency Preparedness, Response & Recovery

At the end of this module, there are various forms which should be filled out now (and updated regularly), then safely stored in your emergency kit.

## Tips for surviving a disaster

1. Stay at home following a disaster event unless you are seriously hurt.
2. If possible, contact your nurse if you have lost power and are unable to dialyze.
3. Begin a survival diet.
4. Wait at home for instructions and details about hemodialysis on TV, radio, personal messenger or phone.
5. If you must go to an emergency shelter, tell the person in charge about your special needs.
6. Patients must take as much responsibility as possible for organizing their own transportation, keeping in contact with the Home Hemodialysis Program and making themselves available to come in to a centre for dialysis at any time – day or night.
7. Be prepared to be evacuated and/or transported by other means than an ambulance, e.g. military vehicles, volunteers, or air evacuation. Bring your medications with you.
8. Keep an extra pair of glasses with your emergency supplies.
9. Notify the Home Hemodialysis Program of any address and telephone changes.
10. In the event that you are not affected by a disaster that has happened somewhere else in your region, you may be contacted by the Home Hemodialysis Program to assist other patients.

## Medical Alert

### Why should you wear a medical alert identifier?

If you are injured or unable to communicate, medical workers need to know quickly that you are a person on dialysis.

### How does it work?

Your medical alert is worn as a bracelet or necklace and bears an internationally recognized symbol. If needed, medical professionals can access your computerized medical data within seconds. This vital data can be sent anywhere in the world to help medical personnel to provide proper diagnosis and care. Prompt treatment could save your life.

### Helpful Tips

- A medical alert bracelet should not be worn on the same arm as your fistula. During a trauma, it could impede the flow if it is pulled up the arm.
- Usually your medical alert is custom engraved with your primary medical conditions, personal ID number and a 24-hour hotline number.



#### Important to note:

My Medical Alert Personal I.D. Number is:

\_\_\_\_\_.

The 24-hour hotline number is:

\_\_\_\_\_.

Out of province contact (check point for other family members):

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## How to stop dialysis in an emergency

When you first start home dialysis, your educator will show you what to do in an emergency.



### Important to remember:

Always keep your emergency take-off kit near your dialysis machine. Your kit should contain: 4 clamps, scissors, sterile gauze, tape and two 10mL pre-filled saline syringes.

If a disaster occurs during a dialysis treatment, follow the directions for emergency take off:

1. Stop the blood pump.
2. Clamp access and blood lines.
3. Open take off kit.
4. Place two extra clamps on each bloodline.
5. If you are unable to disconnect your access from the bloodlines, cut between the two clamps.  
**DO NOT CUT THE ACCESS LINES.**
6. Leave access needles in place until you get to a safe location.
7. Take emergency kit with you.

## Care of your access during an emergency

Under no circumstances should any medical personnel not familiar with your dialysis status, place, or inject anything into your vascular access.

## Emergency disconnect cards

In the unlikely event that you are unresponsive and unable to take yourself off dialysis, an ambulance may be called. Please have the emergency disconnect card on the machine, to help paramedics remove you safely and quickly.

The cards are on the next page for your reference. You can download and print your own copy at:

[www.bcrenal.ca](http://www.bcrenal.ca) → Health Info → Kidney Care → Home Hemodialysis → Resources for Current Patients → Patient Tools

# Fistula/Graft

**Emergency Disconnect Procedure** NxSTAGE For Patients Graft or Fistula

- 1** **PRESS BLOOD PUMP BUTTON**  
Blood pump will stop and small rectangle will turn solid green.
- 2** **USING THE PRODUCTS FOUND IN YOUR CLAMP & CUT KIT...**
- 3** **CLOSE TWO CLAMPS ON NEEDLES AND BLOODLINES. ADD SAFETY CLAMPS BELOW AND ABOVE THE CONNECTION.**
- 4** **DISCONNECT LINES AT THE CONNECTION SITE BY TWISTING**
- 5** **GO TO A SAFE PLACE WITH YOUR CLAMP & CUT KIT**

Produced by **BCRenal**  
 Fraser Health, Interior Health, northern health, Providence Health Care, Vancouver Coastal Health, Island Health, Provincial Health Services Authority

Updated April 2023

**Emergency Disconnect Procedure** Model AK 96 For Patients Graft or Fistula

- 1** **PRESS BLOOD PUMP BUTTON**  
Blood pump will stop and button will start flashing.
- 2** **USING THE PRODUCTS FOUND IN YOUR CLAMP & CUT KIT...**
- 3** **CLOSE TWO CLAMPS ON NEEDLES AND BLOODLINES. ADD SAFETY CLAMPS BELOW AND ABOVE THE CONNECTION.**
- 4** **DISCONNECT LINES AT THE CONNECTION SITE BY TWISTING**
- 5** **GO TO A SAFE PLACE WITH YOUR CLAMP & CUT KIT**

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# Catheter

**Emergency Disconnect Procedure** NxSTAGE For Patients Catheter

- 1** **PRESS BLOOD PUMP BUTTON**  
Blood pump will stop and small rectangle will turn solid green.
- 2** **USING THE PRODUCTS FOUND IN YOUR CLAMP & CUT KIT...**
- 3** **CLOSE CLAMPS ON THE CATHETER AND BLOODLINES. ADD SAFETY CLAMPS BELOW AND ABOVE THE CONNECTION.**
- 4** **DISCONNECT LINES AT THE CONNECTION SITE BY TWISTING**
- 5** **GO TO A SAFE PLACE WITH YOUR CLAMP & CUT KIT**

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Updated April 2023

**Emergency Disconnect Procedure** Model AK 96 For Patients Catheter

- 1** **PRESS BLOOD PUMP BUTTON**  
Blood pump will stop and button will start flashing.
- 2** **USING THE PRODUCTS FOUND IN YOUR CLAMP & CUT KIT...**
- 3** **CLOSE CLAMPS ON THE CATHETER AND BLOODLINES. ADD SAFETY CLAMPS BELOW AND ABOVE THE CONNECTION.**
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## Water disinfection

Water may be disinfected with 5.25% sodium hypochlorite solution (household chlorine bleach).



### Important to remember:

Do not use solutions in which there are active ingredients other than hypochlorite.

Steps:

1. Strain water through a clean cloth or handkerchief to remove any sediment, floating matter or glass.
2. Add bleach using the following proportions:  
One drop = .05mL      1 tsp. = 5mL  
(Use an eye dropper to measure the bleach)

For Clear Water	For Cloudy Water
One litre- add 2 drops	One litre- add 4 drops
Four litres- add 8 drops	Four litres- add 16 drops
20 litres- add ½ teaspoon	20 litres- add 1 teaspoon (5mL)

3. Mix water and hypochlorite thoroughly by stirring or shaking in a container. Let stand for 30 minutes before using. A slight chlorine odour should be detectable in the water. If not, repeat the dosage and let stand for an additional 15 minutes.

### Did you know?

Water may also be purified by bringing it to a rapid boil for 5 minutes. Due to its chemical content, swimming pool or spa water should not be used as a primary source of drinking water.

## Emergency diet plan

This information will help you to plan for an emergency when dialysis may not be available (for example, following a snowstorm, earthquake, flood or hurricane). You will need to limit your **potassium**, fluid, protein and salt more than usual until you have dialysis again. Remember, when a disaster strikes, you may have to wait several days for your next dialysis.

### ***Being prepared could save your life.***

When planning for a disaster or emergency event, follow these guidelines:

- Keep at least a three-day supply of the survival diet in a backpack. You must be ready to move to a shelter if necessary or to travel elsewhere for dialysis.
- Choose non-perishable foods.
- You may not have electricity, water or cooking equipment, so plan meals that do not need to be cooked.
- Canned foods such as beef stew, macaroni and cheese do not need preparation and can be eaten cold.
- If you are being evacuated and have time, add some butter or margarine to your pack for extra calories.
- Remember foods lower in salt will make you less thirsty.
- If power goes out, food in your fridge will keep for one to three days if the fridge is only opened briefly.



## Daily survival diet

### Breakfast

- 1/2 cup canned fruit, drained
- 1/2 cup cold cereal (shredded wheat, puffed wheat or puffed rice)
- 5 low-salt crackers and 2 tbsp jelly
- 1/2 cup Rice Dream

### Mid-Morning Snack

- Hard candy

### Lunch

- 15 low-salt crackers
- 6 tbsp jelly
- 1/2 cup canned fruit, drained
- 1/2 cup juice
- Hard candy

### Mid-Afternoon Snack

- 4 cookies
- 1/2 cup canned fruit, drained

### Evening

- 1 cup canned stew or macaroni and cheese
- 10 low-salt crackers
- 4 tbsp jelly
- 1/2 cup canned fruit, drained
- 1/2 cup juice



#### Important to remember:

If you are hungry, you can eat an additional 10 low-salt crackers and 6 cookies each day. You can also eat 2 tbsp peanut butter.

## Supplies for three-day survival diet

Keep these supplies in your Survival Diet pack.

### Foods

- 12 4 oz cans of fruit (applesauce, pears, peaches, pineapple only)
- 1 package of (3) shredded wheat biscuits or 2 cups of puffed rice or puffed wheat
- 6 4 oz boxes of juice (apple or cranberry)
- 1 box low-salt crackers
- 1 box low-salt cookies
- 2 bottles jelly
- 2 bags hard candy (barley sugar, humbugs, peppermints, hard fruit candies)
- 3 8 oz cans of stew or macaroni and cheese
- 1 small jar of peanut butter (optional)

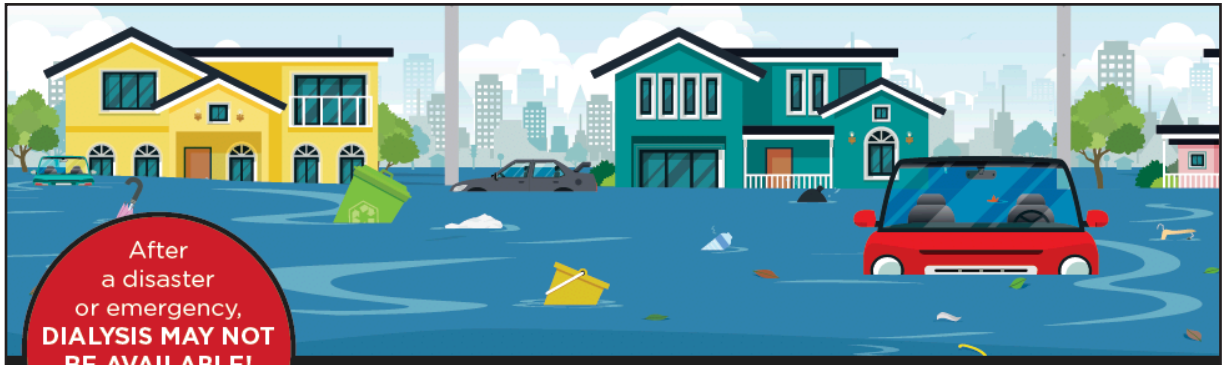
### Substitution list

Foods on the survival diet may be replaced with items listed below if you have access to them.

- 1 cup canned entree: 2–3 oz meat + 1/2 cup noodles or rice
- 2 eggs + 1 slice white bread
- 5 unsalted crackers or 1 slice white bread
- 4 slices white melba toast
- 2 graham crackers
- 1/2 cup fruit or small apple
- 1/2 cup canned or frozen berries
- 1/2 cup reconstituted evaporated milk = 1/2 cup fresh milk or cream

## **Equipment**

- 1 can opener (small, hand operated)
- 1 sharp pen knife
- 1 small piece of aluminum foil
- 1 container with lid
- Ziploc bags
- Paper towels
- Disposable plates, bowls and plastic knives, forks and spoons
- Waterproof matches and candles
- Flashlight and battery-operated radio
- Copy of Survival Diet information









After a disaster or emergency, **DIALYSIS MAY NOT BE AVAILABLE!** Are you prepared? It may save your life!

# PLANNING FOR DISASTER



## Preparing for a Disaster




-  • Keep a copy of the “Emergency Preparedness Information for Hemodialysis Patients” booklet with you. Ask dialysis staff for a copy if needed.
-  • Update the booklet information regularly.
-  • Tell dialysis staff of address or contact changes.
-  • Keep a list of your current medications with you.
-  **3** • Keep at least 3 days of medication on hand.
-  • Make an Emergency Pack.

## After a Disaster

- Stay at home. However, if you are hurt, go to a hospital. 
- Begin **Emergency Renal Diet**. 
- Wait for instructions. Keep radio, TV and phone ON! 
- If evacuated, tell them about your medical information and need for dialysis. 
- Be prepared to have dialysis day or night. 
- Be prepared to have dialysis at another dialysis unit. 

## Emergency Renal Diet

For each day without dialysis, have no more than:

-  **2 cups** of fluids
-  **3-4 servings** of low potassium fruits such as apples, pears or canned fruits\*
-  **1 can** (size of a deck of cards) of lower salt fish, poultry or meat, or 2-3 Tbsp peanut butter

\*One serving = one small piece of fruit, 1/2 cup canned fruit or 1/2 cup fruit juice.

### Choose:

- Lower salt crackers, cookies, cereal, roti, bread, plain rice or noodles
- Jam, jelly, honey, or candies for extra calories
- For people with diabetes: Keep instant glucose tablets, jam, jelly, honey, candies or sugar on hand to treat low blood sugars.

### Avoid:

- High potassium foods such as dried fruit, canned beans, potatoes, bananas and oranges
- Added salt, and salty foods/snacks

# Emergency Information



Please print clearly, and update it if any of the information changes.

**A copy of this sheet should be with you at all times.**

<b>Last Name</b>	
<b>First Name</b>	
<b>Date of Birth (dd/mm/yyyy)</b>	
<b>Address</b>	
<b>Phone Number</b>	
<b>Personal Health Numer</b>	
<b>Your nearest relative or someone to be contacted in case of an emergency:</b>	
<b>Last Name</b>	
<b>First Name</b>	
<b>Relationship to You</b>	
<b>Address</b>	
<b>Phone Number</b>	



# Your Medical Condition and History



If you need to go to another hospital or clinic after a disaster, or if your medical records are unavailable or destroyed, having your medical information with you will help temporary care givers to understand your special needs. You should keep this updated.

<b>Date Completed</b>	
<b>Primary ESRD Diagnosis</b>	
<b>Other Medical Problems</b>	
<b>Infectious Precautions</b>	
<b>Allergies</b>	
<b>Blood Type (if known)</b>	
<b>Modality (type of treatment)</b>	
<b>Hemodialysis at home? (circle one)</b>	<b>YES / NO</b>





# Hemodialysis Information



<b>Date Completed</b>					
<b>I. The Treatment Centre Where You Usually Get Your Care</b>					
<b>Name of Centre</b>					
<b>Address</b>					
<b>Phone</b>					
<b>Family Physician's Name</b>					
<b>Nephrologist's Name</b>					
<b>Other Important Information and Phone Numbers</b>					
<b>II. Usual Dialysis Prescription</b>					
<b>Dialyzer</b>					
<b>Dialysate</b>	Ca _____	K _____	Na _____	Bicarbonate _____	
<b>Dialysis hours</b>		<b>Dialysis treatments per week</b>		<b>Dry Weight</b>	
<b>Blood Flow Rate mL/min</b>					
<b>Heparinization</b>	Loading dose: _____ Hourly rate: _____ u/hr D/C: _____				
<b>III. Type of Vascular Access and Location</b>					
Central Line: _____ Graft: _____ Fistula: _____ Location: _____					
CVC Line Block: _____ Length: _____					





