



Disaster Preparedness



IN THIS SECTION

- *Tips for surviving a disaster*
- *Emergency information*
- *Medical Alert*
- *Your medical condition and history*
- *Hemodialysis information*
- *How to stop dialysis in an emergency*
- *Care of your access during an emergency*
- *Medications*
- *Water disinfection*
- *Emergency diet plan*
- *Daily survival diet*
- *Supplies for three-day survival diet*

Introduction

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.



Disaster Preparedness

Tips for surviving a disaster

1. Stay at home following a disaster event unless you are hurt.
2. If possible contact your Training RN 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. (See Appendix A for radio channels and frequencies.)
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. See the section on Medications for more details.
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.



Disaster Preparedness

Emergency Information

Should you require emergency medical attention, it is important that you can provide the following critical information to your caregivers.

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

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



Name (last) _____ (first) _____

Date of Birth _____

Address _____

Phone _____ Personal Health Number _____

Your nearest relative or someone to be contacted in case of an emergency:

Name (last) _____ (first) _____

Relationship to you _____

Address _____

Phone _____

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



Disaster Preparedness

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, your computerized medical data can be accessed within seconds by medical professionals. 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.

Realistically, in a disaster the phone lines would probably be down. However, your medical alert will at least inform medical personnel about your special health care needs.

Helpful Tips

1. 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.
2. A medical alert necklace might be missed if your upper body clothes are rolled up. Usually your medical alert is custom engraved with your primary medical conditions, personal ID number and a 24-hour hotline number.

Medical Alert: Personal I.D. Number _____

24 Hour Hot Line Number _____



Disaster Preparedness

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 update your information every year, and any time there is a change in your treatment modality.

Date Completed

Primary ESRD Diagnosis

Other Medical Problems

Infectious Precautions

Allergies

Blood Type (if known)

Modality (type of treatment)

Hemodialysis at home



Disaster Preparedness

Hemodialysis information

Date Completed _____

I. The treatment centre where you usually get your care

Name of Centre _____

Address _____

Phone _____

Family Physician's Name _____

Phone _____

Nephrologist's Name _____

Phone _____

Other Important Information and Phone Numbers:

II. Usual Dialysis Prescription

Dialyzer _____

Dialysate Ca ____ K ____ Na ____ Bicarbonate ____

Freezing Yes No

Hemodialysis treatment: Dialysis hours ____ Dialysis treatments/week ____

Heparinization: Loading dose _____ Hourly rate _____ u/hr D/C ____

III. Type of Vascular Access and Location

Central Line _____ Graft _____ Fistula _____ Location _____

CVC Lines: Type _____ Length _____

Post Heparinization _____

Dry Weight _____ HBsAg Status _____

Blood Flow Rate _____ mL/min



How to stop dialysis in an emergency

When you first start home dialysis, your educator will show you what to do in an emergency — and every year after that you will be reminded. Be sure you know the location of your emergency pack.

If a disaster occurs during a dialysis treatment, follow the directions for emergency evacuation situations only — your access needles should be left in place until you get to a safe location.

1. Locate and open the emergency pack which should contain sterile gauze, four clamps, scissors, and tape.
2. Stop the blood pump and turn the machine off.
3. Place two clamps on each bloodline. Apply them far enough apart so that if necessary the lines can be cut between the clamps.
4. If you are unable to disconnect the lines, cut the bloodlines (not the access lines) between the two clamps.
5. Take your emergency pack with you.
6. Leave your home and proceed to a safe place.

Care of your access during an emergency

After disconnecting from your machine, go to the safe area. Do not remove the fistula needles or heparinize your perm cath until medical personnel evaluate you or you are assured that you are in a safe area and out of immediate danger.

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



Water disinfection

1. Before attempting disinfection, strain water through a clean cloth or handkerchief to remove any sediment, floating matter or glass.
2. Water may be disinfected with 5.25% sodium hypochlorite solution (household chlorine bleach). Do not use solutions in which there are active ingredients other than hypochlorite.

Use the following proportions:

One drop = .05 mL 1 tsp. = 5 mL

Clear water

- One litre 2 drops
- Four litres 8 drops
- 20 litres 1/2 teaspoon

Cloudy water

- One litre 4 drops
- Four litres 16 drops
- 20 litres 1 teaspoon = 5 mL

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.

Note: 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.



Disaster Preparedness

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 2–3 day for your next dialysis. ***Being prepared could SAVE YOUR LIFE.***

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

- The attached “Survival Diet” below outlines food you must eat daily to survive until dialysis is available again.
- Keep three day’s supplies for your Survival Diet in a backpack that can be carried by one person. You must be ready to move to a shelter if necessary or to travel elsewhere for dialysis.
- Select foods that you can replace regularly so that they will not get too old.
- 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, you may want to add some butter or margarine to your pack for extra calories.
- Remember that foods lower in salt will make you less thirsty.
- In some emergencies (such as a snowstorm), you can stay in your home but may not know when your next dialysis will be. You may have access to fresh or frozen foods that you could have in place of some foods from your Survival Diet pack.
- If your power goes out, foods in your refrigerator will keep for one to three days if the refrigerator is only opened briefly.
- Keep a copy of these guidelines with your three-day food supply (in your pack) and at your work.



Disaster Preparedness

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

Snack

- Hard candy

Lunch

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

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

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



Disaster Preparedness

- 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)

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

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