

5 Diamond Patient Safety Program

Are You Ready?

Emergency Preparedness for Dialysis Facilities

2008

** This presentation was collaboratively developed by the Mid-Atlantic Renal Coalition (MARC) and the ESRD Network of New England for the 5-Diamond Patient Safety Program.*

The 5-Diamond Patient Safety Program is endorsed by the Renal Physicians Association (RPA) and American Nephrology Nurses' Association (ANNA).

Questions...

1. Does your dialysis facility have an emergency preparedness and response plan?
2. If so, are you familiar with the contents of your facility's plan?
3. How many of your patients are familiar with the contents of your facility's plan? Are you sure?

Session Objectives

- Define an “emergency event.”
- Understand and discuss role of dialysis facility in preparing for emergencies.
- Understand and discuss role of dialysis patient in preparing for emergencies.
- Identify what patient needs in order to dialyze at an alternate facility.

Hurricane Katrina (2005)

- **200,000** with chronic medical conditions displaced.
- **Only 3 hospitals** out of 26 remained open.
- **No power + no reliable water = no dialysis.**
- Almost **2,500 dialysis patients from 43 units** displaced.

Hurricane Katrina (2005)

- Most without dialysis ≥ 1 week.
- **94 dialysis facilities** closed for at least 1 week.
- As of June 2007 – **17 facilities remained closed.**

DCI-Tulane Dialysis Facility (3 weeks post-hurricane)



*Photos courtesy of DCI-Tulane dialysis facility,
as published in the Clinical Journal of the
American Society of Nephrology*

What Went Right...

- All 17 Baton Rouge outpatient facilities had **generators.**
- **Water was available.**
- Set up **surge hospital/triage center** at LSU.
- **Sufficient medical staff** (in some locations) to provide treatment.
- **700 ESRD patients** received dialysis.

What Went Wrong...

- **Limited early evacuation** for vulnerable individuals.
- **Phone networks** overwhelmed.
- **Hospitals** overwhelmed.
- **No designated shelter** for dialysis patients.
- **Staff couldn't locate or contact** patients.
- **No easily accessible dialysis patient database.**
- **Difficulty obtaining supplies** because of transportation.

What is an “emergency?”

CMS defines an emergency as “*a situation requiring help or relief, usually created by an unexpected event.*”

EMERGENCY! EVACUATE IMMEDIATELY!
THIS IS NOT A DRILL! WELL,
ACTUALLY, ...
OH, NEVERMIND...



What is an “emergency?”

External emergencies

- Hurricanes
- Earthquakes
- Tornadoes
- Floods
- Severe snow/ice/blizzard
- Terrorist attacks (large scale)
- Hazardous materials spill/leak
- Contagious illness (e.g., pandemic flu)

What is an “emergency?”

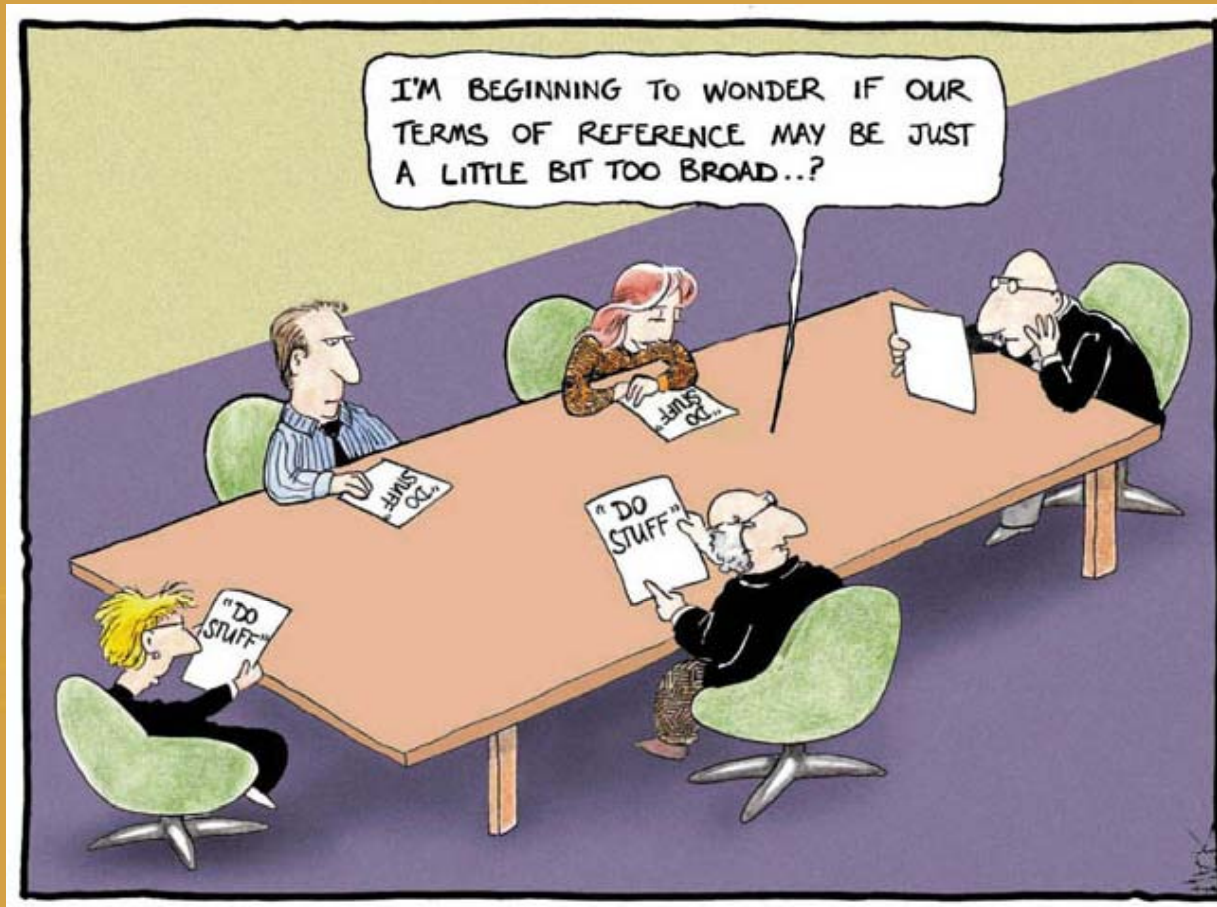
Internal emergencies

- Fire
- Utility disruption (power/water/gas)
- Contaminated water supply
- Violent patient, family member, or staff member
- Bomb threat
- Theft/burglary/security breach

Network of New England's Role

- Assist facilities in developing disaster plans
- Coordinate with providers, emergency workers, and other essential persons
- Assist providers and patients in determining status of dialysis facilities
- Provide information to family members and treating facilities

The Dialysis Facility's Role



ESRD Regulations of 1976

(currently under revision)

Section 405.2140 (d) Emergency Procedures

1. Established written plan
2. Trained personnel and periodic drills
3. Fully equipped emergency tray
4. Familiarity with equipment and procedures
5. Trained patients and periodic drills

ESRD Regulations of 1976

(currently under revision)

Section 405.2160 Affiliation Agreement or Arrangement

- a. Written affiliation agreement or arrangement to provide inpatient care or hospital services
- b. Patients will be accepted and treated in emergencies

ESRD Regulations of 1976

(currently under revision)

Section 405.2139 (b) Protection of Medical Record Information

Facility safeguards medical record information against loss, destruction, or unauthorized use.

ESRD Regulations of 1976

(currently under revision)

The Regulations:

Learn them. Know them. Live them.

4 Keys to Emergency Preparedness & Response

1. Determine types of disasters you might expect.

Higher risk of disruption

- Railway or major interstate highway
- Nuclear power plant or chemical facility
- Military base
- Airport
- Flood zone

Lower risk of disruption

- Onsite generator
- Uninterrupted power supply for critical equipment
- Independent water supply

4 Keys to Emergency Preparedness & Response

2. Evaluate your facility's readiness.

- Secure facility
 - Ceiling TVs, machine and chair wheels locked, well-marked emergency exits, etc.
- Secure patient and business records
 - Back-up data and keep in secure location; distribute patient orders and medication lists periodically to patients
- Have back-up utility plan
 - Power, water, phone, etc.

4 Keys to Emergency Preparedness & Response

3. Prepare staff.

- Identify disaster organizational structure
 - Staff roles
- Develop communications plan
 - Disaster contacts, facility and Network contact info
- Educate key personnel on roles
 - Periodic drills

4 Keys to Emergency Preparedness & Response

3. Prepare staff. (con't)

- Establish back-up facility agreement
 - Local and regional
- Know whom to contact
 - Network, city/county/state emergency response, American Red Cross, etc.
 - Report open/closed status of facility

4 Keys to Emergency Preparedness & Response

4. Prepare patients.

- Educate them
 - Evacuation procedures, clamp and cut/cap, emergency diet, provider and shelter info, etc.
 - Include them in drills!
- Survey them regularly
 - Contact info, treatments/meds, emergency kit, etc.

Facility Case Study

ESRD Network 17 (northern California Network)

- 1994 earthquake in Northridge, CA (southern CA)
- FMC unit categorized as uninhabitable
- Staff tried to get to unit but freeways were blocked
- FMC set up tents; triage performed in parking lot
- 11 FMC facilities affected; cooperated to provide treatments to patients
- Obstacle was time and travel

Facility Case Study

ESRD Network 17 (northern California Network)

Lessons learned:

- Collaboration is the key to success in an emergency.
- FMC is providing laminated cards to patients with their basic medical information.

Facility Case Study

ESRD Network 17 (northern California Network)

- Arson/bomb scare - Satellite Dialysis, Watsonville, CA
- ¼ of facility damaged by fire; facility forced to close
- Had emergency affiliation agreement with another facility
- Transportation agencies willingly transported patients to other facility; equipment and supplies transported by volunteers

Facility Case Study

ESRD Network 17 (northern California Network)

Lessons learned:

- It is important to foster good relationships and partner with other facilities and agencies to develop a simple but rapid response plan.
- Look beyond your immediate neighborhood for alternate facilities to which you can send patients.
- Develop a staffing plan that allows your staff to assist either “at home” or at the alternate facility.

Medical Information

1. Gather and carry important medical information.

- Patient name, address, phone (and ID)
- Emergency name, address, phone (local and out of area)
- Facility and physician name and contact information
- Insurance information
- Medical conditions/allergies (including Hep B status)
- Type of dialysis treatment (HD, PD) and orders
- Current meds, dosage, frequency

**PATIENTS SHOULD CARRY
THIS INFORMATION
WITH THEM AT ALL TIMES!**

Treatments

2. Make alternate arrangements for your treatment ahead of time.

In-center hemodialysis

- Provide current contact info
- Arrange back-up transportation
- Determine alternate facilities

Home hemodialysis

- Contact local utility companies
- Contact supply vendor
- Keep flashlight and batteries handy

Treatments

Peritoneal Dialysis

CAPD (“manual”)

- Keep 5-7 days’ worth of supplies, including some way to sterilize equipment and wash hands (hand sanitizer)

Treatments

Peritoneal Dialysis

CCPD (“automated”)

- Contact water and power companies in advance
- Keep 5-7 days’ worth of supplies, including some way to sterilize equipment and wash hands (hand sanitizer)
- Consider purchasing gas-powered generator
- Review procedure for manual CAPD (no power required)

Emergency Kit

3. Prepare an emergency kit

Medication/medical supplies

- First aid kit
- Hand sanitizer
- 5-7 day supply of meds
- 5-day supply antibiotics (if PD)
- Diuretics, sorbitol, Kayexalate for potassium control (if recommended by physician)

Emergency Kit

Medication/medical supplies (con't.)

- *Diabetics*: 5-7 day supply of syringes, insulin, glucose monitoring supplies, batteries, test strips
- *Heart disease*: 5-7 day supply blood pressure, heart, or anti-clotting meds

Emergency Kit

Household supplies

- Eating utensils
- Dropper
- Paper products
- Candles
- Waterproof matches
- Manual can opener
- Baby wipes/hand sanitizer
- Sharp knife
- Flashlight & batteries
- Radio & batteries
- Plastic jug for storing water
- Bottle of bleach
- Scissors
- Garbage bags
- Piece of cloth or handkerchief
- Strainer
- Extra pair of eyeglasses

Emergency Kit

Food

- Use fresh foods as long as possible
- Dry or evaporated milk
- 1-2 gallons distilled or bottled water
- Single-serving cereal
- Fruit bowls (peaches, apple sauce, NO raisins)
- Canned low-sodium veggies
- Canned low-sodium meat (tuna, chicken, salmon)
- Peanut butter & jelly
- Bread (can be frozen for 3 months)
- Hard candy or jelly beans
- Food for pets

Emergency Diet

4. 3-day Emergency Diet

- Keeps protein wastes, potassium, and fluid to a minimum until patient can get treatment
- Review regularly and before an event (if possible) with the renal dietitian
- May be continued until patient can get treatment, but only in extreme situations

Water Treatment

How to disinfect water:

1. Rapidly boil water for 10 minutes.

OR

2. Mix household chlorine bleach (5.25% sodium hypochlorite solution **ONLY**) with water following procedure in CMS patient guide.

Getting off Dialysis Machine

- Facility staff should show patient **how to disconnect from machine** and **locate his/her emergency pack**.
- Emergency pack
 - Scissors, tape, clamps
 - Should be kept within patient's reach
- Patient should **stay calm** and await instructions.
- Patient should disconnect self **ONLY** in emergency evacuation situations when no staff person is available.

Caring for Your Access

- After disconnecting, patient should go to the **designated safe area**.
- They should **wait for directions** from someone in charge – facility staff, emergency personnel (paramedic, police officer, firefighter).
- Should **not remove access needles** until he/she has been checked by medical personnel or until patient is certain he/she is in an area out of immediate danger.
- Should **never allow any medical personnel unfamiliar with patient's dialysis status to put anything into his/her vascular access**.

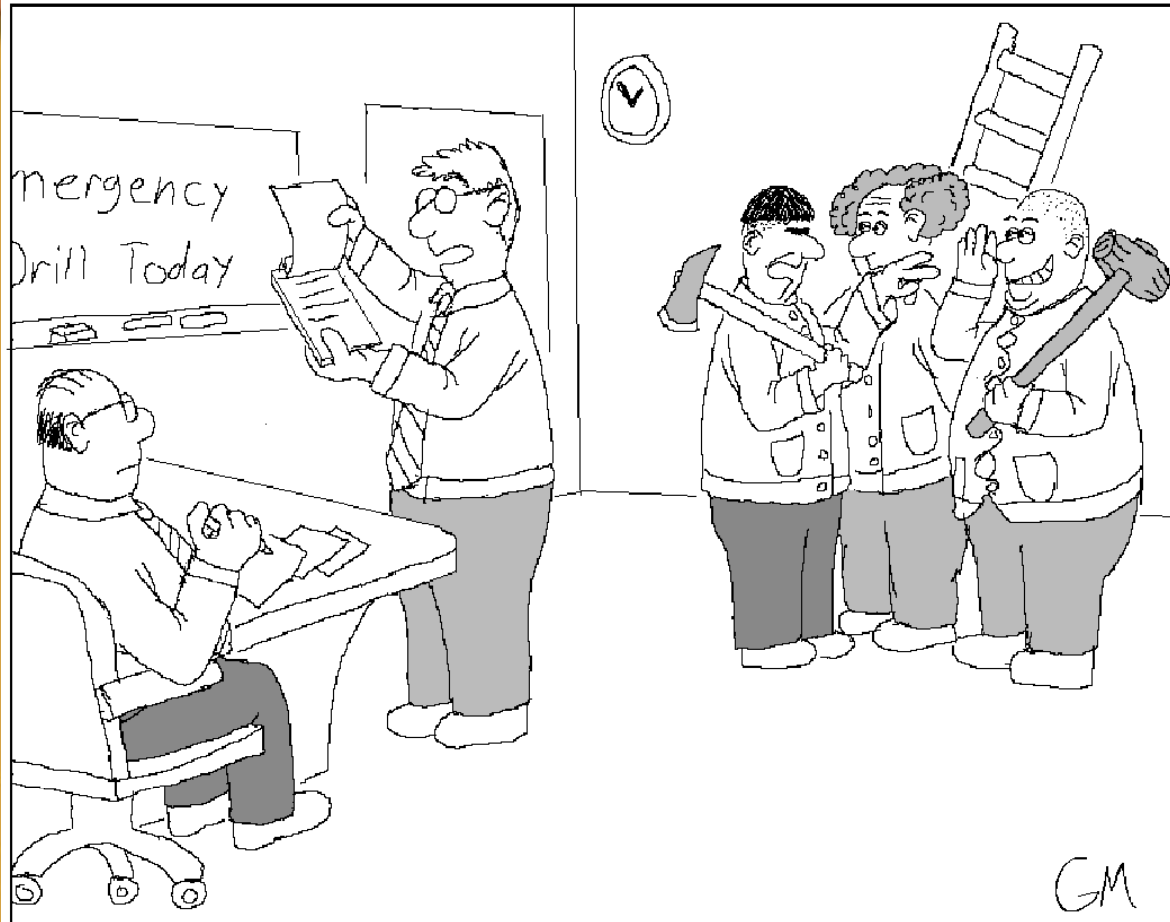
The KCER Coalition

The goals of the national Kidney Community Emergency Response Coalition are to...

- Test and refine the national response strategy
- Raise public awareness of the critical needs of individuals with CKD
- Promote and disseminate tools and resources
- Plan for a possible flu pandemic

The
BORDERLINE™

By Gabe Martin



"And to help us better simulate a real emergency,
we've hired a special team of disaster experts."

Resources

Network of New England website @
www.networkofnewengland.org/emerg.htm

National Kidney Community Emergency Response (KCER)
Coalition @ www.kcercoalition.com

The Nephron Information Center's Disaster site @
www.kidneydisasters.org

Dialysis Facility Compare @
www.medicare.gov – select “Dialysis Facility Compare”

Resources

Kopp, J.B., Ball, L.K., Cohen, A., Kenney, R.J., Lempert, K.D., Miller, P.E., Muntner, P., Qureshi, N., and Yelton, S.A. (June 20, 2007). “Kidney patient care in disasters: Emergency planning for patients and dialysis facilities.” *Clinical Journal of the American Society of Nephrology* 2: 825–838, 2007. doi: 10.2215/CJN.01220307.

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