



**TEXAS ESRD EMERGENCY COALITION**

## **Emergency Preparedness in the Dialysis Community**

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## **Discussion Topics**

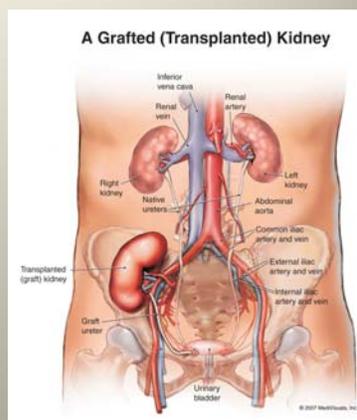
- **What is ESRD**
  - End Stage Renal Disease
- **Treatments**
  - Hemodialysis (home and in-center)
  - Peritoneal dialysis (manual home)
  - transplant
- **Patients needs**
- **Disaster preparedness**
- **What is TEEC**
  - Texas Emergency ESRD Coalition
- **Wrap up**

## End Stage Renal Disease (ESRD)

- ESRD is when the kidneys stop working well enough for you to live without dialysis or transplant
- Anyone can have ESRD
- 2/3 of cases are caused by diabetes or hypertension
- Other causes can be congenital, reaction to medication, or injury

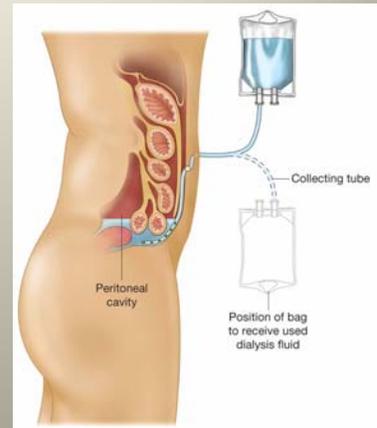
## Treatment

- Transplant
  - When a healthy kidney from another person is put into the body of another
    - Deceased or living donor
    - Supply and demand



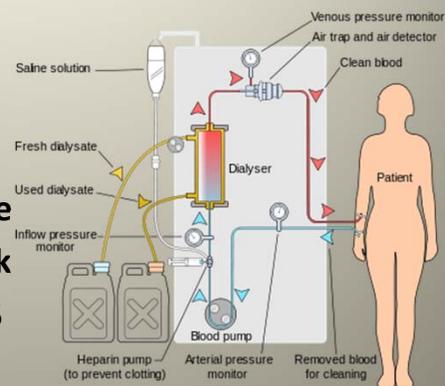
## Treatment

- **Peritoneal Dialysis**
  - Uses the lining in the abdomen (peritoneum) and a special solution (dialysate)
    - CCPD
    - CAPD
    - Performed daily
    - Offers flexibility



## Treatment

- **Hemodialysis**
  - Uses machine to clean the blood
    - In-center or home
    - Requires an access site
    - 3 treatments per week
    - Treatments can be 4-5 hours in length



## ESRD Patients

- Many are elderly (average age of just over 60)
- ESRD increases the chances of other comorbidities
- Take an average of 19 medications per day
- Special requirements:
  - Equipment
  - Water
  - Personnel
  - Diet plan

## ESRD Patients

Question:

*How long can an ESRD patient live without dialysis?*

**3-10 days**

In Texas there are over:

- 550 dialysis facilities
- 44,000 patients

## Issues During Disasters

- **Many dialysis facilities may be inoperable**
- **Patients can be scattered in an evacuation**
- **Utilities and supplies can be scarce**
- **Local communication can be disrupted**

## During an Emergency

- **Patients will become critically ill and perish without treatment.**
- **Patients:**
  - **Will experience a heightened sense of fear and confusion**
  - **May be physically weak, dizzy, or disoriented**
  - **May have just begun treatment at the time of disaster and will be concerned about next treatment**

## Patients' Needs

- **Priority will be to find and receive treatment**
- **Patients should have some disaster preparation**
- **As a group, they will be weaker and sicker than the average person**

## Patient Disaster Preparedness

- **Patients are encouraged to evacuate early to ensure placement at an open dialysis facility.**
- **Patients should take emergency supplies with them.**
- **Start the emergency/disaster diet (sometimes called the three day diet) immediately.**
- **If patients must go to a shelter, they should inform the person in charge of their special needs.**

## Special Needs

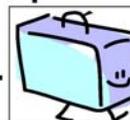
- **INFORMATION!**
- **Greatest fear will be where and when will they receive treatment.**
- **Will want to know who is in charge.**
- **Will need to be reassured that their needs are understood.**

## Emergency Diet

- **Reduces protein and potassium**
- **Sodium restriction is very important**
- **Patient disaster manuals have detailed meal plans.**

**Fluid restriction is a large part of the emergency diet. Many shelters push hydration, but this could be very harmful for a dialysis patient.**

<p><b>GOOD PROTEIN</b> (2 - 3 oz a day) canned, drained, salt free: Tuna, Chicken, Salmon (no bones)</p>	<p><b>VEGETABLES</b> (2 servings a day) canned, drained, salt-free: Carrots, Green beans, Green peas</p>
<p><b>FRUITS</b> (2 servings a day) canned, drained: Pears, Plums Peaches, Fruit Cocktail Pineapple, Applesauce</p>	<p><b>BREADS &amp; STARCH</b> (2 - 4 servings a day) White Rice, Noodles, Macaroni White Breads &amp; Rolls Cooked cereals Crackers, salt-free Graham crackers, Wafer cookies</p>
<p><b>DRINKS</b> (cut in half) Water, Koolaid, Cranberry juice Root Beer, Lemon/lime Soda</p>	<p><b>SWEETS</b> (good for calories) Sugar, Gum drops, Hard Candies Jam, Jelly, Syrup, Honey Cranberry sauce, Marshmallows Skittles®, Starburst®, Lifesavers®</p>
<p><b>FAT</b> (good for calories): Cooking oils, like Canola oil</p>	



# Emergency Diet

## More Diet Ideas (page 2):

- Eat only half (1/2) of the meat that you would usually eat.
- Drink only half (1/2) of what you would usually drink. Even limit foods high in water like cooked cereal/pastas, fruits, vegetables, gelatin, ice cream, sherbet, ice.
- Plan to have only salt-free foods!
- Avoid all high-potassium foods. Some of these are milk (all kinds), beans (all kinds), nuts (all kinds), bananas, potatoes (French fries, baked potatoes, yams), oranges & orange juice, prunes, spinach, avocado and substitute salt.  
Keep a list from your dialysis dietitian in your emergency box.
- If you have diabetes, plan for ways to treat low blood sugar.

**No Electricity?** Food in the refrigerator will stay fresh for a few days.  
Open the refrigerator as little as possible to keep foods cold.



Use foods from your refrigerator first!

# Disaster Plans for Patients

Dialysis patients, especially in coastal areas should have a water proof bag to use during an emergency evacuation to keep:

- ✓ Their 7 day supply of medications
- ✓ Medical records
- ✓ Other important document
  - ✓ Treatment flow sheets
  - ✓ Emergency phone numbers
    - ✓ TEEC
    - ✓ Backup dialysis facility



## Disaster Plans for Patients

Telling patients  
to go to the  
hospital  
emergency room  
**IS NOT A**  
**DISASTER PLAN!**



## Texas ESRD Emergency Coalition

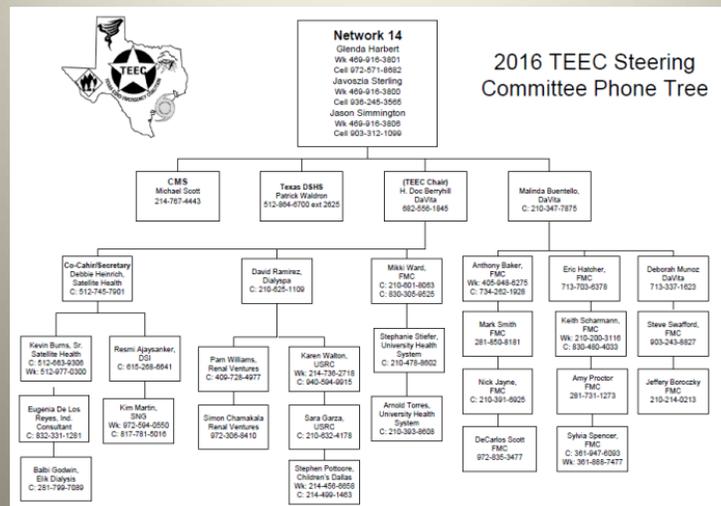
- The mission of TEEC is to ensure a coordinated preparedness plan, response, and recovery to emergency events affecting the Texas ESRD community.



# TEEC

- TEEC is a voluntary group of:
  - ESRD providers
  - ESRD patients
  - State, regional, and local agencies
- Educates facilities on how to prepare for emergencies
- Educates patients
- Serves as a resource for patients, facilities, and external stakeholders

# TEEC



## TEEC

- TEEC partners with Emergency Operations Centers and DSHS leadership in the event of an emergency
- Deploys a Command Center for all ESRD facilities and providers before, during and after a disaster.



## TEEC Command Center

- TEEC has established a toll free number for ESRD patients that will be used during emergencies.
- The command center will be staffed by representatives from the ESRD Network, LDOs, nurses, physicians, social workers, and dietitians.
- Command center is the ESRD community's voice to state officials during a time of need.

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## Floods in Houston: What we Learned

- 19 facility closures
- 1,400 patients affected
- Reasons
  - Flooding
  - Storm damage
  - Lack of staffing

## Resources

- **Texas ESRD Emergency Coalition**
  - [www.texasteec.org](http://www.texasteec.org)
  - Patients can also call 866.407.ESRD
- **ESRD Network of Texas**
  - [www.esrdnetwork.org](http://www.esrdnetwork.org)
- **National Kidney Foundation**
  - [www.kidney.org](http://www.kidney.org)
- **Texas Kidney Foundation**
  - [www.txkidney.org](http://www.txkidney.org)

## Questions

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