

What happens if my heart stops beating?

Developed by the Kidney End-of-Life Coalition

If your heart stops beating while you are on dialysis, staff can do CPR (cardiopulmonary resuscitation) to try to get your heart to start beating again. You can choose to have the staff give you CPR or you can choose for the staff to make sure you are comfortable without trying CPR. If you want to be kept comfortable and allow a natural death, the doctor will write a Do Not Resuscitate (DNR) order for you. The decision to choose CPR or elect not to have CPR is very personal and important. Here are some answers to questions you may have about CPR and DNR orders. This information will help you learn more so you can talk with your family and your doctor about your wishes.

What is CPR?

CPR is a combination of breathing, chest compressions and electrical shock to the heart given when someone's heart stops beating. CPR is done in an attempt to get the heart started and the person breathing on his own. CPR can keep a small amount of blood flow to the brain and other vital organs while efforts are being made for the heart to start working again. These other efforts may include shocking the heart and giving medicines through an intravenous line.

Does CPR work?

Many people think CPR is always successful because of the way it has been shown on television or in the movies. The more health problems someone has, the less likely it is that CPR will bring someone back to their prior health and abilities. When CPR is done in hospitalized patients, it is successful in only about 12-15% of patients. This means that about 15 out of 100 patients who have CPR done while in the hospital will leave the hospital alive. For dialysis patients, studies show that CPR is successful in about 10% of patients.

How is CPR done?

First:

- Staff try to arouse the patient by calling out the patient's name and lightly shaking the patient. Staff check for both a heart beat and breathing.

- If there is no heartbeat and no breathing, staff will
 - Call for help: 911 in most clinics.
 - Call the patient's doctor.
 - Put a privacy screen around the patient.

Then, they start CPR by:

- Putting the patient flat on their back on a firm surface. They will slide the patient out of their dialysis chair onto the floor.
- Opening the person's mouth and airway by lifting the chin forward.
- Checking whether the person is breathing by listening for breath sounds and looking for the chest to move.
- Using a face mask or medical equipment with oxygen in an attempt to get air into the patient's lungs.
- Starting chest compressions if there is no pulse. They may use a machine called an Automated External Defibrillator (AED) to do chest compressions.
- The Fire Department or Emergency Medical Service (EMS) responds to the 911 call and take over when they arrive.
 - Machines are often used to perform chest compressions.
 - Electric shock may be used in trying to restart the heart.
 - Dialysis staff help the EMS team while continuing to take care of the other patients.
- The patient's family is notified.
- If the patient can be stabilized, transportation to the nearest hospital is done by ambulance.

If the patient DOES NOT respond to CPR and cannot be transported to the hospital staff will:

- Notify the patient's doctor that CPR has been stopped by the EMS team.
- Notify the family.
- Provide privacy for the family.
- Notify the funeral home as directed by family or the patient's prior instructions.

Machines that may be used during CPR:

- **Automated External Defibrillator (AED):** reads the heart rhythm and tells staff how to treat the patient. It does this in a loud

computerized voice. It can deliver electric shocks to try to restart the heart. If the clinic has this machine, then the staff has been trained to use it.

- **Cardiac monitors:** reads the heart rhythm only. This puts out a paper strip that is read by the nurse or doctor.
- **Cardiac defibrillators:** deliver an electric shock to try to restart the heart. Use of this machine by staff in the clinic depends on their training.
- **The Fire Department** or EMS may bring in an external device that supports CPR. This machine does the chest compressions.

How is my privacy respected?

Federal privacy laws require that staff not discuss a patient's medical condition with others. While the patients in a clinic are aware that the situation is serious, staff cannot share specifics with them. Staff may speak in general terms about the seriousness of the patient's condition, but they cannot tell other patients of the outcome. All CPR machines require that the patient's clothing be removed. Privacy screens are used, but screens may not entirely block from view the area where the patient may be lying.

What are the side effects of CPR?

CPR can cause serious complications, especially in people who already have a chronic illness, like chronic kidney disease. CPR frequently causes pain and broken ribs. Lack of oxygen to the brain causing permanent brain damage occurs in about 10% of patients who live after CPR. Almost all patients who receive CPR and live through it are on a breathing machine for a few days.

What if I do not want the staff to do CPR if my heart stops beating?

A Do Not Resuscitate (DNR) order is written to respect a patient's decision to refuse CPR when their heart stops or they stop breathing. With this order, dialysis staff will provide the usual treatments in the clinic, such as treating low blood pressure. A DNR order is effective only if the heart stops beating or the patient stops breathing. A DNR order must be written by a doctor and be placed in the patient's medical chart in order for staff to know not to perform CPR.

For patients who do not want CPR started, staff will:

- Try to arouse the patient by calling out the patient's name and lightly shaking the patient. Staff check for both a heart beat and breathing.
- If there is no heartbeat and no breathing, staff will
 - Notify the patient's doctor.
 - Notify the patient's family.
 - Place a privacy screen around the patient or move the patient to a private area.
 - Provide privacy and support to the family.
 - Notify the funeral home as directed by family or the patient's prior instructions.

Should you decide that you do not want CPR if your heart stops, your doctor must know about this and write a DNR order in your chart. **If there is no DNR order in the chart, staff will perform CPR.** If you decide that you do not want CPR if your heart stops, you may also want to have a special bracelet or necklace made that states your medical wishes. Most states have a DNR card that can be issued by your doctor. Talk with your doctor, nurse or social worker if you have any questions or concerns.