

Cardio-Pulmonary Resuscitation (CPR):

A Decision Aid For

Patients And Their Families

The goal of this pamphlet is to provide information about cardio-pulmonary resuscitation (CPR) so you can be adequately prepared to participate in decisions about your care.

Question and Answer

1. What is CPR?

Cardio-pulmonary Resuscitation (CPR) is the term used to describe the treatments used to try and restart a person's heart after it has stopped beating. The heart may stop for many reasons, and when the heart stops and isn't restarted again in a couple of minutes, the person will die.

The heart may stop beating due to unexpected or expected circumstances.

- Unexpected circumstances would include healthy people with no history of serious illness such as younger people who are victims of drowning or traumatic injury.
- Expected circumstances that would cause the heart to stop would include people with serious illnesses. Heart disease for example directly affects heart functioning whereas other illnesses such as kidney failure, pneumonia, severe infection or terminal cancer indirectly affect the heart.
- In patients with chronic illness such as cancer or severe heart failure, CPR may help extend life. In patients with an unexpected and reversible illness such as a heart attack, CPR may be life-saving.

When someone's heart stops beating, they become unconscious within a few seconds because there is not enough blood going to their brain. During this time they are not aware of things around them and do not likely experience pain.

CPR was initially developed to restart hearts that had stopped because of sudden unexpected heart attacks. Later it was used in all situations where someone's heart stopped and in many of these situations CPR was not successful. With experience we now have a better understanding of who is likely to benefit from this treatment.

Patients and families should be aware that CPR and resuscitation will only, at best, bring the patient back to how they were before their heart stopped and will not improve any of the illnesses that caused the cardiac arrest.

2. What happens during CPR?

If a person's heart stops while he/she is in hospital and the decision is made to attempt CPR to resuscitate them:

- An emergency call goes out to a team of doctors and nurses.
- They rush to the patient's room and begin to try to keep the blood circulating around the body by pushing hard on the patient's breastbone.
- They try to help the person breathe by putting a breathing tube through the mouth to the lungs.

- They may use an electric shock (cardio version) to try to get the heart restarted.

You may have seen resuscitation such as this on television programs, although in real life it may not be the same. Certainly, CPR is not always successful in restarting the heart even though it commonly is on television.

3. Why is the doctor asking me about CPR?

- The doctor wants to ensure that your thoughts about important medical decisions are taken into account when planning your care.
- It is important to note that the discussion about CPR may occur even if your risk of needing it is low.
- Like other treatment options, you and your family should be active participants in the decision-making. However, CPR is a treatment decision made with the doctors and your input is crucial. Just as the surgeon would not operate without discussion with and consent of the patient, doctors should not decide about resuscitation without your input and opinions.
- It is important that you discuss your thoughts, concerns and wishes with your family or power of attorney for health and personal care. Their input can be very useful to you. The person who might make decisions for you and your doctors and nurses should follow those decisions if you are unable to speak for yourself.
- Doctors may wish to discuss with you other treatment options in case you develop a serious illness. They will want to know your thoughts about admission to an Intensive Care Unit (ICU) or a breathing machine (machines to help you breathe with a tube down to your lungs).

4. How well does CPR work?

How well cardiac resuscitation works varies depending on the medical condition of the individual. Studies have found the following chances of success with CPR:

Disease causing heart to stop	Approximate chance the person will recover and leave hospital
Heart attack.....	15 out of every 100 receiving CPR
Severe kidney failure.....	5 out of every 100 receiving CPR
Cancer	2 out of every 100 receiving CPR
Severe heart failure.....	2 out of every 100 receiving CPR
Serious infection (sepsis).....	1 out of every 100 receiving CPR

5. Are there any limitations or side effects from CPR?

There can be side effects from CPR:

- Broken breast bone and ribs from pushing down hard on the chest during CPR. This is particularly common in people who have brittle bones or osteoporosis.
- Bruised or punctured lungs from pushing on the chest.
- Impaired mental functioning is the biggest problem. This may occur because the brain has not received enough oxygen during the time the doctors were trying to restart the heart. A stroke might happen, which may leave the individual with paralysis or speech problems as well as memory, language, and personality problems. These mental impairments mean a person can no longer live at home without a lot of care from family and caregivers. Severe forms of mental disabilities are seen in 25-50% of survivors.

6. What other things should I consider?

As with all medical decisions affecting you, it is important to think about everything involved. In discussions around resuscitation, religious and personal beliefs and values will play a large role.

Personal Beliefs:

Many people may not want doctors to try to resuscitate them because of the serious and incurable nature of their health problems, or because they feel they are older and have lived a long life. Other personal beliefs may include:

- “Even if it is only a 2% chance, that is enough for me” (Risk/Odds)
- “I have lived a good life and when it is my time...” (Life is complete)
- “Nothing is worse than death” (Fear of death)
- “I want to see my daughter married and then I can go” (Unfinished Business)

Religious Beliefs:

- Some people believe life is sacred and that maintaining life at any cost is a priority
- Some people believe their death is God’s will and it is appropriate to accept death

Personal Experiences:

- People may have seen a family member with a Do Not Resuscitate order not receive other appropriate treatments (such as antibiotics).
- Some people may have observed a family member being resuscitated and found it to be very upsetting.

7. What happens if I don’t have this discussion and I am unable to communicate my wishes because I am too sick?

It is important for you to know that if there is no discussion of these treatments and your heart were to stop, the doctors and nurses may do CPR even if that was not what you would want.

8. What will happen after I speak to the doctor about CPR?

- The outcome of your discussion will be written in your hospital chart to guide doctors and nurses if you are unable to speak due to your condition. If you and the doctors feel CPR and resuscitation is not the most appropriate treatment for your

situation, this will be written as a **NO CPR** order. Doctors and nursing staff are aware of these orders and your resuscitation preferences and use them to guide care if your heart stops.

- If it is decided that CPR is an appropriate treatment, this will be documented in your chart.
- If you and the doctor decide on other life sustaining treatments such as being on a breathing machine, this will also be noted as an order in your chart.
- Your discussion regarding whether you want or do not want CPR will not affect other parts of your care. It does NOT mean that no other treatments will be provided. If antibiotics, intravenous fluids or other medical treatments are appropriate, they will still be discussed and offered to you. It does mean staff will focus on helping you to stay as comfortable as possible while providing care you need.

CHOICE	WHAT'S INVOLVED	POSSIBLE ADVANTAGES	POSSIBLE DISADVANTAGES
CPR	<p>Chest compression</p> <p>Electric shocks to restart heart</p> <p>Tube down throat to assist with breathing</p> <p>Possible ICU stay</p>	<p>May prevent immediate death</p> <p>Small chance of returning to near previous function</p> <p>Small chance of returning home from hospital</p>	<p>High rate of stroke and brain injury</p> <p>Risk of broken breast bone or ribs and bruised lung</p> <p>Does not improve other health issues if successful at resuscitation</p> <p>Possible need for significant care from family members in order to return home</p>
NO CPR	<p>Other active medical treatments (e.g. antibiotics, ICU admission) may be given depending on treatment choices</p> <p>Comfort measures only may be provided depending on treatment choices</p>	<p>May be less traumatic for family members at time of cardiac arrest</p> <p>Death with less likelihood of discomfort from tubes, procedures or fractured ribs</p>	<p>Death occurs at time of cardiac arrest</p> <p>Patients may be concerned No CPR means no other treatments will be provided</p>

Important things to consider about CPR discussions and your CPR treatment decision:

- Studies have shown that physicians do not always initiate discussions with patients in hospital about this treatment decision. Please think about asking your doctor to discuss this with you.
- Share your views about CPR and other life prolonging treatments with your family. We encourage you to share this document with your family so they can be informed.
- Discuss the role your power of attorney for health would play in the event you are mentally incapacitated to make these decisions for yourself.
- If you change your mind about the decision concerning CPR, be sure and let someone on the health care team know so that this can be discussed and documented on your chart.

CPR treatment decision process:

1. Consider the possible outcomes of CPR.
2. What are the possible advantages and disadvantages of CPR for me?
3. Do I have other questions that need answering?
4. Who should participate in the decision-making?
5. What are my thoughts about this decision? (Which way am I currently leaning in my decision?)
6. Talk about your decision with your doctors (hospital and GP) and with your family.

If you have questions or concerns about the information provided in this pamphlet, please feel free to discuss it with a hospital staff member, such as your doctor. Other staff members such as a nurse, bio-ethicist or staff from Spiritual and Religious Care may be helpful for some patients. Your family physician may also have a helpful perspective.