

Organ and Tissue Donation After Death by Neurological Criteria (DNC)



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How does organ and tissue donation after death happen in Canada?

- Organ and tissue donation after death is when a person who has chosen to donate dies and 1 or more of their organs (like the liver, lungs, heart, or kidneys) is removed and transplanted into another person to help that person live.
- In Canada, a person can donate organs and tissue after death in 2 ways:
 1. **Death by neurological criteria (DNC):** This is when the brain stops working and will not work again. This is also called **brain death**.
 2. **Death by circulatory criteria (DCC):** This is when the heart stops beating and does not start again.
- This pamphlet gives information about donation after death by neurological criteria (DNC).

What is death by neurological criteria (DNC)?

- DNC is when the brain stops working and will not work again. There is no brain activity and your loved one cannot breathe on their own, move, or respond in any way.
- We know this can be hard to understand. Your loved one may still feel warm, and you may see their chest rise and fall or see a heartbeat on the monitor. This is because machines are helping their body stay alive even though their brain has died.
- When a person's brain dies, there is no chance that they will get better.

What causes DNC?

- The brain needs blood with oxygen to work.
- When blood with oxygen does not flow to the brain, brain cells start to die. Once brain cells die, they cannot be brought back to life.
- If a person's brain swells (gets bigger), there is less space in their skull for their brain. This can cause so much pressure in their head that blood with oxygen cannot reach their brain.
- This may be caused by:
 - › A stroke or bleeding in the brain
 - › A head injury (like from a car crash or a fall)

- › A brain tumour
- › Not getting enough oxygen to the brain (like after drowning or a heart attack)

How do doctors know that DNC has happened?

- Doctors follow strict rules to make sure the brain has stopped working. An intensive care doctor with DNC training will do tests to look for signs of brain activity.
- These tests include:
 - › Checking if your loved one responds to light, touch, or sound
 - › Checking your loved one's reflexes (like blinking or coughing)
 - › Taking your loved one off a ventilator (breathing machine) for a short time to see if they try to breathe on their own
- Other tests (like a test to check blood flow to the brain) may also be needed. These tests must show that no blood is going to the brain.

Why is my loved one's heart still beating and their chest still moving?

- Your loved one is on life support. This is the use of machines or medications to help a person stay alive.

- These machines make it look like your loved one is still alive, but when the brain has stopped working and will not work again, the person has died.

Why is my loved one moving?

- Sometimes, the body can twitch or jerk. These are called **spinal reflexes**. They come from the spinal cord, not the brain.
- This can be upsetting, but it does not mean the person is still alive.

Is DNC different than other types of death?

- No. When the brain dies, the person has died. There is no chance they will get better.

Could they just be in a coma?

- No. A person in a coma still has some brain activity and may wake up. A person who is brain dead has no brain activity at all, and this is permanent (will not change).

Can anything else be done?

- We understand how hard this is. Your health care team has done everything possible to try to save your loved one's life. Once DNC has been diagnosed, there is nothing that can be done to reverse it.
- The time that brain death is confirmed is the legal time of death and will be on your loved one's death certificate.

Do miracles ever happen?

- In Canada, brain death is diagnosed using very careful, trusted rules. There has never been a case of a person recovering after brain death was confirmed by an intensive care doctor who was following the rules.

What will happen after DNC is confirmed?

- As part of end-of-life care, your health care team will contact Legacy of Life. This is Nova Scotia's organ and tissue donation program.

- Organ and tissue donation can help save or improve the lives of others. It can be comforting to know your loved one helped other people and will be remembered. Many people say it gives them hope and a sense of peace during a very hard time. An organ donation coordinator may meet with you to talk about this.
- The donation team will work quickly to check if your loved one's organs and tissues are healthy and safe to donate.
 - › Your loved one can still donate some organs or tissues even if others cannot be used. Each organ is checked carefully on its own.
- If your loved one is registered as a donor in Nova Scotia, it will be noted on their health card. The organ donation coordinator will meet with you to talk about your loved one's wishes and make sure they would still want to donate.

Can my loved one stay on life support forever?

- No. A ventilator does not keep a person alive after brain death.
- If your loved one is not able to donate organs and/or tissues, your health care team will stop the ventilator. They will focus on caring for your loved one with dignity.

- If your loved one is able to donate organs and/or tissues, the ventilator will be stopped in the operating room (O.R.) after the organs and/or tissues are removed.

Please remember, your loved one has already died. Stopping the ventilator does not cause death.

What will happen if I decide to have my loved one donate?

- The organ donation coordinator will explain what will happen and answer any questions you may have.
- If you decide that your loved one would want to donate, the donation team will guide and support you.
- If you decide that your loved one would not want to donate, your health care team will still give your loved one and you care, comfort, and respect.

What do I need to do?

- Your health care team will ask for your consent (permission) to have your loved one donate. **This is your choice. You can change your mind at any time.**

- The organ donation coordinator may ask about your loved one's:
 - › Health
 - › Travel history
 - › Medications
 - › Lifestyle

What will happen before my loved one donates?

- Your health care team may do tests on your loved one, like blood work, X-rays, or an ECG/EKG (test to record the heart's rhythm). These tests help the team decide which organs or tissues can be donated.
- Your health care team will share the test results with the Multi-Organ Transplant Program (MOTP). This will help the MOTP find people waiting for a transplant who are the best match.
- The donation surgery will be planned so it can happen quickly after your loved one's death is confirmed. The donation team and the transplant team will work with you to decide the donation time.

What does it mean to withdraw life support?

- Withdrawing (taking away) life support means stopping the machines or medications helping your loved one stay alive.

- Before your loved one's life support is stopped, you will be given time and privacy to say goodbye in your own way. If you have any cultural, spiritual, or religious practices, please tell a member of your health care team. We will do our best to support your wishes.
- Your health care team will focus on keeping your loved one comfortable and managing their pain.

Can I stay with my loved one?

- Yes. You may stay with your loved one while they are taken off life support and as they pass away.

You are not alone. Legacy of Life is here to support you. They can offer care and comfort, and help you cope with your loss.

Questions?

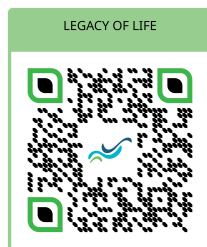
- Organ donation coordinators are available 24 hours a day, 7 days a week. Call Locating and ask to talk with an organ donation coordinator.
 - › Phone: 902-473-2222

Legacy of Life: Nova Scotia Organ and Tissue Donation Program

Park Lane Terraces
Suite 300, 3rd Floor
5657 Spring Garden Road
Halifax, NS B3J 3R4

- › Phone (toll-free): 1-844-411-LIFE (5433)
- › Email: Legacyoflife@nshealth.ca
- › www.nshealth.ca/legacy-life

Scan the QR code on your device (open the camera on your device, point the camera at the code, and tap the banner or border that appears)



Notes:

This pamphlet is for educational purposes only. It is not intended to replace the advice or professional judgment of a health care provider. The information may not apply to all situations. If you have any questions, please ask your health care provider.

Find all patient education resources here:
www.nshealth.ca/patient-education-resources

Connect with a registered nurse in Nova Scotia any time:
Call 811 or visit: <https://811.novascotia.ca>

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