



Patient & Family Guide
2026

Electrophysiology Studies (EPS)

Halifax Infirmary, QE II



www.nshealth.ca

EPS

- Electrophysiology studies (EPS) are procedures that check your heart's electrical system. This electrical system makes your heart muscle pump blood to the rest of your body.
- Sometimes, this electrical system does not work the way it should. When this happens, your heart can beat:
 - › Too fast
 - › Too slow
 - › In an abnormal rhythm
- This can cause you to feel:
 - › Dizzy
 - › Short of breath
 - › Like you are going to faint
- Electrophysiology studies can help your health care provider find out if you have an abnormal heart rhythm.

Getting ready for your procedure

- Your health care provider may tell you to stop taking certain medications before your procedure. **It is very important to follow these instructions.**
- If your health care provider does not give you instructions about your medications, you can keep taking them as usual.
- You should have blood work done within 30 days (1 month) before your procedure. We will mail you a requisition and you can book an appointment at your local blood collection clinic.

The day before your procedure

- **Do not** eat or drink anything after midnight the day before your procedure.
- Unless a member of your health care team gives you different instructions, you can take your medications with small sips of water.

The day of your procedure

Where do I go?

- Go to the Summer Street entrance (1796 Summer Street) of the Halifax Infirmary Building.
- When you enter the building, register at a kiosk on the main floor.
- Take the public elevators to the 6th floor. When you get off the elevator, there will be a waiting room on your left (Room 6012). Wait here and someone will come and get you for your procedure.

What will happen before my procedure?

- A staff member will take you to your room on the Cardiac Day Unit (CDU).
- A health care provider will talk with you and explain how the procedure is done.
- You will sign a consent form (if you have not signed one yet). The health care provider will answer any questions you may have.
- **If you have not had blood work done within the past 30 days, you may need to have blood work done on the day of your procedure.**

- You may have a test called an **electrocardiogram** (ECG or EKG). This is a tracing of your heart's electrical activity.
- You will be asked to change into a hospital gown.
- We will put an intravenous (I.V.) line into a vein in your arm or hand.

Shaving

- A member of your health care team will shave a small area of both of your groins.
- They may also shave some hair from your chest or back, if needed.

Before leaving your room

- When it is time for your procedure, we will ask you to:
 - › Empty your bladder (pee)
 - › Take off your underwear and slippers
- If needed, you may wear the following during your procedure:
 - › Dentures
 - › Hearing aids
 - › Glasses
- **Do not** wear contact lenses on the day of your procedure.

What will happen during the procedure?

- You will be taken to the Electrophysiology Lab and asked to lie on an X-ray table.
- Your health care team will be wearing gloves, masks, and/or gowns.
- They will put sticky monitoring patches on your chest and back.
- They will wash both of your groins with a cleaning solution.
- Once the solution is dry, they will cover you from the neck down with sterile (clean) towels and sheets. This is to keep the washed area clean.
- The health care provider will inject local anesthetic (freezing) in your groin areas. You may feel stinging and burning when the freezing is injected.
- The health care provider will put sheaths (short, hollow tubes) into the femoral (thigh) veins of 1 or both of your groins. You may feel pressure when the sheaths are put in, but you should not feel any pain.

- We will move diagnostic catheters (thin, flexible tubes) through the sheaths to your heart. Diagnostic catheters are used to:
 - › Send electrical signals to your heart to make it beat faster or slower
 - › Get information about your heart's electrical signals
 - › Monitor and record your heart rhythm
- Your health care team may try to bring on an abnormal heart rhythm by sending electrical signals through the catheters, and/or by giving you medication through your I.V.
- If you feel anxious, tell a health care team member. You may be able to have mild sedation (medication to help you relax) or pain medication during the procedure.

Tell your health care team if you have any of these symptoms during your procedure:

- › Heart palpitations (feeling like your heart is racing, fluttering, pounding, or missing a beat)
- › Dizziness
- › Pain
- › Nausea (upset stomach)
- › Feeling like you are going to faint

- The procedure usually takes about 2 hours. Sometimes it may take longer.

After the procedure

- Your health care team will take out any catheters and sheaths from your groins.
- We will use pressure to stop any bleeding. We may put a stitch at the insertion site(s) (where the sheath entered your body), if needed. We will put a small bandage over the site(s).
- You will be taken by stretcher to your room on the CDU.

- You will need to lie flat on your back in bed for 3 to 4 hours. During this time:
 - › The nurse may raise the head of your bed 30 degrees. **Keep your head on the pillow.**
 - › **Do not** bend the leg(s) that you had the sheath(s) in. **Keep your leg(s) straight.**
- Put firm pressure on your insertion site(s) if you:
 - › Laugh
 - › Cough
 - › Sneeze
 - › Pee
 - › Poop
- A nurse will check on you often. They will:
 - › Check the insertion site(s) for bleeding or swelling
 - › Monitor your pulse and blood pressure
- You may be able to eat and drink about 1 hour after you get back to your room. Ask your nurse if this is OK. You will be on bedrest at this time, so if you need help, ask your nurse.
- You may have an ECG or EKG after you go back to your room.

Going home

When will I be discharged from the hospital?

- When you can go home will depend on the results of your procedure. Your health care provider will check your results and tell you when you can go home.
- You may be asked to come for a follow-up appointment within a few months after your procedure. If you live far away from the QE II, you may be able to see a health care provider or cardiologist (heart doctor) near your home instead.
- Depending on the results of your procedure, you may need to be admitted to the hospital for treatment.

When can I take a shower or a bath?

- You can shower 24 hours (1 day) after your procedure.
 - › **Do not** aim the stream of water at your insertion site(s).
 - › **Do not** rub your insertion site(s) for the first few days after your procedure. Pat the site dry.
- **Do not** take a bath, swim, or go in a hot tub for 2 days after your procedure.

When can I remove the bandage?

- You can remove the bandage 24 hours after your procedure.

When can I drive?

- After your procedure, **do not** drive for 2 days. Depending on the results of your procedure, you may need to wait longer.
- Ask your health care provider when you can drive again.

When can I go back to work?

- This will depend on what kind of work you do. Ask your health care provider when you can go back to work.

When can I exercise after my procedure?

- **For 1 week** after your procedure:
 - › **Do not** do any strenuous (hard) sports (like jogging or tennis)
- **For at least 3 days** after your procedure:
 - › **Do not** bend
 - › **Do not** squat
 - › **Do not** lift anything heavier than 5 pounds
- **For 2 to 3 days** after your procedure:
 - › **Do not** walk quickly
- **For 1 to 2 days** after your procedure:
 - › Walk up or down stairs slowly

Drinking fluids

- Unless you were given different instructions, drink lots of fluids for 24 hours after your procedure. This will help to prevent dehydration (not having enough fluids).
- Try to drink water or juice.
- Avoid caffeine. It may make you pee more often.

Will my medications change?

- Your medications may change after your procedure. Your cardiologist will talk with you about this before you leave the hospital.

To help prevent bleeding from the insertion site(s):

- **For the next 2 days, put gentle pressure on the site(s) when you:**
 - › Cough
 - › Laugh
 - › Sneeze
 - › Pee or poop
- Bleeding from the insertion site(s) may be:
 - › Blood flowing from the site(s)
 - › Blood staying under your skin and forming a firm lump

- **If you have bleeding or a lump that is getting bigger while you are in the hospital:**
 - › Put firm pressure at the insertion site.
 - › If you are not in bed, go back to your bed. Lie on your back.
 - › Ring your call bell for a nurse.
- **If you have bleeding or a lump that is getting bigger after you leave the hospital:**
 - › Lie down. Put firm pressure at the insertion site until the bleeding stops.
 - › You may need to have a family member or a support person help you use pressure.
- **If the bleeding does not stop after using pressure for 5 to 10 minutes:**
 - › Call 911 or go to the nearest Emergency Department right away. Do not drive yourself.
- **If there is a lump:**
 - › Use pressure until it gets softer and smaller.
- **If the lump does not get softer, or if it gets bigger, after applying pressure for 5 to 10 minutes:**
 - › Call 911 or go to the nearest Emergency Department right away. Do not drive yourself.

Call your primary health care provider (family doctor or nurse practitioner) if you have:

- › Swelling in your leg(s)
- › Bleeding, pus, or redness at the insertion site(s)
- › A fever (temperature above 38 °C or 100.4 °F) or chills

Call 911 or go to the nearest Emergency Department right away if you have:

- › Bleeding at the insertion site(s) **that you cannot stop**
- › Very bad pain at the insertion site(s)
- › A large bruise or swelling that gets bigger (even after using pressure)
- › Colour changes in your leg(s) (like blue, grey, purple, or white)
- › Chest pain or discomfort
- › Trouble breathing

Questions for my health care team:

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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