

## What is a peripheral nerve block?

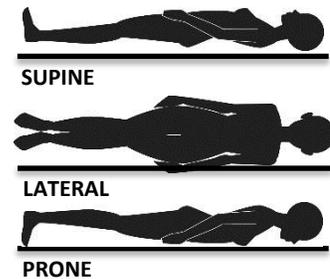
For your upcoming operation, you may be receiving a **peripheral nerve block** to help relieve pain during or after the surgery. For this procedure your anesthesiologist injects *Local Anesthetic* near a cluster of nerves to numb one area of your body.

Benefits of peripheral nerve block	Risks of peripheral nerve block
<p><b>Nerve Blocks are used to:</b></p> <ul style="list-style-type: none"> <li>● Make an area of your body numb for surgical procedures</li> <li>● Help relieve pain after surgery</li> <li>● Decrease the amount of anesthetic medicine you need during surgery</li> <li>● Decrease the amount of opioid medications that you need after surgery, and as a result,</li> <li>● Decrease the amount of nausea and vomiting after surgery</li> <li>● Help you go home sooner after surgery</li> </ul>	<p><b>Generally, this is a safe procedure.</b> Complications are uncommon, but include:</p> <ul style="list-style-type: none"> <li>● Damage to nerves</li> <li>● Bleeding</li> <li>● Infection</li> <li>● Reaction to medicines, such as seizures or heart problems (<i>local anesthetic toxicity</i>)</li> <li>● Prolonged numbness, tingling, or weakness</li> </ul> <p>For upper limb nerve blocks, additional risks include:</p> <ul style="list-style-type: none"> <li>● Lung damage that causes the lung to collapse (<i>pneumothorax</i>)</li> </ul>

## How is a peripheral nerve block performed?

Depending on the location of surgery, a peripheral nerve block can be given in the shoulder, arm, back or leg regions. Typically, you will either be lying flat on your back (*supine*) or lying on your side (*lateral*) but occasionally may even be on your stomach (*prone*). The block is administered at an appropriate location to provide anesthesia for the surgery.

Before the nerve block is performed, your skin will be cleansed with an antiseptic solution. The anesthesiologist will use local anesthesia to numb the skin in the area where the block will be administered. Ultrasound is frequently used to visualize the nerves and the injection. A special needle or catheter is placed near the cluster of nerves that need to be numbed for surgery. Occasionally, the needle will touch a nerve, causing discomfort or a brief tingling sensation down the extremity where the nerve block is being performed, similar to hitting your “funny bone”. The needle may also cause brief muscle twitches in the extremity where surgery will occur. Always let your anesthesiologist know if you experience any sharp or radiating pain during the procedure or injection of the local anesthetic.



## What will my limb feel like after it has had a peripheral nerve block?

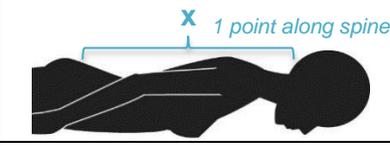
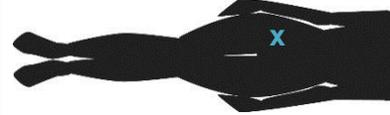
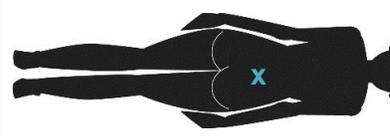
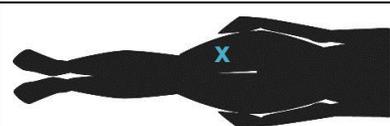
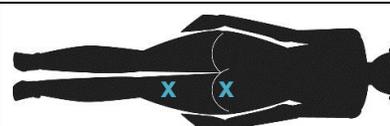
Your limb will feel numb and weak. You might get a tingling or a feeling of pins and needles as it becomes more numb. Once the nerve block has had time to take effect (about 20 minutes) you may not be able to move it. During surgery, there may be a feeling of touching and pressure in the blocked area, but there won't be pain.

## If I get a peripheral nerve block am I awake during the surgery?

In addition to the nerve block, during surgery you may:

- Be awake
- Be given sedation to help you sleep
- Have a general anesthetic

The choice will depend on your medical issues and what type of surgery you have, and it will be made by you and your Anesthesiologist. Even though you are having a peripheral nerve block, you must still follow all the directions to prepare for surgery, such as not eating or drinking beforehand. Some operations can be performed using different anesthetic procedures. Your anesthesiologist, after reviewing your individual situation, will discuss the options with you. If there is more than one type of anesthetic procedure available, your preference should be discussed with your anesthesiologist in order for the most appropriate anesthetic plan to be made.

What are the different types of peripheral nerve blocks?		
Brachial Plexus Block	This is used to provide pain relief or numbness in your shoulder, arm, or hand. The local anesthetic will be injected near your collarbone or in your armpit.	
Paravertebral Block	This is used to provide pain relief or numbness in your chest, lung, lower back or abdomen. The local anesthetic will be injected around the nerves coming out of your spine.	
Ilioinguinal Nerve Block	This is used to provide pain relief or numbness in the groin. The local anesthetic is injected in your lower abdomen.	
Lumbar Plexus Block	This is used to provide pain relief or numbness in your hip or leg. The local anesthetic will be injected into your lower back.	
Femoral Nerve Block	This is used to provide pain relief or numbness in the knee or leg. The local anesthetic will be injected in your groin.	
Adductor Canal Block	This is used to provide pain relief in the knee. It is commonly used for total knee replacement surgery. The local anesthetic will be injected in the middle of your thigh.	
Sciatic Nerve Block (including Popliteal block)	This is used to provide pain relief or numbness in the lower leg. The local anesthetic will be injected in the back of your leg.	

### If you have a lumbar plexus, femoral, adductor canal, or sciatic nerve block:

- You may experience leg weakness. This is expected.
- Do not place weight on the numb limb until the peripheral nerve block has worn off. The weakness may cause you to fall.
- If you have leg weakness, it is important to have someone help you at home.

### How common is nerve injury after a regional block?

Permanent nerve injury after a peripheral nerve block is a rare occurrence, which can occur anywhere from 1 in 4000 blocks to 1 in 200,000 blocks depending on the type of nerve block and specific risk factors. It can be related to direct needle injury of the nerve or to secondary complications like bleeding or infection. In order to prevent nerve injury, please inform your anesthesiologist if you experience any sharp or radiating pain during needle placement or injection. Sometimes you might feel some tingling in your limb, even after the nerve block wears off. This usually goes away after a few days. If it lasts longer, please tell your doctor.

### Do I have to get a peripheral nerve block?

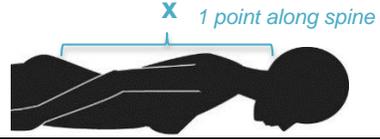
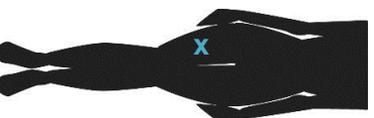
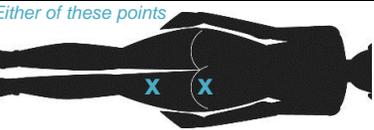
You do not have to get a peripheral nerve block. In the vast majority of cases, the benefits of nerve blocks outweigh the risks. If you have any questions or if you do not want to have a nerve block, you can discuss it with your Anesthesiologist.

#### Sources

Patient Education, Clinical Skills, Elsevier  
 Patient Information, Regional Anesthesia for Surgery, American Society of Regional Anesthesia  
 Patient Information, Peripheral Nerve Block, Vancouver Coastal Health  
 Nerve Block Anesthesia in the Surgical Procedure Rooms, Vancouver Coastal Health/Providence Health Care

## Now that you have completed your procedure

Your Anesthesiologist has performed a peripheral nerve block to reduce your pain and lessen the amount of pain medicine you will need after surgery. The injection was made with local anesthetic. Expect the blocked area to feel numb and weak while the nerve block is in effect.

Which peripheral nerve block did I receive?		
Brachial Plexus Block	This is used to provide pain relief or numbness in your shoulder, arm, or hand. The local anesthetic will be injected near your collarbone or in your armpit.	
Paravertebral Block	This is used to provide pain relief or numbness in your chest, lung, lower back or abdomen. The local anesthetic will be injected around the nerves coming out of your spine.	
Ilioinguinal Nerve Block	This is used to provide pain relief or numbness in the groin. The local anesthetic is injected in your lower abdomen.	
Lumbar Plexus Block	This is used to provide pain relief or numbness in your hip or leg. The local anesthetic will be injected into your lower back.	
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Adductor Canal Block	This is used to provide pain relief or numbness in the knee. It is commonly used for total knee replacement surgery. The local anesthetic will be injected in the middle of your thigh.	
Sciatic Nerve Block (including Popliteal block)	This is used to provide pain relief or numbness in the lower leg. The local anesthetic will be injected in the back of your leg.	
Other		

## How long is the nerve block expected to last?

Date and Time of injection:

Expected duration of block:

## Take special care after your Peripheral Nerve Block

Be aware that you may lose feeling and have weakness in the blocked area. Please take care to avoid injury.

- If you had an upper limb nerve block, during the time the block is in effect, keep your arm in a sling for support and protection. You will not be fully aware of the position of your arm – so it can be injured without you knowing.
- If you have a nerve block in (or near) your leg, your leg muscles will be weak. Do not stand up unassisted because the weakness may cause you to fall. You may need crutches for assistance.
- Be careful when placing hot or cold items on a numb extremity. You could develop a burn or cold injury on the skin. Follow your surgeon's instructions regarding placing ice on your limb.
- Do not do any activities that require coordination or strength, such as drive a car, operate machinery, cycle, etc. until normal sensation and movement of your limb have returned.

If you have received sedation or a general anesthetic, a responsible person must accompany you home after surgery even if you are travelling by taxi. We strongly advise that you have someone stay with you at home for the first 24 hours. Do not drive or operate heavy machinery for at least 24 hours.

## What happens when the Peripheral Nerve Block wears off?

When the nerve block begins to wear off you may experience a tingling 'pins and needles' sensation to the affected area. As soon as you begin to feel tingling or discomfort you should take your prescription pain medication. It is much easier to treat or prevent your pain before it becomes severe. If the peripheral nerve block has not worn off but you are going to bed, you should take your pain medication before you go to sleep to prevent waking up in pain.

## What pain medications should I take?

- Take over-the-counter pain medications such as acetaminophen and anti-inflammatories (eg. ibuprofen, naproxen, celecoxib) on a regular basis for the first few days.
- Take the stronger opioid medication (Codeine, Tramadol, Morphine, Hydromorphone, Oxycodone) as prescribed.

## Notify the Doctor or go to the Emergency Department for the following:

- If you have severe shortness of breath
- If any redness, swelling or discharge develops at the peripheral nerve block site
- If feeling and movement do not return to normal by 48 hours after surgery
- If you have a return of numbness or inability to move after the feeling and movement had returned to normal

## If you have any concerns about your Peripheral Nerve Block:

- Call the Anesthesiologist on call
  - Royal Jubilee hospital **250-370-8000**
  - Victoria General Hospital **250-727-4212**
- Or Visit the closest Emergency Department in your area

### Sources

Care After Regional Anesthesia, Clinical Skills, Elsevier  
Peripheral Nerve Block, Clinical Skills, Elsevier  
What to Expect After Your Lower Limb Block, Providence Health Care  
Peripheral Nerve Block, Patient Information, Vancouver Coastal Health/Providence Health Care