

Numbness and Tingling

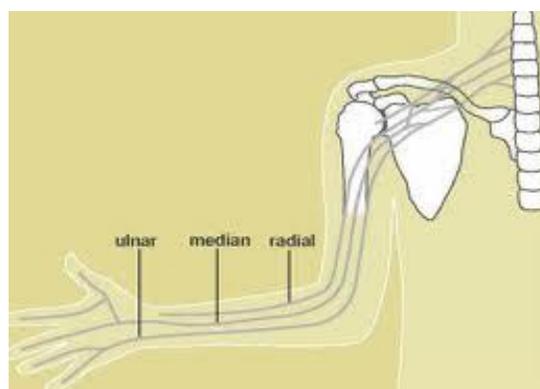
Numbness and tingling is usually a symptom of nerve irritation or injury and is not a normal occurrence. If these feelings last longer than a day or so, or occur frequently, you should schedule an appointment for medical consultation.

Being aware of the specific location of the numbness and tingling can assist the doctor in determining the source of the injury. Also, let the doctor know how often the problem occurs, how long it lasts, and if any particular activities or positions either cause the symptoms or make them worse.

Nerve Anatomy and Function

The nerves are long. Five nerves begin at the spinal cord in the neck, go through a complex series of divisions around the armpit, and divide into the three main nerves that provide power and sensation to the hand.

- Median nerve
- Ulnar nerve
- Radial nerve



The nerves are the pathways that move neural impulses from the brain or the spinal cord out to the hand. These impulses tell a muscle to move, help control circulation, and provide sensation to an area of the body.

A nerve irritation or injury in the neck can cause symptoms all the way down the arm. So can an injury in the area of the branching around the armpit. As the nerves travel down the arm, they travel around bony areas, through tight tunnels or in grooves, and through ligamentous arches and other tight areas that can cause friction or compression. Depending upon the location of the nerve irritation or injury, specific symptoms may occur.

1. If you experience numbness and tingling in the **thumb, index finger, middle finger, and/or part of the ring finger**, you may have a compression or irritation of the **median nerve**. Check out the information for the following:
 - **carpal tunnel syndrome**
 - **pronator teres syndrome**

Numbness and Tingling

2. If you experience numbness and tingling in the **ring finger and small finger**, you may have a compression or irritation of the **ulnar nerve**. Check out the information for the following:
 - **cubital tunnel syndrome**
 - **guyons canal compression**
3. If you experience numbness and tingling over the **back of the hand**, you may have a compression or irritation of the **radial nerve**. Check out the information for the following:
 - **radial tunnel syndrome**
4. If you experience numbness and tingling in the forearm or upper arm, you may have a double crush injury or a compression or irritation of the nerves where they branch or at the neck. Check out the information for the following:
 - **thoracic outlet syndrome**



Double Crush Injury

A nerve that is compromised in one area (for example, in the neck) may impair the function of the nerve throughout its entire length. Because of the compromised nerve function, compressions or injuries may now occur in other locations along the nerve's length. This is called a double-crush injury.

During your doctor's visit:

- The doctor will ask about the types of symptoms you have, how often they occur and how long they last. He will need to know when and how they began.
- The doctor will observe how you move and use your arm.
- He may tap, touch or squeeze over certain locations, or assess positions that may cause symptoms to occur.
- The doctor will look for areas of swelling, redness, tenderness and impaired circulation.
- He will look for muscular weakness.
- He may test sensation in the hand.

Numbness and Tingling

- An x-ray may be ordered to rule-out a fracture or arthritic processes that could cause symptoms.
- Blood tests can rule out rheumatoid factors, thyroid function abnormalities, or other conditions that may aggravate or cause similar symptoms.
- A nerve conduction velocity (NCV) exam may be ordered. This measures the speed at which a nerve impulse travels from a specific location in the arm to another specific location. If the nerve impulse takes longer than a standard amount of time to move from point A to point B, the slow impulse may indicate blockage or compression of the nerve in a particular area. There can be false positive and false negative findings in this type of electro-diagnostic testing. These tests should not be used to diagnose the injury but may be used to confirm the doctor's other clinical findings.
- An electromyogram (EMG) records electrical activity within the muscle allowing the doctor to detect any signs of nerve damage..
- Infrequently, an MRI or CT scan may be ordered if the doctor feels he needs further information.

