

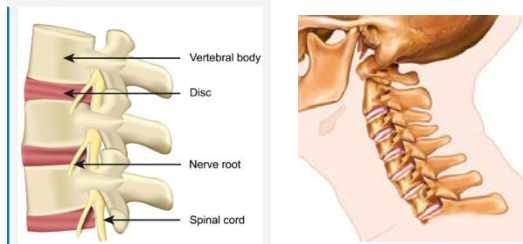
Cook Children's

**Dept. of Neurosurgery: 682-885-2500**

**Home Health Orthotics: 682-885-6295**

Doctor: \_\_\_\_\_

**The Neck and Spine**



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The neck is made up of bones of the spine called vertebrae. Muscles, tendons and ligaments attach to the vertebrae and work together to:

- Protect the spinal cord.
- Support the head.
- Allow movement in the neck.

**Neck also contains:**

<b>Major Blood Vessels</b>	Carry blood to and from the head and brain.
<b>Spinal Cord</b>	Controls all body movements and sensations.
<b>Trachea</b> wind pipe	Brings air in and out of lungs.
<b>Esophagus</b> food tube	Allows food and water to reach the stomach.

**The Neck and Injury**

Because the neck is so flexible and because it supports the head, it is very vulnerable to injury.

**Common causes of neck injuries in children include falls and motor vehicle collisions.**

**Injuries to the neck can:**

- Pull, tear, or stretch muscles, tendons, or ligaments.
- Damage joints or discs between vertebra.
- Dislocate, compress, or fracture vertebra.

**Neck Injury and Cervical Collars**

**Types of Neck Injuries**

<b>Muscle strain</b>	<ul style="list-style-type: none"> <li>• Injury to muscles that attach to the neck and move the head.</li> <li>• Muscles may tear or stretch beyond their normal range.</li> </ul>
<b>Ligament sprain</b>  Ligamentous disruption	<ul style="list-style-type: none"> <li>• Tearing, stretching, or pulling of the bands of tissue called ligaments.</li> <li>• Ligaments surround the vertebrae and connect them to each other.</li> <li>• When injured, they heal more slowly than bones or muscles.</li> </ul>
<b>Subluxation</b>	<ul style="list-style-type: none"> <li>• Happens when a vertebra moves or shifts out of its normal position.</li> <li>• This causes neck to become unstable.</li> </ul>
<b>Compression Fracture</b>	<ul style="list-style-type: none"> <li>• A break in the vertebra bone, causing vertebra to collapse.</li> <li>• Makes vertebra shorter in height.</li> </ul>

**Symptoms**

Depending on the type of injury, symptoms usually include pain, muscle spasms, and neck stiffness. Irritation to the spinal cord may also cause weakness, numbness, or tingling down one arm.

**Goal of Cervical Collar**

- To support the neck and head.
- To decrease the pain and inflammation.
- To keep the neck straight (the best position for healing).
- To keep the neck still (moving the neck can increase the pain and slow down the healing).
- To prevent further damage to the injured tissues.

**How long to wear collar**

Your provider will decide *how long* your child will need to wear the collar. This depends on the type of injury and how it is healing.

**Removing collar each day**

The providers will tell you if your child can shower without the collar on.

***It is very important to follow these instructions.***

Removing the collar too many times or keeping it off for too long can further damage the already injured tissues and delay healing.

## Pediatric Cervical Collars

Miami J cervical collar and Aspen cervical collar

Both collars are made specifically for children.

Before you go home, our team will show you:

- How to take the collar on and off.
- How to care for the collar and pads.
- How to care for the skin under the collar.



**Aspen Pediatric Cervical Collar**

Photos courtesy of Aspen Medical Products

**Miami J Pediatric Cervical Collar**

Photos courtesy of Össur



## Caring for a Child in Cervical Collar

### 1. A snug custom fit:

It is important to keep your child's neck straight and still without moving or tilting. The team will decide on the best type of collar for your child.

### 2. Pain management

There may be some discomfort from the neck injury and from the cervical collar. The neurosurgery or trauma team will develop a plan for taking care of your child's pain while in the hospital and at home.

### 3. Restricted activity

Your child can only do activities that will *not* hurt their neck or put it at risk for more injury.

### Do not allow your child to:

- Play sports or exercise.
- Take part in any type of athletics or PE.
- Play rough or do any vigorous activity.

*Your neurosurgery team will tell you when you can safely return to usual activities.*

## 4. Shower or bath

Your child may take a shower or bath with the cervical collar on. We may suggest you keep two collars, in case one becomes damaged or you need to remove it for cleaning or a bath.

### When the collar is off:

Be careful to keep the head and neck from moving.

- Have child sit quietly in one place.
- Gently wash neck with soap and water. Pat dry.
- Check skin for redness, irritation, rashes, bruising, bleeding, or swelling.
- Do not use any powder or lotion on the skin under the collar.

## 5. Sleeping with collar on

Sleeping may be difficult at first, but your child will soon find a comfortable position.

- Encourage child to sleep on back.
- Regular pillows may be too high. You can try using a towel or blanket folded flat under your child's head.

## 6. When to call your doctor

- Pain is getting worse.
- Skin irritation that does not heal.
- Numbness, tingling or weakness in any part of body.

### For problems with cervical collar:

Please call Cook Children's Home Health Orthotics Department for any concerns you have about the fit of the cervical collar or if you need additional pads. (682-885-6295)

## 7. Follow-up Appointments

We will schedule all follow-up appointments before you go home.

## Care of Collar and Pads

- Use a gentle soap and warm water to clean the collar pads.
- Do not wash in washing machine.
- Do not use heat on the pads.

### Plastic part of collar

Clean plastic part of collar with an antibacterial wipe.

These instructions are only general guidelines. Your surgeon may give you special instructions. If you have any questions or concerns, please ask a member of the Neurosurgery team.

# Neck-Injury-Cervical-Collar

**The healthcare provider talked to me about the information in this handout.**

- I know what I need to do.
- I know why doing this is important.
- All my questions have been answered.
- I have a copy of this handout.

\_\_\_\_\_  
**Patient Name**

\_\_\_\_\_  
MRN (Medical Record Number)

## Patient, Parent, or Legally Authorized Representative

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signed Name

\_\_\_\_\_  
Your Relationship to the Patient

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time a.m. / p.m.

## Healthcare Provider

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signed Name

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time a.m. / p.m.

## Interpreter

\_\_\_\_\_  
Printed Name

\_\_\_\_\_  
Signed Name

\_\_\_\_\_  
Interpreter Number

\_\_\_\_\_  
Date

\_\_\_\_\_  
Time a.m. / p.m.

Print or imprint Patient Information

MRN \_\_\_\_\_

CSN \_\_\_\_\_

