

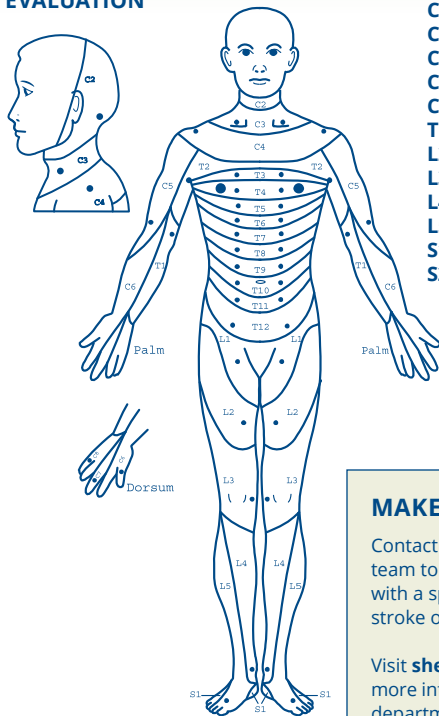


# Emergency Response to Spinal Cord Injury

## TREATMENT

1. Establish airway.
2. Immobilize spine.
3. Record sensory and motor levels.
4. Insert Foley catheter.
5. Determine weight and allergies.
6. Optional: Administer I.V. Methylprednisolone protocol (if this follows the trauma center's protocol).
7. X-ray spine; consider CT of spine/head.
8. Order lab work (CBC, electrolytes, blood alcohol, drug screen, blood gases).
9. Prevent skin compromise by padding bony prominences and repositioning the patient every two hours.
10. Insert N/G tube.
11. Stabilize other fractures.
12. Refer to specialty hospital for spinal cord injury treatment.

## SENSORY EVALUATION



## MOTOR EVALUATION

- C2, C3, C4** - Diaphragm
- C5** - Elbow flexors
- C6** - Wrist extensors
- C7** - Elbow extensors
- C8** - Finger flexors
- T1** - Finger intrinsic
- L2** - Hip flexors
- L3** - Knee extensors
- L4** - Ankle dorsiflexors
- L5** - Long toe extensors
- S1** - Ankle plantar flexors
- S2, S3, S4** - Anal sphincter

## MAKE A REFERRAL

Contact Shepherd Center's admissions team to make a referral for patients with a spinal cord injury, brain injury, stroke or neuromuscular diagnosis.

Visit [shepherd.org/admissions](http://shepherd.org/admissions) for more information or call our admissions department at **404-352-2020**.

# Post-Acute Response to Spinal Cord Injury

## DYSREFLEXIA\*

Dysreflexia is a life-threatening emergency that may affect people with spinal cord injury at T-6 or above.

### Signs and Symptoms:

- Sudden headache
- Elevated B/P
- Stuffy nose
- Flushing in the face/neck/shoulder
- Blotchy skin
- Bradycardia
- Sweating
- Goose bumps

### Causes: The most common noxious stimuli are:

- Bladder distention
- Ingrown toenails
- Pressure ulcers
- Pressure on the skin
- Constipation
- Urinary tract infection

### Treatments:

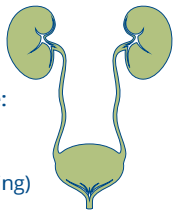
- Sit up straight and loosen tight clothing.
- Catheterize or check for obstruction in bladder drainage system.
- Remove stool from rectum manually using Lidocaine ointment.
- Check skin for cause of pressure.
- If blood pressure is not lowered, consider administration of anti-hypertensive medication, such as Procardia 10 mg.
- Continue to monitor for noxious stimuli.

\* If the patient is pregnant and labor is imminent, dysreflexia may develop and is life-threatening to the mother and fetus.

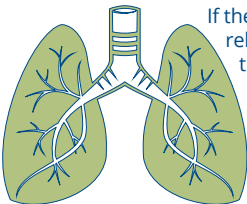
## URINARY TRACT INFECTION

In the patient with spinal cord injury, the indications for obtaining a culture and treating with antibiotics are:

- Fever above 101 degrees F
- Blood in urine (hematuria)
- Bladder program change (e.g., leaking or not draining)



## RESPIRATORY ISSUES



If the patient has an open airway and underwent rehabilitation at Shepherd Center, ask the patient if they have a copy of their most recent chest X-ray and vital capacity measurement available on flash drive. Use this X-ray as a baseline because the patient with spinal cord injury may not have a normal X-ray at baseline.

Also, ask the patient if he/she has a history of sleep apnea. If so, they may be sensitive to pain and sleep medications that could cause respiratory failure.