Back Pain
Adult Office-Hours Version

DEFINITION

- Complains of upper, mid, or lower back pain that occurs mainly in the midline.
- Not due to a traumatic injury
- Minor muscle strain and overuse are covered in this guideline. Sciatic pain is also covered.

PAIN SEVERITY is defined as:

- MILD (1-3): doesn't interfere with normal activities
- MODERATE (4-7): interferes with normal activities or awakens from sleep
- SEVERE (8-10): excruciating pain, unable to do any normal activities

Excluded:

- Pain in the back from significant blunt or penetrating trauma should be triaged using the Back Injury guideline.
- Pain in the lower back in pregnant women, consider labor. See Pregnancy - Labor and Pregnancy - Labor, Preterm guidelines.

TRIAGE ASSESSMENT QUESTIONS FOR BACK PAIN

Call EMS 911 Now

Passed out (i.e., fainted, collapsed and was not responding)

R/O: AAA  FIRST AID: Lie down with feet elevated.

Shock suspected (e.g., cold/pale/clammy skin, too weak to stand)

R/O: AAA  FIRST AID: Lie down with feet elevated.

Sounds like a life-threatening emergency to the triager

See More Appropriate Protocol

Major injury to the back (e.g., MVA, fall > 10 feet or 3 meters, penetrating injury, etc.)

Go to Protocol: Back Injury (Adult)

Pain in the upper back over the ribs (rib cage) that radiates (travels) into the chest

Go to Protocol: Chest Pain (Adult)

Pain in the upper back over the ribs (rib cage) and worsened by coughing (or clearly increases with breathing)

Go to Protocol: Chest Pain (Adult)

Go to ED Now

SEVERE abdominal pain (e.g., excruciating)

Abdominal pain and age > 60

R/O: compression fracture, aortic aneurysm
Unable to urinate (or only a few drops) and bladder feels very full
  
  *R/O: urinary retention, cauda equina syndrome*

Numbness (loss of sensation) in groin or rectal area

**Go to ED Now (or to Office with PCP Approval)**

Sudden onset of severe back pain and age > 60
  
  *R/O: compression fracture, aortic aneurysm*

Pain radiates into groin, scrotum
  
  *R/O: kidney stones*

Blood in urine (red, pink, or tea-colored)

Vomiting and pain over lower ribs of back (i.e., flank - kidney area)

Weakness of a leg or foot (e.g., unable to bear weight, dragging foot)
  
  *R/O: nerve root impingement or cord compression*

Patient sounds very sick or weak to the triager

*Reason: severe acute illness or serious complication suspected*

**Go to Office Now**

SEVERE back pain

Fever > 100.5° F (38.1° C) and flank pain
  
  *R/O: pyelonephritis*

Pain or burning with urination
  
  *R/O: pyelonephritis*

**See Today in Office**

Can't walk or can barely walk
  
  *R/O: severe back strain, cord compression*

Tingling or numbness in the legs or feet
  
  *R/O: severe back strain, cord compression*

High-risk adult (e.g., history of cancer, history of HIV, or history of IV drug abuse)
  
  *R/O: metastasis, epidural abscess*

Rash in same area as pain (may be described as ‘small blisters’)
  
  *R/O: herpes zoster (shingles)*

Pain radiates into the thigh or further down the leg, and in both legs

*Reason: bilateral sciatica carries higher risk*

**See Today or Tomorrow in Office**

Pain radiates into the thigh or further down the leg
  
  *R/O: sciatica*

Age > 50 and no history of prior similar back pain

*Reason: higher risk of serious medical cause*
Patient wants to be seen

See Within 2 Weeks in Office
Back pain persists > 2 weeks

Back pain is a chronic symptom (recurrent or ongoing AND lasting > 4 weeks)

Home Care
Back pain
R/O: muscle strain, overuse
Caused by a twisting, bending, or lifting injury
R/O: muscle strain, overuse
Caused by overuse from recent vigorous activity (e.g., exercise, gardening, lifting and carrying, sports)
R/O: muscle strain, overuse
Preventing back strain, questions about

HOME CARE ADVICE

Back Pain
1.] Reassurance:
• Twisting or heavy lifting can cause back pain. It can also occur after unnoticed minor back injuries
• With treatment, the pain most often goes away in 1-2 weeks.
• You can treat most back pain at home.
• Here is some care advice that should help.
2.] Cold or Heat:
• Cold Pack: For pain or swelling, use a cold pack or ice wrapped in a wet cloth. Put it on the sore area for 20 minutes. Repeat 4 times on the first day, then as needed.
• Heat Pack: If pain lasts over 2 days, apply heat to the sore area. Use a heat pack, heating pad, or warm wet washcloth. Do this for 10 minutes, then as needed. For widespread stiffness, take a hot bath or hot shower instead. Move the sore area under the warm water.
3.] Sleep:
• Sleep on your side with a pillow between your knees. If you sleep on your back, put a pillow under your knees.
• Avoid sleeping on your stomach.
• Your mattress should be firm. Avoid waterbeds.
4.] Activity:
• Keep doing your day-to-day activities if it is not too painful. Staying active is better than resting.
• Avoid anything that makes your pain worse. Avoid heavy lifting, twisting, and too much exercise until your back heals.
• You do not need to stay in bed.
5. **Pain Medicines:**
   - For pain relief, take acetaminophen, ibuprofen, or naproxen.
   - Use the lowest amount of medicine that makes your pain feel better.

   **Acetaminophen** (e.g., Tylenol):
   - Take 650 mg (two 325 mg pills) by mouth every 4-6 hours as needed. Each Regular Strength Tylenol pill has 325 mg of acetaminophen. The most you should take each day is 3,250 mg (10 Regular Strength pills a day).
   - Another choice is to take 1,000 mg every 8 hours as needed. Each Extra Strength Tylenol pill has 500 mg of acetaminophen. The most you should take each day is 3,000 mg (6 Extra Strength pills a day).

   **Ibuprofen** (e.g., Motrin, Advil):
   - Take 400 mg (two 200 mg pills) by mouth every 6 hours.
   - Another choice is to take 600 mg (three 200 mg pills) by mouth every 8 hours.
   - The most you should take each day is 1,200 mg (six 200 mg pills), unless your doctor has told you to take more.

   **Naproxen** (e.g., Aleve):
   - Take 220 mg (one 220 mg pill) by mouth every 8 hours as needed. You may take 440 mg (two 220 mg pills) for your first dose.
   - The most you should take each day is 660 mg (three 220 mg pills a day), unless your doctor has told you to take more.

6. **Call Back If:**
   - Numbness or weakness occur
   - Bowel/bladder problems occur
   - Pain lasts for more than 2 weeks
   - You become worse.

**Preventing Back Strain**

1. **Prevention:**
   - The only way to prevent future backaches is to keep your back muscles in excellent physical condition.
   - A sedentary lifestyle (lack of exercise) is a risk factor for developing back pain.
   - Walking, stationary biking, and swimming provide good aerobic conditioning as well as exercise for your back.
   - Being overweight puts more weight on the spine and thus increases the risk of back pain. If you are overweight, work with your doctor to develop a weight-loss program.

2. **Good Body Mechanics:**
   - **Lifting:** Stand close to the object to be lifted. Keep your back straight and lift by bending your legs. Ask for lifting help if needed.
   - **Sleeping:** Sleep on a firm mattress.
   - **Sitting:** Avoid sitting for long periods of time without a break. Avoid slouching. Place a pillow or towel behind your lower back for support.
   - **Posture:** Maintain good posture.

3. **Strengthening Exercises:**
   - During the first couple days after an injury, strengthening exercises should be avoided. The following exercises can help strengthen the back. Perform the following exercises 3-10 times each day, for 5-10 seconds each time.
   - **Bent knee sit-ups:** Lay on back, curl forward lifting shoulders about 6 inches (15 cm) off the floor.
   - **Leg lifts:** Lay on back, lift foot 6 inches (15 cm) off floor (one leg at a time).
   - **Pelvic tilt:** Lay on back with knees bent, push lower back against floor.
   - **Chest lift:** Lie face down on ground, place arms by your sides, lift shoulders off the floor.

4. **Call Back If:**
   - You have more questions
   - You become worse.
Key Points

- Lower back pain is a cause of countless visits to physicians’ offices and emergency departments. It is the second most common cause of lost workdays, after cold and flu symptoms. Over 80% of people at some point in their lives have lower back pain.
- However, there is some good news. In most cases, the back pain is not serious and it has a self-limited course. Pain subsides within 4-6 weeks in 90% of individuals experiencing acute low back pain.

Four Categories of Back Pain

- Potentially serious: Examples include abdominal aortic aneurysm, neoplasm, osteomyelitis, epidural abscess, vertebral fracture, and neurologic emergencies (e.g., cauda equina syndrome).
- Sciatica (back pain with neurologic symptoms): There is radiation of the back pain (or buttock pain) into a lower extremity suggesting lumbosacral nerve root compression. There may be associated leg weakness, numbness, or paresthesias.
- Non-specific back pain: No neurologic symptoms. Examples include lumbar strain/sprain, degenerative osteoarthritis, lumbar disc disease, and fibromyalgia.
- Referred back pain: There are gastrointestinal causes like pancreatitis, biliary colic, and posterior gastric ulcer; genitourinary causes like renal colic, pyelonephritis, endometriosis, and ovarian cyst.

Lumbar Strain

- Acute lower back pain in the 18 to 50 year old age group is usually a symptom of strain of some of the 200 muscles in the back that allow us to stand upright.
- Often the triggering event is carrying something too heavy, lifting from an awkward position, bending too far backward or sideways, or overuse.
- Individuals with strained back muscles often note that the pain is increased by bending or twisting movements, relieved by assuming certain positions, and that the back muscles are tender.

Degenerative Osteoarthritis

- Degenerative osteoarthritis is a common cause of back pain in the elderly population.
- In uncomplicated osteoarthritis, individuals will complain of chronic midline back discomfort. Frequently, there is morning stiffness that improves as the day progresses.

Bed Rest and Overtreatment

- Complete bed rest is inconvenient and unnecessary in the majority of patients, including those who need to be examined by the physician. Complete bed rest should never be recommended over the telephone.
- Research has demonstrated that continuing ordinary activities within the limits permitted by pain results in a speedier recovery than rest [Malmivaara reference].

REFERENCES


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<th>David A. Thompson, M.D.</th>
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