Michigan Medicine Clinical Care Guidelines

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Acute Low Back Pain

What is low back pain?

Almost everyone has back pain at one time or another. The pain may be in the center of the back or to one side, or may move down the leg. Besides pain in the back, the symptoms may also include pain in the buttocks or legs, stiffness, limited motion, and spasms.

What are the risk factors?

Risk factors for back pain include:

- Accidents
- Heavy physical work
- Lack of exercise
- Obesity

Being overweight may increase the risk for low back pain because it adds to the stress on the back.

How does it occur?

Spinal disks (also called **intervertebral disks**) are stacked between the spine bones. When you walk or run, the disks act as shock absorbers and prevent the spine bones from bumping against one another.

We do not know a lot about what causes low back pain. Some likely causes include pulled muscles, strained ligaments, tight joints, or small tears in the spinal disks. These types of injuries do not show up well on x-rays.

Should I have an x-ray?

Most people with low-back pain do not need an x-ray. X-rays do not provide any useful information that has an effect on treatment. Your

Smoking

Vibration (i.e., driving a truck)



doctor may order x-rays or other tests if your specific symptoms indicate a need for them or if your back pain does not go away in 4 to 6 weeks.

What is the treatment?

The good news is that 90% of people with acute low back pain recover within 4 to 6 weeks.

Most treatment plans for low back pain include:

- **Staying active**. Lying in bed or cutting back on activity is not helpful. People get better faster if they stay active at home and work. Common exercises such as brisk walking, swimming, or riding a bicycle can be helpful in many cases. Your doctor may limit your activity if your job or the sports you play are very physical.
- **Stretching**. Most patients with acute low back pain benefit from doing stretches 2 to 3 times daily. Hold the stretch for 20 to 30 seconds, take a break and do it again. If a stretch seems to make things worse, or if it causes pain to go down your leg, seek further advice from a healthcare provider or your doctor.
- **Ice packs** (a plastic bag with ice cubes and water, wrapped in a ٠ towel). Apply the ice pack to the sore area of your back for 20 to 30 minutes at a time. The pack will feel cold at first, but it may help to decrease pain, spasm, and inflammation in the back. There is nothing wrong with trying heat if it works, but ice may be better.
- **Exercise**. Common aerobic and conditioning exercises, such as brisk • walking, swimming, or riding a bicycle can be very helpful.
- **Medications.** If your doctor recommends medications, it is very important that you take them as instructed. Some medications should be taken on a regular basis and not only when you hurt.

When should I call my doctor?

Call your doctor right away if you have:

- Trouble controlling your bladder or bowels
- Numbness or weakness in your feet, legs, groin, or rectal area •
- Pain that gets worse or extends into your leg and below your knees •
- Pain that limits your normal activities for more than 4 weeks •
- Shooting pain down your leg •

How do I rest my back?

Hold each of these positions for 5 minutes or longer. Start each exercise lying on your back.

- Put pillows under your knees and bend your knees.
- Lie on the floor with your feet toward a chair. Put a pillow under your neck, bend your knees to a 90-degree angle, and place your lower legs and feet on the chair.
- Bend your knees. Bring one knee up to your chest. Grab your thigh ٠ with your hand and hold it there. Repeat with the other knee. Bring both knees to your chest and hold. Grabbing your thigh rather than your lower leg prevents bending your knee too much.

When can I return to my activity or sport?

Returning to heavy physical activities or sports too soon may worsen your injury and could lead to lasting damage. When you can return to activities will depend on how soon your back gets better. The rate of recovery is not the same for all people. Some people recover in days, but for others it may take several weeks or months. Usually the longer you have symptoms before you start treatment, the longer it will take to get better.

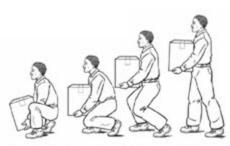
It is very important that you follow your doctor's advice about returning to activities. Your back must be fully recovered before returning to sports or heavy physical work. This means that you have the same range of motion you had before the injury and that you are able to run, jump, and twist without pain. Your doctor will allow you to return to activities when it is safe to do so.

What can I do to help prevent low back

pain?

The following tips may help to reduce the strain on your back:

• When you move a heavy object, do not push it with your arms. Turn around and



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push it backwards. This shifts the strain from your back to your legs.

- When you lift a heavy object, follow these instructions:
 - $\circ\;\;$ keep the object close to your body with your arms bent
 - bend your knees and hips
 - o keep your back straight
 - do not lift heavy objects higher than your waist
 The stronger your legs are, the easier it will be to lift.
- Sit in straight back chairs. Hold your spine against the back of the chair when you sit.
- Do not sit in one place or in one position for a long time. Get up and stretch, walk about, and change positions.
- When you sit in one spot for a long time, use a footrest for one foot. This will help to keep your back straight.
- When you drive, sit close to the pedals. Use your seat belt and a hard backrest or pillow.

- When you sleep or rest, lie on your side and bend your knees. You can also try putting a pillow between your knees.
- When you sleep on your back, put a pillow under your knees.
- If you smoke, ask your doctor for help on how to quit. Smoking limits blood flow to the disks and muscles in your back and slows their healing.
- A regular exercise program will help your back and keep you healthy overall. Talk with your doctor before starting any exercise program.
 See a professional trainer or a physical therapist for exercise advice that fits your specific needs.
 - For aerobic exercise such as walking, bicycling, or swimming, start with low intensity exercise. This means about 5 to 10 minutes of exercise a day, three days a week. Slowly work up to 30 minutes of exercise a day, five days a week. If you cannot do 5 to 10 minutes of exercise, start with 2 to 3 minutes or whatever you can.
 - Strength training is also good for your body and back. You can start with leg strengthening exercises that will help your back when it comes to lifting heavy objects. Use strength training machines if you can. Start with lighter weights, completing 10 to 15 repetitions before increasing the weight at your next workout. Keep in mind that stronger muscles will allow you to do more work and help reduce the risk of back injury.

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