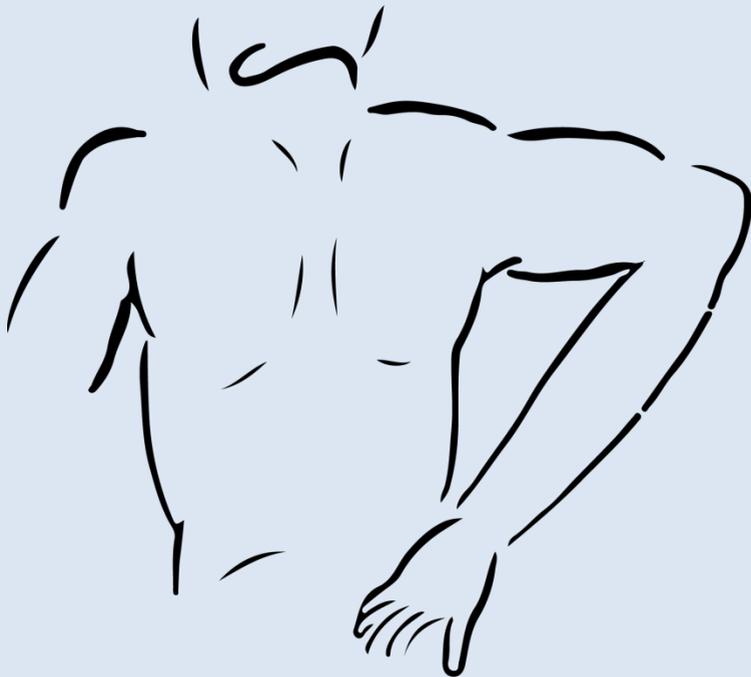


# Chronic Low Back Pain

## So Your Back Hurts...

**Learn what works, what doesn't,  
and how to help yourself**



# Introduction

---

The goal of this brochure is to give you a better understanding of chronic low back pain. It contains important facts about chronic low back pain, and explains what medical research has told us about the diagnosis and treatment of this condition.

This brochure is not meant to replace the care provided by your healthcare provider, but rather to remind you of things he or she may have already discussed with you. If you have questions about anything in this brochure, please discuss them with your healthcare provider.

The information in this brochure is based on an extensive review of medical research conducted by the Institute of Health Economics and healthcare providers from across the province of Alberta. This team has also developed a guideline for the assessment and treatment of chronic low back pain by Alberta community-based healthcare providers. The guideline, patient information sheets and instructional videos on chronic low back pain are available at: [tinyurl.com/lowbackpaininfo](http://tinyurl.com/lowbackpaininfo).

This brochure was adapted for Alberta in 2015 with permission from the Institute for Work & Health (IWH) in Toronto.

**The recommendations are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific clinical circumstances. They should be used as an adjunct to sound clinical decision-making.**

# Table of Contents

---

<b>What Is Chronic Low Back Pain?</b>	<b>1</b>
<b>Frequently Asked Questions</b>	<b>2</b>
<b>What Works for Chronic Low Back Pain?</b>	<b>5</b>
<b>What Can I Do to Help Myself?</b>	<b>8</b>
<b>What Treatments Have Unclear Benefits or Are Potentially Harmful?</b>	<b>9</b>
<b>The Bottom Line for Chronic Low Back Pain</b>	<b>11</b>

# What Is Chronic Low Back Pain?

---

Healthcare professionals define chronic low back pain as pain in the lower part of the back, and sometimes in one or both legs that lasts for more than three months.

In North America and Europe, chronic low back pain is the most common type of chronic pain. Health surveys indicate that more than 8% of Canadian adults suffer from chronic low back pain.

Chronic low back pain can be caused by a variety of health conditions, and it is often not possible to identify a clear cause.

Chronic back pain can be different for different people. It can differ in its location, the intensity of the pain, its impact on a person's ability to carry out everyday activities, and its effect on the lives of family members.

# Frequently Asked Questions

---

## **My back hurts a lot. Is my back pain caused by something serious?**

Bad pain rarely means that you have something serious. Back pain can be bad even when it is caused by strains to the muscles and joints. However, in some cases really bad back pain can be caused by serious diseases. Your doctor, osteopathic physician, nurse practitioner, chiropractor, and physiotherapist are trained to identify when serious diseases could be the cause of back pain. They do this by asking you questions and through physical examination. If they think you may have something seriously wrong, they will order more tests and/or refer you to someone who can make a diagnosis.

## **Can x-rays and MRI scans show what's wrong with my back?**

In most cases, no. These tests do a poor job of showing muscle problems. Also, as people age, they get wear and tear in their joints that may show up on x-rays or magnetic resonance imaging (MRI) scans, even though it isn't related to the cause of the pain. Your doctor may order an x-ray or MRI scan to help find out what's wrong, but these tests don't show everything and can't "see" pain.

In many cases, the results of these tests do not change the treatment that will be recommended. For more information, see the McMaster Pain Assistant - Radiology with Dr. Hamilton video at: <http://mcmasterpainassistant.ca/clinician-resources/videos>, and Choosing Wisely Canada at: [www.choosingwiselycanada.org/materials/imaging-tests-for-lowerback-pain-when-you-need-them-and-when-you-dont/](http://www.choosingwiselycanada.org/materials/imaging-tests-for-lowerback-pain-when-you-need-them-and-when-you-dont/).

## Frequently Asked Questions (cont'd)

---

### **How can you be sure that I don't need surgery?**

There has been a lot of research to see who benefits from back surgery. Because of that research, surgeons now know which specific problems can be helped by surgery. Your doctor, osteopathic physician, nurse practitioner, physiotherapist, and chiropractor can tell you if you might be helped by surgery and will refer you to a surgeon who will do special tests to check if you may be helped. As a general rule, back surgery is often more helpful for back-related leg pain than it is for the back pain itself.

### **My doctor wants to give me opioids for my pain. That scares me. What should I do?**

If you don't like what your doctor's suggests, it makes sense to make a follow-up appointment with your doctor to discuss your worries. There is information which may be helpful for you to know.

Opioids are most often used for short periods to relieve severe flare-ups of back pain. Research does not support the long-term use of opioid medications in people with chronic low back pain. Even for chronic pain, the benefits of opioids tend to be only short term.

Over time, most people find that higher doses are needed to maintain their pain relief, but at higher doses opioids can have the opposite effect of increasing people's sensitivity to pain.

If you are given opioids, your doctor will follow guidelines for prescribing that might include a contract limiting the number of physicians and pharmacies that can give you the opioid medication, as well as random urine drug tests. Your doctor may also test you for risk of addiction.

## Frequently Asked Questions (cont'd)

---

**People seem to be saying that my pain “is in my head”. I am beginning to wonder myself. Could I be doing this to myself?**

It is very rare for chronic low back pain to be caused by psychological problems. However, being in constant pain can be the cause of significant emotional distress and can lead to mental health issues.

If you are concerned about your emotions, you should make an appointment to discuss your worries with your doctor.

Sometimes when a person with chronic low back pain looks healthy, people with no experience with chronic pain may think that the problem is psychological. Having a frank talk with them about your situation can “clear the air” and help restore a comfortable and helpful relationship.

**My doctor tells me that it will help if I am more active. When I try to start doing what I used to do, my back hurts more. That doesn’t make sense to me. Is my doctor wrong about this?**

Your doctor is very likely right and the problem is the way you are trying to get back your usual activity. If you’ve been inactive for a long time, your muscles may be tight and weak, and trying to go back to what you did before is likely to cause aches and pains. The best way is usually to start slowly and to gradually increase your activity level as your strength and flexibility increases.

In many communities in Alberta, there are trained professionals who will be able to help you design a re-activation program that reduces the amount of pain you will have while you get yourself fit again. Your doctor, osteopathic physician, nurse practitioner, chiropractor, and physiotherapist will all have helpful information.

# What Works for Chronic Low Back Pain?

---

There has been a great deal of research on treatments for chronic low back pain. Treatments are believed to be effective if they reduce pain intensity by 30% for about one-third to one-half of the people who have been studied. None of the treatments that have been studied provide 100% relief for the majority of people.

Much of this research has focused on “non-specific chronic low back pain,” that is caused by problems with muscles, ligaments, and joints in the lower back. These conditions do not get better with surgery. People with non-specific chronic low back pain are usually treated by their family doctor, osteopathic physician, nurse practitioner, chiropractor, or physiotherapist.

For people with severe pain and disability, additional more specialized types of treatment have also been studied.

As a general rule, the treatments for chronic low back pain do not cure the cause. The main idea of treatment is to reduce pain and increase the person’s ability to get on with their usual life.

**Effective chronic pain management requires treatments provided by a health professional together with what you can do to help yourself.**

## What Works for Chronic Low Back Pain? (cont'd)

---

The following is a list of medicines that research has found to be helpful for chronic low back pain:

- Acetaminophen (e.g. Tylenol®)
- Non-steroidal anti-inflammatory drugs (NSAIDs, e.g. Motrin® or Advil®). You can accidentally take too many of these pain relievers, as they can be in other over-the-counter medications for coughs, colds, and sleep. If you have any questions, please discuss with your pharmacist, physician, or prescribing practitioner. If you are over 45 or at higher risk for stomach complications, your doctor may recommend additional medication to take alongside the anti-inflammatory drugs to help protect the stomach.
- Muscle relaxants (for short-term relief of muscle spasm)
- Low-dose tricyclic antidepressants (amitriptyline and nortriptyline)
- Herbal medicines (Devil's claw or Salix extract, or Capsicum frutescens plaster).

Take care if considering these - the contents in commercial herbal products may not be the same as what the evidence shows to be useful, and there are possible side effects with Devil's claw and Capsicum frutescens. Ask your healthcare provider for more information, or see the information in the full guideline.

## What Works for Chronic Low Back Pain? (cont'd)

---

The following professionally delivered treatments have been shown to be effective:

- Acupuncture for short periods to relieve flare-ups of back pain or as part of an active treatment program
- Cognitive behavioural therapy (CBT)
- Exercise and therapeutic exercise (including aquacise)
- Massage therapy as part of an active treatment program
- Multidisciplinary treatment program (for patients with severe pain and disability)
- Progressive muscle relaxation or electromyographic (EMG) biofeedback
- Yoga

The following professionally delivered treatments are sometimes offered to carefully selected patients:

- Epidural steroid injections for relief of leg pain (sciatica)
- Prolotherapy in combination with exercise therapy
- Injections directed to the facet or sacro-iliac joints

The decision of what treatment options to try is best made in consultation with your doctor.

# What Can I Do to Help Myself?

---

Research has shown that there are many things people with chronic low back pain can do to reduce their pain and get back to their normal activities. These include:

- Being more physically active, including doing regular exercise (see: [www.evanshealthlab.com/23-and-12-hours/](http://www.evanshealthlab.com/23-and-12-hours/))
- Doing activities you enjoy that are within your physical limits
- Using relaxation techniques
- Learning and using coping strategies. For more information, ask your healthcare provider, or enrol in a workshop provided by the Alberta Healthy Living Program, such as the Better Choices, Better Health® online program (see <https://betterchoicesbetterhealth.ca/online/hl/hlMain>)
- Learning and using other self-management techniques, such as pacing your activities through the day and the week and using proper body postures. For more information, ask your healthcare provider
- Many Alberta communities have chronic disease management programs with classes that can be very helpful for people with chronic low back pain. Your family doctor and other health professionals will know what is available in your community. You may also obtain information from HEALTHLink Alberta by dialing 811.

# What Treatments Have Unclear Benefits or Are Potentially Harmful?

---

## **What treatments have unclear benefits?**

Spinal manipulative treatment and spinal mobilization are common treatments for low back pain. The benefits of these treatments for chronic low back pain are unclear. Some research studies show benefit and others do not.

There are many other treatments for chronic low back pain where little or no research has been done, or the research results are unclear. These include: back belts, corsets, craniosacral massage, gravity tables, non-motorized traction, interferential current therapy, intramuscular stimulation, low-level laser therapy, over-the-counter transcutaneous electrical nerve stimulation (TENS), shock-wave treatment, spa therapy, therapeutic ultrasound, touch therapy, mindfulness training, trigger point injections, buprenorphine transdermal system, dried marijuana or other cannabinoids, duloxetine, and topical nonsteroidal anti-inflammatory drugs (NSAIDs).

## What Treatments Have Unclear Benefits or Are Potentially Harmful? (cont'd)

---

### **Are any treatments for chronic low back pain clearly without benefit or harmful?**

Research has shown that some common treatments for chronic low back pain are harmful or without benefit. We do not recommend the use of motorized traction, antibiotic treatment for modic changes (changes in bone structure seen on MRI scans), or selective serotonin reuptake inhibitors (SSRIs), or the use of massage, prolotherapy, or TENS as a sole treatment.

It is important to understand that all treatments, particularly medications, can have side effects and may cause harm. When thinking about a new treatment, it is always helpful to talk with your healthcare provider about possible side effects and harm.

# The Bottom Line for Chronic Low Back Pain

---

- You aren't alone. Chronic low back pain is one of the most common chronic conditions in Canada.
- Even though your back hurts a lot, chances are you do not have a life-threatening or serious medical illness.
- Most low back pain and stiffness are related to a problem with the muscles and ligaments that surround and support the spine, and not with the spine itself.
- Spine surgery does not help muscle and ligament problems, and it is rarely helpful for people without specific causes of low back pain identified by their doctor, chiropractor, or physiotherapist.
- Your doctor, osteopathic physician, nurse practitioner, chiropractor, or physiotherapist will rule out any serious causes for your low back pain. Unless certain warning signs or "red flags" are present, you will not need a back x-ray or specific imaging tests like CT or MRI scans.
- Non-prescription medications such as acetaminophen and ibuprofen can help you deal with the pain.

## The Bottom Line for Chronic Low Back Pain (cont'd)

---

- The causes of chronic low back pain are not well understood. But you can take steps to help yourself get your life back again.

These steps include:

- Being more physically active
  - Doing regular exercise
  - Learning and using coping strategies
  - Pacing your activities
  - Using proper body postures
  - Doing activities you enjoy that are within your physical limits
- Many Alberta communities have chronic disease management programs with classes that can be very helpful for people with chronic low back pain. Your family doctor and other health professionals will know what is available in your community. You may also obtain information from HEALTHLink Alberta by dialing 811.

This publication is available for free download from the IHE website at <http://www.ihe.ca>.

Also available are the following topic-specific information sheets on the TOP website (<http://www.topalbertadoctors.org/cpgs/885801>):

*What You Should Know About Acute Low Back Pain*

*What You Should Know About Chronic Low Back Pain*