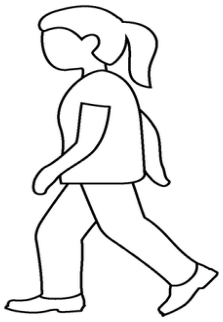
NORTHERN SHARED CHRONIC PAIN SERVICES

Understanding Chronic Pain

A guide for patients and their families



Understanding Chronic Pain

A simple guide for patients

Your Body's Threat Detector

Pain is a powerful sensation that almost everyone experiences at some point in life. It is one of the body's most important protection systems. Its job is simple: to keep you safe.

A helpful way to understand how pain is produced in our body is to think about a smoke detector.

A smoke detector is built to detect smoke or fire. But smoke and fire are not the loud sound you hear. They are the "threats" the detector is designed to notice. When the smoke detector identifies these "threats" it makes a loud, irritating noise to get your attention so you can act quickly and stay safe.

Your pain system works in a similar way.

Your body has specialized sensors in your body that detect possible danger, such as heat, pressure, or injury. These sensors send signals through the nervous system to the spinal cord and brain, where the information is processed. Sometimes signals can also come from the central nervous system itself. These can be more subtle and complex, shaped by things like our memory, stress, past experiences, or learned patterns of protection.

If the brain decides that protection is needed, it produces the loud irritating sensation we call pain.

Most of the time, this system works very well. But sometimes; like a smoke detector going off for burnt toast instead of a real fire; the brain can become overprotective and sound the alarm too easily.

Two Different Kinds of Pain

Acute Pain (Short-Term Pain)

Acute pain is helpful. When something harms your body, warning signals travel through the nervous system to the brain. If the brain believes there is danger, it creates pain to get your attention and encourage you to protect the area while it heals.

This is called acute pain. It usually improves as the body heals. It usually makes sense.

Examples include:

- touching a hot stove
- spraining an ankle
- cutting your finger

Chronic Pain

Chronic pain is different from acute pain. It often continues even after the body has healed. The original injury may no longer be sending danger signals from the tissues. Instead, signals are coming from the central nervous system—the brain and spinal cord—which can still lead the brain to produce pain. These are sometimes called pain-generating neural circuits.

First and foremost, this is not your fault. Chronic pain is an adaptation that can occur in the pain system. It happens because your nervous system has become very good at protecting you. Over time, the pain-producing circuits in the brain and spinal cord can become more sensitive and more efficient at creating pain signals.

In other words, the alarm system has learned to react quickly, even when the level of danger in the body is low. Just like when a smoke detector rings loudly when you burn toast.

Because of this, chronic pain can feel confusing. It may seem to appear without a clear reason or follow a predictable pattern.

But this does not mean the pain is imagined.

It means the body's protection system, the alarm designed to keep you safe, has become overprotective.

When the alarm system becomes more sensitive, you may notice:

- pain that feels stronger than expected
- pain that does not follow a clear pattern
- pain that comes and goes
- pain in more than one area of the body
- other symptoms such as fatigue or poor sleep

This also helps explain why pain can feel intense even when medical tests look normal.

Protective Habits That Can Keep the Pain System Active

When pain lasts a long time, the body often develops protective habits without you realizing it.

These protective behaviors make sense when you have an injury. They help protect the body while tissues heal. But when pain becomes chronic, these same protective patterns can sometimes keep the nervous system on high alert and generate more "threats" from your body even though no damage is occurring.

Common protective habits include:

- holding muscles tight
- guarding certain body parts
- changing posture to avoid discomfort
- avoiding movement because of fear of pain
- constantly checking the body for symptoms

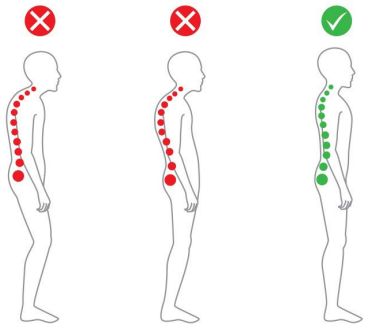
The goal is **not** to force your body to change quickly.

Instead, the goal is to gently teach the nervous system that movement and everyday activities can be safe again. Building awareness of these patterns is often the first step in helping the alarm system dial down.

Bring kindness when you navigate this. You're doing the best you can in this moment.

As you change your posture, you may notice small sensations or brief twinges. This is common and does not mean you are causing harm.

Each time you practice, you are teaching your nervous system that this movement is safe. Over time, your body's alarm system can begin to quiet down.



A Simple Way to Change your Posture

One helpful way to teach your body to stand more upright is to connect a new skill to something you already do every day.

For example, while you are waiting for the kettle to boil or the microwave to heat your food, you can practice standing tall.

Try this:

1. Stand near a countertop so you feel steady and safe.
2. Imagine a string gently lifting the top of your head toward the ceiling.
3. Let your body lengthen in an easy, relaxed way.
4. Gently squeeze your buttock muscles and rock on your feet.
5. Take slow, calm breaths.

Managing Chronic pain

Managing chronic pain is not about pushing harder or relying on willpower. Lasting improvement comes from learning new skills—skills that match how chronic pain works. It rarely comes from treatments or medications alone.

Helpful strategies may include:

- Learning how pain works and why it can continue even after healing
- Gentle, gradual movement that feels safe for your body
- Learning to notice **pain sensations without fear** using science-based tools such as *somatic tracking*, which can help calm an overprotective pain system. (see below)
- Relaxation and calming techniques
- Using medications carefully to make pain more manageable, rather than

trying to make it disappear completely

Hands-on treatments like massage or nerve blocks can sometimes help in the short term, but they are usually only one part of a larger plan.

You don't have to figure this out on your own. Pain self-management programs and chronic pain clinics can help you learn and practice these skills. There are also many supports on-line that are cited at the end of this booklet. Nova Scotia Health's website has information about chronic pain supports available in your local community.

Somatic tracking

Somatic tracking is a skill that helps retrain the brain's pain alarm system. Rather than meeting pain with fear, tension, or avoidance, you practice noticing the sensation with curiosity and calm.

The goal is not to force the pain away. It is to gently pay attention to what you are feeling while reminding yourself that the sensation, though uncomfortable, is safe. Over time, these repeated experiences of safety can help the nervous system become less protective.

By moving at your own pace and responding with reassurance, somatic tracking can help your brain relearn that movement is safe. Take things one step at a time, and celebrate every small win along the way.

Moving your body with chronic pain will not cause damage

Movement can feel unsafe when you live with chronic pain. This is understandable. Try to bring kindness with you as you begin.

- Start small and build slowly
- Choose movement you enjoy
- Pick places where you feel safe
- Be gentle with yourself—avoid step counters or goals that push intensity, especially those tied to weight loss
- Remind yourself that movement does not mean damage
- Move for the joy of moving—dancing, stretching, or listening to music

It's normal to notice some discomfort when parts of your body haven't been used in a while. Although this can feel unpleasant, it does not mean you are causing harm. What matters most is how you interpret the sensation and the thoughts that follow.

It can be helpful to notice your thoughts with curiosity and gently watch for patterns that may increase your sense of threat. For example:

- "How bad is this going to get?"
- "What if I make it worse?"
- "Something must be wrong."
- "I should stop before I hurt myself."

These thoughts are very common. They are your brain's way of trying to protect you.

When you notice them, you don't need to fight them or push them away. Instead, you can gently respond with reassurance:
"This feels uncomfortable, but it is not dangerous."
"My body is learning that movement is safe again."

Over time, this shift, from fear to curiosity and reassurance, can help turn the volume down on the pain alarm.

When you approach movement with a sense of safety, curiosity, and reassurance, you are giving your brain new evidence, teaching it that movement can be safe again.

What You Can Do to Help Your Pain

- Don't put all your eggs in one basket. Waiting to see a "pain specialist" can take time, but there are things you can start doing now.
- Begin building skills to support your pain system. Small steps can make a meaningful difference.
- Gentle activity is safe and can help your body relearn movement.
- Stay connected with your healthcare provider and remain an active part of your care.
- Pain is part of your life, but it does not get to define your whole life.
- Support your body with good sleep, regular meals, and daily routines.
- Make space for joy, connection, and things that give your life meaning.
- Remember: you are more than your pain.

Key messages to remember

- Pain does not always mean damage
- Movement is safe and necessary
- The nervous system can change
- Your participation matters
- Be kind to yourself

Final words

Chronic pain is real, and it is **increasingly treatable**. With understanding, support, and practice, many people learn to live fuller lives, even with pain.

You are not broken.
And you are not alone.

Helpful resources:

- **Pain Canada** – paincanada.ca
- **Nova Scotia Pain Self-Management Programs** – nshealth.ca
- **Book:** *The Way Out* by Alan Gordon
- **Curable App**
- **Somatic Tracking** Exercise for Pain Reprocessing Therapy: **https://www.youtube.com/watch?v=GF-BWH4w8ho**

Update: March 2026 Dr. M. Allen