

The National Pain Centre worked with the American College of Physicians (ACP) and American Academy of Family Physicians (AAFP) to develop new guidelines for the best ways to treat pain for people with new injuries like sprains or strains. These guidelines were based on a review of the best evidence available.

Guidelines use “recommendations” to rate treatment choices. “Strong recommendations” for a treatment are only given when there is moderate to high quality evidence that the treatment will help more than it could harm. When the evidence is not as strong, or there is a close balance between the benefits and harms, a “conditional recommendation” is like a suggestion. You should talk to your doctor to help you make the decision that would be best for you.

CONDITIONAL RECOMMENDATION

Informed individuals may choose the suggested course of action, but an appreciable minority would not.



STRONG RECOMMENDATION

All or almost all informed individuals would choose the recommended course of action, and only a very small proportion would not.

All medications including topicals have potential side effects and may not be the best option for everyone. Please discuss with your doctor and pharmacist.

RECOMMENDATION 1:

The Guideline **strongly recommends** that people who have pain due to new injuries like sprains and strains **should be treated** first with creams, gels and patches containing NSAIDs*. These products might also contain menthol to help create a feeling of immediate relief. This can relieve pain as well as improve movement, activity and the person’s satisfaction with treatment. See table for more information.



RECOMMENDATION 2A:

The Guideline **suggests** that people who have pain due to new injuries like sprains and strains **could be treated** with oral NSAIDs. NSAIDs like ibuprofen and naproxen can reduce pain as well as improve physical function. Another oral medication which could be used to decrease pain is acetaminophen.



RECOMMENDATION 2B:

The Guideline **suggests** that people who have pain due to new injuries like sprains and strains **could be treated** with acupressure* or TENS*.



RECOMMENDATION 3:

The Guideline **suggests** that people who have pain due to new injuries like sprains and strains **not be treated** with opioids such as codeine, fentanyl, hydromorphone, morphine, oxycodone and tramadol. The evidence showed that opioids did not reduce pain from new injuries any better than other options (topicals or oral NSAIDs) but have the highest risk of harms.



*See Definitions box on reverse.

NSAIDs Table

	Topical NSAIDs	Oral NSAIDs
How to Use	Applied directly to the skin on the painful area(s)	Taken by mouth
How Available	Available as creams, gels, ointments, patches, or sprays	Available as tablets, capsules or liquids
Side Effects	<p>Common side effects: redness, dryness or itchiness at the application site(s)</p> <p>Severe side effects are possible but the risks of severe side effects are significantly less than with oral NSAIDs</p>	<p>Common side effects include: stomach upset, diarrhea or constipation, nausea and vomiting.</p> <p>May increase risk of more severe side effects such as: ulcers, high blood pressure, heart attack, stroke, kidney or liver problems.</p>
How to Get	<p>Some are available over-the-counter at your pharmacy. Stronger NSAIDs require prescriptions from your doctor or nurse practitioner.</p> <p>Some prescription NSAIDs are commercially available meaning that they are already manufactured and prepacked by drug companies.</p> <p>When your doctor or nurse practitioner prescribes a personalized topical NSAID product, your pharmacist can create the product at the pharmacy by combining the necessary ingredients. This process is referred to as drug compounding.</p>	<p>Some are available over-the-counter at your pharmacy. Stronger NSAIDs require prescriptions from your doctor or nurse practitioner.</p> <p>Taking two or more different NSAIDs at the same time can be dangerous. Do not take over-the-counter NSAIDs while you are taking prescription NSAIDs without discussing with your doctor, nurse practitioner or pharmacist.</p>

DEFINITIONS

NSAIDs is a short form for *Non-Steroidal Anti-Inflammatory Drugs*. They are a family of non-steroid drugs that reduce pain by decreasing inflammation.

Accupressure is similar to acupuncture but without needles. Accupressure applies pressure to specific body points. Accupressure can reduce pain and improve movement and activity.

TENS is a short form for *Transcutaneous Electrical Stimulation*. TENS uses a mild electrical current that stimulates the body to produce natural pain relievers.

Adapted from:

Jason W. Busse, Behnam Sadeghirad, Yvgeniy Oparin, et al; Management of Acute Pain From Non-Low Back, Musculoskeletal Injuries: A Systematic Review and Network Meta-analysis of Randomized Trials. *Ann Intern Med.* 2020;173:730-738. [Epub 18 August 2020]. doi:10.7326/M19-3601 https://www.acpjournals.org/doi/full/10.7326/M19-3601?rfr_dat=cr_pub++0pubmed&url_ver=Z39.88-2003&rfr_id=ori%3Arid%3Acrossref.org