**How Joint Mobilizations Are Used in Physical Therapy**

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After many surgeries and injuries, [physical therapy (PT)](https://www.verywellhealth.com/physical-therapy-4014670) is recommended to help you regain your independence and return to your prior activities. Therapy also can be a beneficial treatment for different types of chronic musculoskeletal conditions.

During your rehab, your physical therapist may use a form of[hands-on treatment](https://www.verywellhealth.com/joint-mobilization-5215349) called joint mobilization to help with problems you're having. This article will explain how this treatment technique works, the different ways it is used, and when this therapy should be avoided.



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What Is Joint Mobilization?

A joint mobilization is a manual (hands-on) therapy treatment meant to help decrease pain, improve range of motion (how far you can move a part of your body), and increase function.1

A therapist generally performs this technique by stabilizing one segment of a joint and applying manual pressure or traction to the nearby section. The applied force is usually directed in a plane of motion that is very tight, or hypomobile, in an effort to improve overall joint function.

Depending on the patient’s tolerance and the overall goals of the treatment, several different types of mobilizations may be used.

Types of Mobilizations

Joint mobilizations are generally subdivided into the following categories:

* **Oscillatory joint mobilizations:** This involves applying gentle pressure to the joint that is slow in speed (low-velocity) and varies in the size of movement (the amplitude). This type of mobilization is applied at various points throughout a joint’s available range of motion and is graded according to how well a patient can tolerate it.
* **Sustained joint mobilizations:**This is a pulling or traction-type movement that is held steady for a period of time. This type of mobilization is meant to reduce joint compression and stretch the surrounding soft tissue.
* **Manipulation:** A high-speed thrusting movement with a low amplitude is generally applied in a direction of tightness or impaired joint mobility. 1

Occasionally, a classification scale may also be used to more specifically describe the joint mobilizations performed by your therapist.

The following grades are used to differentiate among the many techniques:

* **Grade 1:** Slow, small-amplitude back-and-forth movements that are applied at the beginning of a joint’s arc of motion (normal rotational pattern)
* **Grade 2:**Slow, large-amplitude back-and-forth movements that are applied within the middle section of a joint’s arc of motion.
* **Grade 3:** Slow, large-amplitude back-and-forth movements that are applied from the middle to the end of a joint’s arc of motion.
* **Grade 4:** Slow, small-amplitude back-and-forth movements that are applied to the end of a joint’s arc of motion
* **Grade 5:** A single, small-amplitude thrusting motion (also known as a manipulation) applied at a high velocity at the end of a joint's available motion1

Why Are Joint Mobilizations Used?

Joint mobilizations are known to be effective in reducing pain, temporarily improving range of motion, and enhancing the overall function in a targeted area.1 That said, the reasons for these benefits are not completely understood.

One thought is that mobilizations may temporarily reduce pain by eliciting a heightened response from your sympathetic [nervous system](https://www.verywellhealth.com/nervous-system-1298170) (the system that regulates body temperature, pain, and stress response). Other experts believe that this treatment causes [the nerves](https://www.verywellhealth.com/nerves-4588872)in an affected area to become less sensitive to mechanical pressures or forces that would normally lead to soreness.2

Regarding the effect of joint mobilization on range of motion, the available evidence also is mixed. Research seems to suggest that this treatment does not lead to meaningful reductions in joint stiffness or mobility.2 Because of this, any increases in range of motion that are noted after a mobilization is performed seem to be temporary at best.3

However, in spite of the limitations, this physical therapy technique has been found to have significant benefits in the treatment of a wide variety of musculoskeletal issues, including:

* [Knee osteoarthritis](https://www.verywellhealth.com/osteoarthritis-types-overview-4581911)(wear-and-tear arthritis)4
* [Low back and neck pain](https://www.verywellhealth.com/back-and-neck-pain-overview-4581999) 2
* [Lateral epicondylitis (tennis elbow)](https://www.verywellhealth.com/tennis-elbow-a2-2549917)
* [Wrist fractures](https://www.verywellhealth.com/how-to-reset-a-fracture-2549328)1
* [Lateral ankle sprains](https://www.verywellhealth.com/sprained-foot-7506255)3 (outside of the ankle)

Risks and Contraindications

Joint mobilizations are a relatively safe treatment technique. That said, people with several conditions should exercise caution due to the potential risk of an adverse reaction. Conditions that are susceptible include:

* Mild [osteoporosis](https://www.verywellhealth.com/osteoporosis-overview-4581909) (brittle bones)
* Inflammation in the joint
* [Disk herniation](https://www.verywellhealth.com/herniated-disc-symptoms-7110039) or protrusion (spinal disk that has moved from its normal place)
* [Hypermobility](https://www.verywellfit.com/hypermobility-4766865), or excessive joint looseness
* Systemic infection (infection of the entire body)
* Advanced or severe osteoarthritis in the affected joint

In addition, there are rare conditions and situations in which the use of joint mobilizations may be contraindicated. These diagnoses include:

* Significant osteoporosis or other bone problems
* Local fracture or tumor
* Nerve root or [spinal cord compression](https://www.verywellhealth.com/spinal-cord-compression-4706467)
* Vascular (circulatory) concerns
* Congenital (from birth) or [surgical joint fusion](https://www.verywellhealth.com/arthrodesis-fusion-of-a-joint-2549258) 5

In general, it is always a good idea to speak to your physician or therapist about any underlying health concerns you have before undergoing a joint mobilization.

Typically, the risk of this treatment can be lessened by avoiding thrust-style manipulations and instead performing a gentler, lower-grade mobilization.

Alternatives to Joint Mobilization

Joint mobilizations can be a valuable addition to the physical therapy you receive for a wide variety of diagnoses. That said, they are rarely used by themselves and are typically not the only therapy technique that can address your pain or lack of function.

Other treatments like static or dynamic stretching, [muscular strengthening](https://www.verywellhealth.com/muscle-strength-measurement-2696427) (such as guided weight training), [soft tissue massage](https://www.verywellhealth.com/massage-therapy-5212944) (a form of hands-on therapy applied to soft tissue such as muscles or ligaments), and neuromuscular re-education (a technique used to restore normal body movement patterns) are also frequently utilized in PT to improve soreness, increase joint mobility, and improve function.

Other hands off treatments like [electrical stimulation](https://www.verywellhealth.com/electrical-stimulation-2696122) (electricity that is applied to muscles) or vasopneumatic compression (inflatable sleeve that is used to apply pressure to an area of the body) may also be used for pain relief, depending on your individual circumstances. Your physical therapist can help you weigh the pros and cons of joint mobilization and offer several alternative treatments if this technique is not right for you.

Summary

Joint mobilization is a physical therapy technique meant to improve or normalize joint function. It can help decrease pain and improve range of motion. The amount and type of force applied to the joint vary, depending on the injury or musculoskeletal pain that is being treated.

Joint mobilization is not for everyone. It should be avoided in people with osteoarthritis and other inflammatory joint conditions, spinal disk issues, and circulation problems. There are alternative therapies, such as tissue massage and electrical stimulation, that may be more helpful.

A Word From Verywell

Recovering from surgery or dealing with musculoskeletal pain can be a frustrating experience. Fortunately, joint mobilizations are one tool in the physical therapy “treatment toolbox” that may help to address your symptoms.

To find out if PT and joint mobilizations are appropriate for you, be sure to speak to your healthcare provider. Following a thorough examination, your doctor can provide you with the treatment options available and help you weigh the potential costs and benefits of each.