

# backgrounder

## Massage Therapy: An Introduction

Massage therapy has a long history in cultures around the world. Today, people use many different types of massage therapy for a variety of health-related purposes. In the United States, massage therapy is often considered part of complementary and alternative medicine (CAM), although it does have some conventional uses. This fact sheet provides a general overview of massage therapy and suggests sources for additional information.

### Key Points

- Scientific evidence on massage therapy is limited. Scientists are not yet certain what changes occur in the body during massage, whether they influence health, and, if so, how. The National Center for Complementary and Alternative Medicine (NCCAM) is sponsoring studies to answer these questions and identify the purposes for which massage may be most helpful.
- Massage therapy appears to have few serious risks if it is used appropriately and provided by a trained massage professional.
- Tell your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will help ensure coordinated and safe care.

### History of Massage

Massage therapy dates back thousands of years. References to massage appear in writings from ancient China, Japan, India, Arabic nations, Egypt, Greece (Hippocrates defined medicine as “the art of rubbing”), and Rome.

Massage became widely used in Europe during the Renaissance. In the 1850s, two American physicians who had studied in Sweden introduced massage therapy in the United States, where it became popular and was promoted for a variety of health purposes. With scientific and technological advances in medical treatment during the 1930s and 1940s, massage fell out of favor in the United States. Interest in massage revived in the 1970s, especially among athletes.

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## Use of Massage Therapy in the United States

According to the 2007 National Health Interview Survey, which included a comprehensive survey of CAM use by Americans, an estimated 18 million U.S. adults and 700,000 children had received massage therapy in the previous year.

People use massage for a variety of health-related purposes, including to relieve pain, rehabilitate sports injuries, reduce stress, increase relaxation, address anxiety and depression, and aid general wellness.

## Defining Massage Therapy

The term “massage therapy” encompasses many different techniques (see box for examples). In general, therapists press, rub, and otherwise manipulate the muscles and other soft tissues of the body. They most often use their hands and fingers, but may use their forearms, elbows, or feet.

### Types of Massage Therapy: A Few Examples

In **Swedish massage**, the therapist uses long strokes, kneading, deep circular movements, vibration, and tapping. **Sports massage** is similar to Swedish massage, adapted specifically to the needs of athletes. Among the many other examples are **deep tissue massage**; **trigger point massage**, which focuses on myofascial trigger points—muscle “knots” that are painful when pressed and can cause symptoms elsewhere in the body; and **reflexology**, which applies pressure to the feet (or sometimes the hands or ears), to promote relaxation or healing in other parts of the body.

## The Practice of Massage Therapy

Massage therapists work in a variety of settings, including private offices, hospitals, nursing homes, studios, and sport and fitness facilities. Some also travel to patients’ homes or workplaces. They usually try to provide a calm, soothing environment.

Therapists usually ask new patients about symptoms, medical history, and desired results. They may also perform an evaluation through touch, to locate painful or tense areas and determine how much pressure to apply.

Typically, the patient lies on a table, either in loose-fitting clothing or undressed (covered with a sheet, except for the area being massaged). The therapist may use oil or lotion to reduce friction on the skin. Sometimes, people receive massage therapy while sitting in a chair. A massage session may be fairly brief, but may also last an hour or even longer.

## Research Status

Although scientific research on massage therapy—whether it works and, if so, how—is limited, there is evidence that massage may benefit some patients. Conclusions generally cannot yet be drawn about its effectiveness for specific health conditions.

According to one analysis, however, research supports the general conclusion that massage therapy is effective. The studies included in the analysis suggest that a single session of

massage therapy can reduce “state anxiety” (a reaction to a particular situation), blood pressure, and heart rate, and multiple sessions can reduce “trait anxiety” (general anxiety-proneness), depression, and pain. In addition, recent studies suggest that massage may benefit certain conditions, for example:

- A 2008 review of 13 clinical trials found evidence that massage might be useful for chronic low-back pain. Clinical practice guidelines issued in 2007 by the American Pain Society and the American College of Physicians recommend that physicians consider using certain CAM therapies, including massage (as well as acupuncture, chiropractic, progressive relaxation, and yoga), when patients with chronic low-back pain do not respond to conventional treatment.
- A multisite study of more than 300 hospice patients with advanced cancer concluded that massage may help to relieve pain and improve mood for these patients.
- A study of 64 patients with chronic neck pain found that therapeutic massage was more beneficial than a self-care book, in terms of improving function and relieving symptoms.

There are numerous theories about how massage therapy may affect the body. For example, the “gate control theory” suggests that massage may provide stimulation that helps to block pain signals sent to the brain. Other examples include theories suggesting that massage might stimulate the release of certain chemicals in the body, such as serotonin or endorphins, or cause beneficial mechanical changes in the body. However, additional studies are needed to test the various theories.

## **Safety**

Massage therapy appears to have few serious risks—if it is performed by a properly trained therapist and if appropriate cautions are followed. The number of serious injuries reported is very small. Side effects of massage therapy may include temporary pain or discomfort, bruising, swelling, and a sensitivity or allergy to massage oils.

Cautions about massage therapy include the following:

- Vigorous massage should be avoided by people with bleeding disorders or low blood platelet counts, and by people taking blood-thinning medications such as warfarin.
- Massage should not be done in any area of the body with blood clots, fractures, open or healing wounds, skin infections, or weakened bones (such as from osteoporosis or cancer), or where there has been a recent surgery.
- Although massage therapy appears to be generally safe for cancer patients, they should consult their oncologist before having a massage that involves deep or intense pressure. Any direct pressure over a tumor usually is discouraged. Cancer patients should discuss any concerns about massage therapy with their oncologist.
- Pregnant women should consult their health care provider before using massage therapy.

## Training, Licensing, and Certification

There are approximately 1,500 massage therapy schools and training programs in the United States. In addition to hands-on practice of massage techniques, students generally learn about the body and how it works, business practices, and ethics. Massage training programs generally are approved by a state board. Some may also be accredited by an independent agency, such as the Commission on Massage Therapy Accreditation (COMTA).

As of 2007, 38 states and the District of Columbia had laws regulating massage therapy. In some states, regulation is by town ordinance.

The National Certification Board for Therapeutic Massage and Bodywork (NCBTMB) certifies practitioners who pass a national examination. Increasingly, states that license massage therapists require them to have a minimum of 500 hours of training at an accredited institution, pass the NCBTMB exam, meet specific continuing education requirements, and carry malpractice insurance.

In addition to massage therapists, health care providers such as chiropractors and physical therapists may have training in massage.

### Licenses and Certifications

Some common licenses or certifications for massage therapists include:

- LMT Licensed Massage Therapist
- LMP Licensed Massage Practitioner
- CMT Certified Massage Therapist
- NCTMB Has met the credentialing requirements (including passing an exam) of the National Certification Board for Therapeutic Massage and Bodywork, for practicing therapeutic massage and bodywork
- NCTM Has met the credentialing requirements (including passing an exam) of the National Certification Board for Therapeutic Massage and Bodywork, for practicing therapeutic massage

## If You Are Thinking About Using Massage Therapy

- Do not use massage therapy to replace your regular medical care or as a reason to postpone seeing a health care provider about a medical problem.
- If you have a medical condition and are unsure whether massage therapy would be appropriate for you, discuss your concerns with your health care provider. Your health care provider may also be able to help you select a massage therapist. You might also look for published research articles on massage therapy for your condition.
- Before deciding to begin massage therapy, ask about the therapist's training, experience, and credentials. Also ask about the number of treatments that might be needed, the cost, and insurance coverage.

- If a massage therapist suggests using other CAM practices (for example, herbs or other supplements, or a special diet), discuss it first with your regular health care provider.
- Tell your health care providers about any complementary and alternative practices you use. Give them a full picture of what you do to manage your health. This will ensure coordinated and safe care. For tips about talking with your health care providers about CAM, see NCCAM's Time to Talk campaign at [nccam.nih.gov/timetotalk/](http://nccam.nih.gov/timetotalk/).

## NCCAM-Funded Research on Massage Therapy

Recent NCCAM-sponsored studies have been investigating:

- The effects of massage on chronic neck pain and low-back pain
- Massage to treat anxiety disorder, alleviate depression in patients with advanced AIDS, and promote recovery in women who were victims of sexual abuse as children
- Massage to relieve fatigue in cancer patients undergoing chemotherapy, reduce treatment-related swelling of the arms in breast cancer patients, and alleviate pain and distress in cancer patients at the end of life
- Whether massage improves weight gain and immune system function in preterm infants
- Whether massage given at home by a trained family member helps reduce pain from sickle cell anemia.

## Selected References

- Barnes PM, Bloom B, Nahin RL. Complementary and alternative medicine use among adults and children: United States, 2007. *CDC National Health Statistics Report #12*. 2008.
- Bureau of Labor Statistics, U.S. Department of Labor. *Occupational Outlook Handbook, 2008-09 Edition: Massage Therapists*. Accessed at <http://www.bls.gov/oco/ocos295.htm> on August 6, 2008.
- Cherkin DC, Sherman KJ, Deyo RA, et al. A review of the evidence for the effectiveness, safety, and cost of acupuncture, massage therapy, and spinal manipulation for back pain. *Annals of Internal Medicine*. 2003;138(11):898-907.
- Chou R, Qaseem A, Snow V, et al. Diagnosis and treatment of low back pain: a joint clinical practice guideline from the American College of Physicians and the American Pain Society. *Annals of Internal Medicine*. 2007;147(7):478-491.
- Corbin L. Safety and efficacy of massage therapy for patients with cancer. *Cancer Control: Journal of the Moffitt Cancer Center*. 2005;12(3):158-164.
- Eisenberg DM, Cohen MH, Hrbek A, et al. Credentialing complementary and alternative medical providers. *Annals of Internal Medicine*. 2002;137(12):965-973.
- Ernst E. The safety of massage therapy. *Rheumatology*. 2003;42(9):1101-1106.
- Ezzo J. What can be learned from Cochrane systematic reviews of massage that can guide future research? *Journal of Alternative and Complementary Medicine*. 2007;13(2):291-295.
- Field T. Massage therapy effects. *American Psychologist*. 1998;53(12):1270-1281.
- Furlan AD, Imamura M, Dryden T, et al. Massage for low-back pain. *Cochrane Database of Systematic Reviews*. 2008;(4):CD001929. Accessed at <http://www.cochrane.org> on November 25, 2008.
- Goldstone LA. Massage as an orthodox medical treatment past and future. *Complementary Therapies in Nursing and Midwifery*. 2000;6(4):169-175.
- Kutner JS, Smith MC, Corbin L, et al. Massage therapy versus simple touch to improve pain and mood in patients with advanced cancer: a randomized trial. *Annals of Internal Medicine*. 2008;149(6):369-379.
- Massage: Bottom Line Monograph. Natural Standard Web site. Accessed at [www.naturalstandard.com](http://www.naturalstandard.com) on July 25, 2008.
- Moyer CA, Rounds J, Hannum JW. A meta-analysis of massage therapy research. *Psychological Bulletin*. 2004;130(1):3-18.
- Sherman KJ, Cherkin DC, Hawkes RJ, et al. Randomized trial of therapeutic massage for chronic neck pain. *Clinical Journal of Pain*. 2009;25(3):233-238.

## For More Information

### NCCAM Clearinghouse

The NCCAM Clearinghouse provides information on CAM and NCCAM, including publications and searches of Federal databases of scientific and medical literature. The Clearinghouse does not provide medical advice, treatment recommendations, or referrals to practitioners.

Toll-free in the U.S.: 1-888-644-6226

TTY (for deaf and hard-of-hearing callers): 1-866-464-3615

Web site: [nccam.nih.gov](http://nccam.nih.gov)

E-mail: [info@nccam.nih.gov](mailto:info@nccam.nih.gov)

### PubMed®

A service of the National Library of Medicine (NLM), PubMed contains publication information and (in most cases) brief summaries of articles from scientific and medical journals. CAM on PubMed, developed jointly by NCCAM and NLM, is a subset of the PubMed system and focuses on the topic of CAM.

Web site: [www.ncbi.nlm.nih.gov/entrez](http://www.ncbi.nlm.nih.gov/entrez)

CAM on PubMed: [nccam.nih.gov/camonpubmed/](http://nccam.nih.gov/camonpubmed/)

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