



Fact Sheet

# Temporomandibular Joint Disorder (TMJD) Pain

## About

Temporomandibular Joint and Muscle Disorders, commonly called TMJD or TMJ, are a collection of poorly understood conditions characterized by pain in the jaw and surrounding tissues and limitations in jaw movements. Injury and conditions that routinely affect other joints in the body, such as arthritis, also affect the temporomandibular joint.<sup>1</sup>

Pain is the most common symptom. TMJD pain is often described as a dull aching pain in the jaw joint and nearby areas, including the ear, which comes and goes. Some people, however, report no pain, but still have problems using their jaws. Other symptoms can include:<sup>1</sup>

- pain in the neck and shoulders
- headaches
- jaw muscle stiffness
- limited movement or locking of the jaw
- painful clicking, popping or grating in the jaw joint when opening or closing the mouth
- a change in the way the upper and lower teeth fit together or a bite that feels “off”

Additional symptoms may include: ringing in the ears, ear pain, decreased hearing, dizziness and vision problems.<sup>1</sup>

## Facts

The TMJ Association estimates that approximately 35 million people in the United States suffer from Temporomandibular Joint and Muscle Dysfunction (TMJD) problems. While both men and women experience TMJ disorders, the majority of those seeking treatment are women in their childbearing years.<sup>2</sup>

An analysis of TMJD-type pain in the 2002 U.S. National Health Interview Survey (NHIS) found the following:<sup>3</sup>

- The overall national prevalence of TMJD-type pain was 4.6%, with 6.3% for women and 2.8% for men
- For non-Hispanic white women up to age 50, the prevalence was approximately 7% to 8%, but it decreased after age 55

- Non-Hispanic black women had much lower prevalence at younger ages (approximately 4% at 25 to 34 years), which increased thereafter up to 55 to 64 years of age
- A similar racial pattern seemed to emerge for non-Hispanic black men, with the lowest prevalence at ages 25 to 34 years, while non-Hispanic white men had higher prevalences<sup>3</sup>

75%

Temporomandibular joint disorders are common in adults. In epidemiologic studies, up to 75% of adults show at least one sign of joint dysfunction on examination and as many as one-third have at least one symptom, which include jaw or neck pain, headache, and clicking or grating within the joint. Most TMJD symptoms are temporary and come and go over time, requiring little or no professional intervention.<sup>4</sup>

TMJD is the second most commonly occurring musculoskeletal condition resulting in pain and disability (after chronic low back pain), affecting approximately 5 to 12% of the population, with an annual cost estimated at \$4 billion. About half to two-thirds of those with TMJ disorders will seek treatment. Among these, approximately 15% will develop chronic TMJD.<sup>5</sup>

TMJD is a likely underdiagnosed cause of chronic headache and facial discomfort.<sup>6</sup>

Researchers have found chronic TMJD pain is often comorbid with other painful conditions, which are also more prevalent in women, such as fibromyalgia, irritable bowel syndrome, and vulvar vestibulitis (a subtype of vulvodynia).<sup>7</sup>

Severity of signs and symptoms of TMJD and their effect on functional status are highly variable. Symptoms include:<sup>8</sup>

- Myofascial pain, which is discomfort or pain in the muscles that control masticatory function and the neck and shoulder muscles
- Limited mouth opening
- Earaches and headaches
- Clicking, grinding, or popping sounds in the jaw joint
- Fatigue, pain, or tenderness in the masticatory muscles

For those with temporomandibular disorders, it takes an average of four years from symptom onset to diagnosis.<sup>9</sup>

## Additional Resources

### **American Academy of Craniofacial Pain**

1901 North Roselle Road, Suite 920  
Schaumburg, IL 60195-3187  
Phone: (800) 322-8651  
Phone: (847) 885-1272  
Fax: (847) 885-8393  
E-mail: [central@aacfp.org](mailto:central@aacfp.org)  
[www.aacfp.org](http://www.aacfp.org)

### **National Institute of Dental and Craniofacial Research**

**National Institutes of Health**  
Bethesda, MD 20892-2190  
Phone: (301) 496-4261  
Phone: (866) 232-4528  
Fax: (301) 480-4098  
E-mail: [nidcrinfo@mail.nih.gov](mailto:nidcrinfo@mail.nih.gov)  
[www.nidcr.nih.gov](http://www.nidcr.nih.gov)

### **The TMJ Association**

P.O. Box 26770  
Milwaukee, WI 53226-0770  
Phone: (262) 432-0350  
E-mail: [info@tmj.org](mailto:info@tmj.org)  
[www.tmj.org](http://www.tmj.org)

Resources verified July 2011.

## References

1. The TMJ Association. TMJDs Overview. <http://tmjassociation.org/site/content/tmj-d-basics>. Accessed June 1, 2011.
2. TMJ Association. TMJD Basics. <http://tmj.org/site/content/tmj-d-basics>. Accessed June 1, 2011.
3. Isong U, Gansky SA, Plesh O. Temporomandibular joint and muscle disorder-type pain in U.S. adults: the National Health Interview Survey. *J Orofac Pain*. 2008 Fall;22(4):317-22.
4. Buescher, J. "Temporomandibular Joint Disorders." *Am Fam Physician* 2007;76:1477-82.
5. National Institute of Dental and Craniofacial Research. Facial Pain. <http://www.nidcr.nih.gov/DataStatistics/FindDataByTopic/FacialPain>. Updated March 25, 2011. Accessed June 1, 2011.
6. Lupoli TA, Lockey RF. "Temporomandibular dysfunction: an often overlooked cause of chronic headaches." *Ann Allergy Asthma Immunol*. 2007 Oct;99(4):314-8.
7. International Association for the Study of Pain. Global year against pain in women fact sheet: sex and gender differences in orofacial pain. 2007. [http://www.iasp-pain.org/AM/Template.cfm?Section=Fact\\_Sheets&Template=/CM/ContentDisplay.cfm&ContentID=4498](http://www.iasp-pain.org/AM/Template.cfm?Section=Fact_Sheets&Template=/CM/ContentDisplay.cfm&ContentID=4498) Accessed June 10, 2011.
8. McCaffery M, Pasero C. *Pain: Clinical Manual*. Mosby Inc., 1999;589.
9. Hoffman RG, Kotchen JM, Kotchen TA, et al. Temporomandibular joint disorders and associated clinical comorbidities. Submitted for Publication. March 2010.