

Musician's Dystonia

Professional musicians are susceptible to a number of occupational conditions, including *task-specific focal dystonia*. Dystonia is a neurological disorder characterized by involuntary muscle contractions and postures.

The term *focal* indicates that the dystonia affects a single, specific area of the body. The term *task-specific* indicates that the symptoms only occur when the individual is completing a particular task, such as playing a musical instrument.

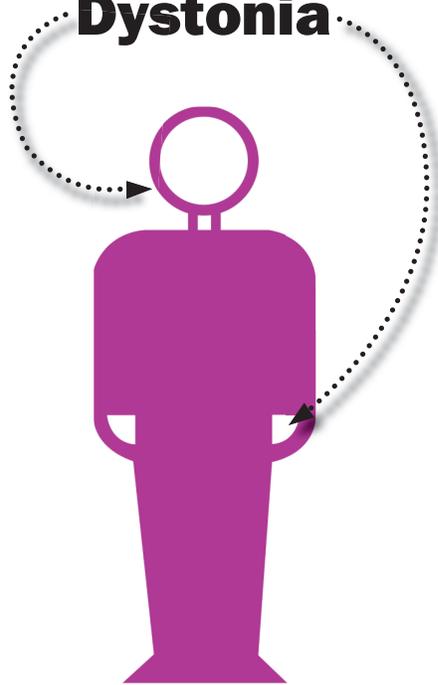
Experts estimate that 1-2% of professional musicians are affected by dystonia, but there are likely large numbers of musicians living with symptoms who remain unidentified. Almost all individuals with musician's dystonia are classically trained, and most are male.

Symptoms

The first signs of musician's dystonia are lapses in the usually instinctive ability to perform on the instrument. Musicians may perceive the early symptoms of dystonia as a result of faulty technique or insufficient preparation.

Musician's dystonia is triggered by playing the instrument and does not typically affect other activities. The top three musical instruments associated with musician's dystonia are piano, guitar, and brass instruments.

Pianists typically develop symptoms in the right hand, often affecting the fingers. String players usually experience symptoms in the left hand. Guitarists and percussionists



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may develop symptoms in either hand. Woodwind players may develop symptoms in the hands, face, or mouth. Brass players are usually affected in the corners of the mouth and jaw.

There is typically no pain associated with musician's dystonia.

Because musician's dystonia is a neurological disorder, the aim of treatment is to help the nervous system relearn the ability to complete specific movement tasks without triggering dystonia.

The origins of musician's dystonia are being researched by scientists around the world. As a person develops and learns movement tasks, these movements are stored in the brain as sensory motor programs. Musician's dystonia somehow corrupts the sensory motor programs associated with playing the instrument.

Although there is no cure for musician's dystonia at this time, several treatment options exist.

Embouchure Dystonia

Embouchure dystonia is a type of dystonia that affects brass and woodwind players. Embouchure dystonia targets muscles in the mouth, face, jaw, and tongue.

The involuntary, abnormal movements associated with embouchure dystonia are often very subtle and occur only when the musician is playing, buzzing into the mouthpiece, or forming the embouchure.

Symptoms of embouchure dystonia may include air leaks at the corners of the mouth, sometimes accompanied by a tremor, and involuntary contractions of the muscles in the face.

Treatment may include rehabilitative methods that attempt to retrain the nervous system to perform on the instrument without triggering symptoms, oral medications, and botulinum neurotoxin injections administered by an experienced physician.

A neurologist who specializes in movement disorders is typically the most appropriate physician to diagnosis and treat embouchure dystonia.

Hand Dystonia

Focal hand and limb dystonia is characterized by involuntary, abnormal movements in the hands and/or fingers. Hand dystonia is seen in pianists, string players, guitarists, percussionists, and woodwind players.

Symptoms of hand dystonia may include subtle loss of control in fast passages, lack of precision, curling of the fingers, fingers “sticking” to keys, involuntary flexion of the thumb in strings, and tremor.

Musician’s hand dystonia is highly task specific, and may have a prominent sensory component. For example, a pianist may experience symptoms with playing on ivory keys but not while playing on plastic.

Treatment may include rehabilitative methods that attempt to retrain the nervous system to perform on the instrument without triggering symptoms, oral medications, and botulinum neurotoxin injections administered by an experienced physician.

A neurologist who specializes in movement disorders is typically the most appropriate physician to diagnosis and treat hand dystonia.

Support

Musicians With Dystonia (MWD) was founded in 2000 by Glen Estrin, a former professional French horn player diagnosed with embouchure dystonia, and Steven Frucht, MD in partnership with the Dystonia Medical Research Foundation.

MWD established a network of health care practitioners knowledgeable about the disorder and an informal support network of fellow affected musicians.

MORE INFORMATION:



D Y S T O N I A M E D I C A L R E S E A R C H F O U N D A T I O N

serving all dystonia-affected persons

One East Wacker Drive, Suite 2810 • Chicago, Illinois 60601-1905

Toll free: 800-377-DYST (3978) • **Phone:** 312-755-0198

Email: musicians@dystonia-foundation.org

Web: <http://www.dystonia-foundation.org/musicians>

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