

## **Stretching**

Julie Young, MS, ATC, PES Athletic Trainer Nationwide Children's Sports Medicine

Flexibility is an important part of fitness. Stretching is used to increase the flexibility of muscles. There are several different types of stretching including static, dynamic, and proprioceptive neuromuscular facilitation (PNF). Static stretching is the most common and involves slowly increasing motion until a mild stretch is felt and holding that position for 20-30 seconds. Dynamic stretching involves actively moving a muscle through a range of motion several times. This type of stretching has become increasingly popular among athletic teams because it moves the muscle in the same manner as it is used during athletic activity. PNF stretching is commonly done with the assistance of an athletic trainer and involves contracting a muscle for several seconds before stretching the muscle.

Static stretching is common because it is considered the safest. All stretching should be done after a warm-up of 10-15 minutes – enough to get your heart rate up and begin to sweat. This is important because muscle tissue becomes more elastic after a warm-up and stretching then will be more effective and safer. A static stretch is generally held for 20-30 seconds and repeated 3-5 times.

Children with tight muscles may be at a higher risk of injury. Injuries to the muscle, such as straining a muscle, are common in people who do not have the flexibility they need for their activity. Common muscles that are tight in youth are the quadriceps (thigh muscles), hamstrings (back of the upper leg muscles), hip flexors (front of the hip muscles) and calf muscles. Muscles tend to be very tight in pre-teen and early teen children because they are going through a growth spurt. When this happened, sometimes the bones grow very quickly and it takes longer for the muscles to adapt to the new body size. Children this age need to pay particular attention to stretching when participating in activity.

Stretching needs to be done consistently to have a positive effect. Generally, stretching once a day after a warm-up should be enough to help keep muscles loose. However, if the muscles are too tight, stretching frequency should be increased to several times per day. Stretching should not be painful, but the muscles do need to be challenged. Many times, stretching is part of a group warm-up. However, many athletes use this time to socialize rather than focus on really feeling a stretch in the targeted muscle.





Stretching is an important part of fitness that is often overlooked. A good stretching routine as a part of activity can help decrease muscle injuries and improve performance.

Consult your primary care physician for more serious injuries that do not respond to basic first aid. As an added resource, the staff at **Nationwide Children's Sports Medicine** is available to diagnose and treat sports-related injuries for youth or adolescent athletes. Services are now available in four locations, to make an appointment, call **614-355-6000**.