



# Young Athletes™ Warm Up and Stretching Guide

## Introduction

The Special Olympics Pennsylvania Young Athletes™ Warm Up and Stretching Guide is designed as a resource for young athletes, parents, coaches, teachers, and caregivers to help develop healthy routines for physical activity. Warm ups and stretching are important for young athletes prior to physical activity to prepare the body for exercise. Warm ups and stretching help prevent injuries and increase flexibility and range of motion.

## **Warm Up Basics**

The term "warm up" describes various light-aerobic and cardiovascular activities that literally warm up the core temperature of the body and the muscles. Using dynamic movements during warm ups remind the muscles of the actions they will need to perform while participating in the physical activity to follow. Warming up can also help to increase the heart and respiratory rate, increase the amount of nutrients and oxygen delivered to the muscles, and prepare the body for demanding physical activity. Warming up can also help prepare young athletes mentally so that their minds and bodies are connected. Warm ups for Young Athletes™ activities should last approximately 10 minutes and should utilize dynamic movements rather than static stretching. Dynamic stretching will more effectively reduce muscle tightness and prepare muscles for physical activity. Static stretching may actually lower muscle power due to the relaxation caused in the muscles and is best used during cool down routines.

## **Dynamic Stretching**

Dynamic stretching is a movement based stretch consisting of slow, controlled movements using the muscles themselves to create a stretch, rather than holding a stretch position as in static stretching. Dynamic stretching may include simple movements such as arm circles, flowing movements such as in yoga, or walking and jogging movements. Dynamic stretching is believed to be better for reducing muscle tightness and preparing for a workout or competition. Proper technique with dynamic stretching is imperative to avoid injury and properly warm up for physical activity.

# **Example Dynamic Stretching Routine**

<u>Side Shuffle</u>: Side shuffles help protect against groin and outer hip injuries. Have the young athletes face forward, bending slightly at the knees and hips and keeping their backs straight. Have them "shuffle" sideways for a few paces and then back the opposite direction.

<u>Carioca/Grape Vines</u>: Grape vines help improve flexibility in the leg muscles. Have the young athletes face forward, bending slightly at the knees and hips. Have them cross their left foot in front of their right, bring the right foot through back to the starting position, and then cross their left foot behind

their right. Repeat so that they travel a few paces to the right and then switch and travel back the opposite direction.

Straight Leg Kick/Goose-Steps: Goose-steps help to warm up hamstrings and hip flexors. Have the young athletes keep their back straight and kick each leg forward and up, while walking forward. Encourage the young athletes to keep their legs straight and reach toward their toes with their opposite hand without bending at the waist.

Knees to Chest/Knee Lifts: Knee lifts help stretch major muscle groups from the shoulders to the thighs. Have the young athletes walk forward and raise each knee as far as possible toward the chest. Have them "hug" their knees to pull the knee as far into the chest as possible (and comfortable).

Heel to Rear/Butt Kicks: Butt kicks help to stretch the front of the leg. Have the young athletes walk or slowly jog forward and lift their heels as far as possible as if to hit their buttocks. Encourage them to use an exaggerated arm swing to help warm up their shoulders as well.

Power Skip: Power skips help to stretch the whole body. Have the young athletes skip as high as they can on one leg, while raising the opposite knee to their chest. Encourage them to reach the arm opposite the high knee up as far as they can to exaggerate the skip and arm swing. Have your young athletes focus on how high they can skip rather than how far.

Do several repetitions of 30 seconds for each dynamic stretch. Ensure that the movements are done in a controlled way and that the young athletes still have energy for the Young Athletes™ activities.

#### **Cool Down Basics**

The term "cool down" describes various light-aerobic and stretching activities to help the body recover from a workout. Cool down activities can help slow the heart rate and breathing to a normal pace, avoid muscle stiffness and soreness, relax the muscles, and reduce the risk of dizziness or lightheadedness. Cool down routines, like warm ups, should last approximately 10 minutes.

## **Static Stretching**

Static stretching after physical activity can help to decrease the risk of injury and can help lengthen muscles and improve flexibility. It can also help with joint range and motion and increase the blood flow to muscles. It is best to hold static stretches for 10-30 seconds. Stretch muscles gradually, remember not to force a stretch, and avoid bouncing or bobbing which can damage the muscles. Stretching should never hurt, so stop the stretch or relax to where the stretch is comfortable. Be sure to stretch both sides of the body equally.

# **Example Static Stretching Routine**

Calf Stretch: Have the young athletes stand arm's length away from a wall and place one foot in front of the other. Have them slowly bend their forward leg and keep their rear knee straight with their rear heel on the floor. Switch legs and repeat.

Hamstring Stretch: Have the young athletes sit on the floor with their backs straight and both legs straight out in front of them. Have them bend on leg so the foot is flat and next to the straight leg. Have the young athletes lean forward, reaching for their toes as they exhale. Switch legs and repeat.

Quad Stretch: Have the young athletes stand near a wall or another sturdy piece of equipment for support. Have them grasp their leg slightly above the ankle and pull up and back until they feel a stretch in the front of their legs. Encourage the young athletes to keep their knees close together and hold onto the wall or equipment for support as needed. Switch legs and repeat.

Knee to Chest Stretch: Have the young athletes lie on the floor with legs straight out in front of them. Have them bend one knee and gently pull it to their chest to stretch the lower back. The opposite leg can remain straight or bend, whichever is more comfortable for the young athlete. Switch legs and repeat.

Shoulder Stretch: Have the young athletes stand up straight and bring one arm across the body and hold it with the opposite arm either above or below the elbow. Switch arms and repeat.

Neck Stretch: Have the young athletes stand up straight and bend their head forward and slightly to one side. With the hand on that side, gently have them pull their head downward toward the shoulder, as comfortable, until they feel a gentle stretch along the opposite side of the neck. Switch sides and repeat. Hold each stretch for 10 - 30 seconds. Remind the young athletes that stretches should never hurt and to stop the stretch or relax to where the stretch is comfortable if any pain occurs.

## Resources

Bane, Julie. "Proper Stretching Techniques: Warming Up, Dynamic Stretches, and More." WebMD. Ed. Louise Chang. MD, 25 Oct. 2010.

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"Fitness." Slide Show: A Guide to Basic Stretches. Mayo Clinic, n.d.

Francisque, Fabiola. "Good Stretches for Children." LIVESTRONG.COM. LIVESTRONG.COM, 25 June 2015.

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"Stretching." KidsHealth. Ed. Mary L. Gavin. The Nemours Foundation, July 2013.