

## **Use Strength and Preparation to Keep Your Dancer in Top Form**

Parents take pride in seeing their child up on stage, enjoying the spotlight and the applause. However, sometimes in the world of dance, the pressure to succeed and be the “star of the show” can become all encompassing. Sometimes, this can lead young dancers to push too hard, too fast, as well as overlook injuries that can worsen over time. In order to stay in top form, it is important to pay attention to certain factors: the body’s readiness to advance, injury prevention, and prompt treatment of ailments.

### **Physical Readiness for Dance**

One of the most common issues of preparedness parents and dancers may encounter is when to begin pointe work. Most young ballerinas can’t wait to take their dancing to the next level, but there are some things to consider so they don’t end up damaging their feet. The four main components to consider are age, anatomy, strength, and technique. Generally, dancers should not begin pointe before age 12 so they have the skeletal maturity to handle the stresses of pointe work. However, other factors that contribute to delaying pointe are:

- Extremely flexible feet and ankles
- Trunk or leg weakness
- Previous history of less than 4 years of ballet class
- Ballet class less than 2 times a week

These are some guidelines to consider; however, the dance instructor, parent and child should all be involved when assessing the dancer’s readiness.

### **Preventing Injuries**

One aspect of protecting a young dancer’s health is to employ injury prevention strategies. Many young dancers try to stretch their arches to improve their ability to point their foot. One such stretch is kneeling back on the heels with the top of the foot on the ground and pulling the toes away from the floor. While this stretch is not damaging in itself, it is important to include strengthening as well to prevent instability. Strengthening exercises to include are: picking up objects with the toes (e.g. marbles, coins, etc, or laying a towel on the ground and scrunching it with the toes to strengthen the arch). Also, it is important to strengthen the front of the ankle by flexing the foot against either a band or partner’s hand for resistance.

Another common way dancers injure themselves is through decreased balance, causing missteps, leading to sprains and strains. One activity to try is to stand at the barre in

either coupé or possé and wait to see where the body begins to wobble, either at the hips and trunk or the ankle. Then work on strengthening activities for the body part that begins to wobble first. The increased strength will lead to increased stability and balance and less injuries. Enrolling in a Pilate's course is a good way to increase the strength of the hips and trunk. Strengthening the ankle can be done by using a band or pushing against a wall for resistance of side to side movements of the foot.

### **Common Dance Injuries**

Unfortunately, even well-trained and in-shape dancers may still suffer from injury. Some common dance injuries are pain around the big toe, heel pain and knee pain. Causes of these symptoms may be bunions, Achilles tendonitis and hyperextension at the knees.

Bunions are an enlargement of the joint at the base of the big toe. Also, the big toe will typically be at an angle pushing into your other toes. Bunions may be accompanied with pain in moving the big toe and wearing shoes. Some things to try to relieve symptoms are soft gel toe spacers, using tape to align the big toe, and avoiding rolling in onto the big toe while dancing. Also, try and fan your big toe out away from your other toes and hold for 5 seconds before letting it come back in. This may be hard to do initially, but with practice the foot will strengthen improving the alignment.

Heel pain most typically will be caused by Achilles tendonitis in dancers. This will be pain at the back of the heel causing difficulty with pointing the foot and pain while in relevé. Some things to try are heel cups in shoes to put the tendon in a resting position with everyday activities. Also, it is important to strengthen the muscles in the front of the ankle. Typically dancers have a muscle imbalance between the muscles that point the foot to the muscles that flex the foot of 6.2 to 1. Strengthening activities are flexing the foot against a band or partner's hand for resistance.

Finally, a common cause of knee pain in dancers is hyperextension of the knee joint. Hyperextension of the knee is when the knee pushes too far back in standing. This causes the ligaments in the knee to become stretched out causing instability and pain around the joint. When practicing, do basic steps in front of the mirror watching to avoid positioning the knee into hyperextension. Also, throughout the day concentrate on keeping your weight more forward to take stress off the knees.

The above are some suggestions to help dancers protect their health and maintain their place in the spotlight. However, even if the body is ready to progress and one is aware of preventing and treating ailments, injuries may still occur. Therefore, if symptoms persist or worsen, contact your health care provider.

*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.*