

Injury Prevention for Dancers

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Dance Training 1 ADPB4004

What is an injury?

injury, n.

Hurt or loss caused to or sustained by a person or thing; harm, detriment, damage. With an and plural. An instance of this.

(Oxford English Dictionary, 2024)

Intrinsic vs Extrinsic factors

Extrinsic



Intrinsic

- Poor technique, muscular imbalance, weakness, prior injury history, poor alignment, fatigue, and poor cardiorespiratory fitness (Haas, 2018)

Poor technique

- Example: overpronation of feet to force turnout. (Haas 2018)
- To avoid this, observe demonstrations closely and ask questions when unsure of technique and alignment

Muscular imbalance

Dancers tend to be weak in the deep abdominals, which increases the risk of lower back pain (Haas, 2018).

A key section is the transverse abdominus, a large muscle that lies beneath the “six pack”, acting as a corset to stabilize the trunk (SSPhysio, 2017).

Transverse abdominis muscle activation isn't straight forward because of the deep location in the abdomen (Set for set, 2024).

Exercises for weakness in the deep abdominals

- 1) Hollow body hold (squeeze glutes!)
- 2) Bird dog knee to elbow
- 3) Dead bug
- 4) Forearm plank

(Set for set, 2024)

Prior injury history

- According to one study carried out on a group of professional dancers by open repository (2019), when asked about a current injury, the reoccurrence of an old injury was the main perceived cause (53.7%).
- Lifetime injury rates among ballet dancers are estimated to be as high as 84%

Fatigue

- Rest is needed to repair the body, without this an increase in risk of injury and aggravation of old injuries is seen.
 - 7-8 hours of sleep minimum required
 - Maintaining a regular sleeping pattern is important
- (Nicks, B. and Price, J. 2014)
- Injuries occur more often later in the day or season (Haas, 2018)

Cardiorespiratory fitness

An indication of overall physical health. Tests to measure this monitor how well the heart, lungs, and muscles perform during moderate to high intensity exercise. (Medical news today, 2019)

Exercises for improvement include:

- Star jumps
- Running
- Power walking

Warming up

Some benefits include:

- Faster muscle contraction and relaxation
- Steadier flow of oxygen to the muscles
- Faster nerve transmission
- Improved muscle metabolism

(Dance insight, 2018)

Further reading/action

Screening and assessment:

- Assesses your anatomy to identify any characteristics that could lead to injury, and evaluates alignment, strength, and range of motion (Haas, 2018).
- <https://www.spirehealthcare.com/spire-cardiff-hospital/treatments/a-z/dance-medicine-clinic/>
- <https://prosportsmedicine.co.uk/>

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Thank you for listening!

