

# Falls in Duchenne Muscular Dystrophy



### Introduction

Falls are common in people who have Duchenne Muscular Dystrophy (DMD) and the risk of falls varies through the different stages of the condition. It is important to reduce this risk to prevent injury and impaired mobility and this leaflet discusses the reasons why you might fall and how to help minimise these risks.

### What causes falls?

DMD causes your muscles to be weaker and this is likely to change over time. Muscles that are weak are unable to react quickly to sudden changes in direction, different surfaces under foot or small hills or bumps on the road that require you to adjust your position quickly. These sudden changes can lead to a loss of balance and a fall.

### Young Children

In young children with DMD, falls can be a daily occurrence when running around trying to keep up with friends. The muscle weakness is less significant at this stage and children can compensate to some extent for their fall by trying to reach their hands out to catch themselves or roll and change position to better protect themselves from injury.

Ankle tightness can also increase the risk of falls. A lack of range of movement in the ankle can make the ankle less flexible to adjust to walking on different surfaces and alters the way in which the ankles, knees and hips all move together when walking. Your physiotherapist will advise on how best to maintain flexibility at the ankles and advice may include stretching exercises, the use of night splints and perhaps the use of a standing frame or standing sloping board. See the "Ankle Management" Leaflet on the Scottish



Muscle Network website for further details.

If an orthotist has provided insoles then these should be worn in all footwear to best help support the foot and maintain a stable base to walk on.

### Late Ambulatory

When walking becomes a bit more challenging, and you find you are walking less and using your wheelchair more, you may also find that you are more likely to stumble or fall. Some people describe their legs "giving way" all of a sudden, without reason. If your muscles are weak, they will tire more quickly and tired muscles do not respond well to activities needing continuous energy such as walking or standing for periods of time. This is called muscle fatigue. The **"Fatigue Management"** Leaflet includes useful information about how to prevent your muscles from becoming overly tired and you can discuss this in more detail with your physiotherapist.

It may feel at this stage that you may benefit from using your wheelchair more frequently to help conserve your energy. Your local Wheelchair Centre and their team can advise on a wheelchair that best suits your needs, either manual or powered, and which features would be useful for you. It can be difficult adjusting to using your chair more often, however many people report that they feel they have more energy to do the things they enjoy and also feel safer.



If you are weaker, you are also less likely to be able to protect yourself when falling by altering your position and therefore land more awkwardly causing injury. An injury may cause you to be off your feet for a period of time and this has consequences for your muscle strength in the longer term. The muscles become weaker more quickly as they are not being used as much as before and this can make it harder to get back on your feet. It is important that you contact your physiotherapist if you have any type of fall that results in pain or discomfort so that you can be assessed or given advice on how best to manage this and be sure there isn't an injury to the bones.

### Falls from the wheelchair

Falls can still occur when sitting in your wheelchair or from your bed. It is strongly encouraged by health professionals that you always make use of your seat belt to prevent these accidents from occurring, particularly when outdoors negotiating turns and bumps. Take care when transferring between your bed, chair and toilet and always use the equipment provided to ensure you transfer as safely as possible. At times it can seem quicker or easier for a carer to lift you and not use the equipment, but these manoeuvres come with risk to both of you and a fracture or injury is not a risk worth taking. An Occupational Therapist (OT) can help to advise you on appropriate moving and handling equipment.

### What to do if you fall

If you fall then the first thing to do is to assess for injury before trying to get back up again. Do you have any areas of pain? Can you move all of your limbs as you normally would be able to? If you are unhurt, then you can try to get back up again.



## What to do if you Fall



Lie still for a moment and decide if you have severe pain or not and then do either of the following:



#### l can get up

Turn over on to your front and slowly ease yourself up onto your forearms



#### Move on to your hands and knees in a crawling position



#### I can't get up

#### Attract Help

- Shout or bang something
- Use your mobile phone if you can



#### Get Comfy

 Put a cushion or rolled up piece of clothing under your head



Hold onto a stable surface such as a coffee table or chair

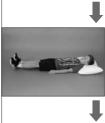


Face the chair or table and ease yourself round until you are up



on your feet







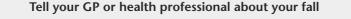
#### Keep warm

· Cover yourself with something handy such as a rug or coat etc

Try and keep moving If you can:

- Change position to avoid pressure on your skin which can become painful
- Move arms and leas to avoid stiffness and keep your circulation moving
- Wait for help to arrive

Turn yourself around and sit and rest for a few minutes



If you can get up yourself, or with some assistance, then these are the steps to follow:

- 1. Roll on to your hands and knees and look for a stable piece of furniture, such as a chair, table or bed.
- 2. Face the piece of furniture and ease yourself up until you are on your feet.
- 3. Turn around to sit on the chair and rest.
- 4. Re-check that you aren't injured.

If you would usually use a hoist or aid to help you to move then it is best that you use it to assist you back to your bed or chair. If this isn't possible then further assistance from other people or the ambulance service may be required to help you to be moved safely.

If you think you are injured or suspect a broken bone, then don't try to move as you may make these injures worse. Call for help to either move you carefully and safely, and if this is not possible then call for an ambulance. While waiting, try to stay warm by covering up with a blanket and place a pillow under your head.

If you have sustained an injury or have visited hospital and have been treated for a broken bone (fracture) then please contact your neuromuscular team. This can include the Neuromuscular Specialist Nurse, Endocrinologist, Neurology Consultant or Physiotherapist. The team will want to be made aware of your injury so that they can help to support your recovery.

Please also refer to your personal individual Steroid Management plan to determine if you may require additional steroids.

### **Further Information**

If you would like more information on falls management, please contact your physiotherapist.

The leaflets mentioned here can be found on the Scottish Muscle Network website at:

www.smn.scot.nhs.uk/other-useful-information/

Name of hospital physiotherapist:

Name of community physiotherapist:

If you have any queries regarding this leaflet please contact

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