Including children who have Osteogenesis Imperfecta in mainstream PE lessons

Basic principles to follow when including a pupil with OI in a mainstream PE lesson

- Please seek specific advice from the pupils Paediatric Physiotherapist for their inclusion in P.E lessons. Specific advice/guidelines should be given to all staff involved in the teaching of P.E and the delivery of extra-curricular sessions whenever a pupil with OI is involved.
- One to one support/supervision should be considered and advice sought regarding this as required.
- Pupils should always be included in their age appropriate classes/groups.
- Pupils should be given time and space in order to attempt and complete all suitable P.E activities.
- Pupils should be encouraged to participate fully in P.E lessons and to perform activities as independently and safely as possible. Participation in most non-body-contact sport is encouraged, particularly swimming.

Pupils should be encouraged to participate fully in P.E lessons and to perform activities as independently and safely as possible.

Key pieces of advice

- Lightweight P.E equipment can be used by pupils such as foam balls and beanbags.
- Pupils with OI may need to take time during a P.E session to rest if they are tired or experience aches/pains.
- If appropriate, wheelchair users should be encouraged to get out of their wheelchair as much as possible. Muscles that cross the hip joint can become short and stiff if pupils sit for long periods of time.
- Swimming and water therapy are ideal activities for pupils with OI, as water allows independent movement with little risk of fracture/injury.
• Be aware of the danger of pupils tripping over P.E equipment scattered on the floor.
• Skills at all sports should be learnt and pupils can help with refereeing or scoring during contact activities.
• Pupils withOI may find it difficult to keep up with their peers when running a straight distance. Thus warm ups that involve running within a confined area e.g. a sports court/gym is preferable to running around an open area.
• If a pupil is unable to perform an action, encourage them to come up with an alternative.
• Be aware of the possible danger of collisions in team games. It may be preferable to make multiple smaller group sizes and locate the pupil withOI into an area which has a limited number of pupils allowed to move in it. This may help minimise the risk of them colliding with other pupils.
• Pain in children withOI should be taken seriously and teachers need to report concerns about pain to the parent/carer.
• Some pupils withOI may need modified equipment or resources that assist with fatigue and support them to participate in physical activities. For example, some pupils may need to wear specialised splints or footwear to provide joint stability. They should wear any such equipment while doing PE.

Due to the risk of fractures, pupils withOI
• Should not be allowed to jump off apparatus. They should alternatively be instructed to climb down safely onto a mat below.
• Should not take part in ‘high impact’ repetitive activities in standing or sitting, such as trampolining, horse riding, sledging, quad biking.
• Should avoid contact sports such as rugby, judo.
• Should not be allowed to tackle or take part in rough play.
• Should avoid activities that could lead to a fall, such as ice skating, skiing, roller blading.
Support and Advice
A Paediatric Physiotherapist can assist schools in maximising participation in physical activity, while ensuring the child with OI remains as safe as possible.

Advice can be sought from the pupils Physiotherapist on how to incorporate some of the pupils individual stretches or exercises into the lesson for the whole class to do as well.

A visit to the school from a member of the OI Team can be arranged if necessary to provide additional information or support to staff or pupils.

First Aid
Fortunately fractures at school are not common, but can and do happen. All suspected or actual fractures should be examined and treated by the child’s doctor/hospital or an orthopaedic specialist which the child’s parents/carers can organise.

If a fracture is suspected at school, first aid procedures should be applied and the parent/carer contacted. The ambulance should be called for major injuries and in an emergency. (Please refer to The Brittle Bone Society fracture management factsheet for further information).

An individual health care plan should be developed that includes agreed procedures for responding to a suspected fracture or more serious injury. The plan should be developed in consultation with the family and medical professionals involved in the pupils care.

Key points for including pupils with OI in P.E Lessons
• Pupils with OI have an increased likelihood of fracturing their bones, often with relatively low trauma.
• Contact sports and repetitive high impact activities should be avoided.
• It is important that pupils with OI are encouraged to exercise as much as possible to promote muscle and bone strength.
• Pupils with OI should not ‘sit out’ of lessons. P.E activities can and should be modified to allow participation.
• Generalised pain and fatigue are common particularly as pupils get older. These need to be identified and managed with the help of health professionals.
• Risk management and implementation of an individual health care plans for pupils with OI is essential.