

1. What is genu valgum / genu varum?

Genu valgum is also known as 'knock knees'. It is when there is a gap between the ankles when standing with knees together.

Genu varum is also known as 'bow legs'. It is when the legs curve outwards at the knees when in standing with ankles together.



2. How common is genu valgum / genu varum

Knock knees are considered a part of normal development up to the age of 7yrs.

Bow legs are considered a part of normal development up to the age of 4 yrs.

We refer to this as "normal variant".

Most toddlers and young children have at least some degree of physiological bowing or knocking of their knees. In the absence of symptoms, adults with knock knees or bow legs are also 'normal'.

3. What causes genu valgum / genu varum?

Bow legs in children are felt to be as a result of slight rotation/twisting occurring during bone development within the womb in order for the baby to fit into the small space.

Knock knees in children are felt to be a result of normal bone and growth development when an infant reaches 2yrs of age – it can cause the knees to turn inwards for a short while.

The appearance of the knock knees or bow legs can initially appear worse as the infant begins to walk but usually resolve as they develop.

4. Types genu valgum / genu varum

Physiological vs pathological

Physiological genu valgum/genu varum are both lower limb deformities considered to be normal variants within the normal development timeline of a child.

Pathological genu valgum/genu varum is usually a more severe deformity and can be linked to causes such as blount's disease, and rickets. These children should be referred to Orthopaedics.

A simple way of checking if the deformity falls inside/outside of normal limits:

[ADD LINK TO ASSESSMENT PRESENTATION](#)

7. When to Refer?

In some cases, it will be appropriate to refer children on for further assessment. i.e If there are concerns over a more severe deformity, mobility restrictions and they complain of regular pain

Please refer to the East Lancashire Paediatric Physiotherapy Referral guidance for Genu Valgum & Genu Varum for information on when it is appropriate to refer, and which service you should refer to.

6. What advice should I give?

Reassure parents / guardians it can be normal for children to have either knock knees or bow legs. Making unnecessary referrals increases patient / parental anxiety and expectations.

Direct them to the East Lancashire Paediatric website for advice and information on.

- What knock knees/bow legs are and why they occur
- General advice to encourage continued normal development

5. Treatment of genu valgum / genu varum

Knock knees and bow legs in children that are considered to be within normal variants do not require any treatment.

There is no evidence that asymptotic knock knees or bow legs in children leads to lower limb or back problems in later life.

Both deformities can be considered to be a part of normal development and resolve without intervention.



Genu Valgum/knock knees & Genu Varum/bow legs

A guide for referrers