



What are Twisted Legs?

Twisted leg describes an abnormal angle in poultry legs. The “twist” is caused by a rotation in the tibia bone near the hock joint.

If the foot turns inward, the term **varus** is used to classify the abnormal angle of the foot.

If the foot turns outward, or away from the body, the term **valgus** is used.



Together, these abnormal leg conformations are referred to as **Varus Valgus Deformity (VVD)**



A. Varus deformity of both legs

Source: Guo et al (<https://doi.org/10.3382/ps/pez269>)



B. Valgus deformity of the right leg

Source: Guo et al (<https://doi.org/10.3382/ps/pez269>)

Akbas and team estimate that VVD is moderate to highly heritable, meaning that it is very likely that a parent may pass this disease on to their offspring. It is important to note that heritability is likely to vary between breeds of chickens. Link to study <https://go.umd.edu/akbas2009>

How Do You Prevent VVD in Your Flock?

The prevalence of VVD in flocks will vary depending on:

- ▶ **Breed:** Commercial broilers (or meat) birds are more likely to develop VVD than slower-growing birds.
- ▶ **Nutritional deficiencies:** Poor nutrition may predispose a flock to develop VVD.
- ▶ **Sex:** VVD is more often seen in males.

VVD is not an infectious disease and cannot spread from bird to bird.

There is no treatment for the skeletal deformity that causes VVD. Monitoring and prevention are key. Provide proper nutrition and consider breeds with good leg health.