

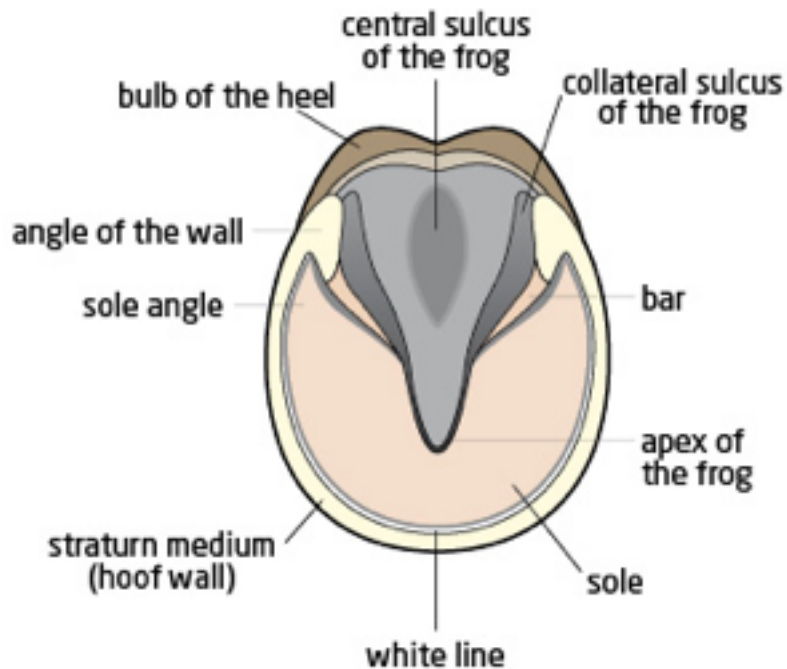


1N303 LaFox Rd, La Fox, IL 60147  
FVEP@foxvalleyequine.com  
(630) 365-5600

## White Line Disease

### ***Definition***

The white line is a normal anatomical structure in the equine hoof. The line is formed by the junction of the hoof wall and sole on the bottom of the hoof. This line can be seen from the bottom of the hoof as a white to yellow thin line coursing around the outer edge of the hoof. *White line disease* is the separation of the hoof wall from the underlying lamella. This occurs when a crack develops at the white line allowing bacteria and/or fungal agents to travel up the white line creating a separation and cavity between the hoof wall and underlying tissue. Extremely wet or dry conditions can weaken hooves predisposing them to development of white line cracks and the development of white line disease. Horses battling chronic laminitis are predisposed to the development of white line disease due to chronic stress at the white line.



### ***Clinical Signs***

Widening and deepening of the white line is the classic finding for white line disease. Oftentimes, a white crumbly material is present within the white line that can be picked out with a hoof pick. Horses with white line disease are usually not significantly lame.

### ***Diagnosis***

Diagnosis is made by a thorough physical exam. A tool is used to probe the white line investigating for any separation and deepening of the white line. Horses tend not to be overly sensitive to probing of the white line. Radiographs are often performed allowing visualization of the extent of the cavity formed by the separation of the hoof wall and underlying laminae. In subtle white line cases, where a horse presents for a primary lameness, it is important for a thorough lameness exam to be performed to rule out other potential causes of the lameness. This may include flexion tests and regional nerve blocking.

### ***Treatment***

In mild cases where the cavity does not extend very deeply into the white line, a cotton ball soaked in tincture of iodine can be placed into the space. The placement of a shoe can aid in keeping the cotton ball in place. In more advanced cases, hoof wall resection is performed to remove the section of hoof wall overlying affected area. A dremel tool is commonly used for this procedure. Removal of the overlying hoof wall allows direct topical treatment to the entire affected area (i.e. iodine or merthiolate) and facilitates proper growth and attachment of new hoof wall growth. An acrylic patch may also be applied to the resected area once the infection is controlled.

### ***Prognosis***

Prognosis is variable and depends largely in part on the underlying cause of the white line disease. Horses with white line disease secondary to chronic laminitis are more prone to have recurrence of the disease. Horses with white line disease due to environmental conditions, and who respond well to initial treatment, have a good prognosis.