

Glycogen Branching Enzyme Deficiency (GBED)



What is GBED?

- Fatal disease of newborn foals or developing fetuses
- Inherited as an autosomal recessive disease in Quarter Horses and related breeds
- Affected foals cannot store sugar molecules properly in their heart, skeletal muscle, liver, and brain, meaning that these organs are not able to function properly.
- A causative genetic mutation has been identified and a genetic test is available.

What you can do to keep your horse healthy:

- Quarter Horse and Paint Horse sires and dams should be genetically tested prior to breeding to avoid carrier x carrier matings.
- Offspring of two GBED carriers have a 25% chance of being affected.
- Breeding a horse with no copies of the GBED mutation to a carrier (with one copy) will not result in an affected foal but will produce a GBED carrier 50% of the time.

Signs

Late-term abortions
Stillbirths
Decreased muscle tone
Low body temperature
Limb deformities
Seizures
Cardiac arrest
Respiratory failure

Transmission

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Treatment

There is no treatment for GBED.

**If your horse needs medical care, contact the Large Animal Clinic at (530) 752-1393.*



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