

## **HYPP**

**Hyperkalemic periodic paralysis** is an inherited autosomal dominant muscle disease that affects the sodium channels in the horse's muscle and the potassium levels in the blood and has been traced to the stallion, IMPRESSIVE. The disease causes sporadic attacks of muscle contractions and convulsions. These range from mild episodes of involuntary muscle twitching, to a full body collapse and death. Changes in feed/supplements, environment, or stress can trigger an HYPP attack. *Horses with a single dominant gene WILL EXPRESS the disorder (at some point) AND can pass it to their offspring 50% of the time. Horses with two dominant genes will always produce afflicted offspring.*

### **Lethal:**

– YES. Horses can die from HYPP, they can suffocate from the inability to breathe during an attack. Even normally non-symptomatic horses can die from their first and only HYPP attack. HYPP attacks can harm and/or kill humans around the animal while it is having an attack, and/or while riding an HYPP affected horse as an attack occurs. Only experienced individuals and vets should approach an HYPP seizing horse to treat it.

### **Inheritance:**

– Simple DOMINANT. If a horse has at least 1 copy (heterozygous) of HYPP are affected with the disorder. Homozygous HYPP horses (2 copies) often suffer more severely than those who are heterozygous.

### **Affected breeds:**

–Quarter Horses, Appaloosas, Paints and cross breeds descending from the Quarter Horse stallion, IMPRESSIVE, who was likely the origin of the HYPP mutation.

### **Statistics:**

– HYPP is present in approximately 4% of Quarter Horses and approximately 40% of halter horses. The statistics of variant HYPP is currently unknown.

### **Available Tests:**

–YES direct test. There are variants of HYPP that do not show up on a traditional HYPP test. A horse may test negative for HYPP and still have symptoms. Variants are currently being researched.

### **Treatment:**

– Can often be better managed with special diet (only 0.6–1.5% potassium) and/or medication. Consult a vet.

### **Prevention:**

– The only way to prevent foals born with HYPP is to not breed HYPP individuals.

### **Links:**

<http://www.aqha.com/en/News/News-Articles/02032012-Genetic-Testing.aspx>

[http://en.wikipedia.org/wiki/Hyperkalemic\\_periodic\\_paralysis](http://en.wikipedia.org/wiki/Hyperkalemic_periodic_paralysis)

<http://www.horsetesting.com/HYPP.htm>

summary and format from:

<http://www.horsegroomingsupplies.com/horse-forums/breeders-guide-to-equine-genetic-disorders-367267.html>