When to test for IgG levels

Newborn foals ingesting good quality colostrum will have a blood IgG (gamma globulins, or antibodies) concentration of 8g/L or greater by 4–8 hours old. Testing foals as early as this age allows oral supplementation with colostrum from a colostrum bank. However, foals may be tested up to 48 hours of age to monitor their freedom from Failure of Passive Transfer (FPT) or Partial FPT. Consult flow chart overleaf.

Directions

1. Use whole blood (fresh or with EDTA anticoagulant).
2. Add 1.5mL exactly to the “fill” line in the GAMMA-CHECK®E tube.
3. Swirl tube to ensure mixing and note time.
4. Tilt tube every 2 minutes.
5. End Point is the formation of a firm clot—note the time when blood clots firmly.

If a firm clot has formed in less than five minutes, the foal has IgG levels of 8g/L or greater. If not, consult the flow chart. A jelly-like clot that slips down the side of the tube is usually positive (OK), but should be retested.

False Positive results may occur with sick foals (due to elevated Fibrinogen) or dehydrated foals, or with hemolyzed samples. In these cases, repeat the GAMMA-CHECK®E test using serum.

When serum is used in the GAMMA-CHECK®E, clot formation in five minutes indicates IgG of 8g/L or greater.

* Caution: The reagent (glutaraldehyde) inside the GAMMA-CHECK®E tubes is caustic—if skin or eye contact occurs, wash with copious amounts of water and consult a physician.

* Do not leave tubes in the hot sun.
1. Because foals that nurse good quality colostrum in their first 12 hours should have over 8g/L IgG, the level should ideally be checked at about this age. This can be accomplished in 5 minutes at the foal’s side using the GAMMA-CHECK®E, utilizing whole blood.

2. Foals with a negative or low GAMMA-CHECK®E reading at less than 12 hours old, should be given good quality colostrum as soon as possible.

3. Foals older than 12 hours, with a low or negative GAMMA-CHECK®E reading, should be transfused with one unit of EQUIPLAS® initially, over a period of approximately 15 minutes. Transfusion reactions are rare with properly prepared commercial plasma, given to normal foals. However, compromised foals should receive plasma at a much slower rate (1–2 hours), to avoid volume overload. Signs of this would be increased heart rate and trembling — slow or stop transfusion and restart when signs disappear.

4. EQUIPLAS® should always be transfused from its original bag, and should not be mixed with any other drug/substance. Thawing instructions should be followed exactly.

5. Always transfuse with a filtered blood giving set with a 200 micron filter in the drip chamber.

6. Thawed product must be refrigerated and used within 21 days.

7. Does not expire for 3 years from date of manufacture, when kept frozen.