Prevention of calf scours can be difficult. The absorption of antibodies from good quality colostrum is the first line of defense and the foundation which other factors depend upon. Sanitation is the other means to prevent scours. Ideally, the use of both strategies will optimize calf health.

The only way to administer antibodies against these diseases is through the mouth and into the gut, where absorption takes place.

There are two ways to do this:
1. Vaccinate the cow against these pathogens so her colostrum is full of specific antibodies, or
2. Use products containing these specific antibodies and administer directly to the calf.

Both methods are time dependent; the sooner they are administered, the more complete the absorption. You should always consult your veterinarian before changing any vaccination protocols.

**Vaccines for Pregnant Cows**
There are several vaccines available for pregnant cows:
- Guardian™
- ScourGuard 4 K/C™
- Scour Bos™

There are differences in the vaccination schedule and pathogen combinations as well as differences in their slaughter withdrawal. It is important to follow the vaccination schedule to ensure that antibodies in colostrum are maximized.

There are many colostrum replacer choices if an operation decides not to use the cow’s colostrum. A good quality replacer will have IgG levels over 150 grams. It is vital that sufficient amounts be administered in the first twelve hours of life when the calf’s ability to absorb the antibodies is at its highest. Calves should be fed one gallon of high quality maternal colostrum or colostrum replacer within one hour after birth to provide good immune protection. Maternal colostrum should be tested for quality and bacterial count.

*Salmonella can be difficult to prevent due to the many different strains, but vaccination with Endovac™, SRP™ or Entervene-D™ has been beneficial on certain farms.*
Calf Scours Prevention

Calf Vaccines & Scouring Aids

There are several products available that supply antibodies directly to the calf that fight against bacteria, viruses and toxins.

- **First Defense™** offers protection against E. coli and coronavirus.
- **Calf Guard™**, a modified live vaccine given orally to newborns, helps control scours caused by Rota and Corona viruses.
- **Bovine Ecolizer + C20™** contains an antitoxin against Clostridium perfringens and an antiserum against E. coli that aids in the prevention of scours caused by those agents.
- **BoviCare™** contains Cryptosporidium parvum egg derived proteins that are designed to meet enteric health needs and promote increased feed efficiency and weight gains.

The timing of administration for all products is critical. These products need to be given at least an hour prior to the first feeding to allow for adequate absorption. Once the first colostrum enters the digestive tract, it hinders the absorption of these products.

**All calves should be fed from youngest to oldest, and sick calves should always be fed and treated last to decrease spread to healthy calves.**

**Key Areas to Inspect for Cleanliness**

Good sanitation is key in preventing calf scours. Remember, a calf explores its environment with its tongue and the causative agents of scours are contracted orally. A calf should be removed from the cow as soon as possible after birth to prevent it from sucking on manure on the cow’s legs and belly. A calf’s gut is wide open at birth allowing the absorption of any bacteria it comes into contact within for the first 24 hours. It is important to keep areas clean to reduce the calf’s exposure to scour-causing pathogens.

**Six critical areas/items to investigate:**

**Cleaning removes what you can see while sanitizing removes what you can’t.**

1. **Calving pen (most critical)**
   - Clean and bed this area as frequently as possible.
   - Anything that comes in contact with a newborn calf should be sanitized thoroughly after every use.

2. **Colostrum milking buckets/hoses**
   - Sanitize thoroughly after every milking.
   - Change hoses regularly.
   - For best quality colostrum, cows should be milked within one hour of calving.

3. **Esophageal feeders**
   - Sanitize thoroughly after every use.

4. **Bottles and nipples**
   - Sanitize thoroughly after every use.
   - Use brushes specially designed to clean nipples.

5. **Feeding buckets**
   - Wash after every use.

6. **Hutches and pens**
   - Thoroughly wash and sanitize in between calves.

Calves are the future of the business. Everything possible should be done to keep them healthy.