



# ROUTES OF ORAL TRANSMISSION

## BEEF CATTLE

### General Management

- Y N Do you avoid purchasing cattle from multiple sources?
- Y N Do you clean and disinfect contaminated facilities and treatment items (e.g. balling guns, speculum, stomach tube, etc.) between uses?
- Y N Do you prohibit sharing equipment (including tractors) with other operations?
- Y N Do you have an established deworming program for each production stage?

### Calving/Calf Management

- Y N Do you maintain a defined and strict calving season to minimize age differences between calves?
- Y N Do you maintain clean and dry calving areas?
- Y N Do you calve heifers prior to and separate from cows?
- Y N Do you maintain cleanliness of cows and their udder (e.g. prevent entry into ponds, avoid developing deep mud at feeders, etc.)?
- Y N Do you ensure that calves nurse from their dam for adequate ingestion of colostrum within the first 6 hours of life?
- Y N If you need to supplement colostrum, is it from test negative dams in your herd or a commercial product?
- Y N Do you avoid using foster calves?
- Y N Do you minimize exposure of young calves to older calves?

### Feed/Water Management

- Y N Do you only purchase feeds from reputable sources with established quality control programs?
- Y N Are feed deliveries monitored to prevent inclusion of ruminant animal proteins into cattle rations?
- Y N Do you take measures to ensure feed is properly stored/treated after harvest (e.g. ensiling, ammoniation, etc.)?
- Y N Do you routinely examine all feedstuffs for manure, mold, foreign material, and overall quality?
- Y N Do you store feeds to prevent access by ALL animals (e.g. wildlife, dogs, cats, livestock)?
- Y N To minimize feed contamination, do you maintain an effective rodent control program?
- Y N To minimize feed/water contamination, do you take steps to minimize bird nesting on your farm?

## ROUTES OF ORAL TRANSMISSION (CONT'D)

### BEEF CATTLE



- Y N Do you have separate equipment dedicated to only the handling of feed and NOT handling of manure?
- Y N If you use the same equipment to handle manure and feed, do you clean/disinfect it after handling manure and before it is used for feed?
- Y N Do you use troughs/feeders for feed, as opposed to feeding directly on the ground?
- Y N Do you clean troughs/feeders of gross debris (e.g. "old" feed, manure, leaves, water, etc.) before adding fresh feed?
- Y N Do you clean areas around troughs/feeders frequently by scraping?
- Y N If possible, do you move feeders to prevent buildup of manure and stagnant water in the area?
- Y N If water on your farm became unfit to drink, do you have a plan to provide good quality water to your livestock?
- Y N Do all animals on farm have access to clean drinking water sources?
- Y N Do you have railings around the waterers to prevent animals from entering, defecating, or urinating in them?
- Y N Do you limit access to undesirable water sources (e.g. stagnant water and lagoons)?
- Y N If you utilize natural water sources (e.g. ponds and streams), do you control access so cattle cannot enter and contaminate it?
- Y N Do you clean areas around watering sources frequently?
- Y N Do you restrict your animals from access to waterways that pass through other livestock operations upstream?

### Manure Management

- Y N Do you prevent the runoff of other operations from entering your operation?
- Y N Do you take measures to prevent runoff from spreading between different areas of your operation?
- Y N Do you store collected manure and waste in a manner that limits spills and overflows?
- Y N Do you prevent the use of non-composted manure from other operations on pastures and/or crops in your operation?
- Y N If manure is spread on crop ground, is it done early in the growing season?

# ROUTES OF ORAL TRANSMISSION (CONT'D)

## BEEF CATTLE



### Pasture/Pen Management

- Y N Do you monitor forage availability to prevent overgrazing? (this results in animals grazing closer to the ground and nearer to fecal pats)
- Y N Do you drag pastures to disperse manure?
- Y N If manure is spread on pastures, do you prohibit animals from grazing the field for a sufficient length of time? (this will vary with weather conditions, age of animals grazing, and diseases of concern; increasing the time to re-introduction will reduce risks)
- Y N Do you segregate pastures/pens according to production groups (e.g. designated pastures for cows vs. heifers)?
- Y N Do you minimize stocking densities in pastures and pens?

### Conclusion

**Total number of:**      **Yes responses** \_\_\_\_\_      **No responses** \_\_\_\_\_

If you have 1 or more No responses, you have identified areas for improvement on your farm. Not all questions are equal in their risk of disease transmission, so it is important to work with your veterinarian to develop a management plan addressing the biggest risks first. This will help minimize the chance of an orally spread disease from entering or spreading on your farm. Each farm will be unique in their ability to prevent disease transmission because management styles, herd sizes and finances vary.