

MBNS Calf Sanitation Protocols

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Maternity Pen & Calf Processing Pen Hygiene

Frequency: Pens should be cleaned and sanitized once daily.

Caution: Recommend not using a pressure washer because of cross-contamination.

- (1) Remove bedding and physically scrape as much organic material from the floor as possible. If the floor is concrete, rinse the floor removing as much organic material as possible.
- (2) Apply a chlorinated alkaline foaming detergent with hot water (140°F). Soak for 15 minutes.
- (3) Rinse with water and allow pens to dry.
- (4) Sanitize floor with 250 ppm Chlorine Dioxide solution (no livestock present).
- (5) Allow pen to dry prior to re-bedding.
- (6) Misting bedded packs with livestock present use 100 ppm Chlorine Dioxide solution.

Milk Bottles, Nipples, and Mixing Equipment Hygiene

Frequency: Immediately following each feeding.

- (1) Rinse all bottles, nipples, and mixing equipment with warm water (110°F) removing all organic material before washing.
- (2) Soak bottles, nipples, and mixing equipment in hot water (140°F) with a chlorinated alkaline detergent (pH 11 – 12) for approximately 5 minutes.
- (3) Wash vigorously with a brush for 1 minute (use separate brushes for inside and outside of bottles).
- (4) Rinse with cold water with 50 ppm Chlorine Dioxide solution.
- (5) Allow to dry.
- (6) Additional Option: Spray all bottles and mixing equipment with 50 ppm Chlorine Dioxide solution 5 to 15 minutes before using. No need to further rinse the Chlorine Dioxide solution from bottles and mixing equipment.

Calf Hutch Hygiene

Frequency: Between each hutch use. Preferably allow to sit idle for 2 – 3 weeks before next use.

Caution: Recommend not using a pressure washer because of cross-contamination. If you use a pressure washer: (1) Make sure the hutches are moved away from young calves & (2) Wash all hutches with pressure washer first, then go back and sanitize them all.

- (1) Physically scrape as much of the organic material as possible from the hutches.
- (2) Remove bedding, all organic material, and top layer of sand/soil/clay.
- (3) Spray new exposed surface with 100 ppm Chlorine Dioxide solution and allow to sit exposed to sunlight for a minimum of 2 weeks.
- (4) Rinse the calf hutch with water, beginning at the top and working down. Remove as much organic material as possible.
- (5) Apply a chlorinated alkaline foaming detergent (pH 11 – 12) with hot water (140°F), beginning at the bottom and working up. Soak for at least 10 minutes (begin cleaning the next hutch).
- (7) Rinse with water, beginning at the top and working down. Allow pens to dry.
- (8) Additional Option: Apply an acidic foaming detergent (pH 3 – 4), beginning at the bottom and working up. Soak for 15 minutes. Rinse with water, beginning at the top and working down. This step can also be performed once every 3 hutch uses.
- (9) Sanitize the hutch with a 100 ppm Chlorine Dioxide solution.

Drinking Water

- (1) Chlorine Dioxide can be added to drinking water at 0.5 to 0.8 ppm.

Routine Analyses

- (1) Determine sanitation success by measuring ATP activities on sanitized equipment, bottles, nipples, and hutches every 6 months or as needed.