Implementing an Ursid Neonatal Care Program

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Advancing Bear Care ‘11
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Adequate Staffing

- Four levels of care for hand-rearing team
- Developmental stages dictate skill criteria
  - Neonatal
  - Growth
  - Weaning
Hand-Rearing Coverage

- Amount of attention
- Skill Level
  - Veterinarian
  - Vet Technician
  - Curator
  - Keeper

Hand-Rearing Needs

- Thorough evaluation
- Close Monitoring
- Developmental Phases
Level One  24 – 15 hr shifts

Neonate Requires

- Intensive physiological monitoring
- Intensive medical support therapy
- Maximum number of caregivers = 7 or fewer
- Sensitive to multiple handlers
Poor immune system reported in Giant Panda Neonate (mother-reared and hand-reared)

Cause of death was pre- and post-natal bacterial infections
What issues can interfere with adequate transfer IgG?

- Poor maternal immunoglobulin titer
- Poor colostrum quality
- Inability to nurse
- Orphaning
- Older immunodeficient neonate is one that has passed the point of gut closure
- Infants with absorption problems (diarrhea)
Administering maternal serum subcutaneously (SQ) or 7.5 – 15cc per 100 g exceeds the volume that a newborn can safely ingest during the first 16 hours after birth.
Level Two  24 – 15 hr shifts

Neonate Requires

- Moderate physiological monitoring
- Moderate medical support therapy
- Stay with established core team 7 or fewer
- Sensitive to multiple handlers
Level Three 24 – 15 hr shifts
Neonate Requires

- Physiological monitoring
- Ø Medical support
- Stay with established core team 7 or fewer
- Sensitive to multiple handlers
Level Four  8 hour day
Neonate Requires
Level Four  24 – 15 hr shifts
Neonate Requires

- Doesn’t require medical support
- Stay with established core team (<7)
- Introduce additional staff as needed
- Not sensitive to multiple handlers
Objective

- Physically and psychologically productive adult
- Environmental manipulation natural behaviors
  - Encouraged or discouraged
- Controlling imprinting
  - reduce inaccurate imprinting
Communication

- Understand procedures
- Keep detailed records
- Communicate effectively
- Communicate often with others
Workshop
Quality & Consistent Care

• Well trained professional surrogates
• Proper nutrition
• Essential equipment
  – Twin Swapping
Workshop
Behavioral Aspect

• Genetically controlled
• Environment can effect quality of psychological development
Workshop
What is IgG

- Create serum bank
- Institute protocol
- The serum can provide a significant safety factor against prenatal or postnatal infections and act as a natural antibiotic.

- May need to be repeated in 4 – 5 weeks if animal was compromised at birth.

- Serum is also used as part of the total fluid replacement calculation of 100 ml/kg per day.

- Collect, store and freeze serum that can be made available to other facilities.
Questions?

Answers In
The Workshop!