Readings

Required
- Standard operating procedures
- SEPARC collecting and shipping specimens for diagnostic testing
- Green et al. “Disease Monitoring and Biosafety” Section 26.3 and 26.4

Supplemental
- Green et al. “Disease Monitoring and Biosafety”

What to wear, what to wear

- Rubber boots or waders
- Disposable gloves
  - Latex
  - Nitrile
  - Vinyl

- Derma Care
What to look for

- Corpses
- Lethargic or odd behaviors
- External signs
  - Lesions
  - Edema
  - Erythema
  - Malformations

Internal gross signs

- Discolored or abnormal looking organs

- Other common tissues
  - Kidneys, liver, lungs, gills, spleen, thymus, skeletal muscle

- Oddities

Collection

- Collect any corpses
- Collect specimens that show gross external signs
- Or specimens that exhibit odd behavior
- Individuals from various age groups
- Place individuals into separate bags or containers
Equipment Disinfection

- Remove mud
- Spray with disinfectant
- Dispose of gloves

- >75% alcohol: 1 min.
- >3% bleach: 1 min.

Next Step?

Euthanize any live specimens
- Using Benzocaine hydrochloride:
  - Must be authorized by veterinarian
  - 100 – 250 mg/L
  - Mix with 90% ethanol

Other approved procedures

- Tricaine Methanesulfonate (MS222):
  - >250 mg/L

- Slow cooling
- Physical methods (only recommended for unconscious animals):
  - Sharp blow to the head
  - Electrocautery
  - Decapitation
For reptiles
Consult AAZV Euthanasia of Nondomestic Animals
1) Ketamine HCl or Telazol (DEA)
   - Veterinarian must purchase
2) Sodium pentobarbital (DEA)
   - Veterinarian must purchase
3) Decapitation/gunshot

Oh... Crap!

Preservation of tissues
Fresh tissues are always preferred
For diagnostic tests
   - Freeze or preserve in ethanol 90% or greater
For histology
   - Formalin fixed tissues
     10% buffered formalin

Shipping animals
For live animals
   - Call diagnostic lab for specific instructions
   - Follow courier’s guidelines
For specimens
   - Triple package system
Guidelines for triple packaging

- Label each layer
- Do not use biohazard bags unless known infection with Category A substance (human health hazard)
- Use dry ice only when shipping frozen samples
- Ethanol and formalin samples don’t need dry ice or ice packs
- Outermost layer
  - Include the label “Exempt animal specimen”
  - Include shipper and receiver addresses
  - Include other appropriate chemical labels (Dry ice, dangerous goods, etc.)

Other materials sent inside package

- Detailed list of contents
- Description of where samples originated
- Contact information of the shipper
- Requested services
  - Diagnostic testing
  - Histology
  - Serology
- MSDS
  - Only if BSL-2 materials or regulated substances (formalin or EtOH)

Shipping fresh/frozen tissues

- Ship fresh tissues with ice packs
  - ThermoSafe® Polar Pack
- Dry Ice:
  - Only use dry ice with frozen samples
- Shipping FedEx:
  - Class 9 dangerous goods label
  - If not included on label – mark DRY ICE UN1845
  - Must indicate weight of dry ice
  - Do not exceed 5 lbs of dry ice
Shipping dry ice with UPS

- Only except packages with small amounts of dry ice (<5lbs)
- DO NOT put class 9 label on outer box
  - Will not accept
- Only need to state “Dry Ice used as refrigerant for diagnostic materials”

Shipping with ethanol and formalin

- Both FedEx and UPS require either
- Dangerous Goods In Excepted Quantity label
  - < 500mL, <30ml/Container
- Or Dangerous Goods in Hazardous Quantity label
  - >500mL

Shipping Label

- No statement required for environmental samples
  - Unless shipping with Dry Ice
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