New York State Wildlife Health Program (WHP)

Field Bio-safety Protocol

Good hygiene practices can prevent disease transmission - between wildlife and you or between animals. Even animals that appear healthy can be carrying viruses, bacteria, or parasites that can cause disease, and it’s important to practice good biosecurity to avoid accidentally moving disease around. Gloves and other essential protective equipment should always be worn when handling wildlife. Obviously sick individuals should not be handled unless there is a scientific need for handling. All gear that comes in contact with animals should be appropriately disinfected or disposed of as described below. As always, report any sick or dead animals to the Wildlife Health Program.

Vehicles

- If you can, park vehicles at a distance from the site to prevent contaminating truck tires with fecal material or contaminated water, etc.
- Only take the amount of equipment and supplies that you need to complete the task with you - leave back up material in the vehicle
- Bag or box any contaminated equipment or carcasses before putting them in the vehicle to reduce contamination of the truck bed or interior
- Clean the truck bed and vehicle tires and disinfect between sites if there is contamination with any body fluids, fecal material, etc.

Equipment

Always clean between sites and between individuals, if possible - particularly if they appear sick.

- Clean equipment with hot soapy water
- Spray with disinfecting solution so that it is saturated or immerse in solution then rinse with water.
- Take care to avoid handling personal equipment (phones, pens) when wearing contaminated gear

Supplies

- Gloves should be changed in between individual animals that are handled and ideally should not be used at more than one site
- Tyvek suits, sleeves, masks, boot covers and other disposables should be changed between sites.
Any contaminated clothing or shoes should be changed before moving between sites. Better still; wear boots that can be disinfected.

- Only lug-bottom hip boots or waders should be used in the field (no felt-bottom soles).
- Wash boots by removing all visible debris with a brush and hot soapy water.
- Spray with disinfecting solution so that it is saturated or immerse personal gear in solution. If equipment or gear is porous (e.g., breathable or neoprene waders) let soak in solution for 10 minutes. If this is not possible, let personal gear dry for at least three hours before entering a new site.
- Rinse personal gear with water
- Machine launder clothing using detergent (and bleach if possible) in hot water.

### Disinfection Solutions

Use commercially prepared disinfectant such as *Novalsan*, *glutaraldehyde*, or *Virkon*, bleach or alcohol solution (70% ethanol or isopropyl).

Disinfectants generally require a contact time of about 10 minutes to be effective

- Roccal®: Mix one-half fluid ounce (oz) of Roccal per gallon of water.
- Nolvasan® (chlorhexidine diacetate 2 percent): Mix 3 fluid oz of Nolvasan per gallon of water.
- Household bleach (sodium hypochlorite 6 percent): Mix three-fourths of a cup of household bleach per gallon of water or 9 parts water to 1 part bleach.
- Lysol® spray for footwear
- Purell for hands
- Virkon S:

<table>
<thead>
<tr>
<th>Quantity of Water</th>
<th>0.5% Solution*</th>
<th>1% Solution</th>
<th>2% Solution</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Quart</td>
<td>0.15 ounces*</td>
<td>0.3 ounces</td>
<td>0.7 ounces</td>
</tr>
<tr>
<td>1 Gallon</td>
<td>0.65 ounces*</td>
<td>1.3 ounces</td>
<td>2.7 ounces</td>
</tr>
<tr>
<td>10 Gallons</td>
<td>6.7 ounces*</td>
<td>13.4 ounces</td>
<td>26.7 ounces</td>
</tr>
<tr>
<td>50 Gallons</td>
<td>33.4 ounces*</td>
<td>66.8 ounces</td>
<td>133.5 ounces</td>
</tr>
</tbody>
</table>

Dispose of disinfecting solution away from bodies of water and drinking water sources (follow protocol in MSDS).