

## **Decontamination Protocol for Cavers**

Decontamination of Clothing and Equipment: All clothing and gear used in any other cave outside El Malpais National Monument must be cleaned or decontaminated prior to entering any El Malpais' caves. Any **new caving equipment** does not need to be decontaminated.

### **Boots and Shoes**

#### **Step One: Get the Dirt Off!**

You can use a soft bristled brush to clean off excess dirt from your boots.

#### **Step Two: Pre-Rinse**

Pre-clean your boots by using a spray bottle, and/or wet sponge. Get off all of the dirt and debris. Rinse the sole of each boot more thoroughly.

#### **Step Three: Decontamination**

Add 1 gallon of water into a waterproof container that will cover the soles of your boots. Next add 1 ounce (oz) of Lysol Professional Quaternary Cleaner. Soak the soles of your boots in the container for 10 minutes. As the soles soak, use another soft bristled brush to scrub the outside of the boot. Be careful not to soak the upper part of the boot if you plan to wear them immediately.

#### **Step Four: Rinse and Dry**

Rinse off this solution with water using a spray bottle or wet sponge. Allow boots to air dry.

### **Clothing:**

If previously laundered, these clean articles of clothing are ready to wear caving. If any clothing items have not been washed, they cannot be worn in a cave.

### **Backpacks/Gloves: Decontaminate or leave them at home or in a vehicle.**

- 1) Use a damp towel to remove excess dirt and debris.
- 2) Spray with Formula **409® Antibacterial All-Purpose Cleaner** and allow to dry for 10 minutes.
- 3) Wipe with damp paper towel and let air dry.

**Cameras/Electronic equipment: Decontaminate or consider leaving them in a vehicle.**

- 1) Use a damp towel to remove excess dirt and debris.
- 2) Use Clorox or Lysol® Disinfecting Wipes **thoroughly** on the item and let dry 10 minutes.
- 3) Wipe with damp paper towel and let air dry.
- 4) We recommend wrapping a camera in a plastic bag while in the cave or avoid further need for decontamination. Cameras will need a small hole for the lens.

**Headlamps/Flashlights/Helmets: Decontaminate or leave them at home or in a vehicle. The below procedure can be used on glasses, watches and other hard-surface items.**

- 1) Use a damp towel to remove excess dirt and debris.
- 2) Use Clorox or Lysol® Disinfecting Wipes **thoroughly** on the item and let dry 10 minutes.
- 3) Wipe with damp paper towel and let air dry.

### **Non-Chemical Option**

If gear is waterproof and you have ample time to allow your gear to dry, another procedure is to completely submerge it in a hot water. Be sure your gear is waterproof and not heat sensitive before submerging.

- 1) Fill a deep container with 131 degrees F water.
- 2) Completely submerge gear in the water. Make sure there are no trapped air pockets, and soak for 20 minutes. Water temperatures must stay at or above 131 degrees F for the entire 20 minutes.
- 3) Remove gear and allow to air dry.

### **Post Decontamination clean-up:**

Decontaminating the decontamination gear is also necessary!

- Brushes/sponges should soak in Lysol Professional Antibacterial All Purpose Cleaner for at least 10 minutes, then be rinsed, and left to air dry.
- Dispose of liquid in an appropriate sink.
- After use containers should be washed with soap, rinsed, and air dried.