

Hellbender's Guide to Mold Avoidance & Decontamination

Adapted from military radiation and nerve agent response





Product Ingredients

Spray Trio

Spray No. 1 ('Clean')

Ingredients:

Aqueous alkaline base with mineral pH buffers (borate, bicarbonate, carbonate), plant-based surfactants, natural enzyme blend (protease, amylase, lipase), probiotic cultures, natural chelating agents, Tetrasodium EDTA, and natural essential oils (clove and peppermint, less than 1%).

Spray No. 2 ('Clear')

Ingredients:

Purified water with distilled white vinegar (acetic acid), gentle plant-based surfactants (nonionic), mineral binders, natural polysaccharide flocculant, and botanical antimicrobials (less than 1%).

Spray No. 3 ('Protect')

Ingredients:

Water-based suspension containing dormant probiotic spores (Lactic Acid Bacteria and Bacillus species), biogenic nanosilica as a stabilizing and sorptive scaffold, natural emulsifiers (e.g., polysorbate class), fermentation-derived bioactive co-factors, and lavender essential oil (<1%).

Laundry Duo

Laundry Solution No. 1 - ('Clean Wash')

Ingredients:

Ingredients: Aqueous alkaline base with mineral pH buffers (borate, bicarbonate, carbonate), biodegradable surfactants (non-ionic and amphoteric), enzyme complex (protease, amylase, lipase), probiotic cultures, chelating agents (including tetrasodium EDTA), and natural essential oil blend.

Laundry Solution No. 2 – ('Clear Rinse')

Ingredients:

Ingredients: Distilled water and white vinegar (acetic acid), mild biodegradable surfactants (nonionic), mineral-binding agents, plant-derived polysaccharide flocculant, and botanical antimicrobials.



Product Ingredients



Shower Foams

Foam No. 1 (mildly alkaline)

Ingredients:

Buffered alkaline water with mineral-based pH adjusters (borate and carbonate class), plant based foaming cleansers (nonionic and amphoteric surfactants), enzyme blend, natural chelators (including <1% EDTA), plant-derived foam stabilizers, and botanical essential oils (peppermint and clove, <1%).

Foam No. 2 (mildly acidic)

Ingredients:

Purified water with distilled white vinegar (acetic acid), plant-based foaming cleansers (sugar-derived surfactants), natural polysaccharide flocculant, mineral chelating agents, and essential oils of peppermint and clove (less than 1%).

Foam No. 3 (probiotic)

Ingredients:

Water-based probiotic spore suspension with bioavailable mineral stabilizers, natural emulsifiers, fermentation-derived bioactive co-factors, and lavender essential oil (<1%).



Directions for Use

Sprays #1, #2, and #3 (for surfaces & air)

Step 1 – Spray #1 *('Clean')*

Spray #1 starts the sequence with a high-pH solution that penetrates biofilms, denatures mold fragments, and disrupts the molecular structure of embedded toxins—preparing them for removal

Mist in the air and on items & surfaces. Then immediately proceed to step 2.

Step 2 – Spray #2: ('Clear')

Spray #2 meets the alkaline action of #1 with a controlled acidity, neutralizes it, and—through that pH shift—binds and removes the residues, completing the clean at a structural level

Mist Spray #2 everywhere Spray #1 was used.

Allow to dry naturally or wipe clean. Then immediately proceed to step 3.

Step 3 - Spray #3: ('Protect')

Spray #3 neutralizes airborne toxins and forms a living defense layer on surfaces.

Mist into the air above the area you cleaned. Avoid direct saturation—this step works best when used sparingly.

Use Protect everywhere - mist your sheets before bed, clean laundry, pet fur and skin, on houseplants, in pet crates and in trash cans.

For best results, apply each spray as the <u>finest mist possible</u>. Use a continuous mist sprayer, an electrostatic or cold fogger, or adjust the red nozzle tip on the spray bottles provided to achieve the smallest possible droplet size.



PROTECT Spray: Your Last Line—and First Defense

After you clean, you might notice a wave of symptoms—brain fog, burning skin, trouble breathing. That's not your imagination. When you break down mold, it often releases a burst of toxins into the air. That's why PROTECT Spray is the final and very important step in your Hellbender protocol.

But it doesn't stop there. PROTECT does more than calm the storm. It also prevents the next one.

Instant Neutralization:

PROTECT releases a fine mist of dormant probiotic spores suspended in a fermentation-stabilized mineral matrix. Together, they bind airborne toxins before you breathe them in. It's fast—you can feel it.

Lasting Surface Defense:

Once sprayed, PROTECT doesn't disappear. It stays on surfaces, bedding, and even pet fur, lying in wait. These friendly microbes remain dormant until moisture or organic matter appears—the same conditions mold needs to grow. But instead of mold taking over, PROTECT activates and outcompetes it.

Everyday Contamination? Handled:

Spray PROTECT on your skin for cooling relief from irritation. Spray it into your bedside trash can each night so your detox tissues don't turn it into a toxin bomb. Use it on your dogs and cats to prevent them from tracking mold fragments around the house. And while you'll still want to change and wash your sheets regularly, pre-treating bedding with a light mist of PROTECT before you lie down can dramatically reduce recontamination overnight. Customers report fewer flare-ups, less skin irritation, and deeper, more restful sleep—even during detox.

Skin-Level Protection:

The same protective technology in the spray is also available in our PROTECT Shower Foam. Users apply it to the skin before or after exposure, during detox flares, or anytime they're experiencing irritation. It calms skin reactions, supports topical detox, and leaves behind a bioactive residue that continues working.

Good for plants, too:

Many customers also use PROTECT Spray on indoor plants—on the leaves *and* the soil. Not only do their plants grow better, but the soil itself becomes less likely to harbor mold fragments, bacteria, or other microbial triggers that sensitive individuals may react to.

It's not magic. It just feels like it.

PROTECT lays down a living defense system, built from nature, backed by science, and designed by people who've lived through mold hell and found a way back.



Directions for Use

Laundry Solutions #1 and #2 (Washable fabrics)

Laundry #1('Clean Wash')

Add 4 oz to the **wash** (WITH liquid sudsing laundry detergent) to denature and dislodge mold toxins from fabrics.

Laundry #2 ('Clear Rinse')

Add 4 oz to the **rinse** to bind and wash away what Laundry #1 has released.

Always use in order: #1 (wash), then #2 (rinse).

Foams #1, #2, and #3 (skin, scalp & hair)

Foam #1 - Clean

Apply to skin & scalp in the shower to break down & neutralize toxins.

Foam #2 - Clear

Follow immediately with Foam #2 to clear and restore an acidic skin pH.

Foam #3 - Protect

Use last to calm skin and leave behind a probiotic defense.

Important Reminders

Always follow the application sequence. Spot test foams for sensitivity prior to the first use. Avoid contact with eyes; in case of accidental contact rinse with water.



Why Use Military-Inspired Protocols?

Military decontamination procedures are:

- Highly systematic
- Designed to limit spread to clean zones
- Based on zone containment, item triage, and personnel processing

Summary:

Military-style decontamination protocols—characterized by strict separation of clean and contaminated zones, structured entry and exit routines, and material triage—can be life-changing for individuals with Toxin Induced Loss of Tolerance illnesses (mold reactivity, MCS, ME/CFS, etc). When adapted for civilian use, these strategies help prevent ongoing re-exposure to environmental triggers, which is essential for healing.

The Science Behind Avoidance & Decontamination and Toxin Induced Lack of Tolerance (TILT):

1. Loss of Neurological Tolerance

People who have developed TILT after toxic mold exposure often experience:

Multiple Chemical Sensitivity * Myalgic Encephalitis * Chronic Fatigue Syndrome * Neuroinflammation * Blood-brain barrier permeability * Mast cell activation * Impaired detoxification * Sensitization to trace chemical or mold exposures

2. Extreme Reactivity

Environmental toxins that may not even be noticed by others can cause debilitating symptoms in someone whose previous mold exposure has caused TILT. Like a peanut allergy sufferer can react to the airborne particles from someone else's peanut butter sandwich, people with TILT can react to miniscule amounts of mold toxins or chemicals in their environment.

3. Avoidance is Key

Avoidance of mold is not a passive step—it is an active treatment strategy.

When exposures stop:

- The immune system can begin to heal
- Mitochondrial energy production improves & the brain starts to heal



• Tolerance to low-level stimuli gradually returns

In order to heal, protecting one's environment from mold cross contamination is crucial.

Part 1: Understanding High-Risk Materials and Environments

High-Contamination Materials (to avoid in clean zones)

| Material | Why Problematic |
|-------------------------------|--|
| Thin plastic grocery bags | Porous, electrostatically attract spores and VOCs |
| Paper & cardboard | Fibrous, spore-absorbent, retain mycotoxins, especially after water damage |
| Upholstered fabrics & carpets | Hold onto VOCs, fragrances, mold fragments |
| Shoes | Track in dust, spores, industrial residue |

These should be:

- Kept outside of clean zones
- Bagged and discarded or washed/treated when contaminated
- Replaced with nonporous or washable alternatives when possible

Common Exposure Hotspots

Even short visits to these areas can cause symptoms and create potential for cross contamination:

- Stores (especially with scented or dusty products)
- Schools, hospitals and daycares (old buildings, cleaning products, HVAC)
- Office buildings (carpet, fluorescent lighting, mold in ductwork)
- Thrift shops and libraries (paper-based mold collectors)
- Industrial zones or areas with pesticide drift

Why Sensitized People React (While Others Don't)

Mold and chemical reactive people often experience:



- Breakdown in detox pathways
- Neuroimmune hypersensitivity
- Reactions to doses that don't affect others

Part 2: <u>Decontamination Steps (Military to Civilian Translation)</u>

| Military Protocol | Civilian Mold/Chemical Decon Adaptation | |
|---|---|--|
| Remove outer layers in "dirty" zone | Strip outerwear before entering home/car | |
| Rinse exposed skin | Rinse head, face, arms, and neck with water | |
| Bag contaminated items | Place clothes and outerwear in sealed tote or bag until washed | |
| Wash or neutralize with reactive agent | Use Hellbender Laundry, Sprays & Foams | |
| Maintain clean/dry gear in "clean zone" | Store clean clothing/items separately from potential contaminants | |
| Avoid porous/sorptive gear | No cardboard, paper, or grocery bags in clean areas | |



Part 3: Car Protection & Entry Protocol

Cars are easily contaminated via clothing, packaging, outdoor toxins or previous exposures.

Car Mitigation Checklist:

- Use removable seat and floor covers (washable or disposable)
- Decon before entering the car after exposure
- Wear cover clothes into common exposure hot spots that can be removed before entering the vehicle.
- Spray shoes with #1, then #2 before getting in after leaving an exposure hot spot.
- Use Hellbender Spray #1 followed by #2 for daily interior cleaning
- Use Spray #3 as a final air treatment (interior use only)
- Wash car exterior frequently
- Change cabin air filter frequently

Decon Kit to Keep in Car:

- Bottles of water (for rinsing head or hands)
- Hellbender Sprays #1 & #2 and Protect Spray
- Clean clothes in a lidded tote
- Lidded tote and white trash bags for transporting items and packages
- Lidded "dirty" tote for items that will need to be decontaminated.



Part 4: Laundry and Fabric Decontamination

| Step | Product | Function |
|-------------|--|--|
| Wash | Hellbender Laundry #1 and liquid laundry detergent | Denatures mycotoxins, breaks up biofilms |
| Final rinse | Hellbender Laundry #2 in rinse cycle | Clears liberated toxins and residues, reduces static |
| Notes | Use hot water and bulky setting in top loaders if applicable | |

Final Entry Protocol (for home or clean zone)

- 1. Step inside mudroom or porch space (transition zone)
- 2. Remove jacket/shoes, spray with Hb #1 & Hb #2, and *leave them in the transition zone*
- 3. Before or immediately upon entering home or clean zone: Rinse face/hair/hands with clean water or take a shower.
- 4. Change into clean "indoor clothes" stored in protected bin
- 5. Spray, wash or isolate any carried item (purse, bag, packages)

Key Philosophy:

"Leave the Outside Outside"



Even a brief exposure can bring lingering contamination into a healing space. These measures may seem extreme to outsiders—but for sensitized individuals, they're essential for survival and recovery.

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