

**Application:** The following Canine Field Decontamination Using Premade Wipes Protocol was developed for application to a broad spectrum of biological threats that Odor Detection Canines (ODCs) and their handlers may encounter in the field.

Each implementing agency will need to determine the application frequency of the following protocol in response to the anticipated or perceived level of risk and contamination their teams typically encounter in the field.

It is recommended that each ODCs/handler team has access to the key materials needed to carry out this protocol should they encounter, or be at an increased risk of exposure to a potential bacterial, fungal, or viral threat of concern in their operational environment.

**Key Materials:** (additional information on materials in Appendices)

- Eye Protection (face shield, goggles, safety glasses)
- Face Covering/Mask (face shield, face mask)
- Gloves (disposable latex or nitrile)
- Arm Covering (disposable sleeves, lab coat, washable/removable long sleeve shirt)
- 0.5% Chlorhexidine Wipes
- Disposable plastic bag for disposal of waste

## Canine Field Decontamination Using Premade Wipes

Disclaimer: Avoid contact with canine or human eyes, or mucous membranes. If eye contact occurs, flush immediately with water or eye irrigating solution. Ingestion may cause gastrointestinal problems. In case of accidental ingestion, for canines call: ASPCA Poison Control Center (888) 426-4435; Pet Poison Helpline (855) 764-7661, for humans call Poison Help 1-(800)-222-1222. If any abnormal side effects are noted after application of the protocol for humans please contact their physician, and for canines contact their veterinarian.

1. Gather previously prepared wipes (wipe preparation process outlined in Appendix B), PPE materials, and a plastic waste disposal bag. Please refer to the chart at the end of this document for estimated number of wipes needed, based on dog size.



2. Don proper PPE, such as gloves, eye protection, a face mask, as well as long sleeves to protect yourself prior to beginning decontamination process (see Appendix A for more information on donning and doffing PPE).



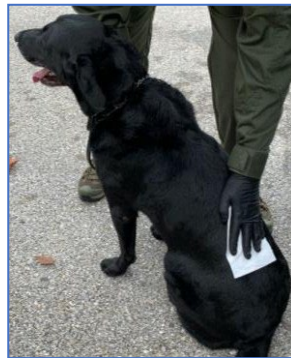
3. Remove all contaminated operational equipment (harness, collar, leash, toy, etc.) and set aside for decontamination prior to storage. Put a clean leash and collar on the canine prior to performing the wipe down process.



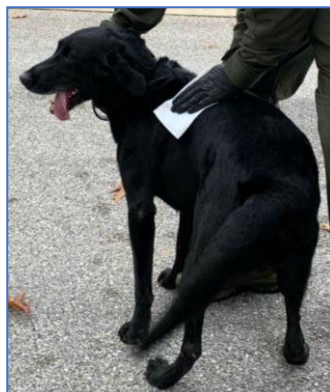
4. Start by wiping the canine's head and face focusing on the top of the head and furred region of the muzzle. Avoid direct contact with eyes, inside of ears, nose and mouth. After face is wiped, discard wipe in plastic waste disposal bag. If the wipe makes contact with the canine's eyes, flush the eyes with eyewash for a minimum of 30 seconds.



5. Next begin at the top of the canine's neck, take a wipe and in one continuous motion wipe from the base of the head, along the back, to the tail base. Discard wipe in plastic waste disposal bag.



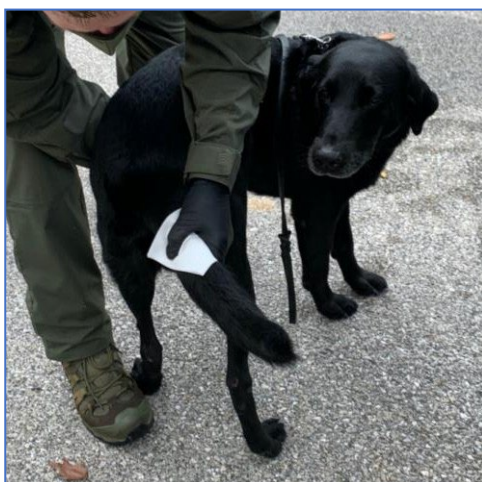
6. Position the next wipe to the side of the previously wiped area, but overlapping slightly, and wipe from head to tail region. Discard wipe.



7. Continue this process until the entire back and sides of the torso and neck have been wiped down. Discard used wipes.



8. Gripping around the tail with a wipe, gently pull the wipe down the length of the tail in one motion. Discard wipe.



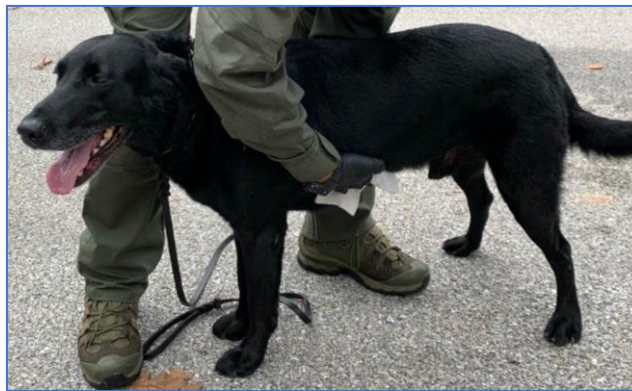
9. Lift the head of the dog and wipe the underside of the neck down to the underside of the chest, in one motion. Repeat process with fresh wipes until entire neck and chest area has been decontaminated. Discard used wipes.



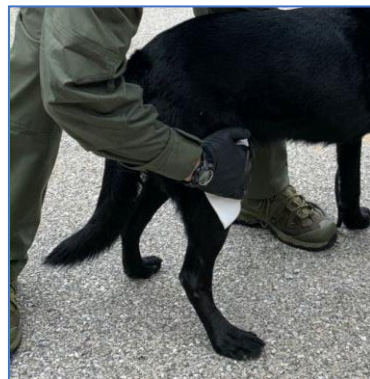
10. Starting at the top of the front leg near the armpit, grip around the leg with a wipe, gently pull the wipe down the leg in one motion. Repeat as needed to ensure the entire diameter of the leg has been wiped. Discard used wipe(s).



11. Repeat previous step on the opposite front leg.
12. Lift front leg up gently and wipe underarm area in one motion. Discard wipe. Repeat on opposite front leg.
13. Reach under the canine and wipe under the chest and down over the belly, in a single motion. Repeat if needed to ensure entire area has been decontaminated. Discard used wipes.



14. Moving to the rear leg, place a wipe at the top of the leg and wipe downward in a single motion, to the foot. Discard wipe.



15. Repeat previous step until entire rear leg has been decontaminated. Discard used wipes.
16. Repeat on opposite rear leg.
17. Lift each paw, wipe the bottom of each paw paying special attention to areas in between toes. Discard used wipe after each paw.



18. After the canine is wiped down, return canine to a holding area (patrol car, kennel, etc.) and complete decontamination process by wiping down the complete surface of all operational equipment including the canine's collar, harness, leash, and reward toy.
19. Finally, carefully remove and properly dispose of any contaminated PPE and all used wipes in the plastic waste disposal bag (See Appendix A for additional information of donning and doffing PPE). Tie waste disposal bag closed and discard in a dumpster or outside garbage receptacle when finished.



Canine size (in lbs)	Estimated number of wipes*
<50	15-20
50-75	20-25
>75	25+

\*Canines with longer fur may require more wipes.

### Types of recommended PPE

- Face Protection: Face shield and/or face mask (medical grade, respirator, non-medical grade), goggles and/or safety glasses
- Disposable Gloves
- Arm covering: Disposable sleeves, disposable lab coat, washable lab coat, disposable gown, long sleeve clothing

### Donning Procedures

- 1) Begin by donning PPE that will cover your arms.
  - a) Disposable sleeves:
    - i) Pull the sleeves high onto each arm, leaving enough material to completely cover your wrists.



- b) Lab Coat (disposable or washable):
  - i) Slide each arm into the lab coat.
  - ii) Button or snap the coat starting at the neck, working your way down.
  - iii) Ensure that the coat is loose enough to cross your arms across your chest without straining the fabric, and the sleeves are long enough to completely cover your wrists without obstructing your hands.



- c) Disposable gown:
  - i) Slide each arm into the gown.
  - ii) Tie the strings behind your neck and waist.
  - iii) Ensure the sleeves are long enough to completely cover your wrists without obstructing your hands.



d) Long sleeve shirts

- i) You may wear a regular long sleeve shirt of your choosing as long as the sleeves completely cover your wrists. Long sleeve article of clothing should be removed and washed after the decontamination process is complete.

2) Next, don facial coverings.

a) Face shield

- i) When using disposable face shields with tie straps, place face shield over your mouth and nose, tying the straps behind your neck and behind the upper portion of the head.



- ii) If using a reusable face shield, position the clear plastic over your face and place the plastic straps over your head. Pull on the plastic strap to comfortably tighten the shield.

b) Face mask (medical, non-medical, respirator)

- i) If using a face mask or respirator with ear loops, place over your nose and mouth and place ear loops over both ears. Pinch nose wire over the bridge of your nose if equipped.



- ii) When using masks or respirators with tie straps, place mask over your mouth and nose, tying the straps behind your neck and behind the upper portion of the head. Pinch nose wire over the bridge of your nose if equipped.
- iii) For masks or respirators with elastic straps, place the mask over your mouth and nose, pull the straps over your head. Tighten by pulling on the ends of the straps to ensure a snug fit. Pinch nose wire over the bridge of your nose if equipped.



- c) Goggles
  - i) Place goggles over your eyes and pull the strap over your head. Pull the loose ends of the strap to tighten the goggles comfortably.
  
- d) Safety glasses
  - i) Slide the safety glasses onto your face, placing the temples behind your ear. If equipped, shorten the temples to ensure a snug fit behind the ears.



- 3) Lastly, don appropriately-sized gloves.
  - a) Latex or Nitrile disposable gloves recommended
    - i) Pull gloves onto each hand
    - ii) Pulling the cuffs up over the end of your arm covering or sleeve, as far up the wrist as they will reach.



## Doffing Procedures

- 1) Begin the doffing procedure by removing arm coverings.
  - a) Disposable sleeves:
    - i) Grab the upper external portion of the sleeve, rolling the inside of the sleeve outward while pulling it down and off of the arm so no external portion of the sleeve touches the wearer's skin or clothing and the sleeve is inside-out upon complete removal.
    - ii) Repeat procedure on other sleeve.
    - iii) Dispose of used sleeves in a plastic waste disposal bag.
  - b) Lab coat:
    - i) For disposable lab coats, starting at the bottom of the coat, pull snaps apart and shrug the lab coat off. Dispose of used lab coat in appropriate trash receptacle.
    - ii) For washable lab coats, unbutton lab coat starting at the bottom of the coat and shrug the lab coat off. Place into a laundry receptacle, sealed container, or disposable bag for washing.
  - c) Disposable gown:
    - i) Untie strap behind neck and back.
    - ii) Grasp the gown near the shoulders and pull off of the body.
    - iii) Dispose of used gown in appropriate trash receptacle.

- 2) Next, remove your contaminated gloves.

- a) Latex or Nitrile Gloves

- i) Start by gripping just below the cuff of one glove with the opposite gloved hand, being careful not to touch the skin with the contaminated hand.



- ii) Pull the glove down and off of your hand, keeping the contaminated glove in the still gloved hand.



- iii) Slide the pointer finger of your ungloved hand carefully under the cuff of your gloved hand.



- iv) Pull the glove down and off of your hand with the pointer finger of your opposite hand. Dispose of gloves in appropriate waste receptacle.



3) Lastly, remove your face coverings.

a) Face shield

- i) To remove a disposable face shield, untie the straps behind your head and neck. Move the shield away from your face using only these straps.
- ii) For a reusable face shield, grasp the plastic strap behind your head and pull the shield up and off of your head. Place the shield in a separate container or bag for decontamination prior to next use.

b) Face mask

- i) Removing a face mask with ear loops.
  - (1) If using a face mask or respirator with ear loops, pinch the portion of the loop that is behind your ear and pull it over and off of your ear.
  - (2) Still holding onto this loop, pull the mask off of your other ear, without touching the front of the mask.
  - (3) If the mask is washable, place into a laundry receptacle, sealed container, or disposable bag for washing.
  - (4) If the mask is disposable, place it into the appropriate trash receptacle.
- ii) Removing a face mask with ties.
  - (1) When using masks or respirators with tie straps, untie the straps and pull the mask away from your face using only the straps.
  - (2) If the mask is washable, place into a laundry receptacle, sealed container, or disposable bag for washing.
  - (3) If the mask is disposable place it into the appropriate trash receptacle.
- iii) Removing masks or respirators with elastic straps.
  - (1) Grasp the elastic pieces behind the head and pull up and off the head, giving caution not to touch the front of the mask.
  - (2) If the mask is washable, place into a laundry receptacle, sealed container, or disposable bag for washing.
  - (3) If the mask is disposable place it into the appropriate trash receptacle.

c) Goggles

- i) Grasp the elastic strap behind the head.
- ii) Pull the strap over the top of the head and away from your face.
- iii) Place the goggles into a sealed container or disposable bag for decontamination prior to next use.

d) Safety glasses

- i) Grasp the glasses by the temple and pull away from the face.
- ii) Place the glasses into a sealed container or disposable bag for decontamination prior to next use.

For all materials disposed of in a non-reusable plastic bag, tie open end of bag into a knot and

dispose into dumpster or outside garbage receptacle.



## Appendix B: Preparation of Disinfectant Wipes

Disclaimer: Read the health and safety information listed on the bottle of chlorhexidine 2% solution (for animal use) for proper use and handling of the product. Avoid direct contact with human skin, eyes, and mucous membranes. Ingestion may cause gastrointestinal problems. In case of accidental ingestion, call Poison Help 1-(800)-222-1222. Wear gloves while preparing wipes.

1. Prior to preparing solutions and wipes, don safety glasses to protect your eyes from splashes.



2. Obtain a medium-sized resealable container (approximately 9" by 9") and a measuring cup to prepare the disinfectant solution.



3. Measure 1/2 cup of 2% chlorhexidine solution (for animal use) and pour it into the resealable container.
4. Measure 1 and 1/2 cups of water and pour it into the resealable container.
5. Place the lid onto the container and gently swirl the solution to mix. Remove lid and set aside.
6. Obtain a packet of dry single use disposable wipes and remove approximately 25 wipes from the pack.



7. Place wipes into the container and press down on them to facilitate absorption.



8. Flip the stack of wipes over and press down on them to absorb the remaining liquid.



9. Place the lid back onto the container and reseal.
10. Store wipes in vehicle along with PPE and other materials needed for canine decontamination.

This document was created by Johns Hopkins Applied Physics Laboratory and disseminated with funding from the Department of Homeland Security's Science and Technology Directorate under contract 70RSAT19CB0000002. For more information, contact us at [STK9@hq.dhs.gov](mailto:STK9@hq.dhs.gov)