

GMR COVID-19 VEHICLE DECONTAMINATION PROCEDURES

VERSIONS:

March 11, 2020: Original

March 14, 2020: Added Decontaminating Ambulance with Fogger (Ground Unit Application) and Vital Oxide Precautions

March 18, 2020: Added revised helipad decontamination guidance; added revised medical equipment and oxygen cylinder guidance

March 19, 2020: Added Suggested Fogging Frequency

March 23, 2020: Added additional PPE and disinfectant supply, removed aircraft fogging procedures

March 30, 2020: Added provision for substitute products

April 1, 2020: Added Item # 147847

April 8, 2020: Added Supply and Fogger Video Hyperlinks

April 20, 2020: Added Fogger Unit Cleaning Procedures

GMR AIR AND GROUND VEHICLE COVID-19 DECONTAMINATION STANDARDS

Vehicle (air or ground) will be decontaminated after transfer of care at the receiving facility¹. Single person decontamination inside the vehicle should be performed to avoid incidental contact in the vehicle.

Applicability:

- Employees are engaged in the cleaning and decontamination of GMR air and ground vehicles (including air and ground maintenance staff and Vehicle Service Technicians)

COVID Approved Supplies:

[Approved Chemicals and PPE for Ground Use](#)

[Approved Chemicals and PPE for Air Use](#)

Important Note regarding Supply Orders: Unlike our normal SOP for medical supplies it is imperative we ramp up our PPE supplies to a 60-90 day PAR and more importantly to replenish that 60-90 day PAR weekly as we draw it down keeping in mind orders are filled on a first in / first out basis. McKesson has added messages to Supply Manager to discourage their customer base from ordering items they have no history of purchasing in the past. These messages do not pertain to GMR. Additionally, unusually large orders will likely be rejected and you will need to adjust accordingly.

¹ In the event that the aircraft must vacate the helipad PRIOR to decontamination; the pilot should secure the aircraft and leave his/her N95 on for the repositioning flight.

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Decontamination Procedures:

1. Vehicle doors should remain open for a minimum of 10 minutes prior to decontamination allowing sufficient air exchanges to remove airborne virus and throughout decontamination process to provide ventilation during use of decontaminants or bleach solution.
 - Note if ambulance doors require opening use clean gloves to touch door to avoid potentially contaminated door handles.
2. Properly don PPE². Click to link to [Instructional Video](#), [Printable Poster](#)
3. Lay impermeable decontamination sheet on the ground near the vehicle.
 - Ground ambulances lay decontamination sheet at the back of the ambulance and a post-decontamination sheet next to it (red biohazard bags/yellow infectious linen bags and extra gloves on each).
 - For aircraft, lay decontamination and post decontamination sheets at patient compartment door
4. Place potentially contaminated reusable equipment (monitors, portable oxygen cylinders, etc.) on the decontamination sheet.

NOTE: Portable, installed main oxygen cylinders and cylinders stored for cascade operations will be cleaned and disinfected in accordance with these guidelines PRIOR to vendor pick up. Empty Oxygen Storage areas will be placarded “Empty Decontaminated Oxygen Tanks Only”.

- *Potentially contaminated equipment that requires manufacturer special cleaning instructions may be bagged for later cleaning.*

NOTE: External surfaces should be decontaminated PRIOR to shipping and no disposable probes, circuits, tubing, etc. should be packaged with the equipment being returned.

5. Place linen in yellow infectious linen bags for proper cleaning later.
6. Remove any contaminated materials from reusable equipment and decontaminate by wiping down all surfaces and placing used rags/wipes in red biohazard bag (leave red bag on decontamination sheet close to accessible edge).
7. Place decontaminated equipment on post-decontamination sheet for drying.
8. Absorb/wipe any liquid or solid spills.
9. Clean and decontaminate all potentially contaminated surfaces inside ambulance patient treatment area and pilot/driver/passenger compartment. Special attention should be given to high contact areas such as control panels, floors, walls, cabinet facings, seats, cot, mounts, door handles as well as main oxygen cylinder with recommended decontaminant and dispose of in red biohazard bag.
10. Place red biohazard bag at edge of decontamination sheet.
11. Properly Doff PPE at edge of decontamination sheet while stepping off the sheet. (leave doffed PPE on sheet).

² [https://www.globalmedicalresponse.com/getattachment/Resources/Emerging-Infectious-Diseases/Caregiver-Information/GMR-COVID19-Guidelines-for-Preparation-and-Response-\(3-4-20\).pdf?lang=en-US](https://www.globalmedicalresponse.com/getattachment/Resources/Emerging-Infectious-Diseases/Caregiver-Information/GMR-COVID19-Guidelines-for-Preparation-and-Response-(3-4-20).pdf?lang=en-US)

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12. Use alcohol-based hand sanitizer.
13. Don clean pair of gloves from post decontamination sheet.
14. Place used red biohazard bags in new ones from the post-decontamination sheet.
15. Fold up the decontamination sheet with PPE inside by touching the clean underside of the sheet and place in red biohazard bag.
16. Doff and dispose of gloves in red biohazard bag.
17. After surfaces dry, place equipment back in vehicle.
18. Dispose of post-decontamination sheet by folding up the same as the decontamination sheet.
19. Wash hands thoroughly or use Alcohol based hand sanitizer
20. Dispose of used red biohazard bags according to local procedures for regular medical waste.
21. It may be possible that a person can get COVID-19 by touching a surface or object that has the virus on it and then touching their own mouth, nose, or possibly their eyes, but this is not thought to be the main way the virus spreads (air and ground maintenance staff and Vehicle Service Technicians should utilize the protective equipment and procedures discussed in this document).

Decontaminating Ambulance with Fogger (Ground Vehicle Application)

To disinfect ambulance patient care compartment by fogging using the Concrobium Fogging Unit with Vital Oxide Solution.

Vital Oxide comes ready to use as a full-strength disinfectant for non-porous surfaces. Full strength should be used in environments with highly infectious diseases in high touch point areas.

Vital Oxide removes blood and other organic matter commonly found in patient care industry. Vital Oxide may be used to pre-clean or decontaminate critical or semi-critical medical devices prior to sterilization of high-level disinfection. Blood and other body fluids must be thoroughly cleaned from surfaces and objects prior application of this product.

CAUTION: If bleach solution is used in decontamination area PRIOR to fogging with Vital Oxide wipe areas with water or allow bleach to dry for 30 minutes before using Vital Oxide to prevent chemical overlap.

CAUTION: Do not leave fogger unattended while operating.

[Fogging Instructional Video](#)

1. When no fogger and/or Vital Oxide solution is available standard decontamination process provide more than adequate protections and should be applied.
2. Prior to utilizing the fogger, prepare ambulance in accordance with the decontamination procedures listed above.
3. Remove Fogger power head from tank and add 5-7oz. Vital Oxide solution to fogger tanks and fasten clamps to secure power head.
4. Install intake air filter to protect motor from intake of product moisture. Intake filter installs over louvers of rear housing of fogger. Attach the two adhesive backed hook fasteners to 10 o'clock

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and 2 o'clock positions, anchor bottom of filter and stretch elastic over housing.

NOTE: Filters can be cleaned and reused as they become soiled.

5. Plug extension cord into fogger unit leaving unplugged at power source.
6. Remove any contents that can become damaged if wetted.
7. Adjust liquid flow rate knob at side of fogger head to Low.
8. Open doors of ambulance and place fogger at one end of patient compartment area with nozzle pointing towards patient compartment area.
9. Place fogger on stable platform, approximately two feet above ambulance floor, to better center fogger nozzle vertically in the compartment space.
10. Do not direct spray nozzle at surfaces to avoid over application and interference with fogging.
11. Close ambulance doors being careful not to damage power cord.
12. Plug extension cord into power source allowing fogger to operate for recommended timeframe, see *Table 1 for Approximate Fogger operating times*.
NOTE: Due to various factors; ambulances dimensions, environmental temperature, humidity, altitude etc., fogging times *will* vary and should adjusted slightly to coat inside of unit to thoroughly coat surfaces without creating run-off or pooling. If run-off or pooling occur, decrease fogging time.
13. After recommend fogger operating timeframe has been met, unplug the extension cord at power source.
14. Leave doors closed allowing fog to penetrate and dissipate for 15-20 minutes.
15. After fog has dissipated for the required time, open all ambulance doors to ventilate area and allow air exchange. Product may require additional dry time.
16. Run-off and pooling are a sign of over-application and can be wiped up with rags/towels.
17. To prevent oxidation of tank and fogger components between uses:
 - a. Remove tank and funnel remaining Vital Oxide back into original container.
 - b. Fill tank with water, attach fogging unit and agitate to rinse internal tank and lid.
 - c. Run fogger on high setting for 1-minute to rinse lines with water.
 - d. Remove fogging unit from tank and run on high for 1-minute to clear lines.
 - e. Wipe down internal tank and lid with rag.
18. Use a surgical or dust mask (not N-95 or greater) to avoid mucosal irritation if exposed to atomized solution.
19. Suggested frequency-The suggested fogging frequency is once per shift for vehicles that have transported known or suspected COVID 19 patients. Fogging between patients transports is not warranted. Suggested frequency is based upon availability of material and supply and standard decontamination procedures remain our primary means of ensuring that vehicles are cleaned and disinfected.

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Table 1

Approximate Fogger Operating Time on **LOW** Setting

| Ambulance Type | Approximate Cubic Feet | Approximate Fogging Time (minutes) |
|---------------------|------------------------|------------------------------------|
| Ground Units | | |
| Type I | 540 | 5:30 |
| Type II | 528 | 5:15 |
| Type III | 576 | 5:45 |

Vital Oxide Precautions

Eye Exposure

Hold eye open and rinse slowly with water for 15-20 minutes. Remove contact lenses after the first 5 minutes and continue rinsing. Call a poison control center or doctor for treatment advice. Have the product container or label with you when calling a poison control center or doctor or going for treatment

Storing

Store Vital Oxide in original closed container in a cool, dry place away from heat and open flames. Do not allow product to become overheated in storage. Avoid prolonged storage temperature above 40°C or 90°F, which may cause increased degradation of the product and effectiveness. Vital Oxide shelf-life, if properly stored;

- Unopened – 24 months
- Opened – 12 months