Guidance for Vehicle Use

1 Document framework
This document is intended for all users of MSF Vehicles or rental vehicles used for the movement of MSF staff or for transporting patients in a sitting position (suspect/confirmed, with or without caretaker).

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Version | Date | Name / Position | Validation
---|---|---|---
Initial OCP | 20 April 2020 | Daniel Moglia; motorized fleet technical referent | Validated
3 Preparation

3.1 Operational

Vehicle use will be impacted by the pandemic, so it must be included in the strategy of movement and use of vehicles.

It is therefore essential to assess the real need and capacity of your fleet of vehicles by considering the following:

- Reduction of HR capacity due to confinement context
- The reduction in transport capacity per vehicle due to the reduction in available seats (respect for distances between passengers).
- The time it takes to clean-disinfect vehicles
- Should the driver be isolated or not, should he actively help with the loading of patients, availability of PPE
- Other specific contextual criteria.

Note: Avoid sharing vehicles between several drivers as much as possible in the same day.

3.2 Of vehicles before 1st use in a Covid 19 context

- Clean and disinfect the vehicle using the "daily" and "weekly" procedure (see "maintenance and disinfection of the vehicle").
- Remove from the vehicle anything that is not absolutely necessary.
- If possible, protect the vehicle's seats with machine washable or waterproof protective covers. It is also possible to use single-use covers. See examples in Appendix.
- Set up the on-board equipment, see next paragraph.
- Make on-board access plans, determine the number of passengers and seats to be occupied, display them.
- display available prevention signs inside and outside the car.

4 On-board equipment

In addition to the mandatory on-board equipment, provide:

4.1 PPE (Personal Protective Equipment)

- Masks provided by your MSF medical service
- Disposable gloves
- Household gloves (reusable after cleaning)

4.2 Other equipment

- Hydro-alcoholic gel
- Hand sprayer with disinfectant cleaner (see Appendix 2)
- Hand sprayer with water for rinsing if necessary (see Appendix 2)
- Disposable wipes or fabrics
- If possible, handwashing water in an easy-to-handle container
- soap
- Garbage bags
- This document
- If several drivers in the same day: the maintenance registration sheet (see Appendix 1)
5 Use of the vehicle

5.1 Special precautions

In addition to the usual barrier gestures in this context (safety distance, coughing/sneezing in the elbow hollow or a disposable handkerchief thrown immediately after use, hand hygiene), it is important to respect the following gestures:

Before each daily use or between each transfer / after transporting suspected or confirmed patients / soiled

- The driver cleans and disinfects the vehicle using the "daily" Protocol (see paragraph 7 - Cleaning/maintenance and disinfection of the vehicle)

Before getting into the vehicle

- Driver and passengers wash their hands with a hydro-alcoholic solution or water and soap.
- The driver tells the passengers their respective seats by respecting 1 m of distance between each person. See paragraph 5.2 People's placement in Vehicles.

On board the vehicle

- Drive windows open: Each passenger open his window to enable the air flow.

- Use of heating and air conditioning: only if windows open; never activate inside air recycling.

Before getting out of the vehicle

- The driver will communicate the arrival at the health center so that staff can prepare and minimize contact between patients.
- Driver and passengers close their windows.

After getting out of the vehicle

- Driver and passengers wash their hands with a hydro-alcoholic solution or water and soap.
- The driver may eventually clean/maintain/disinfect his vehicle as well as dispose of waste if necessary (see criteria in paragraph 7 - Cleaning/maintenance and disinfection of the vehicle).
5.2 Seat allocation in Vehicles

The space and distance between people must be considered to minimize the risk of transmission. The rule is to respect at least 1.00 m distance between each person on board.

Be careful, you have to respect rules to apply in your country concerning the transportation.

Separation in the vehicle

The driver has to be alone in the front. The physical separation of the driver from its passengers using a fixed or removable wall is to be encouraged (to see example on appendix 3). This allows him to avoid the wearing of PPE and to have to disinfect his cabin after each passenger/patient journey.

Example of seat allocation in Land Cruiser HZJ8 "Hard Top"

Example of seat allocation in a Land Cruiser HZJ76 or HZJ79 "Double Cabin"

Seat Allocation in a Land Cruiser HZJ9 "Simple Cabin"
Example of seat allocation in city vehicles

2-row vehicle + partition (5 seats)

3-row vehicle (7 seats)

Example of seat allocation in mini bus

Maximum 1 person per seat row when using a minibus

Véhicule WITHOUT partition

Véhicule WITH partition
6 Personnal Protection Equipment (PPE)

Mask, surgical or tissue but has to be validated by medical MSF

<table>
<thead>
<tr>
<th>Concerned people</th>
<th>Activity</th>
<th>Type of procedure or PPE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Driver</td>
<td>Vehicle equipped with a partition, or driver alone on board</td>
<td>No PPE</td>
</tr>
<tr>
<td></td>
<td>Help load and unload suspect or confirmed patients</td>
<td>Mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye protection</td>
</tr>
<tr>
<td></td>
<td>Vehicle without partition, no direct contact with suspicious or confirmed patient.</td>
<td>Mask</td>
</tr>
<tr>
<td>Suspected or confirmed patient</td>
<td>Transportation to the reference health facility</td>
<td>Mask and respect 1 meter distance</td>
</tr>
<tr>
<td>Non-suspicious passenger</td>
<td>Vehicle not equipped with a partition</td>
<td>Mask and respect 1 meter distance</td>
</tr>
<tr>
<td></td>
<td>Vehicle equipped with a partition</td>
<td>1 passenger:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>No PPE</td>
</tr>
<tr>
<td></td>
<td></td>
<td>From 2 passengers:</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mask and respect 1 meter distance</td>
</tr>
<tr>
<td>Care taker</td>
<td>Intervenes on patient during transfer</td>
<td>Mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye protection</td>
</tr>
<tr>
<td>Cleaning staff</td>
<td>Cleaning after and between transporting suspected or confirmed patients</td>
<td>Mask</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gown</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gloves</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Eye protection</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Closed work boots or shoes</td>
</tr>
</tbody>
</table>

7 Cleaning and disinfection

7.1 Generalities:

The cleaning of the vehicle is done by trained personnel and equipped with the appropriate PPE. This may be the driver who was trained for it.

The cleaning of the vehicle is done with the doors open (allows a good air renewal), and empty of any equipment.

The cleaning of the vehicle is done with clean reusable cleaning gloves if the hand sprayer is used.

If wipes are used, single-use gloves can be used.

Don't forget to wash and disinfect hands with a hydro-alcoholic solution after taking out the gloves.
### 7.2 Waste disposal

**Common waste**: (masks, gloves, gown, wipes, disposable seat covers...) are left in a garbage bag and disposed of in the single garbage can (domestic waste).

If **medical waste** (needles, sharps, etc.) the medical staff will take care of its waste, or, it is arranged in a safety box type “safety box” and stored separately in the vehicle (in a garbage bag). This waste must be disposed of in a suitable structure (hospital).

### 7.3 Recommendations on cleaning and disinfection

**You only disinfect what is clean**

If necessary, clean surfaces with detergent (soap) use a sponge, a cloth. Be careful not to put water on risk areas such as radio or dashboard selectors.

Then disinfect with a suitable product (see Appendix 2).

**Beware**, too much water or chlorine will damage the equipment.

**Technic**: always from the dirtiest to the cleanest, from the top down and from the inside out.

<table>
<thead>
<tr>
<th>Frequency</th>
<th>Type of equipment</th>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daily</td>
<td>• Dashboard&lt;br&gt;• Steering wheel&lt;br&gt;• Selectors and control buttons&lt;br&gt; • Radio, GPS screen&lt;br&gt; • Rear mirror&lt;br&gt; • Gear shifter&lt;br&gt; • Handbrake&lt;br&gt; • Inside doors (glass lift, handle…)&lt;br&gt; • Interior windows&lt;br&gt; • Outdoor handles&lt;br&gt; • Mobile phone&lt;br&gt; • Vehicle keys&lt;br&gt; • Pens, logbook&lt;br&gt; • Seat belt and buckle</td>
<td>Clean and disinfect</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between each transfer</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After transporting suspected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or confirmed patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soiled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>• Roof&lt;br&gt; • Seats&lt;br&gt; • Lateral panels and Doors&lt;br&gt; • Carpet&lt;br&gt; • Floor&lt;br&gt; • Cleanable seat covers (waterproof)</td>
<td>Clean and disinfect</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>After transporting suspected</td>
<td></td>
<td></td>
</tr>
<tr>
<td>or confirmed patients</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soiled</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Weekly</td>
<td>• Fabric seat covers&lt;br&gt; • Work clothes</td>
<td>Machine Wash at 60°C</td>
</tr>
<tr>
<td>OR</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Soiled</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
8 Appendix 1: Example of cleaning and disinfecting record sheet

<table>
<thead>
<tr>
<th>Vehicle</th>
<th>Week from</th>
<th>Remark</th>
<th>at</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Monday</th>
<th>Tuesday</th>
<th>Wednesday</th>
<th>Thursday</th>
<th>Friday</th>
<th>Saturday</th>
<th>Sunday</th>
</tr>
</thead>
<tbody>
<tr>
<td>DAILY</td>
<td>Clean and disinfect</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dashboard</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Steering wheel</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Selectors and control buttons</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Radio, GPS, screens</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mirrors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gear shifter</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hand break</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insides doors (glass lift, handles)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Interior window</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Outdoor handles</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mobil phone</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seat belt and buckle</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pens and logbook</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Name</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Signature</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>WEEKLY</th>
<th>Clean and disinfect</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Interior roof and doors panels</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Seats</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Floor and carpets</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fabric seat cover and work clothes; to wash at 60°C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Date / name / signature</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
9 Appendix 2: Common cleaning and disinfection products

Consult your Watsan referent, IPC or Hospital Hygiene Manager in case of doubts.

For all products, follow the manufacturer or your referent recommendations for:
- Concentration and mode of dilution
- Contact time

Remark: when you use a spray, never spray directly on the surface but in the paper towel.

9.1 Hand sprayer with 0.1% chlorinated solution + rinse:

Provide 2 sprayers: 1 opaque for chlorinated solution, the other for rinse water.
- Prepare 0.1% chlorinated solution in an opaque sprayer in advance; Do not spray directly on the surface to be cleaned but in the paper towel and then wipe it on the surface, wait 5 minutes.
- Rinse with the other water-filled sprayer. Same process; do not spray directly on the surface to rinse but in the paper towel and then wipe it on the surface to rinse.

9.2 Hand sprayer with Surfanios Premium solution at 0.25%
- 0.25% active product dilution, harder to find outside the hospital environment
- To be prepared in an opaque sprayer. Do not spray directly on the surface to be cleaned but on a paper towel and then wipe it on the surface, let it act 15 minutes.
- Do not rinse with water.
- Discard the rest of the Surfanios Premium solution at the end of the day.

9.3 If available, Alcohol 70% (isopropylic)
- Apply on paper towel, then wipe it on the surface to be disinfected.
- No rinsing.
- Preferable for electronic equipment (Radio, GPS, Screen, Phone...).

Warning: highly flammable!

9.4 If available, standard virucide wipes EN 14476:
- For example, ARSILOM ; ARVO 21 SR ; ASEPTIL ; SANYTOL.
- Refer to the manufacturer's recommendations for application and contact time.

9.5 If available, standard virucide hand spray EN 14476:
- For example Sanytol.
- Do not spray directly on the surface to be cleaned but in the paper towel and then wipe it on the surface.
- Some products require a rinse, in this case provide a sprayer with water. Do not spray directly on the surface to be cleaned but in the paper towel and then wipe it on the surface.
10 Appendix 3: Example of separator partitions

**Objective**: Isolate the front part from the rear part of the vehicle.

If installing a driver separator, its surface should be washable and disinfectable.

**Temporary installations**: local plywood and plastic sheeting should be used as such. Remove and dispose of when washing and disinfection condition becomes degraded.

<table>
<thead>
<tr>
<th>Partition in washable canvas</th>
<th>Clear plastic partition</th>
</tr>
</thead>
<tbody>
<tr>
<td>The surface should be covered with washable paint or plastic sheeting</td>
<td>Partition in plexiglass, not waterproof; the vehicle is considered as not equipped of partition</td>
</tr>
</tbody>
</table>
11 Appendix 4: Examples of seat protection covers

<table>
<thead>
<tr>
<th>Washable waterproof covers</th>
<th>Non waterproof, machine washable fabric covers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Washable waterproof covers</td>
<td>Disposable waterproof covers</td>
</tr>
</tbody>
</table>

12 Reference documents

Check if there is the latest update,

- IPC Contact Group and WatSan Working Group, MSF Environmental Health guidance in COVID-19
- Personal Protective Equipment (PPE) Guidance in COVID-19
- MSF IPC WatSan Intersection Environmental Health Covid-19 Guidance FR
- WHO-2019-nCoV-IPC-2020.3-eng