

 <b>Heli Austria</b> <small>www.heli-austria.at</small>	<b>MINI SOP</b> <b>COVID 19 – HEMS OPERATION</b>				
	<b>ISSUE NO:</b> <b>00</b>	<b>REVISION NO:</b> <b>00</b>	<b>EFFECTIVE DATE:</b> <b>28-03-2020</b>	<b>PRODUCED BY:</b> <b>HELI AUSTRIA GMBH</b>	<b>Released by PCT/P.Köhle</b>

**Valid from:** 28.03.2020 until revoked

**Valid for:** HEMS Martin Flugrettung

**Crew:** Pilot / HCM / Doctor (Medical Passenger)

**Helicopter:** MD902 / H145 / H135

**Content:** In the following MINI SOP, is the description of the daily routine, operational sequence and the PSA of the crew, as well as the protective equipment for the patient during the COVID-19 outbreak.

**Obligation:** Each crew member must be instructed on this SOP and trained accordingly.

## !! CAUTION !!

**Due to the current infection situation (Corona Virus), EVERY patient in the  
 Primary and Secondary Rescue/Transport is considered as potentially infectious!  
 Direct patient contact is therefore only possible with the appropriate protection of the crew.**

### 1. BASICS

- There must be a distance of **at least 3 meters** between crew members. If a lesser distance is necessary, this is only permitted with a mask and gloves, but **not less than 1 meter**. Coughing people must be kept at a distance of **at least 5 meters**.
- **Masks are mandatory** when two or more people are in the same room!
- Each crew member is to only use **the labeled chairs/seats assigned to him**.
- There is **no sitting across from each other or sitting together** - whether at the PC, eating, or on the couch.
- **Mixing** with technicians or transport crews **is not permitted** (stay in the bedroom or lounge).
- Maintain **hand hygiene** (wash hands thoroughly with soap and water for 30 sec.).
- Adhere to the **coughing and sneezing** in your elbow.
- **Protective equipment** for crew and patient is mandatory.

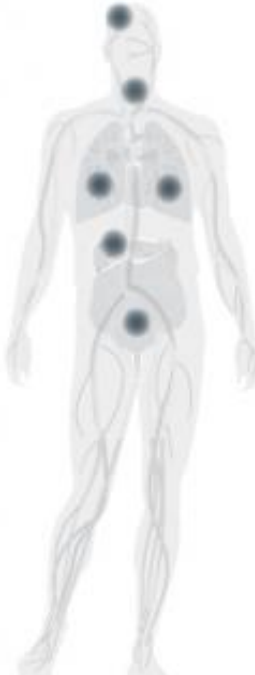
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## 1. EXCLUSION CRITERIA FOR CREW MEMBERS

- Body temperature over 37.5 ° C
- Caughing
- Shortness of breath

### Coronavirus symptoms

2019 Novel Coronavirus identified in Wuhan, China



**Common signs of infection**

- Fever
- Cough
- Diarrhea
- Shortness of breath
- Breathing difficulties
- Gastro-intestinal symptoms

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**Severe cases**

- Pneumonia
- Severe acute respiratory syndrome
- Kidney failure
- **DEATH**

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**Treatment**

- No vaccines or antiviral drugs available
- Symptoms can be treated

Sources: WHO/CDC 

If a crew member does not feel **FIT TO FLY**, this must be **immediately** reported to the flight operations management.

It is each crew member's **OWN RESPONSIBILITY**. If you are not feeling well, please stay at home and report this to the flight operations management as soon as possible!

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### 3. DAILY PROCEDURE HEMS BASE

#### ARRIVAL AT HEMS BASE

- Clothing:
  - Arrival in private clothes
  - Work clothes that are brought from home, before your first work week (washed and cleaned with hygienic detergent) must be brought in a sealed container.
- Disinfection of shoes and hands at the disinfections bath area

Disinfections bath area



Shoe disinfection (> 30 sec.)



Hand disinfection



- Control of body temperature by HCM, and entry in the 'Temperature Measurement List' by the pilot on duty (repetition every 3 hours!)
- Now go directly to your own room (bedroom) and change from private to official work clothing.
- Do not put the climbing harness on; this is in its own bag - see below under "Alpine Call-out".
- Preparation of the helicopter

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**BEFORE  
ENTERING  
THE LOUNGE**

- Hand disinfection
- Disinfections bath: Put on the FFP3 mask and protective gloves

Disinfections Room



- Preparation of the PPE in the disinfections room (see point 4 + 5)

**WITHIN THE  
LOUNGE**

- Masks are mandatory when two or more people in the same room!
- Maintain a minimum distance between crew members (3 meters or more, not less than 1 meter).
- It is preferred that you stay in your bedroom.
- Each crew member has their own chair and place at the table, which they keep (labeled).



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- Alternate eating (on the predefined, labeled space)
- The lounge must be disinfected every 2 hours by the HCM, or after every call-out.
- The computer station is to be used individually and with disposable gloves.
- Don't forget: Measure your body temperature every 3 hours!

**DAY END**

- Final check of the COVID symptoms described above (cough, shortness of breath and body temperature)
- Send the temperature measurement list to Roy, Saskia, Anita, Boris & Matthias
- Change in the respective bedrooms
- Work clothing remains at the base and is processed (washed) by the HCM and stored in labeled containers after washing and drying.
- A description of how to use the washing machine and dryer is available.

Laundry room



Laundry Container per crew member



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#### 4. OPERATIONAL SEQUENCE HEMS MISSION

##### ALARM

- Put on the provided personal protective equipment. This is provided in the disinfections room. (see below, Point 6)

Protective gear



- Pilot: Protective suit / FFP 3 mask (until FM53 mask is available) / 2 x disposable gloves
- HCM: Protective suit / FFP3 mask / 2 x disposable gloves / safety glasses
- Doctor: Protective suit / FFP3 mask / 2 x disposable gloves / safety glasses / 3M half mask 7502 stowed in the helicopter for longer transports or for COVID flights


##### BOARDING EMS HELICOPTER

- Doctor and HEMS crew members in the cabin (with I-Pad), except for EMS HELICOPTER-hangars with high radio load → HEMS crew does their usual job in the cockpit
- Coordinates are entered while on the ground
- The pilot remains in the cockpit during the entire operation

##### ARRIVAL AT THE HEMS OPERATING SITE

- Immediately put a protective mask on the patient (FFP1)
- Bring only the most necessary emergency equipment close to the patient
- HCM remains 'clean' and provides the Doctor with the necessary medical equipment; if possible, the supporting Red Cross SEW / RTW, NRW crews should be involved in the process
- Integration of the HCM only in absolute necessary situations (otherwise he stays with the helicopter)
- Communication between Doctor and HCM via 2m company radio

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ALPINE RESCUE	<ul style="list-style-type: none"> <li>When HEC/slinging is required, the complete flight harness is only put on after the decision has been made. This is immediately taken off again after the HEC flight and deposited in its bag in the helicopter.</li> </ul> <p style="text-align: center;">Bag for flight harness</p>  <ul style="list-style-type: none"> <li>If there is a need to transport support personnel, they must be equipped with a protective mask (FFP2) and disposable gloves.</li> </ul>															
SUSPECTED COVID / COVID CONFIRMED	<ul style="list-style-type: none"> <li>Immediately inform the company management via WhatsApp or email; a call is also possible if anything is unclear.</li> <li>Inform „Leitstelle“</li> </ul> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td>FBL Roy Knaus</td> <td>+43 664 8044080</td> <td><a href="mailto:r.knaus@heli-austria.at">r.knaus@heli-austria.at</a></td> </tr> <tr> <td>Dep. FBL Jürgen Köll</td> <td>+43 664 8044024</td> <td><a href="mailto:j.koell@heli-tirol.at">j.koell@heli-tirol.at</a></td> </tr> <tr> <td>Dr. Boris Buck</td> <td>+43 664 8044083</td> <td><a href="mailto:b.buck@martin-flugrettung.at">b.buck@martin-flugrettung.at</a></td> </tr> <tr> <td>Dr. Matthias Stark</td> <td>+43 664 8044085</td> <td><a href="mailto:m.stark@martin-flugrettung.at">m.stark@martin-flugrettung.at</a></td> </tr> <tr> <td>PCT Philipp Köhle</td> <td>+43 664 80 44077</td> <td><a href="mailto:p.koehle@heli-austria.at">p.koehle@heli-austria.at</a></td> </tr> </table>	FBL Roy Knaus	+43 664 8044080	<a href="mailto:r.knaus@heli-austria.at">r.knaus@heli-austria.at</a>	Dep. FBL Jürgen Köll	+43 664 8044024	<a href="mailto:j.koell@heli-tirol.at">j.koell@heli-tirol.at</a>	Dr. Boris Buck	+43 664 8044083	<a href="mailto:b.buck@martin-flugrettung.at">b.buck@martin-flugrettung.at</a>	Dr. Matthias Stark	+43 664 8044085	<a href="mailto:m.stark@martin-flugrettung.at">m.stark@martin-flugrettung.at</a>	PCT Philipp Köhle	+43 664 80 44077	<a href="mailto:p.koehle@heli-austria.at">p.koehle@heli-austria.at</a>
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AFTER PATIENT DELIVERY	<ul style="list-style-type: none"> <li>Disinfection wipe-down of all equipment used in the clinic/hospital</li> </ul>															

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**ARRIVAL AT HEMS BASE**

- Refueling in PPE
- Disinfections wipe-down of the EMS Helicopter and the equipment
- Replacement of the ventilator hose system after each use
- Pilot protective suit removal by the HCM; thus the pilot is outside the contaminated area and has no contact with the others.
- Protective suit removal of the HCM by the Doctor
- HCM collects replenishment material and places it outside of the disinfections room (container exit towards the helicopter) so that the Doctor can load the Doctor backpack.
- Protective suit removal of the Doctor (through the disinfections room) by himself, if possible.
- Provision of new PPE by the HCM
- Discharge process through disinfections room:
  - Take off the disposable protective suit before entering the container. This prevents the container from being contaminated. Put the protective suit in the garbage bag provided for it. (see below, point 6)
  - Shoe disinfection (> 30sec.)
  - Put gloves in the garbage bag provided for this
  - Hand disinfection
  - Put new gloves on
  - Exchange masks (half mask for FFP3)
  - New masks and protective suits prepared by the HCM
  - Disinfections room disinfected by HCM
  - Leave the disinfections room
  - Disinfect shoes and hands
  - Return to the lounge or bedroom

→ **This procedure must be shown!**

Container Outside



Container inside (Disinfections room)



**IMPORTANT: REDUCE CONTACT WITH THE DOCTOR TO AN ABSOLUTE MINIMUM!**



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### 5. PPE FOR THE CREW

#### MASK

- FFP3 mask
- Daily shaving is imperative for the tight fitting of the mask!
- Mask is personalized (labeled)!
- Use the visor



#### SAFETY GOGGLES

- Not necessary for the pilot



#### 2 PIECE DISPOSABLE GLOVES



#### DISPOSABLE PROTECTIVE SUIT



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## 6. DONNING AND DOFFING PPE

### DONNING

PPE used must be applied in the following order:

- Apply 1st pair of disposable gloves
- Apply coverall without zipping up and leave hood down at this stage
- Apply FFP3 respirator
- Apply eye protection
- Apply coverall hood, zip up coverall then close small storm flap, large storm and chin flap in that order
- Apply thumb loops on coverall
- Apply 2nd pair disposable gloves over suit cuffs- ensure no skin is showing between coverall and gloves

### DOFFING

Used PPE must be removed in the correct order to prevent contamination. Doffing (removal) of PPE when using FFP3 respirator and eye protection is described below.

Follow the order below with the support and observation of your crewmate to ensure the risk of contamination is minimised:

- Wipe boots with surface cleaning wipes if required and remove outer gloves
- Open all external flaps on coverall exposing the zip
- Undo zip and remove coverall (avoid touching the outside) roll down to feet remove and dispose
- Remove inner gloves
- Perform hand hygiene
- Remove eye protection from the back and dispose
- Remove respirator without touching the front and dispose
- Perform hand hygiene
- Wash hands with soap and water as soon as possible

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## 7. PROTECTIVE EQUIPMENT FOR PATIENT

### MASKS

- The FFP1 is used for patients

min. surgical mask FFP1



**OR**

FFP2 Mask



**OR**

FFP3 Mask WITHOUT valve

