

Embalming Guidelines for Confirmed or Suspected COVID-19 Cases

By Karl Wenzel

The following is based on information available as of April 13, 2020.

1. These are in addition to all recommended removal guidelines¹.
2. Wear full PPE with N95 respirator or greater
3. Preferably two individuals -- one active in handling the case and the second cleaning and passing instruments. This will avoid cross contamination of the work area.
4. Deceased must have facial area covered with a barrier prior to any manipulation (suggested disinfectant used as barrier), and entire remains must be sprayed down with disinfectant.
5. Deceased clothing and personal effects must be bagged and then double bagged in a way not to contaminate the second bag.
6. Deceased (with facial area covered) receives a complete cleansing with a disinfectant soap. Adhere to “contact time” of the product used.
7. A plastic, see-through barrier must be placed over the entire head area creating another barrier. The facial area should be also cleansed.
8. Clean eyes, nose, ears, mouth and throat using a strong disinfectant. Adhere to the contact time of the product. The plastic barrier must remain in place as you can work with your hands under the plastic at all times.

¹ The full list of recommended removal guidelines can be found in a previous ICCFA article, “What Should Deathcare Providers Be Doing Right Now”, March 16, 2020. Part of the article explained that for removals: Use your PPE, which would include a N95 mask and face shield along with all other PPE. Do not wear funeral suits as not to transmit anything that may come in contact with the fabric. It is important to notify the family in advance that the removal team will be wearing complete protective equipment, so the family is prepared. Actively disinfect your equipment after every use including disinfecting the service vehicles after each use. You can do this with chlorine bleach diluted at a 1:10 ratio. An example of that would be 1.5 cups of chlorine bleach to water. Gloves MUST be worn during the transfer. Gloves and appropriate PPE should always be worn. Disinfection using appropriate disinfecting sprays should always take place before and after moving the deceased. Cover the nasal and mouth area of the deceased with a barrier to eliminate the aerosolizing of particulates from the lungs during movement is imperative.

9. After the nose, mouth and throat are cleaned, place packing (i.e. cotton) with disinfectant into the throat and nasal area in attempts to completely occlude the passages from the throat leading to the nose and mouth.
10. Set features accordingly.
11. Raise vessels and prepare for arterial injection.
12. Mix an arterial solution no less than 3-4% and increase as needed throughout the procedure.
13. Use a drain tube for your drainage to create a closed system between you and the blood discharged during the embalming. The hose leading off the drain tube should be placed down into the waste drain to prevent exposure to the blood as much as possible. THERE SHOULD BE NO FREE-FLOWING DRAINAGE DOWN THE TABLE.
14. Begin your injection on a closed system (drain tube closed). A low rate of flow is suggested so you don't cause distention.
15. Allow as much injection to take place without causing distention or risking purge. Remember, the plastic barrier is still in place over the head and facial area.
16. When you have injected a sufficient amount of chemical, turn the machine off and wait for 15-20 minutes to allow the chemical to work and accomplish as much disinfection as possible in the allotted time.
17. Begin injection again and open drainage to allow the release of pressure.
18. Perform intermittent drainage throughout the embalming process, allowing pressure to build and then release.
19. Follow normal embalming procedures to ensure a well embalmed body (i.e. use more arterial chemical if needed per case analysis). Stop after arterial injection.
20. Wash and disinfect remains again (terminal disinfection).
21. DO NOT aspirate the remains for a minimum of 24-hours after arterial injection.
22. *NOTE: Some are suggesting that cavity or disinfectant be hypo injected into the lung area at this time. Many are finding that this is creating purge and the risks of purge overnight.
23. If necessary, aspiration can be completed following the 24-hour minimum wait time. This allows the arterial chemical under arterial pressure to work and disinfect as much as possible before aspiration begins.
24. *NOTE: If aspiration is not felt to be a necessity then forgo any aspiration.
25. When aspiration begins, place a disinfecting cloth around the aspiration site. Make sure the trocar is in contact with that cloth throughout the entire process.
26. *NOTE: If using a hydro aspirator, be very cautious. If backflow happens then the trocar must not be removed from the remains. Turn off the system immediately.
 - a. Hydro aspirators feeding into a commode/toilet need to have a splash

cover over the discharge area to prevent droplet spray and aerosolization of the discharge.

- 27.** Place a strong gas inhibitor cavity fluid into the chest area no higher than the clavicle to aid in reducing possible purge. A second bottle (pending body size) can be placed to lower abdominal area.
- 28.** Disinfect site and clean and disinfect remains.

- 29.** *NOTE: Your main barrier between this virus and exposure is your proper attire of PPE. Follow proper donning and doffing procedures and wash your hands immediately before and after the procedure.



A special thank you to Karl Wenzel, Founder of the Canadian School of Advanced PREP, for providing this information. Karl has been in the funeral profession for 25 years. For the last 12 years Karl has been heavily involved in the preparation room and education surrounding the handling of human remains both safely, and with the outcome that families deserve for viewing purposes. Karl speaks nationally and internationally on topics that involve proper techniques and care of handling remains. Karl puts a lot of effort into the health and safety of embalmers and how they can effectively do their job for the families, yet also focus on personal risks and how to handle them. He founded the Canadian School of Advanced PREP which focuses in on handling difficult case embalming, and in late 2019 he launched Genelyn Canada Inc. (genelyn.ca) and began to distribute a new form of less toxic, low fuming, formaldehyde based embalming chemical to funeral homes.