

Disclaimer: We kindly ask to acknowledge that due to the diverse and heterogeneous nature of the questions and the dynamic pandemic situation some of the information might be incomplete or only correct for the time being. Thus, please consider the date and date of the last update with the below information. All available information was provided by a country representative from the PHIRI network during or in connection to the respective meeting.

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Country	Protocols/procedures for treatment of moribund COVID-19 patients	Additional information
Austria	<p>There are recommendations from Austrian expert associations for palliative care considering pharmaceutical and non-pharmaceutical interventions for dying patients with COVID-19. They both focus on interventions to provide relief from (severe) dyspnea. Find here (in German): https://www.hospiz.at/wordpress/wp-content/uploads/2020/03/OPG.DokumentCOVID19-2020_03_25-final.pdf https://www.hospiz.at/wordpress/wp-content/uploads/2020/04/Tirol-20200328_Linderung-Symptome-Sterbephase-COVID-19_2020-03-27_Pflegeheime-Mobile-Dienste.pdf</p> <p>The Austrian society for clinical pathology provides recommendations regarding autopsies of deceased individuals with a SARS-CoV-2 infection. These should only be performed by personnel who is trained in handling infectious dead bodies. Aerosol-generating procedures should be avoided, if they are necessary, appropriate PPE must be used (FFP3 masks plus face shields and safety goggles). Needle necropsies are preferred over extensive opening of body cavities. Any waste waters generated during autopsy must be disposed of carefully. Find here (in German): https://oeggm.com/post/covid19/Rahmenbedingungen-und-Informationen-zur-Obduktion.pdf</p> <p>Recommendations for undertakers:</p> <ul style="list-style-type: none"> - Ritual washing and embalming should be avoided - Ceremonial farewell at an open coffin is possible but only with appropriate physical distance; physical contact to the dead body must be avoided - Dead bodies can be transported nationally in wooden coffins that must be labelled “infectious” - International transport of dead bodies requires sealed metal coffins <p>Find here (in German): https://www.wko.at/branchen/k/gewerbe-handwerk/bestatter/Leitfaden-der-Bestatter-11-2020.pdf</p>	
Albania	No specific rules exist for these cases. In general, if people die in hospital a disinfection procedure takes place but each hospital has its own protocols according to general recommendations from Ministry of Health and Institute of Public Health.	
Belgium	<p>There are specific protocols, decided upon by Sciensano and the High Health Council. The key points are as follows:</p> <ul style="list-style-type: none"> - Try as much as possible for the families to say their goodbyes (although all COVID measures should be respected) - Body bags should be resistant to blood and body fluids ad a barrier to viruses according to ISO 16603 - biodegradable according to the Norm EN 1342 - The oral, nasal and pharyngeal cavities must be disinfected and plugged, a ritual washing is forbidden - Recommended to prepare the body for burial three days after death - Specific recommendations for performing an autopsy - Viewings at home are forbidden - A hermetic coffin is not necessary - No information on recommendations on how long a grave should be sealed in Belgium (it differs per region, for example: Brussels is normally 5 years, Flanders is normally 10 years). - Max 15 ppl at a funeral, no funeral feast <p>https://covid-19.sciensano.be/sites/default/files/Covid19/COVID-19_procedure_deaths_NL.pdf</p>	
Croatia	<p>There are specific procedures in place. Guidelines for equipping, transferring, transporting, cremating, and burying a person who has died as a result of a COVID-19-infection can be found under the following link. https://www.hzjz.hr/wp-content/uploads/2020/03/Opremanje-prijenos-prijevoz-kremiranje-i-pogreb-osobe-preminule-kao-posljedica-bolesti-COVID-19.pdf (in Croatian)</p>	
Czech Republic	There is no specific protocol in place.	About 8% of deaths are going to autopsy



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Estonia	<p>In Estonia for moribund patients official guidelines do not exist. Guidance for care of the deceased with suspected or confirmed coronavirus is based on WHO guidance https://www.who.int/publications/i/item/infection-prevention-and-control-for-the-safe-management-of-a-dead-body-in-the-context-of-covid-19-interim-guidance</p> <p>For funeral homes: https://www.terviseamet.ee/sites/default/files/Nakkushaigused/Juhendid/COVID-19/surnukeha_kasitlemise_pohimotted_matusebuuroodele-22.12.2020.pdf</p>	
Finland	There are protocols available on how to handle deceased, equipment for potential exposures, etc. There are no specific instructions on e.g. how long a grave should be sealed.	
Ireland	Yes, there are care plans for residents and nursing homes in place. Standardized protocols are available.	
Italy	<p>Emergency indications related to the COVID-19 epidemic concerning the funeral, cemetery and cremation sector are available here: https://olympus.uniurb.it/index.php?option=com_content&view=article&id=22118:sal11285_2020&catid=6&Itemid=137 (in Italian)</p> <ol style="list-style-type: none"> 1. Nature and duration of the emergency indications 2. Precautions to be taken in general for all the deceased for whom the contraction in life of Covid-19 cannot be excluded 3. Post-mortem examinations and diagnostic findings 4. Reduction of observation times and to carry out funeral transport to the cemetery or crematorium 5. Contribution to the cemetery 6. Cemetery 7. Waste <p>Information on palliative care in Italy can be found here (most of recommendations and guidelines derive from international guidelines, e.g., CDC-Atlanta-US, NHS-England): https://www.sicp.it/la-questione-del-momento-epidemia-sars-cov-2/ (in Italian)</p>	
Malta	Patients still do not get visits in last hours of life. There are opportunities for relatives for a final look and there are protocols in place that cover issues like e.g. using doubled body bags, funerals have to be organized in 24 hours, graves remain sealed for 10 years.	
Netherlands	<p>As part of the RIVM LCI COVID-19 guidelines, there are guidelines in case of death/dying: https://lci.rivm.nl/covid-19/bijlage/overlijden</p> <p>Before death It is important that immediate family members can say goodbye to a person with COVID-19 who is dying. It's possible that a close relative also has COVID-19. In that case, consultation with ward staff or the hospital's Infection Prevention Department is necessary so that saying goodbye can be facilitated, thereby minimizing the risk of further spread.</p> <p>After death SARS-CoV-2 is a virus that is transmitted from human to human by contaminated droplets that are released during coughing, sneezing and (direct) contact. This no longer poses a risk after death. Influenza viruses are spread in the same way. The care for a patient who died of the new coronavirus is therefore the same as the care for a patient who died of influenza (flu). The regular hygiene measures that apply to the funeral industry are therefore also sufficient for the care of deceased people from the new corona virus.</p> <p>Contamination risks The virus only survives outside the body for a short time, from a few hours to a day. By wearing personal protective equipment and performing hand hygiene in accordance with the regular hygiene measures within the funeral industry, the risks of contamination can be kept to a minimum. Wear a long-sleeved apron and gloves during grooming. It is not necessary to wear safety glasses and a mouth and nose mask. Put on the apron first and then the gloves, over the cuffs of the sleeves. When stretching, the order is the other way around: first take off the gloves, then apply hand hygiene, then take off the apron and then apply hand hygiene again. Thanatopraxia or embalming the body of a deceased with COVID-19 is possible if the usual hygiene measures are followed. Hand hygiene should be applied after any contact with the deceased, after removal of personal protective equipment, and after moving and transporting the deceased.</p> <p>Transport and lay-out</p>	<p>https://lci.rivm.nl/richtlijnen/covid-19: step-by-step plans and scenarios for and by professionals in infectious disease control.</p> <p>LCI=Landelijke Coördinatie Infectieziektebestrijding-national coordination infectious disease control</p>



	<p>The deceased can be collected and transported by the funeral director in the usual way, this will usually be from the hospital or a care institution. In case of direct contact with the deceased, a long-sleeved apron and gloves should be worn, followed by hand hygiene. Follow local directions from the hospital or healthcare facility.</p> <p>The deceased may be laid out both at home and in the funeral home. The chest can be opened or closed. There is no objection to laying the deceased in bed with cooling by means of a bed cooling system (this system is often used in the home situation and in care institutions for long-term care such as nursing homes).</p> <p>Contact with the deceased and the next of kin</p> <p>After the deceased has been cared for, there are no restrictions on the contact of the next of kin with the deceased. Here, too, good hand hygiene is recommended after a direct contact.</p> <p>If home isolation or quarantine applies to the next of kin, a physical visit is undesirable. A funeral director can then conduct the 'scheduling conversation' over the telephone or other modern communication options.</p> <p>Currently, the advice is not to shake hands and to keep your distance. There are no further restrictions on contact with the next of kin, unless they also have COVID-19. In the latter case, they cannot in principle be physically present at the funeral. First degree survivors may be an exception to this. If their health allows it and they have few complaints (no fever and no cough), they can be present with a surgical mask for the mouth and nose. Fortunately, there are modern means of communication that make it possible to experience the funeral or farewell service (via an audio or video connection) live.</p> <p>Funeral, farewell service and condolence</p> <p>Currently, people who gather for a funeral are exempt from the maximum group size rules. See the Frequently Asked Questions about the corona virus and funerals on Rijksoverheid.nl for the current numbers regarding group size and for the other conditions that apply to funeral services, farewell service and condolence.</p> <p>For information about the association see www.bgnu.nl</p>	
<p>Norway</p>	<p>It is recommended to use protective equipment and keep a good hand hygiene when dealing with dead COVID-patients. The full protocol on procedures with dead patients is available here: https://www.fhi.no/nettpub/coronavirus/rad-og-informasjon-til-andre-sektorer-og-yrkesgrupper/rad-til-begravelsesbyraer/?term=&h=1 (in Norwegian).</p> <p>A translated summary is as follows:</p> <p>Infection in contact with the dead</p> <p>The primary route of transmission after death has been contact infection, especially through direct contact with blood and body fluids. The likelihood of infection with SARS-CoV-2 upon contact with the deceased is considered low. However, it is recommended that physical contact with the deceased be restricted and that personal protective equipment be worn at all contact with the deceased.</p> <p>Relatives</p> <p>Dignity for the dead, cultural and religious traditions and the needs of relatives must be respected and safeguarded as much as possible. Infection control shall not prevent the family from seeing the deceased and may participate in care if this is desired, if they receive information about relevant infection control measures and access to protective equipment.</p> <p>Funeral services</p> <p>It is important that the health, environment and safety of those caring for the deceased are taken care of throughout the procedure. To ensure this, care of the dead must be planned regarding the necessary equipment and that as few people as possible participate in the care.</p> <p>Routines and facilities for the care of the dead may vary depending on local conditions. Funeral homes are encouraged to establish systems that ensure dialogue with the health institutions or municipal doctors in the area for which they have assignments.</p> <p>Burial or cremation follows national recommendations. It is not contraindicated to bury the dead with covid-19.</p> <p>Use of personal protective equipment during care</p> <p>In contact with the dead, caregivers can be exposed to infection. Proper use of personal protective equipment helps to significantly reduce the risk of infection transmission. Personnel in funeral homes, funeral services, relatives, and the health service must have received training in the correct use of personal protective equipment. This includes how the equipment is turned on and off, as well as critical points during use.</p> <p>Use of personal protective equipment in the covid-19 epidemic</p> <p>Dressing of infection control equipment: https://www.youtube.com/watch?v=AmH_60_nWDY&t=48s</p> <p>The following personal protective equipment must be used in all contact with the deceased:</p> <ul style="list-style-type: none"> - Medical sanitary napkins (type II or IIR). - Eye protection (visor / glasses). - Disposable nitrile or latex gloves, with long cuff. - Moisture-resistant disposable coat with long sleeves or care coat with plastic apron on the outside. 	



- The need for a shoe cover and hood is considered if body fluids are expected to splash.

Execution of care

Before starting care, make sure that the necessary equipment is available.

Perform hand hygiene.

Wear personal protective equipment.

Ensure that the equipment is put on correctly.

During the work, one should not touch areas outside the dead and the trolley / table the dead is lying on. If there is a need to touch other objects, the gloves must be removed, and hand hygiene performed (hand washing or hand disinfection). New gloves must then be put on before work continues. This is so as not to spread infection to furniture and equipment, including the outside of the coffin.

When the work is finished, the protective equipment is removed. When undressing, make sure that the protective equipment is removed in the correct order to prevent contamination.

The used protective equipment underlay and equipment that has been used to care for the deceased are placed in a waste bag that is tightly tied and placed in a new bag that is closed. In case of spillage with body fluids, the waste must be disposed of as infectious waste in accordance with current routines.

Thorough hand hygiene is performed.

All equipment that has been in contact with the deceased, or is considered as possibly contaminated during the work, as well as the care area, must be cleaned and disinfected according to current routines. Common cleaners and disinfectants are effective against SARS-CoV-2.

Use of mother bags (body bags)

Mother bag can be used according to current routines. Indication for use of mother bag may be:

In case of extensive leakage from body openings.

After autopsy.

When moving and transporting.

In situations with several dead.

The mother bag must be made of a moisture-resistant and degradable material.

If the dead person is placed in a mother bag in the ward, this must be marked so that it appears that the dead person has been isolated with a droplet infection regimen.

When the mother bag is used, the dead must be placed in the coffin with the mother bag. The mother bag should mainly not be opened.

Exceptionally, there may be a need to open the mother bag after care has been taken to facilitate sewing. Assisting personnel must use personal protective equipment as described above. Relatives are encouraged to avoid touching the deceased without the use of personal protective equipment.

Coffins with mother bags must be marked so that the cemetery authority is notified that there is an infection. Where the funeral custom means that the coffin is not to be used, the dead person must be wrapped in a shroud / textile and placed in a closed mother bag which is marked with infection.

Washing ceremony

The Islamic Council has advised against washing ceremonies, but if this is to be carried out, this must be agreed and those involved must wear personal protective equipment as described above.

Deaths in health institutions

Handling of dead with suspected or confirmed covid-19 must be carried out in accordance with current routines for care of the dead who have been isolated with a droplet infection regimen.

The health institution must arrange for the dead person to be stitched in suitable rooms. Health personnel are responsible for transporting the deceased to the mother's room or chapel.

Relatives are encouraged not to touch the deceased without the use of personal protective equipment. Hand hygiene is performed when leaving the room.

Relatives must be made aware that in the event of death with a suspected or confirmed covid-19, there will be only exceptionally access to sewing after the deceased has been placed in the mother bag.

Deaths at home

Employees of the funeral home use personal protective equipment in all contact with the deceased and follow routines for execution as described.

The funeral home must ensure that dignity, cultural and religious needs are taken care of in the best possible way. If relatives wish to participate in care, they must use personal protective equipment as described above.

The mouth and nose of the deceased can be covered with a bandage before turning and moving.



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	<p>Assess the need for mother bag. Hand hygiene is performed after all contact. The room where the deceased has stayed is cleaned in the usual way. Have a special focus on the areas of the room closest to the dead and all common points of contact. Cleaning during and after home insulation. There is no need to remove furniture and fixtures. Textiles are placed directly in the washing machine and washed at the highest possible temperature. Personal belongings are cleaned. Other equipment that the deceased has had direct contact with is disposed of as residual waste. It is important that relatives can say goodbye to the deceased. Relatives must be made aware that it will only be possible to see the deceased after the care has been completed. Relatives are encouraged to avoid touching the deceased without the use of personal protective equipment. Hand hygiene is performed after removing the protective equipment.</p> <p>Funeral services Personnel assisting in burial or cremation must use personal protective equipment. If the deceased is to be cremated or buried without a coffin, protective gloves should be worn. Hand hygiene is performed after removing gloves. The number of people assisting during the procedure should be reduced to a minimum</p> <p>Autopsy SARS-CoV-2 may survive in lung tissue for some time after death. For post-mortem procedures related to the patient's airways shortly after death and for the use of high-speed rotating instruments / tools, personnel should use personal protective equipment in accordance with aerosol generating procedures.</p> <p>The following protective equipment must be used: Respiratory protection (FFP3 or FFP2) Eye protection (goggles or visor) Contagious coat Disposable nitrile or latex gloves, with long cuff. It can be considered whether to use double gloves. Hood</p> <p>Reference is also made to the Norwegian Pathologists' Association's advice on autopsy and other handling of corpses with suspected or confirmed covid-19 disease (legeforeningen.no)</p>	
Poland	There are no special protocols of moribund COVID-19-patients in place.	
Portugal	The procedures are available here (in Portuguese): https://covid19.min-saude.pt/dgs-atualiza-norma-sobre-os-procedimentos-post-mortem/	
Slovakia	There are no new specific protocols and procedures for death and burial in Slovakia. The common rules in handling after death are satisfactory. In general, the body is infectious, and the environment has to be protected against transfer, e.g. the tomb is closed. The personnel has to follow common sanitation rules (mask, gloves, disinfection of vehicles, rooms, tools).	
Slovenia	No special guidelines, only guideline on e.g. gatherings on funeral, ...	
Spain	Yes, there is a protocol for corpses including: corpses transfer to the morgue, autopsy, other activities over the corpse, transfer to mortuary and final destination (burial or crematory): https://www.mscbs.gob.es/profesionales/saludPublica/ccayes/alertasActual/nCov/documentos/Manejo_cadaveres_COVID-19.pdf	
United Kingdom	Guidance for care of the deceased with suspected or confirmed coronavirus (COVID-19): https://www.gov.uk/government/publications/covid-19-guidance-for-care-of-the-deceased/guidance-for-care-of-the-deceased-with-suspected-or-confirmed-coronavirus-covid-19	

