



**FACULTY OF  
PATHOLOGY**

ROYAL COLLEGE OF  
PHYSICIANS OF IRELAND

# **Recommendations Relating to Post-Mortem Examination Practice during the COVID-19 Pandemic**

December 2021

# Contents

<b>Guidelines summary.....</b>	<b>2</b>
<b>Executive Summary .....</b>	<b>3</b>
<b>Why these guidelines are necessary .....</b>	<b>5</b>
<b>General principles underpinning these guidelines.....</b>	<b>6</b>
<b>Recommendations.....</b>	<b>7</b>
<b>Useful Links .....</b>	<b>9</b>

## Guidelines summary

- 1) Mortuary Pathology Teams to meet daily
- 2) Discuss each case with the local Coroner
- 3) Testing protocols should be agreed locally, with full PPE for staff
- 4) No open cavity post-mortem examinations if COVID-19 status is unknown
- 5) Continue to follow standard precautions and procedures
- 6) When an assumed COVID-19 negative natural death turns out to have a positive test result with SARS-CoV-2 RNA detected:
- 7) Hold a second multidisciplinary meeting to assess critically the requirement for an open cavity post-mortem examination, and assess if a clinical cause of death can be reliably assigned by performing a limited post mortem examination and/or the use of other supplemental investigations, including CT scanning, toxicology sampling and an external examination.
- 8) If, however, the coroner requires an open cavity post-mortem examination after all these considerations, the examination should be performed in the closest appropriate facility.

## Executive Summary

In response to the COVID-19 pandemic, the Faculty of Pathology at the Royal College of Physicians of Ireland (RCPI) is working very closely with the Coroner's Society of Ireland, the Department of Health, the Department of Justice, the Department of Housing, Planning and Local Government, and the HSE.

Histopathologists and state forensic pathologists in Ireland perform approximately 5,500 post-mortem examinations per year on behalf of coroners to identify a cause of death. Given the hazardous nature of the SARS-CoV-2 virus (COVID-19) and the risk to the mortuary staff, anatomical pathology technicians and pathologists carrying out post-mortem examinations at this time, these guidelines have been developed and reviewed by the Faculty of Pathology.

This risk has been somewhat mitigated with the successful vaccination of all eligible and consenting healthcare staff. Several HSE mortuaries have also been upgraded and modernised in the last year. To date, there have been no formal reports of post mortem transmission of the virus in a mortuary setting (<https://ncceh.ca/documents/field-inquiry/covid-19-risks-handling-deceased> ).

The guidance on screening of acute hospital inpatients was recently updated on 22.10.2021 by the HSE (HSPC). In their "Acute Hospital Infection Prevention and control Precautions for Possible or Confirmed COVID\_19 in a Pandemic Setting" (<https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/guidanceforhealthcareworkers/acutehospitalsguidance/InfectionPreventionandControlPrecautionsforAcuteSettings.pdf> ) they recommend that "Surveillance testing of fully vaccinated adult patients on admission is not required in all cases but may be appropriate based on institutional risk assessment". They also recommend that there is no need for surveillance testing if someone has tested negative within the previous 3 days or have had laboratory confirmed COVID-19 infection within the last 9 months. The Faculty of Pathology recommend that no open cavity post mortem examination should be performed without establishing the COVID-19 status of the deceased (using one or more of: post mortem swabbing, vaccinations status, recent infection).

In line with international best practice, our guidelines continue to recommend that in all cases where a positive ante-mortem or post mortem swab diagnosis of COVID-19 has been confirmed, each unit hold multi-disciplinary team conferences with the coroner. The

importance of this step cannot be emphasised enough and will inform all mortuary staff how to proceed with the case. Each COVID-19 positive death must be assessed in detail and in the context of clinical, radiologic and laboratory findings to ensure that an accurate cause of death is ascribed, with the consideration of the need for a post-mortem examination for this determination.

In COVID-19 positive cases requiring post-mortem examination, with fully vaccinated staff and recently upgraded mortuaries available, consideration must be given in the first instance to performing an appropriate post mortem examination at the local hospital mortuary (following risk assessment and where facilities are appropriately equipped for this purpose). The two centres (Dublin District Mortuary and Cork University Hospital) mentioned in the previous draft of these guidelines, are no longer the only mortuaries capable of handling these cases and are currently operating at maximum capacity. Transfer to mortuaries in Dublin and Cork should only be considered in specific cases i.e. following the multi-disciplinary meeting and where there is a clearly outlined reason to transfer the deceased e.g. risk assessment has deemed local facilities to be unsuitable. This will ensure reduced risk to undertakers and mortuary staff. It will also minimise delays for bereaved families at this difficult time.

Our detailed recommendations are listed on page 5. These guidelines will be continually reviewed. Our aim at all times is to ensure that our histopathologists and state forensic pathologists can investigate all deaths fully, respectfully, and with full empathy for the families of the deceased.

## **Why these guidelines are necessary**

The performance of post-mortem examinations by pathologists remains a crucial component of the work of the Departments of Justice and Health, providing support to coroners investigating death, as well as underpinning hospital audit and clinical governance structures.

Post-mortem examinations pose a risk to healthcare staff who may contract infectious diseases while completing the examination. Pathologists mitigate these risks with the use of PPE, vaccination and, on occasion, post-exposure prophylaxis. In some clinical circumstances, the risk of infection is so great that post-mortem examinations are undertaken only in special post-mortem examination facilities where isolation and air-handling afford an additional layer of protection for staff.

COVID-19 is a recently recognised, potentially fatal disease. However, there has been a successful national vaccination programme in Ireland and international research is ongoing to identify an effective medical treatment. There have been no formally documented cases of transmission of the virus in a post mortem setting, but performance of post-mortem examinations on patients who die from COVID-19 continues to pose a substantial risk to staff. There were previously only two mortuaries in Ireland where these risks could be appropriately mitigated, but recent upgrades of several hospital mortuary facilities, and the success of the vaccination programme mean that this is no longer the case.

Recognising the challenges imposed by these circumstances, the Faculty of Pathology continue to engage with relevant health authorities (including the HSE, Expert Advisory Group, and the National Public Health Emergency Team,), the Department of Justice and the Coroner's Society of Ireland to produce these guidelines to ensure service continuity while minimising risk to staff.

## **General principles underpinning these guidelines**

During infectious outbreaks such as the present COVID-19 pandemic, it is prudent to review all procedures to ensure the safety of staff. Although standard precautions are routinely applied at all times during post-mortem examination practice, it is also important during this pandemic to ensure that appropriate risk assessments for COVID-19 are performed before the post-mortem examination to minimise the risk of transmission of SARS-CoV-2 to staff.

Close working relationships and communication with the Coroners is imperative during this period and they strongly support the approach that we are recommending.

The Histopathology Steering Committee (formerly working group) (endorsed by the Board of the Faculty of Pathology) has put together a pragmatic, principle-based approach to dealing with mortuaries/post-mortem examinations during this period and for use within this jurisdiction.

These guidelines are based on present information regarding the virus/infection, with the knowledge that these guidelines may change as further information dictates this.

## Recommendations

- 1) Mortuary Pathology Teams to meet daily
- 2) All units should form Mortuary Pathology Teams (MPT) to deal with risk assessments of deceased patients on a daily basis. These teams are to include a Pathologist and mortuary staff.
- 3) Discuss each case with the local Coroner
- 4) Discuss each case with the local Coroner(s) to deliver a multidisciplinary team approach to the COVID-19 risk evaluation and plan for testing as required. The HSE has prioritised post-mortem COVID-19 swabs for laboratory testing to facilitate timely management of these recommendations.
- 5) The decision whether to proceed with a post-mortem examination will be made by the coroner based on the multidisciplinary team discussions and clinical input – cases may therefore be signed off without a post-mortem examination. If the case is to proceed to post-mortem examination, discussion needs to include if this is to require a full or limited post-mortem examination.
- 6) Testing protocols should be agreed locally, with full PPE for staff
- 7) Testing protocols should be agreed locally with full PPE available for staff performing this testing. The protocols should state who performs the test, the turnaround time for results from the laboratory, etc. Consideration should be given to the updated HSE (HSPC) guidelines for acute hospital inpatients and protocols discussed with local infection control teams.
- 8) No open cavity post-mortem examinations if COVID-19 status is unknown
- 9) No open cavity post-mortem examination should be undertaken without first performing a swab to test for SARS-CoV-2, or without establishing vaccination or recent infection status during this pandemic period.
- 10) Continue to follow standard precautions and procedures
- 11) All post-mortem examinations (assumed to be COVID-19 negative), carried out during this time should follow standard precautions and procedures. The following personal protective equipment (PPE) should be worn:
  - 12) Surgical scrubs
  - 13) Eye protection
  - 14) White coverall suit or surgical gown
  - 15) Plastic apron
  - 16) Double gloving (possibly with chain mail glove)

17) FFP2/3 respirator

18) We recommend proper don and doff techniques and a shower after a post-mortem examination.

### **Supplemental safety precautions**

It is becoming clearer that there is a prevalence of COVID-19 in our community, with many asymptomatic and pre-symptomatic individuals, even among vaccinated people. At present, this prevalence is simply not known. These individuals, although positive for the virus, can die from non-COVID-19 diseases such as stroke, injury, myocardial infarction, etc.

We are still advising that a test for SARS-CoV-2 is performed in all potential open cavity post-mortem examinations as a supplemental safety precaution.

### **When an assumed COVID-19 negative natural death turns out to have a positive test result with SARS-CoV-2 RNA detected**

There will be cases where the coroner and pathologists agree to do a post-mortem examination in a patient who was assumed to be COVID-19 negative natural death, but a test result is reported as SARS-CoV-2 RNA detected. In this scenario, we recommend that a second multidisciplinary meeting occurs between the pathologists, the coroner, clinicians/GP, depending on the circumstances. The purpose of this second meeting is to again assess critically the requirement for an open cavity post-mortem examination, and assess if a clinical cause of death can be reliably assigned by performing a limited post mortem examination and/or the use of other supplemental investigations, including CT scanning, toxicology sampling and an external examination.

If, however, the coroner requires an open cavity post-mortem examination after all these considerations, the examination should be performed in the closest appropriate facility.

## Useful Links

[Health Protection Surveillance Centre](#)

<https://www.hpsc.ie/a-z/respiratory/coronavirus/novelcoronavirus/guidance/guidanceforhealthcareworkers/acutehospitalguidance/InfectionPreventionandControlPrecautionsforAcuteSettings.pdf>

[Coroner's Society of Ireland Guidance in relation to Deaths due to Covid-19 Infection \(PDF\)](#)

[National Collaborating Centre for Environmental Health \(Canada\):](#)

<https://ncceh.ca/documents/field-inquiry/covid-19-risks-handling-deceased>