A GUIDE TO THE POST MORTEM EXAMINATION

Introduction
You have been asked to read this booklet because someone close to you has died. On behalf of our staff, we would like to express our sympathy to you and your family following your loss.

We understand that this is a sad time for you and it may be difficult for you to consider a post mortem examination. This booklet aims to help you to understand the reasons for undertaking a post mortem examination and gives details about what is involved and its potential value. It is intended to supplement the information you receive from the hospital team. Please take the time to read it and discuss it with your family if you wish. Please ask us if anything is unclear or if you have any questions. Members of the multidisciplinary hospital team (i.e. medical doctors and other healthcare professionals) will endeavour to provide any assistance and support they can.

By its nature you may find the description of some details distressing and you may find it difficult to read this booklet at a time of extreme grief. You may prefer to have a relative or friend read the booklet on your behalf.

If you have difficulty reading this booklet because English is not your daily language, or your eyesight is not so good, or for any other reason, please do not hesitate to ask the staff to help you receive this information in another form.

What is a post mortem examination?
This Latin phrase literally means ‘after death’. A post mortem examination is a medical examination carried out on the body after death. It is also called an autopsy (which means ‘to see for oneself’), especially by legal professionals.

When is a post mortem examination done?
A post mortem examination is performed in two principal circumstances:

- At the direction of the coroner for the district in which the death occurs. This is known as a coroner’s post mortem examination (see Appendix A).
- At the request of the family of the deceased or the deceased’s clinician with the consent of the family. This is known as a hospital post mortem examination (see Appendix B).

Who performs the post mortem examination?
Post mortem examinations are carried out by a pathologist, who is a doctor specialising in the laboratory study of disease and diseased tissue. The pathologist may be assisted by a technician who is specially trained for this purpose.

Where is the post mortem examination carried out?
Examinations are carried out in special facilities provided in the hospital mortuary. The body will be removed respectfully from the place of death to the place where the examination will be carried out. In certain circumstances it may be carried out in the local public mortuary or in a regional centre for specialist post mortem examination. You will be told if this is necessary.
When will the post mortem examination be carried out?
The post mortem examination is usually carried out as soon as possible after death, usually within 2 to 3 working days following the death. The earlier the examination is held the more chance of it yielding useful information. If your religion requires that you hold a funeral within 24 hours please tell the hospital staff so that if possible, arrangements can be made with the pathologist to try to carry out the post mortem examination within that time limit. The actual examination can take up to three hours. However, some post mortem examinations may take longer. Some laboratory investigations that are carried out after the post mortem examination may take several weeks.

Why is a post mortem examination carried out?
Modern diagnostic tests may provide a lot of information but they do not provide all the answers. The post mortem examination is one of the most informative investigations in medicine and provides information about illness and health that could not be discovered in any other way. However, even the most detailed post mortem examination may leave some questions unanswered and does not always find the cause of death.

Post mortem examinations help to:
- Identify the cause of death (if this is not known, a coroner’s post mortem examination is required).
- Confirm the nature of the illness and/or the extent of the disease.
- Identify other conditions that may not have been diagnosed.
- Assess the effects of treatments and drugs, and identify any complications or side-effects.

You might like to know about aspects of your relative’s illness that could affect your own health. Some illnesses are hereditary and these can be identified during a post mortem examination. Co-existing conditions may also be revealed including inheritable problems whose early recognition may benefit other family members.

The benefits of a post mortem examination extend beyond providing information to individual families. Information obtained during the examination can also:
- Provide information which can help doctors treat other patients with the same kind of illness.
- Facilitate in assessing and improving the quality of medical care.
- Be very valuable for ongoing medical training purposes.
- Give vital research information into the nature, causes and prevention of disease.
- Assist public health planning by providing information as to why and how people have died and what they have died from.
What happens in a post mortem examination?
The pathologist carries out a detailed examination of the body, working to professional standards set by the Faculty of Pathology of the Royal College of Physicians of Ireland. The full post mortem examination can be described in seven stages.

Stages 1-3: Permission, identification and history
The pathologist ensures that valid permission has been given to undertake the post mortem examination (direction from the coroner or consent of the family), confirms the identity of the deceased and reviews any clinical records and accounts of the circumstances of death.

Stage 4: The external examination
The skin and surface of the body is examined for any irregular signs, scars or lesions (any abnormality caused by disease or trauma) and these are noted. Diagnostic images (e.g. X-rays or scans) and/or photographs of scars or lesions may be taken.

Stage 5: Internal examination
The internal examination consists of inspecting the internal organs of the body. This part of the examination is like a major operation and usually takes two to three hours to complete.

NOTE: This section contains specific information that you may find difficult to read
A large cut (called an incision) is made in the chest and abdomen. Then the major organ systems are carefully removed, weighted and examined in detail (dissected). An incision is made in the scalp so that the top of the skull can be opened and the brain removed and examined. Any diseased area in the organs or tissues is noted and may be photographed. Small portions of tissue are taken from each organ to prepare microscopic slides (see section on the taking of tissue samples). Samples of blood and other fluids may be taken for biochemical, microbiological or other special examinations (including metabolic and toxicology as required). The organs and tissues are then returned to the body (but see the following section on organ retention) and the incisions are sutured (sewn up).

The taking of tissue samples
Small samples of tissue are taken for the purposes of diagnosis. These are chemically treated in order to create blocks and slides for viewing under a microscope and to allow preservation of the tissue samples. The blocks and slides are kept as part of the post mortem examination record and are therefore available for subsequent review if required. The storage and management of blocks and slides follow the same laboratory procedures in place for dealing with samples from surgical procedures in line with best practice standards.

The preparation and preservation of tissue blocks and slides is included in the consent given for post mortem examination as the retention of tissue samples is an integral part of high quality post mortem examinations:

- The relevance and completeness of the examination would be substantially compromised if the retention of such samples were precluded.
- The preservation of blocks and slides for the purpose of audit, clinical governance and quality assurance is a requirement of many of the professional bodies which regulate pathology practice.
In addition to forming part of the post mortem examination record these blocks and slides are also available for further study. This may be of potential benefit to the family in the future as it may allow the objective evaluation and re-evaluation of disease processes in an individual should any new knowledge or medical insights arise years after the death of the individual.

**Organ retention**

Internal organs are removed from the body during the post mortem examination so that they may be fully examined to identify any abnormality. In many cases the organs are returned to the body prior to the burial but this is not always possible. In certain circumstances it may be necessary to retain organs for further diagnostic purposes in order to complete the examination. Retained organs are not usually returned to the body prior to burial.

Possible reasons why it may be necessary to retain organ(s) for detailed examination include:

- Reference may be required to a specialist pathologist so that the best possible information is obtained. For example, in circumstances of neurological disease, it may be necessary to retain the brain for examination by a pathologist specialising in brain diseases (a neuropathologist). Similarly genetic cardiac conditions may require referral to a specialist cardiac pathologist and/or a geneticist.

- The obtaining of comprehensive information from the post mortem examination. This may require an organ to be placed in a fixative (chemical preservation) for a number of weeks before examination and more detailed tests. As a result such organs are not returned to the body prior to its release for burial. (In some cases, it may be possible to carry out rapid fixation to facilitate return of the organ to the body before it is released for burial, however as rapid fixation is not suitable in many situations, its use is limited).

Retained organs are kept in appropriate containers that are clearly identified, traceable and stored in a designated secure area. Where there is more that one retained organ following the post mortem examination, the hospital will ensure that these are stored together as far as is practicable. Organs retained for the purpose of completing the post mortem examination process will be released as soon as appropriate, following completion of the investigative process in accordance with the family’s wishes.

**Stages 6-7: Special examinations/tests and reports**

An account of the findings is then written up by the pathologist and later the results of any special examinations or tests and of the microscopic examination may be added. The timeframe for the availability of the final post mortem report varies. It may be available in 6 -12 weeks but may take much longer dependant on any special examinations or tests. Clinical video/photography/X-rays taken to assist in the diagnostic process become part of the healthcare record of the deceased.

There are important difference between a coroner’s post mortem examination and a hospital post mortem examination, please refer to the appropriate appendix found at the back of this booklet for further information.
Will the appearance of the body be affected by the post mortem examination?
It is not normally obvious that a post mortem examination has taken place and the body can be viewed afterwards as if no such examination has been performed. Great care is taken with the external appearance of the deceased and most of the incisions will be hidden by clothes or hair. However, please be aware that the cause of death and the normal changes which occur after death may impact on the appearance of the body.

Will a post mortem examination delay the funeral?
Every effort is made to perform the post mortem examination in a timely fashion so funeral arrangements should not need to be delayed. The body is usually released to the undertaker on the day of the post mortem examination.

What information will the family be given regarding organ retention?
Following completion of the post mortem examination unless you express a wish for no information, you will be contacted with relevant information in relation to the retention of organ(s) (with the approval of the coroner in the case of a coroner’s post mortem examination). If organ(s) have been retained, the organ(s) will be identified and the purpose and expected duration of retention explained.

What will happen to any organs retained during the post mortem examination?
You will have the opportunity to decide on the ultimate disposition of (final arrangements for) retained organ(s) once the purposes of the post mortem examination have been completed. There are various options available to you in relation to what will happen to the organ(s):

- **Continued retention for medical education/research purposes**
  It may be proposed that the organ(s) are kept indefinitely for clinical teaching and/or education purposes and/or research which may advance medical knowledge and benefit society. This is because the long term availability of the organ(s) provides an opportunity to learn important information about the underlying condition and its treatment both now and in the future. Regardless of whether a coroner’s or hospital post mortem examination was carried out, any such retention requires consent of the family.
  
  If consent is given for the continued retention of organs for medical education/research purposes, the retained organ(s) are anonymised so that the identity of the deceased person will not be disclosed. On completion of education/research purposes or cessation of the educational/research value, the organ(s) will be sensitively disposed of in a respectful manner. In a small number of cases, organs may be used as medical museum specimens for teaching purposes.

- **Options for sensitive disposal of retained organs**
  You can choose to allow the hospital to make arrangements for the sensitive disposal of retained organ(s), with or without your participation or alternatively you may wish to make your own arrangements with or without the support of the hospital.

  Insert section containing details of local hospital arrangements for sensitive disposal of retained organs here
Insert local contact details including the following here

Details of the hospital staff member who will be your contact person regarding the post mortem examination
Include Name and Job Title

The County or District Coroner

Register of Births, Deaths and Marriages

Other information as appropriate:
For example: Local bereavement support groups
Appendix A:  
The coroner’s post mortem examination

Who is the coroner?
The coroner is an independent office holder with responsibility under the law for the medico-legal investigation of certain deaths. A coroner must inquire into the circumstances of sudden, unexplained, violent and unnatural deaths. This may require a full post mortem examination, sometimes followed by an inquest. The coroner’s inquiry will establish whether death was due to natural or unnatural causes. If death is due to unnatural causes then an inquest must be held by law.

Who has responsibility to report a death to the coroner?
In a case of sudden, unnatural or violent death there is a legal responsibility on the doctor, registrar of deaths, funeral undertaker, householder and every person in charge of any institution or premises in which the deceased person was residing at the time of death, to inform the coroner. The death may be reported to a sergeant of the Garda Síochána who will notify the coroner. However, any person may notify the coroner of the circumstances of a particular death.

What happens when a death is reported to the coroner?
Deaths occurring under a wide range of conditions must be reported to the coroner who then inquires into the circumstances of the death. Sometimes a doctor may be in a position to certify the cause of death. If this is so, and if there are no other circumstances requiring investigation, the coroner will permit the doctor to complete a medical certificate of the cause of death, and the death will be registered accordingly. However, if the certificate cannot be completed the coroner will order that a post mortem examination be carried out.

In the coroner directs that a post mortem examination take place, a full post mortem examination including the removal and retention of organs, tissues and/or other body fluids for detailed laboratory examination and diagnostic purposes in the context of establishing the cause of death is mandatory and CONSENT IS NOT REQUIRED from the family of the deceased.

Although consent is not required for a coroner’s post mortem examination, the family are asked to sign a form to indicate that they have been given information relating to the reason why the death was reportable to the coroner, the coroner’s post mortem examination (including the retention of organs) and the office and role of the coroner.

Identification of the body
In the case of a coroner’s post mortem examination, a formal identification of the body is required. A member of the Garda Síochána will act for the coroner in such cases and will arrange a formal identification of the body, normally by a member of the deceased person’s family (family members are not compelled to view the body against their wishes). Formal identification may take place in the Emergency Department or a hospital ward or may entail attendance at the mortuary to identify the body to the Garda. The fact that relatives may be met at the hospital by a uniformed Garda or that a Garda may call to the home to take a statement does not mean that the death is regarded as suspicious.
Release of the body following completion of the coroner's post mortem examination

The release of the body depends on the approval of the coroner or his officer who, in relation to the post mortem examination will normally be the pathologist. Funeral arrangements should not be made until the body is released for burial.

Continued retention of organs

Organs retained during the course of the coroner's post mortem examination may be a valuable resource for clinical teaching and/or education purposes and/or research which may advance medical knowledge and benefit society. Some families choose to allow the continued retention of organs for use in medical education or research. The continued retention of organs and their use for such purposes is outside the remit of the coroner and the consent of the family is required.

Will the family be able to find out the results of the coroner's post mortem examination?

When the coroner decides that a post mortem examination is required, the pathologist will be asked to carry out the examination. The pathologist will report all findings to the coroner. In these circumstances the pathologist acts for the coroner and is independent of the hospital, therefore any enquiries concerning the post mortem examination report can be only be gained from the Coroner. It should also be noted that it can take a minimum of 6 months for the report to be finalised depending on certain circumstances such as toxicology results and whether further testing is required in the State Laboratory.

Who issues the Death Certificate?

A death certificate can only be issued by the Register of Deaths when the coroner has issued a Coroner’s Certificate.

On receipt of the final post mortem examination report, the coroner will then consider if an inquest needs to be held. If the coroner decides that an inquest is not necessary, the Register of Deaths will be notified and the death can then be registered and a Death Certificate issued.

If an inquest is ordered, registration of the death is delayed while the coroner is conducting their enquiries. On request, the coroner’s office will issue you an Interim Death Certificate, which is acceptable to the Department of Social and Family Affairs for bereavements grants and other benefits.

Further details regarding the work of the coroner are available as follows:

- Insert details relating to booklets available from the hospital here
- A booklet ‘Guide to the work of the Coroner’ may be accessed online at www.coroners.ie.
- Information regarding the functions of the coroner with particular reference to procedures in the coroner’s district of Dublin is accessible at: www.coronerdublincity.ie.
Appendix B:

The hospital post mortem examination

If the coroner decides that a coroner’s post mortem examination is not required, or if it was not necessary to report the death to the coroner, the family of the deceased or the deceased's doctors may request a hospital post mortem examination.

A hospital post mortem examination can only be carried out WITH THE CONSENT OF THE FAMILY of the deceased.

The hospital team will provide you with information to allow you to make an informed decision on whether you wish to give or refuse consent for a hospital post mortem examination. If you decide to give consent for a hospital post mortem examination, you will be asked to complete a consent form to document the nature of consent given. A doctor will explain each item in the consent form and you will have the opportunity to discuss these with other family members, the doctor and other members of the hospital team. You should only sign the consent form when you have been given a full explanation and you have no further questions. You will be given a copy of the consent form for your records. Consent should not be given if a family member of a similar degree objects to the hospital post mortem examination.

A hospital post mortem examination can be full or limited.

Full post mortem examination

This will include both an external and internal examination with a detailed examination of all the internal organs as described in the information booklet under the section: What happens in the post mortem examination?

Limited

You may be uncomfortable with the idea of a full post mortem examination. If that is the case you may be asked to consider agreeing to a limited post mortem examination. This would involve you attaching limitations to the extent of the internal examination, for example you may wish to limit the post mortem examination to a specific region of the body or to examination of those organs directly involved in the cause of death. This may, however, mean that no information will be available about possible abnormalities present in other organs but which may have contributed to death.

Retention of organs

Organs cannot be retained as part of the hospital post mortem examination without the consent of the family. A full or limited hospital post mortem examination may involve the retention of organs. As the need for retention of organs may only become apparent during the post mortem examination itself, you will be asked if you consent to such retention and you will be able to indicate your decision on the consent form. It is important that you indicate any limitations you wish to place on the retention of organ(s) on the consent form.
Will the family be able to find out the results of the hospital post mortem examination?

A report on the post mortem examination will automatically be sent to the primary consultant responsible for the care of the deceased. A report may also be sent to the general practitioner of the deceased.

You will be given various options in relation to communication of the hospital post mortem examination results.

- You may choose not to be given details of the results. A record of the findings of the hospital post mortem examination will be maintained and you may wish to request this at some future date.
- If you wish to be informed of the results of the post mortem examination, you can ask for an appointment with the consultant, who looked after the deceased, or with their GP. They can then discuss the results with you.
- A copy of the hospital post mortem examination report will be made available to you at your request, however as these reports are usually written in medical terminology it may be helpful to have the results explained to you.

Who issues the Death Certificate?

Issuing of Death Certificate is not affected by a hospital post mortem examination.

To register a death, you must bring a Death Notification Form stating the cause of death to any Register of Births, Deaths and Marriages.

A registered medical practitioner who attended the deceased during the illness must complete and sign Part 1 of the Death Notification Form, stating to the best of his or her knowledge and belief, the cause of death. The registered medical practitioner gives the Death Notification Form to a relative or civil partner of the deceased, provided that relative or civil partner is capable as acting as a qualified informant (one who has knowledge of the required particulars in relation to the death and who is not incapable of complying with these procedures by reason of ill-health).

The relative or civil partner must complete and sign Part 2 of the form, which concerns additional personal details of the deceased. Upon completion of Part 2, the relative or civil partner must give the form to any Registrar of Births, Deaths and Marriages as soon as possible but no later than three months from the date of death. In order to complete the registration, the relative or civil partner is required to sign the Register of Deaths in the presence of a Registrar.