What is a post-mortem examination?
A post-mortem examination is the examination of a body after death and can also be called an autopsy. Post-mortem examinations are carried out for two main reasons:

1. At the request of a Coroner, because the cause of death is unknown, or when a death happens unexpectedly or suddenly.
2. At the request of a hospital, to provide information about an illness or cause of death, or to advance medical research.

The reasons for a post-mortem examination
- When a person has recently died, a post-mortem examination can give valuable information about an illness and its effects on the body.
- The examination may also help to contribute to medical knowledge.
- It may help give more information about precisely why a person died, however, a post-mortem examination may not answer every question that may be asked.
- The information found at a post-mortem examination may help the relatives come to terms with the death of the person.

Types of post-mortem examination
Coroners post-mortem examination – this examination is required by law and does not need a person’s consent.

This examination is performed to investigate:
- Sudden and unexpected deaths.
- Deaths where the cause is unknown and the doctor cannot issue a death certificate.
- Deaths where the cause is known or suspected to be from a cause which is not a natural Disease; for example an accident or industrial disease.

Consented hospital post-mortem examination – this examination is usually performed at the request of the doctors who have been caring for the patient, or sometimes by the relatives who may wish to find out more information about the cause of death or the illness. A hospital post-mortem can only take place with consent. Sometimes the person may have given consent before they died. Where this is not the case a person close to them can give consent.

If you agree to a post-mortem examination you must give your permission in writing on the consent form for hospital post mortem examination. Please note; before a hospital post mortem takes place, the death must be registered.
Hospital post-mortem examinations can be limited to certain areas of the body, such as the head, chest or abdomen, and this will be discussed with you when your consent is sought. Only those organs or tissue you agree to can be removed and will be examined.

The Human Tissue Authority (HTA) recommends that you should be given 24 hours to consider your decision about the post-mortem examination, and that you will be given the details of someone to contact if you change your mind.

This examination requires written consent from the relatives/next of kin or qualifying relationship.

What happens during a post-mortem examination?
A consented post-mortem examination may either be:

- **A Full Examination**: meaning that all the internal organs are carefully removed, examined in detail and then returned into the body.
- **A Limited Examination**: a relative may feel uncomfortable with a full examination and may wish to limit the post-mortem to the organs that appeared to be directly involved with the illness. However, this may mean that some other information, which could be found in some of the other organs, would not be found.

The nature of a post-mortem examination
A post-mortem examination will always be carried out with respect for the deceased and is usually carried out as soon as possible, usually within 2 or 3 working days. The examination will be carried out in a post-mortem examination room, rather like an operating theatre, which is licensed and inspected by the HTA.

You will be given time to discuss the request to carry out a post-mortem examination. When a religious observance requires that the funeral is carried out within 24 hours every effort will be made to carry out the examination within this period. A doctor known as a pathologist carries out post-mortem examinations and is assisted by trained technicians. The examination is performed in a special part of the hospital mortuary according to standards set down by the Royal College of Pathologists.

At first a careful external examination of the deceased’s body is performed. Photographs or X-rays may also be taken. After this the internal examination is performed. An incision (large cut) is usually made down the front of the body to allow the internal organs to be removed for examination. Very occasionally, a previous surgical scar may be used. If the brain needs to be examined an incision is made in the hair at the base of the head. (Small tissue samples are usually taken from organs that have been examined for further examination and investigation with a microscope).

If you agree to a post-mortem examination you must give your permission in writing on the consent form for hospital post-mortem examination. Please note; before a hospital post-mortem takes place, the death must be registered.
What are organs and tissue?
Organs and tissue are made up of cells. Tissue is a collection of cells with a specific role. Tissues include blood, blood vessels and muscle. Small samples or biopsies taken from organs are often classed as tissue. Organs are made up of more than one type of tissue and have a specific role in the body. They also have their own structure and blood supply. The body has many organs including the brain, heart, lungs, kidneys and liver.

Why do organs and tissue need to be retained?
In around 20% of adult post-mortem examinations and in most paediatric post-mortem examinations, the cause of death is not immediately obvious. A diagnosis can only be made by retaining small tissue samples of relevant organs for more detailed examination. The Pathologist may need to retain a whole organ for a full assessment to allow an accurate diagnosis of cause of death to be made. For example, this may be the brain in cases where there has been a head injury or the possibility of a complex disease like Alzheimer’s disease or multiple sclerosis, or the heart to confirm disorders like congenital heart conditions. When this happens the organ or tissue is normally sent to a specialist unit.

These full assessments often take weeks or even a few months to complete, depending on the extent of investigations required. Once they are complete, the Pathologist will produce a report for the Coroner or the medical staff responsible for the care of the person before they died.

Tissue samples
Small tissue samples which are needed for further examination are usually set into blocks made from paraffin wax. The wax blocks are sliced into very thin layers, which are about ten times thinner than a hair. These slices are placed onto glass slides and stained with a special dye to allow the cells to be studied under a microscope.

Organs
If whole organs, part of an organ, or tissue are needed for more detailed examination, they will normally be treated with a chemical that preserves them. Samples of the organ or tissue may then be processed into blocks and slides as described above.

What happens when the post mortem examination is complete?
When the post-mortem examination is complete, you will be told whether tissue samples and organs have been retained.

If tissue samples and organs have been retained then you should expect to be given a choice about what happens to them when they are no longer needed by the Coroner or the hospital. Your consent will be needed for any tissue samples or organs to be kept for future use such as research or education and training of medical staff.

If you agree to a post-mortem examination you must give your permission in writing on the consent form for hospital post-mortem examination. Please note; before a hospital post mortem takes place, the death must be registered.
Blocks and slides
With your consent, the tissue blocks and slides may be stored as part of the record of the post-mortem examination, sometimes called the pathology or medical record, in case they are useful to your family in the future. If the post-mortem examination takes place in a Local Authority Public Mortuary, rather than an NHS Mortuary, then your consent will be taken to mean that you agree to the transfer and storage of the blocks and slides within the healthcare sector.

The samples may also be useful for one or more of the following:
- Teaching
- Research
- Clinical audit
- Quality Assurance (This list is not exhaustive)

These samples can be a very valuable resource that helps answer important medical questions and improve patient care for others. However, for them to be kept and used for these purposes, you consent must have been given. Alternatively, where consent is not given for storage of organs or tissue samples they are disposed of in a timely and respectful manner.

In summary your options are:
- The organisation storing the blocks and slides may dispose of them
- If a funeral has already taken place, then the blocks and slides can be returned to you, usually through your funeral director. It is advisable to discuss this with your funeral director when the funeral is arranged as there may be a charge for this. There may also be health and safety issues that may prevent this option
- The blocks and slides may be returned with the body before the funeral. It is important to realise that choosing this option could significantly delay the funeral. Some crematoria do not allow blocks and slides to be cremated with the body.

Whole organ and tissue samples
Organ and tissue samples cannot be stored as part of the medical record in the same way that blocks and slides are. They can be re-united with the body, or buried or cremated separately. Alternatively they can be retained for future use in:
- Teaching
- Ethically approved research
- Audit and other clinical purposes

.....but only with your consent. Organs and tissue can be a very valuable resource which assists in improving patient care for others.

After the post-mortem examination, the technician will prepare the deceased body for the relatives to see if they wish. The deceased body will be dressed so that the long body incision is not seen. If the brain has been examined the incision at the back of the head will be concealed in the hair.

If you agree to a post-mortem examination you must give your permission in writing on the consent form for hospital post-mortem examination. Please note; before a hospital post-mortem takes place, the death must be registered.
Any funeral arrangements should NOT ordinarily be delayed by a post-mortem examination. (Please see exceptions below)

If the examination has been carried out in the morning the body can usually be released to the Funeral Director that day, or the next morning if the examination has been in the afternoon. The Funeral Director will know when the body has been released. If the investigations of the deceased are complex or a very detailed examination of the organs is required then there may be a delay to the funeral of several days or weeks, particularly if you wish any tissue, organ or body part to be reunited with the body.

A post-mortem report will automatically be sent to the consultant who was in charge of the deceased's care or to the coroner if the examination was a coroner's post-mortem. A report may also be sent to the deceased's General Practitioner (GP). By the nature of the report a lot of medical terminology is used and if the relatives wish for an explanation in terms that they understand they will need to make an appointment with the Consultant or the General Practitioner. A pathologist may be able to make a report available to you in non-medical language.

Who can give consent?
The most important wishes to consider are those of the person who has died. If it is known that the person who has died gave consent or specifically did not want to give consent to the retention of tissue samples or organs, then those wishes must be respected.

If their wishes are not known, then a person nominated by them when they were alive, or someone in a relationship with them or closely related, must give consent. The Human Tissue Act defines a list of ‘qualifying’ relationships, which are ranked:

1. Spouse or partner (including civil or same sex partner). The HT Act states that, for these purposes, a person is another person's partner if the two of them (whether of different sexes or the same sex) live as partners in an enduring family relationship
2. Parent or child (in this context a child may be of any age and means a biological or adopted child)
3. Brother or sister
4. Grandparent or grandchild
5. Niece or nephew
6. Stepfather or stepmother
7. Half-brother or half-sister
8. Friend of long standing

That means that the person nearest the top of the list should be approached and a decision of that person cannot be overturned by someone below them on the list. The spouse or partner is the highest on the list, and a long term friend is at the bottom. If there is more than one person at the same level, for instance there may be two or more siblings, consent is only required from one of them.

If you agree to a post-mortem examination you must give your permission in writing on the consent form for hospital post-mortem examination. Please note; before a hospital post mortem takes place, the death must be registered.
What is the role of the Human Tissue Authority?
With the interests of the public and those that they regulate at the centre of their work, they aim to maintain confidence by ensuring that human tissue is used safely and ethically, and with proper consent. In England, Wales and Northern Ireland, all hospital and local authority mortuaries where post-mortem examinations take place are licensed and inspected by the HTA and must show they meet the their standards. If HTA standards are not met, the HTA will take action which ranges from providing advice and guidance, restricting activity in a mortuary or, in extreme cases, asking an establishment to stop working until the standards are met.

How do I make a complaint?
If you have any complaints or allegations about your experience at our organisation, please raise the issue directly with us first to allow us the opportunity to deal with your concern. If you are not satisfied with the response, you can contact the independent complaints handling channels such as the Parliamentary and Health Service Ombudsman at www.ombudsman.org.uk or by calling 0345 015 4033.

The HTA will assess any allegations (including whistle blowing) made to them according to the risk of not meeting the requirements of the Human Tissue Act 2004 (the Act) or their licensing standards. If you have an allegation about a licensed establishment please e-mail: enquiries@hta.gov.uk or telephone 020 7269 1900.

Further information and support
If you have any other questions which are not covered in this information sheet, please feel free to ask a member of staff or contact us by telephone on 0151 430 1336. If this person is unable to help they will find a person who can answer your questions.

St Helens & Knowsley Teaching Hospitals provides an interpretation service. Please do not hesitate to ask a member of staff if you need an interpreter. This leaflet can be made in alternative languages/ formats on request.

A hospital post-mortem examination consent form is available which also has information for your guidance

Creation Date – January 2012
Revised June - 2015
Review Date – June 2018
Produced by Bereavement Group

If you agree to a post-mortem examination you must give your permission in writing on the consent form for hospital post-mortem examination. Please note; before a hospital post mortem takes place, the death must be registered.