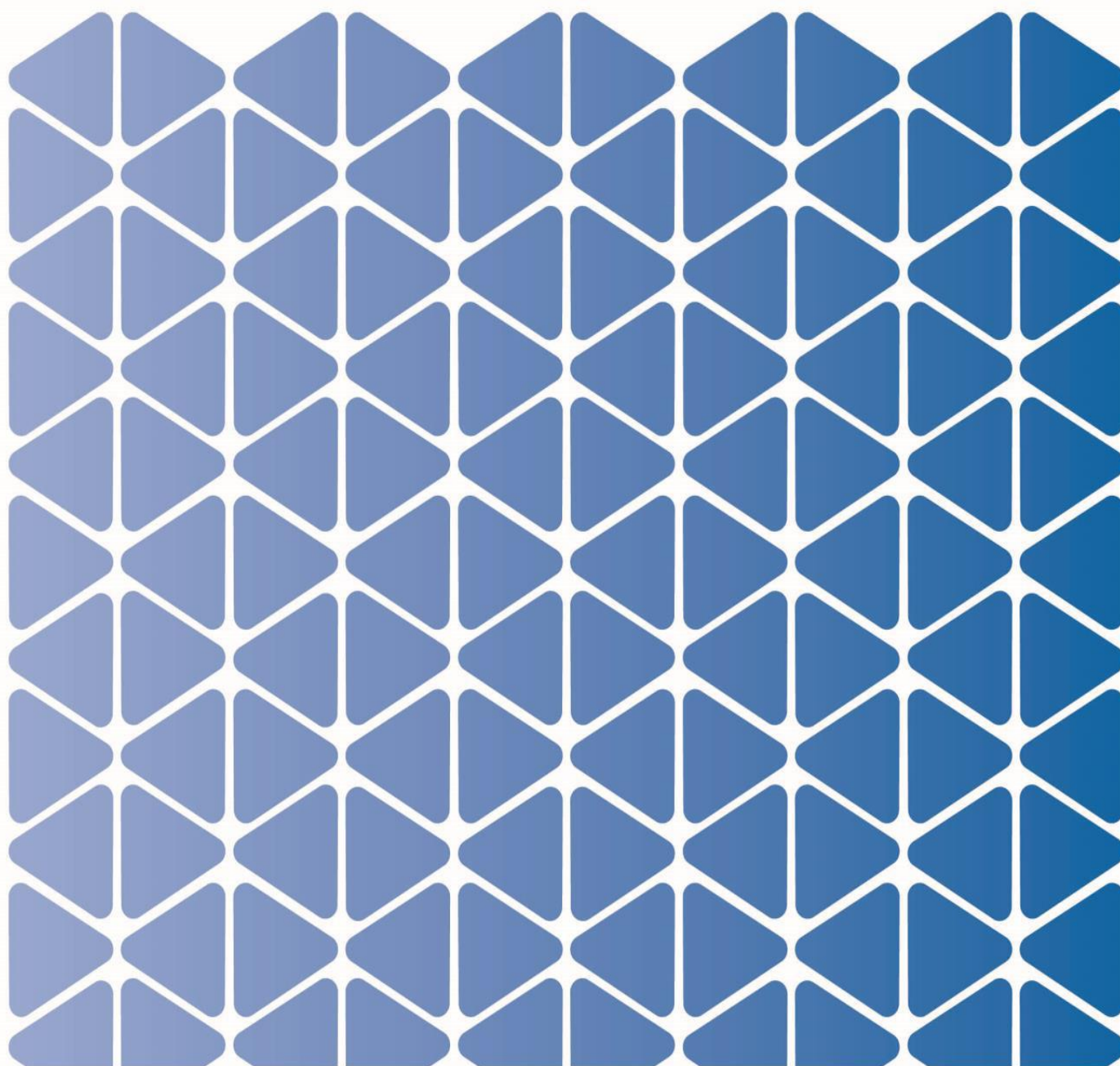


PATIENT INFORMATION

# UNDERSTANDING BRAIN STEM DEATH

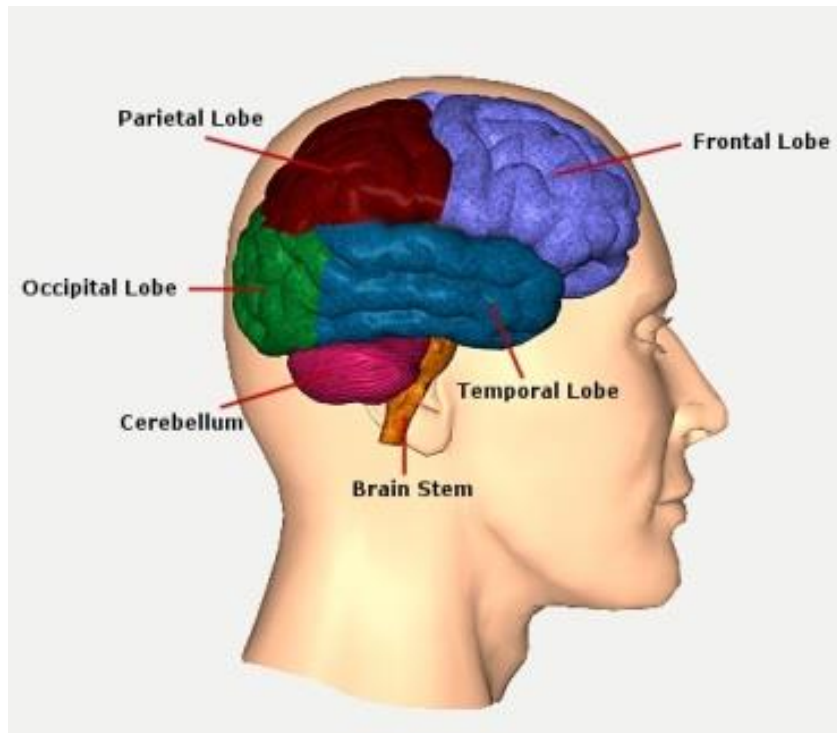


## Understanding Brain Stem Death

This leaflet explains brain stem death and the tests used to confirm the diagnosis. It is a difficult concept to grasp and we encourage you to speak to the doctors and nurses about any questions you may have.

### What is the brain stem?

The brain stem is a small area at the base of the brain. It controls all our vital functions that keep us alive such as breathing, our heart beat and consciousness.



### What is brain stem death?

Brain stem death is where a person has permanently lost the potential for consciousness and the capacity to breathe. These are the two definitions of life. Once brain stem death has been confirmed the person has legally died.

### What causes brain stem death?

Brain stem death happens when the brain has been injured resulting in swelling and the brain becoming starved of blood and oxygen. This may happen for many reasons including after a fall, a road traffic accident, a bleed in the brain, suffocation or drowning.

### How is brain stem death diagnosed?

Brain stem death is diagnosed by two senior doctors who perform two sets of tests. The tests are based on strict and legally accepted guidelines and are conducted in the same way in all hospitals. Before the tests are undertaken we ensure that any sedative

medications have worn off and that the patient's blood results and temperature are within normal range.

### **Tests for brain stem death:**

Tests are carried out to see if the patient:

- Breathes without the ventilator
- Responds to physical stimulation
- Blinks when stimulated
- Coughs or gags
- Has any natural eye movements
- Reacts to a cold stimulus
- Has any pupillary response to light

### **QUESTIONS YOU MAY HAVE:**

#### **Why does the heart still beat and the chest continue to move?**

The chest is moving because the ventilator keeps pushing oxygen into and out of the lungs. This oxygen keeps the heart beating. Without the ventilator there is no oxygen and the heart will stop.

#### **Why do they feel warm?**

Patients feel warm because the heart is pumping blood around the body.

#### **Will they move?**

Occasionally spinal cord reflexes can cause movements typically in the arms and legs. These are not purposeful movements and are not related to brain function.

#### **Will they be in discomfort or feel pain?**

The patient has died. They will not be in any discomfort or feel pain.

#### **What happens next?**

You will have the time you need to stay with your relative and say your goodbyes. If you wish, it can be arranged for a member of the hospital chaplaincy to be with you. The doctors and nurses will talk to you about the diagnosis and answer any questions you may have.

#### **Organ Donation**

You may be asked to consider donating your relative's organs to help others and give the "gift of life". A Specialist Nurse in Organ Donation will be contacted to discuss this with you.

## **Bereavement**

We realise that this is a difficult time for you so please do not hesitate to speak to the medical or nursing staff about any concerns that you may have or if there is any assistance that you require. The nurse will give you the hospital's bereavement booklet that contains useful information to assist you in the following weeks.

## **Acknowledgements**

This guide was produced with information from similar leaflets published by Mid Cheshire Hospitals NHS Foundation Trust and University College London Hospitals NHS Foundation Trust.

## **Contact details for Critical Care Units at the Worcestershire Acute Hospitals NHS Trust:**

Worcestershire Royal Hospital  
Charles Hastings Way  
Worcester  
WR5 1DD

Alexandra Hospital  
Woodrow Drive  
Redditch  
B98 7UB

Direct line: 01527 512090  
Switchboard: 01527 503030

Website: [www.worcsacute.nhs.uk](http://www.worcsacute.nhs.uk)

## **Where can I get more information?**

NHS Choices

<http://www.nhs.uk/Conditions/Brain-death/Pages/Introduction.aspx>

**If your symptoms or condition worsens, or if you are concerned about anything, please call your GP, 111, or 999.**

### **Patient Experience**

We know that being admitted to hospital can be a difficult and unsettling time for you and your loved ones. If you have any questions or concerns, please do speak with a member of staff on the ward or in the relevant department who will do their best to answer your questions and reassure you.

### **Feedback**

Feedback is really important and useful to us – it can tell us where we are working well and where improvements can be made. There are lots of ways you can share your experience with us including completing our Friends and Family Test – cards are available and can be posted on all wards, departments and clinics at our hospitals. We value your comments and feedback and thank you for taking the time to share this with us.

### **Patient Advice and Liaison Service (PALS)**

If you have any concerns or questions about your care, we advise you to talk with the nurse in charge or the department manager in the first instance as they are best placed to answer any questions or resolve concerns quickly. If the relevant member of staff is unable to help resolve your concern, you can contact the PALS Team. We offer informal help, advice or support about any aspect of hospital services & experiences.

Our PALS team will liaise with the various departments in our hospitals on your behalf, if you feel unable to do so, to resolve your problems and where appropriate refer to outside help.

If you are still unhappy you can contact the Complaints Department, who can investigate your concerns. You can make a complaint orally, electronically or in writing and we can advise and guide you through the complaints procedure.

### **How to contact PALS:**

**Telephone Patient Services: 0300 123 1732 or via email at: [wah-tr.PALS@nhs.net](mailto:wah-tr.PALS@nhs.net)**

### **Opening times:**

The PALS telephone lines are open Monday to Friday from 8.30am to 4.00pm. Please be aware that you may need to leave a voicemail message, but we aim to return your call within one working day.

If you are unable to understand this leaflet, please communicate with a member of staff.