

# Hydrocephalus Medical Alert

How to spot and respond to the signs of shunt malfunction



Shunts and Endoscopic Third Ventriculostomies (ETV) can malfunction for a number of reasons.

Acute blockages can be **life threatening**. It is important to be vigilant and aware of the protocol to follow if you suspect a shunt malfunction.

You will need easy access to home, work and mobile phone numbers for the person's specified emergency contact or next of kin.

## Shunt Malfunction Protocol

Emergency symptoms or signs to look for may include some, or all of the following:



Drowsiness/  
Confusion



Vomiting/  
extreme nausea



Photophobia/  
Sensitivity to light



Visual  
disturbances



Severe  
headaches

If you notice any of the symptoms listed:

## Think Shunt!



### Call the next of kin:

Describe the symptoms and ask the next of kin what they want you to do. Do they want you to call 999? Do they want to collect the person?



### Check shunt alert card:

If the next of kin can't be contacted, check the shunt alert card for details of the neurosurgical centre and call them for advice



### Be ready to call 999:

If the next of kin ask you to, or if you cannot contact them or the neurosurgical centre. If they are losing consciousness, call an ambulance (999) immediately.

## The next of kin should:

1. Contact the hospital A & E department
2. Speak directly to the Neurosurgery ward sister or neurosurgery registrar
3. In acute shunt malfunction, the person needs to be seen at a neurosurgical unit **within four hours**.

You may need to carry out steps 1 and 2 if unable to contact the next of kin.

# Chronic Symptoms

Chronic symptoms may develop over weeks or even months. Symptoms that should be reviewed at a neurosurgery centre include:

- Fatigue
- Behaviour changes
- General malaise
- Decline in academic performance
- Visual problems
- Being “not right”

If a person with hydrocephalus has any of these symptoms, **do not assume** that someone else has noticed. **You should inform the next of kin immediately.**

## Health and safety alerts

People with hydrocephalus can do most activities, although extra care should be taken in the following situations:

### Magnets

Close supervision is required when using magnets as some shunts are sensitive to them. Anything with an electro-magnetic field must be kept well away from a person’s shunt valve (usually in the neck area). If someone with a programmable shunt becomes unwell then the shunt malfunction protocol overleaf should be followed.

### Hydration

It is important that people with hydrocephalus do not become dehydrated as it can cause fatigue, headaches and behaviour changes. It is recommended that children drink a small glass of water approximately every hour. If a child is noticeably more tired in the afternoons, check their water intake.

### Visiting the toilet

People who are drinking water regularly will need to use the toilet more often. Someone with hydrocephalus may not always notice the messages their body gives them. Discreet prompts to go to the toilet may help avoid accidents.

### Technology

Always conduct a safety assessment for handling tools and equipment. If in doubt, seek advice from the person’s neurosurgeon or one of Shine’s health specialists.

01733 555988  
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[firstcontact@shinecharity.org.uk](mailto:firstcontact@shinecharity.org.uk)  
Registered charity: 249338

## Getting around...

Some people with hydrocephalus have difficulty finding their way. Do not assume that a route has been memorised and can be recalled. People who have difficulty judging speed and distance must be supervised when crossing roads.

## Sports alerts

Physical activity has huge benefits for anyone with hydrocephalus as it can help to “reprogram” the brain through repetition and positive feedback. There are very few sports that are not advisable, but you should **always communicate with a person’s emergency contact before starting a new activity programme.**

- Swimming is a recommended sport, although people with epilepsy may need close supervision
- People with hydrocephalus can run, jump, trampoline, do forward rolls and use gym apparatus, but may need help with balancing activities. They should **not** hang upside down for any length of time as the shunt will not drain in this position.
- If a person has a lumbar peritoneal (LP) shunt, sports involving twisting of the lumbar region may not be advisable, e.g. gymnastics, aerobics, golf or ballet.
- Some people may find sports that require good visual perception and spatial awareness challenging. Team sports requiring quick and accurate responses, e.g. close-fielding positions in cricket or rounders may be difficult if the person has visual perception difficulties.
- Care should be taken with contact sports or certain martial arts, as well as any activity where someone is grabbed around the neck, as shunt tubing can become fractured
- Advice should be sought from a neurosurgeon before partaking in contact sports.



## Watch out!

If someone is hit hard in the head during any activities (e.g. struck by a ball) then watch out for signs of shunt malfunction.

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