



## My child needs a Nephrostomy tube - Information for Parents or Carers

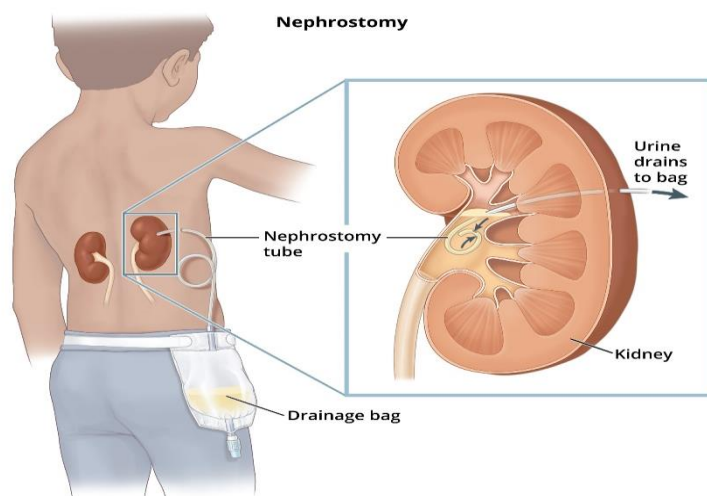
This leaflet aims to answer some of the questions you may have about your child undergoing a nephrostomy tube insertion procedure. It explains the risks and the benefits of the procedure and what you can expect when your child comes to hospital.

If you have any questions or concerns, please do not hesitate to speak to the staff caring for your child.

### What is a nephrostomy tube?

Normally urine drains from the kidneys through a narrow tube (ureter) into the bladder. A nephrostomy is required when there is a blockage of the ureter; in turn the kidney rapidly becomes affected, especially if infection is present. If left untreated, the kidney will become damaged. During a nephrostomy insertion, a fine plastic tube (catheter) is placed through the skin on your child's back and into the kidney to drain the urine. The urine is collected in an attached drainage bag outside the body. The bag can be strapped to your child's leg or waist so they can move freely. A nephrostomy tube can be a temporary or longer-term measure requiring three monthly exchange procedures and aims to relieve the symptoms of a blockage.

### Nephrostomy tube insertion



## Who carries out the procedure?

A paediatric interventional radiologist (Doctor), who will be supported by a radiographer and nursing team, carries out a nephrostomy. All are trained professionals in this type of procedure.

## Possible risks of having a nephrostomy

A nephrostomy is a safe procedure that will provide relief from your child's symptoms if successful, but as with any medical procedure there are some risks and complications that can occur. The radiologist will explain these to you before the procedure. The most common complications include:

- **Bleeding.** Blood in the urine immediately following a nephrostomy is common and usually clears in 24-48hrs. Major bleeding requiring a blood transfusion is uncommon.
- **Infection.** Most cases can be treated satisfactorily with antibiotics. Occasionally a more serious infection (sepsis) requires an escalation in your level of care.
- **Tube dislodgement.** Your child's nephrostomy may dislodge or fall out, requiring reinsertion.
- **Kidney Injury.** Trauma to the kidney requiring a follow-up procedure or surgery to stop bleeding or prevent leakage of urine outside of the kidney.
- **Pleural or Bowel Perforation.** Rarely the lining of the lung (pleura) or adjacent bowel may be damaged during the nephrostomy insertion.

## Contrast

Nephrostomy insertion uses X-ray dye (contrast), and very rarely, a reaction may occur. If your child has ever had a test that uses X-ray dye and they have had a reaction to it, you should tell the Radiologist or nurse before the procedure. A reaction may take the form of a rash or itching and very rarely, a more severe allergic reaction can occur. The team have measures in place to deal with this safely should this occur.

If your child has had a previous reaction, please let us know, and we can put measures in place to minimise risk from another reaction.

## Radiation – Benefit versus Risk

Nephrostomy insertion uses X-ray radiation. The radiation dose that your child will get from a nephrostomy insertion is small and the associated risks are low. Clinical staff consider both the risks and benefits when deciding what examination is appropriate for your child. The benefits of having the nephrostomy outweigh any risk. Clinical staff are responsible for making sure that the dose your child receives is kept as low as necessary to aid your diagnosis or treatment.

## Pregnancy

All children 10 years or older will be asked about their periods and any possibility that they could be pregnant. This is a legal requirement under the Ionising Radiation (Medical

Exposure) Regulations (IR(ME)R) 2017. Please inform the Radiology Department if your child’s period falls outside of its normal cycle on the appointment date, as it may need to be rescheduled.

### Consent

We want you to be involved in all the decisions about your child’s care and treatment. Your child’s radiologist will discuss any risks to your child with you and they will answer any questions you have before the procedure. If you choose to go ahead, you will be asked to sign a consent form. This confirms that you agree for your child to have the procedure and understand everything involved.

### Fasting

Your child will be asked not to eat or drink anything for 6 hours before the procedure.

### What happens before the procedure?

Please attend the appropriate department as stated on your appointment letter with your child. On arrival to the ward, your child will be asked to change into a hospital gown and a small cannula (thin tube) will be inserted in their arm. This is a very small tube and numbing cream can be used. The ward staff will help to prepare your child for their procedure; this may include completing a theatre checklist and taking a blood sample. There is play specialists there to help your child understand what is going to happen.

Your child will be brought to the X-ray theatre in a bed / cot, where you will be met by a team of nurses, a radiographer an interventional radiologist. The Royal Victoria Hospital and Royal Belfast Hospital for Sick Children are teaching hospitals and as such, university students may attend, with your permission.

When you receive this letter, please let us know if your child has any of the following:

A history of severe allergy (or anaphylaxis)?
A previous adverse reaction to X-ray dye?
Difficult to treat asthma?
Renal impairment (poor kidney function)?

### What happens during the procedure?

Your child will be helped to transfer onto the X-ray table and asked to lie on their back. Monitors will be attached to record heart rate and blood pressure. An anaesthetist will be present to put your child to sleep. Once your child is asleep, they will be positioned on their front or onto their side, and pillow or supports used to ensure there are safe and comfortable.

The procedure is performed under sterile conditions and the interventional radiologist will wear a sterile gown and gloves to carry out the procedure. The skin will be cleaned with antiseptic, and numbed with local anaesthetic. Using ultrasound guidance a small needle will be placed accurately into the kidney. Once in position, a guidewire is placed under X-ray guidance to allow the nephrostomy catheter to be inserted into the kidney. A small amount of X-ray dye is injected and a X-ray image will be taken to confirm the position of the nephrostomy catheter. This will be held in place with a stitch and covered with a dressing. A drainage bag will be attached to the nephrostomy tube with connecting tubing. This will collect the urine from the kidney.

Your child will be recovered (woken up) once the procedure is complete, and will be transferred back into their bed or cot to be returned to their ward for recovery and monitoring.

### Duration

The procedure is performed in the Children’s X-ray department and should take approximately 1 hour.

Whilst we try to accommodate all patients at their appointed time, occasionally emergencies arise which may delay your child’s procedure or result in an extend length of time in the ward prior to the procedure. If your child’s procedure is cancelled due to an emergency, it will be reappointed as soon as possible.

### What happens after the procedure?

Once back to the ward, your child will generally remain in bed for 4 hours for monitoring and to ensure the nephrostomy is working. Your child can usually eat and drink normally, unless told not to and will generally go home later that day.

### Aftercare following discharge

The drainage bag will need to be emptied frequently to avoid it becoming too heavy. You will be shown how to do this. Always be careful to avoid dislodging the tube.

Your child’s nephrologist will decide how long it will remain in for as it is not usually a permanent solution for the problem. If it is a long term option, the nephrostomy will need to be changed every 2 to 3 months.

### Results and follow-up

A nephrostomy is usually a temporary procedure. Once the kidney has drained, your child may not need any further treatment. Depending on the cause of the blockage, other treatment options are as follows:

- **Ureteric stenting** – a stent (plastic tube) can be placed in the ureter across the blockage to allow urine to flow normally from the kidney to their bladder without an external drainage bag staying attached permanently
- **Surgery** – Occasionally this is required to relieve the blockage

All options will be discussed by your child's doctors, the interventional radiologists and with yourself.

The performing interventional radiologist will dictate a formal report on the procedure, and it will be attached to the images on our Radiology Information System (RIS). A copy of the report will be sent by Radiology to the referring clinician. Any follow up will be arranged by the referring clinician.

### Image sharing

Your images will be electronically stored on the hospital picture archiving system. This data can be accessed throughout the Belfast Health and Social Care Trust and other doctors and health care professionals who are directly involved in your care. The ability to share images and radiological reports will improve the safety and quality of your care by ensuring that the right information is available in the right place at the right time.

In order to improve the medical services we provide we may also use your data as anonymously as possible for internal audit and medical education. If you would prefer that your data is not used for these purposes, please inform a member of staff when you attend for your examination.

If your data is to be used for research, then a separate consent process will be used. You will be asked for your consent, should this be the case.

### Contact us

If you have any queries, we will be happy to answer any questions before or after your child's procedure and you can contact us on the number given on your appointment letter.

*Royal Belfast Hospital for Sick Children, Tel: 02896150289 Childrens X-ray Reception Desk*

Further information can be accessed on the British Society of Interventional Radiology patient portal: [https://www.bsir.org/patients/what-is-interventional-radiology/#col\\_right](https://www.bsir.org/patients/what-is-interventional-radiology/#col_right).

### Feedback

We hope you found the information in this leaflet helpful. If it did not tell you what you needed to know or you would like to provide any feedback on your experience please let us know so that we can make any necessary improvements.

#### **You can provide feedback on your experience:**

Telephone: (028) 9504 8000 (Monday-Friday: 9am-4pm)

Textphone: 18001 028 950 48000

By email: [compliments@belfasttrust.hscni.net](mailto:compliments@belfasttrust.hscni.net)

By email: [complaints@belfasttrust.hscni.net](mailto:complaints@belfasttrust.hscni.net)

By completing an online form: <http://www.belfasttrust.hscni.net/contact/FeedbackForm.htm>

## Care Opinion



We invite you to share your experience by clicking the following link:  
<https://www.careopinion.org.uk/>

or by scanning the following QR code on your smartphone or tablet:



## Language and accessible support services

### Deaf/Hard of Hearing

If a Sign Language interpreter is required, please either telephone **028 9615 8900** via the Sign Video remote interpreting service (<https://signvideo.co.uk/deaf-community/>) or email us at [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net) and we will arrange one for your appointment. Please have your H&C number ready when calling or include it in your email. This can be found at the top right corner of any Health and Social Care letters you may have received.

If you are unable to hear on the phone and need to contact us with regards to your appointment you can email us at [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net).

### Do you need this information in another format or language?

The Trust has access to interpreting and translation services. If you need this information in another language or format, including Braille, large print, CD, audio tape please contact the telephone number **028 9615 8900** or e-mail address [MPHAdminFOH@belfasttrust.hscni.net](mailto:MPHAdminFOH@belfasttrust.hscni.net), and we will do our best to meet your needs.

### Polish - Czy potrzebujesz tych informacji w innym formacie lub języku?

Fundusz ma dostęp do usług w zakresie tłumaczeń ustnych i pisemnych. Jeśli potrzebujesz tych informacji w innym języku lub formacie, w tym w piśmie Braille'a, dużym druku, na płycie CD, kasecie magnetofonowej, skontaktuj się z nami pod numerem telefonu lub adresem e-mail **028 9615 8900 / MPHAdminFOH@belfasttrust.hscni.net**, a my dołożymy wszelkich starań, aby spełnić Twoje potrzeby.

### Arabic - هل تحتاج هذه المعلومات بصيغة أو بلغة أخرى؟

تستطيع الجمعية توفير خدمات الترجمة الفورية والتحريرية. إذا احتجت هذه المعلومات بلغة أو بصيغة أخرى، بما فيها صيغة برايل Braille أو صيغة بالأحرف الكبيرة، أو في سي دي CD أو في شريط مسموع، يرجى الاتصال برقم التليفون أو عبر البريد الإلكتروني **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**، وسوف نبذل قصارى جهدنا في تلبية احتياجاتك.

### **Lithuanian - Ar jums reikia šios informacijos kitu formatu ar kalba?**

Tarnyba gali suteikti vertimo žodžiu ir raštu paslaugas. Jei reikia šios informacijos kita kalba ar formatu, įskaitant Brailio raštą, didelį šriftą, kompaktinį diską, garso įrašą, skambinkite telefonu arba susisiekite el. paštu **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900** ir mes padarysime viską, kad patenkintume jūsų poreikius.

### **Romanian - Aveți nevoie de aceste informații într-un alt format sau altă limbă?**

Trustul are acces la servicii de interpretariat și traducere. Dacă aveți nevoie de aceste informații într-o altă limbă sau într-un alt format, inclusiv Braille, tipărire cu caractere de mari dimensiuni, CD, înregistrare audio, atunci vă rugăm să ne contactați la numărul de telefon sau la adresa de e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, iar noi vom face tot posibilul pentru satisfacerea necesităților dumneavoastră.

### **Tetum - Ita presiza atu informasaun ida ne'e iha formatu ka lian seluk ka lae?**

Fidusiáriu ida ne'e iha asesu ba servisu durubasa no tradusaun. Se Ita presiza informasaun ida ne'e iha lian ka formatu seluk, inklui letra Braille, letra boot, CD, kasete audio, entaun favór telefone númeru ka enderesu e-mail **MPHAdminFOH@belfasttrust.hscni.net / 028 9615 8900**, no ami sei halo esforsu tomak atu kumpre Ita-nia nesesidade sira.

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