Tracheostomy Tube Types

There are many different types of tracheostomy tubes all with slightly different ways to care for them. The tracheostomy specialist Nurse/ ENT ACP and ward staff will support you in caring for the tube. Your child’s consultant will be responsible for choosing the appropriate tube to ensure your child has a safe airway.

Shiley Tracheostomy Tube: (NEF/PEF/PELF)

- Will most likely be the tube used for the initial tube insertion and will remain in place for the first five/seven days with cotton tapes.
- These are disposable and made of plastic.
- They come in a sterile box with an introducer and tape.
- This type of tube will be routinely changed weekly.
- Can be changed more frequently to facilitate training.
- The tubes are available in neonatal, paediatric and cuffed in a variety of different diameter sizes and lengths.
- After the first tube change they can be secured with cotton or Velcro fasteners.
Bivona flextend:

This tracheostomy tube improves access in children when in the prone position. It also keeps the ventilation connections away from under the chin improving comfort and mobility.

- Preferable choice for children requiring pressure support and/or young babies
- Enables the development of natural head movements in babies with small necks as the tube does not hinder movement
- If deemed the most appropriate tube for your child they will switch to this tube at the first tube change.
- These tubes can be reprocessed for single patient use up to 5 times
- Wash in mild, fragrance free, clear detergent. Rinse thoroughly and allow to air dry.
- These are made from silicone, stored in a sterile box with an introducer and tape.
- This type of tube will be routinely changed monthly.
- Can be changed more frequently to facilitate training.
- Available in neonatal, paediatric and cuffed in a variety of diameter sizes and lengths.
- Can be secured with cotton or Velcro fasteners (not trachi-holds).
- You need to be aware that these tubes are NOT compatible in MRI scan due to internal spring for support. Therefore if your child needs an MRI scan the tube will need to be changed to the equivalent sized shiley tube for the scan. This will be arranged by the ward nurses.
**Bivona: (not frequently used within RMCH)**

- Can be used as a like for like replacement for shiley tube if issues with tube availability.
- These are made from silicone, stored in a sterile box with an introducer and tape.
- These tubes can be reprocessed for single patient use up to 5 times.
- Wash in mild, fragrance free, clear detergent. Rinse thoroughly and allow to air dry.
- This type of tube will be routinely changed monthly.
- Can be changed more frequently for training.
- Available in neonatal, paediatric and cuffed in a variety of diameter sizes and lengths.
- Can be secured with cotton or Velcro fasteners (not trachi-holds).
- You need to be aware that these tubes are **NOT compatible in MRI scan** due to internal spring for support. Therefore if your child needs an MRI scan the tube will need to be changed to the equivalent sized shiley tube for the scan. This will be arranged by the ward nurses.
Cuffed Tubes: Shiley -(NCF/PCF/PLCF), Bivona and Bivona TTS

- Cuffed tubes may be used if your child requires ventilation. The cuff acts as a seal between the tube and the tracheal lining to help maximize the ventilation.
- If your child is to be discharged on long term ventilation the aim would be to gradually reduce the cuff and change to an un-cuffed tube before discharge.
- Only very occasionally do we discharge children with a cuffed tube.
- If your child is going to be discharged with a cuff tube you will be trained in how to care for it.
- Shiley cuffs are inflated with a maximum of 5mls air and need the pressure monitoring every 8 hours using a manometer.
- Bivona/Bivona TTS cuffs are inflated with a maximum of 5mls water.
- Cuffs should be deflated fully weekly and the air/water replaced.
- It is also important to have someone perform suction when the cuff is being deflated, to prevent any secretions sitting on the cuff being aspirated.
- If your child starts to have a trial of a speaking valve while they still have a cuff it needs to be deflated.
Tracheostomy tubes with an inner tube

If your child is to be transition to adult services with their tracheostomy then they will need changing to this type of tube and there are many different types. The most suitable one will be chosen for your child, the change can be quite difficult as they are much longer in length than the paediatric tubes and it may mean we have to trial a few different types.

- This tracheostomy tube tends to be for older children.
- They have an outer tube, introducer and an inner tube.
- The inner tubes will need removing, cleaning and replacing a minimum of every four hours.
- These tubes are routinely changed monthly and are disposable.
- Some of the inner tubes are reusable during the month and are discarded with the tube; other tubes will have inner tubes that are discarded every time they are removed.
- You will be made aware of how to care for the tube if your child needs changing to this type.
**Miscellaneous tubes**

**Blue line Portex**

- Your child may have difficulty with their secretions and this tube will allow the secretions to be aspirated and prevent them being aspirated onto their chest
- This tube also has a cuff to help reduce the amount of secretions on the chest
- It has disposable inner tubes
- Monthly routine tube change and is disposable
- It is very rare that we send children home with this type of tube.

**Bivona adult tube**

- If your child is not quite ready for an tube with an inner tube they may convert to this tube
- It is cared for exactly like the paediatric bivona tubes with a monthly change but can be reprocessed up to 10 times
The main difference with both these tubes is that you need to twist the introducer before removing it as it locks into place.