



The Shrewsbury and  
Telford Hospital  
NHS Trust

## LARYNGECTOMY ALGORITHM

*The Trust has adopted this algorithm from the  
National Tracheostomy Safety Project*

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**Division** : Support Services  
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**Comments** : Feedback & resources at [www.tracheostomy.org.uk/](http://www.tracheostomy.org.uk/)

# Emergency laryngectomy management

**Call for airway expert help**

**Look, listen & feel at the mouth and laryngectomy stoma**

A Mapleson C system (e.g. 'Waters circuit') may help assessment if available

Use **waveform capnography** whenever available: exhaled carbon dioxide indicates a patent or partially patent airway

No

Is the patient breathing?

Yes

Call Resuscitation Team  
**CPR if no pulse / signs of life**

**Apply high flow oxygen to laryngectomy stoma**  
If any doubt whether patient has a laryngectomy, apply oxygen to face also\*

Assess laryngectomy stoma patency

Most laryngectomy stomas will NOT have a tube in situ

Remove **stoma cover** (if present)  
Remove **inner tube** (if present)

Some inner tubes need re-inserting to connect to breathing circuits  
Do not remove a tracheoesophageal puncture (TEP) prosthesis

Can you pass a suction catheter?

Yes

**The laryngectomy stoma is patent**  
Perform tracheal suction  
Consider partial obstruction  
Ventilate via stoma if not breathing  
Continue ABCDE assessment

No

Deflate the **cuff** (if present)

**Look, listen & feel at the laryngectomy stoma or tube**  
Use waveform capnography or Mapleson C if available

Is the patient stable or improving?

Yes

Continue ABCDE assessment

No

**REMOVE THE TUBE FROM THE LARYNGECTOMY STOMA if present**

**Look, listen & feel at the laryngectomy stoma.** Ensure oxygen is re-applied to stoma  
Use waveform capnography or Mapleson C if available

Call Resuscitation Team  
**CPR if no pulse / signs of life**

Is the patient breathing?

Yes

Continue ABCDE assessment

Primary emergency oxygenation

**Laryngectomy stoma** ventilation via either  
Paediatric face mask applied to stoma  
LMA applied to stoma

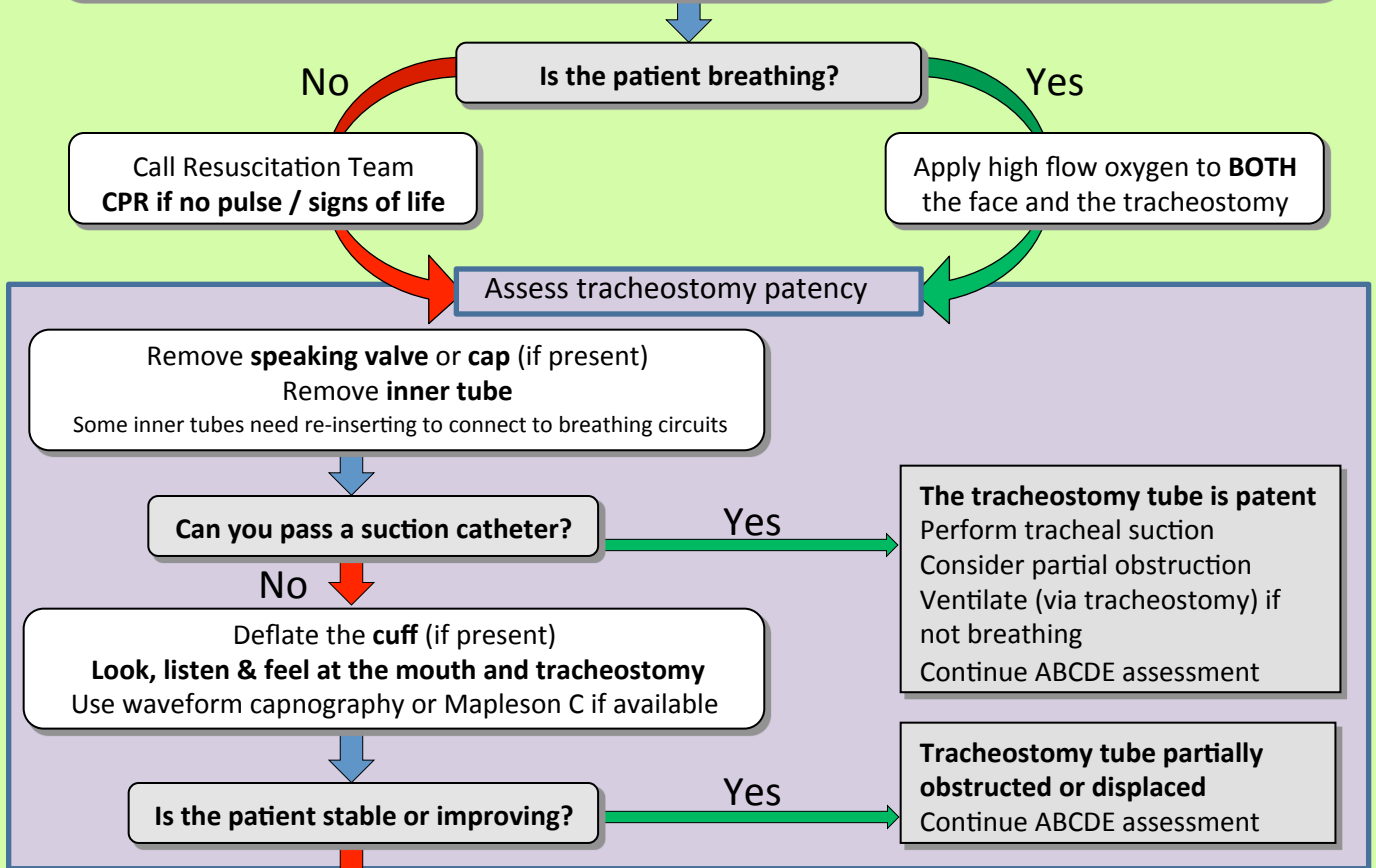
Secondary emergency oxygenation

Attempt **intubation of laryngectomy stoma**  
Small tracheostomy tube / 6.0 cuffed ETT  
Consider Aintree catheter and fiberoptic 'scope / Bougie / Airway exchange catheter

\* Laryngectomy patients have an end stoma and **cannot be oxygenated via the mouth or nose**  
Applying oxygen to the face and stoma is the default emergency action for all patients with a tracheostomy

# Emergency tracheostomy management - Patent upper airway

**Call for airway expert help**  
**Look, listen & feel at the mouth and tracheostomy**  
 A Mapleson C system (e.g. 'Waters circuit') may help assessment if available  
 Use **waveform capnography** when available: exhaled carbon dioxide indicates a patent or partially patent airway



**REMOVE THE TRACHEOSTOMY TUBE**  
**Look, listen & feel at the mouth and tracheostomy.** Ensure oxygen re-applied to face and stoma  
 Use waveform capnography or Mapleson C if available



**Primary emergency oxygenation**

Standard **ORAL airway** manoeuvres  
 Cover the stoma (swabs / hand). Use:  
 Bag-valve-mask  
 Oral or nasal airway adjuncts  
 Supraglottic airway device e.g. LMA

**Tracheostomy STOMA** ventilation  
 Paediatric face mask applied to stoma  
 LMA applied to stoma

**Secondary emergency oxygenation**

Attempt **ORAL intubation**  
**Prepare for difficult intubation**  
 Uncut tube, advanced beyond stoma

Attempt **intubation of STOMA**  
 Small tracheostomy tube / 6.0 cuffed ETT  
 Consider Aintree catheter and fiberoptic  
 'scope / Bougie / Airway exchange catheter