# Rapid Sequence Intubation/Airway Algorithm

This clinical pathway is intended to supplement, rather than substitute for, professional judgment and may be changed depending upon a patient's individual needs. Failure to comply with this pathway does not represent a breach of the standard of care.

# Preparation

## Identify Predictors of Difficult Intubation (LEMON)

- Look for external markers of difficulty of BVM and Intubation
- Evaluate the 3-3-2 rule
- Mallampati score ≥ 3
- Obstruction/Obesity
- Reduced Neck Mobility

If a difficult airway is predicted, IMMEDIATELY consult a clinician experienced in airway management and intubation before proceeding.

#### MALE MESS

- Mask
- Airways (oral and nasal)
- Laryngoscopes, Laryngeal Mask Airway (LMA)
- Endotracheal tubes Adult Males 8F, Females 7.5F; Child >1 year (Age/4) + (4(uncuffed) or 3.5(cuffed))
- Monitoring (pulse oximetry, ECG, capnography), Magill Forceps
- Emergency drugs/trolley
- Self-inflating bag valve resuscitator;
- Suction, Stylet, Bougie
- Plentiful oxygen supply

#### Pre-oxygenation

- Attach oxygen via nasal prongs. Turn up to MAXIMUM if patient is unconscious or after sedation. Keep this for the entire intubation process.
- Spontaneously breathing patient Position patient as below and allow at least 5 mins of spontaneous breathing with a tight-fitting non-rebreather facemask at MAXIMUM and continue until the patient stops breathing after sedation/paralysis: Avoid positive pressure ventilation if possible
- Patient not breathing or not breathing adequately— Use a Bag-Valve-Mask (BVM) with a reservoir and O2 at 15L/min to provide 1 breath every 6 seconds (synchronized to the patient's breaths) until you can achieve and sustain the highest possible SpO<sub>2</sub>



## Position the patient

Ensure you have 360° acccess to the patient

- Belt/Belly Height Head at or just above belt/belly level
- HoP up Head of Patient up to Head of Bed
- HoB up Head of Bed up 30°; Reverse trendelenburg in High BMI, Late Pregnancy, Spinal Immobilisation
- . Face Plane parallel to Ceiling (or just 10° tilt back) & Ear level to Sternal Notch

Assistants ready to help add or maintain external laryngeal manipulation, head elevation, jaw thrust, mouth

# Paralysis with Induction

Pharmacologic agents and dosages used for rapid sequence intubation			
Sedatives	Dose		
Ketamine (Ketamine is preferred for patients with hemodynamic instability or renal insufficiency)	2 mg/kg IV		
Midazolam	0.15 to 0.2 mg/kg IV (decrease dose in elderly)		
Neuromuscular Blocking (NMB) Agents	Dose	Onset	Duration
Succinylcholine (depolarizing NMB)  Contraindications:	1.5 mg/kg IV (adults) 2 mg/kg IV (infants) 3mg/kg IV (new-borns)	½ to 1 min	6-10 min

Pass the tube /Laryngeal Mask Airway (LMA) Limit attempt to < 30 seconds. Proceed down the algorithm after 30 seconds

Successful Proof of Intubation/LMA Insertion Not Successful 5 Point Auscultation - Epigastrium, Bilateral Axillae, Bilateral Lung Bases

- Self-inflating bag valve resuscitator ventilation 1 breath every 6s
- Secure tube at a depth of 3 x ET Tube size at the teeth/gums
- Check vital signs (BP, PR, RR, SPO<sub>2</sub>, T° C, RBS)
- · Connect patient to the ventilator if available
- · Initiate postintubation analgesia and sedation
  - Morphine 0.1 0.4mg/kg/hr
  - Ketamine (analgesic and sedative) 0.05 0.4mg/kg/hr
  - Midazolam 0.02 0.1mg/kg/hr
- Obtain portable CXR to Confirm Depth of ET Tube NOT location

Resume BVM ventilation - 1 breath every 3 seconds

See 6. Failed Intubation Algorithm

