

# Procedural sedation in the ED

## COVID-19 advice

**Procedural sedation in the emergency department (ED) may result in airway complications. Airway interventions to address complications of procedural sedation in ED should be managed as an Aerosol Generating Procedure (AGP).**

### Remember

- **Procedural sedation in ED should be avoided for patients with high probability of COVID-19 infection\*** (e.g. patients with fever, respiratory symptoms, close contact with confirmed case).
- **Alternative methods should be considered**, including:
  - local or regional anaesthetic block
  - general anaesthesia in the operating theatre.
- If procedural sedation in ED is the most appropriate strategy for your patient, **plan to make a single, best attempt at the procedure**. All clinicians involved in delivering sedation and performing the procedure should be senior and experienced. The ideal proceduralist for specialty surgical procedures (e.g. orthopaedics, ENT, plastics, etc.) is the relevant surgical registrar or consultant.
- **The clinician in charge of the ED should be involved in decision-making** regarding procedural sedation strategy, including infection control procedures and medication selection.
- When performing procedural sedation for patients with **high probability of COVID-19 infection, AGP precautions are required**, including contact, droplet and airborne PPE and appropriate room choice.\*\* The patient should wear a surgical mask, when appropriate.
- **Ketamine is the preferred primary sedation agent** because of the low risk of apnoea requiring airway management.
- **Nitrous oxide sedation should be avoided** because of high rates of aerosolisation. When no alternative is possible then nitrous oxide can be administered in ED with appropriate precautions. A viral filter should be placed between the mouthpiece and the regulator. The risk of aerosolisation is lower when using inhalation-driven nitrous oxide delivery systems.
- **When performing nitrous oxide sedation on children <5 years**, use compressible silicone face mask, low volume filter and commence at 70% nitrous oxide to **minimise re-breathing of CO<sub>2</sub>** and optimise nitrous oxide delivery in the context of increased circuit dead-space. Placing viral filters at both entry and exit points of the circuit is preferable. See [Paediatric Community of Practice](#) resources for further information about use of viral filters for paediatric patients.
- **Avoid high oxygen flows**. Use a standard oxygen face mask at flows <6L/min and monitor ETCO<sub>2</sub>.
- **Bag-mask ventilation is an AGP and should be avoided**. Basic airway manoeuvres should be used as firstline intervention for airway obstruction, including application of strong jaw thrust.

\* When COVID-19 risk status is "Red" alert, this may be all patients. When COVID-19 risk status is "Amber", staff may be directed by the ED director/nurse manager to manage all patients in the emergency department as if they have high probability of COVID-19 infection. When COVID-19 risk status is at "Green" alert, clinicians should undertake a risk assessment for each patient regarding the probability of COVID-19 infection.

\*\*Refer to [CEC Infection Prevention and Control guidelines Infection Prevention and Control guidelines for Management of COVID-19 in Healthcare Settings](#) and [CEC Response and Escalation Framework](#).

Document information	
Version number	3
Original publication date	6 July 2020
Developed by	Dr James Miers (ECI), Dr Clare Skinner (EDCoP clinical Lead), Natalie Wright (ECI Manager)
Consultation	ECI and Emergency Department Community of Practice Reference Group, Paediatric COP, Anaesthetic COP.
Endorsed by	Nigel Lyons
Review date	23 December 2020
Reviewed by	ED COP Reference Group
For use by	Guidance for ED clinicians when performing procedures that require sedation in ED during the COVID-19 pandemic.
Feedback	Feedback on this document can be provided to <a href="mailto:ACI-ECIs@health.nsw.gov.au">ACI-ECIs@health.nsw.gov.au</a>