

## Aerosol generating procedures – National IPC precautions for the Ambulance Sector.

(Currently only applicable to English trusts – Devolved nations please check latest local guidance).

AGPs are medical procedures that can result in the release of aerosols from the respiratory tract. The criteria for an AGP are a high risk of aerosol generation and increased risk of transmission (from patients with a known or suspected respiratory infection).

In response to the SARS-Cov-2 pandemic, infection prevention and control (IPC) guidance was developed for the NHS across the four nations of the UK. This guidance included a list of aerosol generating procedures (AGPs) based on the findings of previously conducted reviews. Given that SARS-CoV-2 was a novel pathogen and the evidence base regarding AGPs was still evolving, and the extant AGP list was determined when COVID-19 was classified as an HCID (High consequence infectious disease), a review of the extant AGP list was deemed necessary in support of NHS remobilisation needs across the UK.

A rapid review was conducted that sought to assess the available evidence identified for each procedure included on the current UK AGP list and to identify risks specific to SARS-CoV-2 in the current context (epidemiology and vaccination inclusive). The research question of the review was purposefully focused. Specifically, the review sought to answer the following research question: What is the available evidence to support the removal of any procedures currently included on the UK AGP list?

Following this review, the new NHSEI IPC manual (NIPCM) which has just been published has been updated to reflect the new updated list of AGPs and the associated PPE to be worn when undertaking these. Please note that this may not be the same in the devolved nations NIPC manuals.

### **What are AGPs? and what has changed?**

The list of medical procedures that are considered to be aerosol generating and associated with an increased risk of respiratory transmission is now as follows:

**Awake<sup>1</sup> bronchoscopy** (including awake tracheal intubation).

**Awake<sup>1</sup> ear, nose, and throat (ENT)** airway procedures that involve respiratory suctioning.

**Awake<sup>1</sup> upper gastro-intestinal endoscopy.**

**Dental procedures** (using high speed or high frequency devices, for example ultrasonic scalers/high speed drills).

**Induction of sputum.**

**Respiratory tract suctioning.**<sup>2</sup>

**Surgery or post-mortem procedures** (like high speed cutting/drilling) likely to produce aerosol from the respiratory tract (upper or lower) or sinuses.

**Tracheostomy procedures** (insertion or removal).

\*Awake including 'conscious' sedation (excluding anaesthetised patients with secured airway) \*\*

The available evidence relating to respiratory tract suctioning is associated with ventilation. In line with a precautionary approach, open suctioning of the respiratory tract regardless of association with ventilation was incorporated into the (COVID-19) AGP list. It is the consensus view of the UK IPC cell that only open suctioning beyond the oro-pharynx is currently considered an AGP, that is oral/pharyngeal suctioning is not an AGP. All insertion, removal and suction past of the oropharynx of any tracheostomy remains an AGP.

NHSEI are aware that this list is not currently the same as the UK wide list and for now this will apply across England. The national IPC cell view is that the evidence review is robust and provides a clear rationale for change but this change although likely to be adopted in some of the other nations, it will ultimately be up to each country to consider.

The UK IPC guidance for respiratory infections (including SARS-CoV-2) has now been archived and all guidance in relation to PPE now links to the new NHSE NIPCM.

Whilst Individual risk assessments still apply depending on the patient presentation and clinicians can and should make decisions on PPE requirements it is evident from the new list that most AGPs currently undertaken in the pre-hospital have now been removed from the list (except in the rare instance of tracheostomy insertion or removal). Airborne precautions (PPE / RPE) are not required for AGPs on patients / individuals that are not suspected / confirmed to be suffering from a respiratory infectious agent.

The clinicians decision making around the use of PPE and RPE must be guided by a risk assessment based on the individuals infection status. Standard and transmission-based precautions will apply depending on the clinical presentation of the patient in the pre-hospital setting.

Due to the increased risk of blood and body fluid and/ or respiratory droplets when in cardiac or respiratory arrest PPE is now recommended to be as follows:

- Gloves
- Facemask (FRSM)
- Eye protection
- Apron

The decision to wear an FFP3 respirator/hood should be based on clinical risk assessment e.g., the risk of aerosol transmission-based infections, the task being undertaken, the presenting symptoms, the infectious state of the patient, risk of acquisition and the availability of treatment, however clinical treatment should not be delayed.