

Aerosol-Generating Procedures (AGPs) COVID-19 Virus Positive Patients or PUI

Aerosols generated by medical procedures are one route for the transmission of the COVID-19 virus.

HIGH RISK PROCEDURES

The following procedures should be considered HIGH RISK and therefore require N95 precautions in addition to contact + droplet. Only those healthcare staff who are needed to complete the procedure should be present in the room during the procedure.

- Intubation, extubation and related procedures during these times
- Tracheotomy/tracheostomy procedures, including suctioning
- Manual ventilation
- Open airway suctioning
- Bronchoscopy
- Non-invasive ventilation (NIV) e.g. BiPAP, CPAP
 - *Exceptions:* viral/bacterial filter placed on the expiratory port; closed ventilator circuit, e.g. Servo; Bubble CPAP; **Note:** N95 precautions should be followed if/when the patient's mask is removed
- Surgery and post-mortem (autopsy) procedures in which high-speed devices are used
- High-frequency oscillating ventilation (HFOV)
- Induction of sputum
- Some dental procedures (e.g. high speed drilling)
- Cardiopulmonary resuscitation unless invasively ventilated and connected to ventilator

LOW RISK PROCEDURES

The following procedures are considered LOW RISK, and therefore continued use of respiratory contact & droplet precautions is appropriate:

- Nasal and oral suctioning
- NP and OP specimen collection
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Certain other procedures/equipment may generate an aerosol from material other than patient secretions but are not considered to represent a significant infectious risk. If patient is actively coughing please use High Risk process.

- High-flow Nasal Cannula (HFNC); surgical mask will mitigate droplet dispersal from coughing
- Bubble CPAP
- Medication administration via nebulization; transition to MDI when feasible

Note: During nebulization, the aerosol derives from a non-patient source (the fluid in the nebulizer chamber) and does not carry patient-derived viral particles. If a particle in the aerosol coalesces with a contaminated mucous membrane, it will cease to be airborne and therefore will not be part of an aerosol. Staff should use appropriate hand hygiene when helping patients to remove nebulizers and oxygen masks. All other patients use ordered isolation guidelines.

REFERENCES

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<https://vapootherm.com/covid-19-resource-center/>

[COVID-19 UK Government Guidance for infection prevention and control in healthcare settings](#)