



# Covid 19 Scenario: Patient's Risk grading, PPE Guidelines & Protocols for Aerosol handling in ORs, Cath labs, Imaging suites & ICUs for Health Care Workers

Dept of Anaesthesiology, Sree Chitra Tirunal Institute for Medical Sciences & Technology, Trivandrum, Dept of Science & Technology, Govt of India (Version 2)

Screening Criteria for Exposure (For Q 1-4, add family members also)		Points
1	Any H/o travel within the prior 14 days to a location where there is local or community transmission of COVID-19?	6
2	Any H/o close contact with a confirmed or suspected case of COVID-19 in the prior 14 days, at home or at work including in health care settings?	6
3	Is he/she living in the same household or flat as of a person with symptomatic laboratory-confirmed COVID-19 infection?	6
4	Is there any H/o traveling in close proximity with (that is, within 1 m) a COVID-19 patient in any mode of travel?	6
5	Is there any H/o severe acute respiratory illness in the absence of an alternative diagnosis that fully explains the clinical presentation?	6
6	Critically ill patient with unexplained pneumonia or respiratory failure / Are you Covid tested +ve in last 2 months	6
7	Health care worker managing a patient with acute respiratory symptom or fever in the last 14 days	6
8	Are you a health care worker/public health officials/social leader?	4
9	H/o fever / URI / LRI / Diarrhoea in last 14 days	4
10	Critically ill patient(Sepsis, MOD, Life threat malignancy etc)	2
11	Any underlying chronic health conditions: HT, DM,IHD COPD, Heart failure, Age >50 years, C/c Kidney; Liver diseases, immunocompromising conditions?	2
<b>Patient RISK: High- 6 or more ; Intermediate-4: Low-2</b>		

Risk Category	Precautions	PPE
1 <b>Aerosol / Non-aerosol</b> generating procedures in <b>Low risk / Non-COVID-19 patients</b>	Hand hygiene	Cap Triple layer / N95 mask, Gloves Consider goggles
2 <b>Aerosol</b> generating procedures in <b>Intermediate Risk</b>	Droplet & contact precautions	Cap, N95 mask Gloves, Goggles Impermeable Gown
3 <b>Aerosol</b> generating procedures in <b>High Risk</b>	Droplet & contact precautions	Cap, N95 mask Gloves, Goggles Impermeable Gown or Full PPE
4 <b>Aerosol</b> generating procedures in <b>COVID-19 patient</b>	Airborne, Droplet & contact precautions	Full PPE + Face Shield
5 <b>Routine care / Non aerosol</b> generating procedures of <b>COVID-19 patient</b>	Droplet & contact precautions	Full PPE
6 <b>Routine care / Non-aerosol</b> generating procedures in <b>High Risk</b>	Droplet and contact precautions	Cap N95 mask Gloves Goggles
7 <b>Routine care / Non-aerosol</b> generating procedures in <b>Intermediate Risk</b>	Hand hygiene & contact precautions	Cap Triple layer/ N95 mask, Gloves Consider goggles
Ref: Covid 19 Guidelines & Updates: American and Australian Society of Anaesthetists Guidelines of MOH FW, GoI Approved by Covid Cell SCTIMST 27-4-2020		

Aerosol generating procedures	Non-aerosol generating procedures
<ul style="list-style-type: none"> <li>• Bag mask ventilation, Intubation, Extubation</li> <li>• Ryle's tube insertion</li> <li>• Tracheostomy, NIV</li> <li>• Chest physiotherapy, Suctioning</li> <li>• Bronchoscopy, Coughing</li> <li>• Vomiting/retching</li> <li>• Prone positioning</li> <li>• TEE, Transfer of patients</li> <li>• Sternotomy, Bone drilling</li> <li>• Craniotomy</li> <li>• CUSA, Nebulisation</li> <li>• Cautery dissection</li> <li>• Laparoscopic/Endoscopic procedures</li> <li>• Pleural cavity procedures</li> </ul>	<ul style="list-style-type: none"> <li>• Central line insertion</li> <li>• Arterial line insertion</li> <li>• Bladder catheterisation</li> <li>• Regional nerve blocks</li> <li>• Central Neuraxial blocks</li> <li>• Lumbar puncture</li> <li>• Muscle Biopsy</li> <li>• Cath lab Percut. Interventions</li> <li>• CT Scan</li> <li>• MRI scan</li> <li>• TTE</li> </ul>
<b>Measures to prevent aerosol dispersion (Covid 19 &amp; High Risk cases)</b>	
<ul style="list-style-type: none"> <li>• The OR positive pressure ventilation system &amp; AC to be turned off until 20 min post last aerosol generating procedure</li> <li>• Disposable plastic sheets over monitors, ventilators, anesthesia machine etc.</li> <li>• If patient requires O<sub>2</sub>, the oxygen mask is applied over the surgical mask or N95 mask</li> <li>• Clean room 20 minutes after tracheal intubation (or last aerosol generating procedure)</li> <li>• During transfer, the team should wear a new proper PPE outside the operating room</li> <li>• If the patient is transferred with ETT, a single patient-use Ambu bag with HME filter attached should be used</li> <li>• Limit the number of personnel during the conduct of aerosol generating procedures</li> <li>• Prefer regional anaesthesia whenever possible</li> </ul>	