COVID-19 INTUBATION GUIDELINES

PREPARED BY THE SOCIETY OF ANAESTHETISTS OF ZAMBIA IN COLLABORATION WITH THE NATIONAL COORDINATOR FOR ANAESTHESIA AND CRITICAL CARE

Please use this guide to prepare for the intubation of a patient with suspected or proven Covid-19 disease.

For urgent concerns contact: .....

NO EXCEPTIONS: FULL PPE BEFORE ENTERING ROOM

PRE-INDUCTION

IV ACCESS x2..... CONFIRM
FACE MASK..... CONFIRM
AMBUBAG ..... CONFIRM
OXYGEN GUAGE..... CONFIRM
ETT ..... CONFIRM

INDUCTION (RAPID SEQUENCE INDUCTION ONLY)

DRUGS

STABLE PATIENT	UNSTABLE PATIENT
☐ **Fentanyl 3mcg kg^{-1}** ☐ **Ketamine 2mg kg^{-1}** ☐ **Suxamethonium 1-2mg kg^{-1}**	☐ **Fentanyl 1mcg kg^{-1} (can be omitted)** ☐ **Ketamine 1mg kg^{-1}** ☐ **Suxamethonium 1-2mg kg^{-1}**

- ☐ Apply standard monitoring, ensure HME filter and $ETCO_2$ applied to circuit
- ☐ Check IV access, patient position
- ☐ Pre-oxygenate with appropriate tight seal
- ☐ Give RSI drugs
- ☐ Turn oxygen flow down before removing mask
- ☐ Intubate and place blade on INCO pad on patient's chest
- ☐ If hypoxic, consider low pressure/low volume mask ventilation (2 handed technique)
- ☐ If laryngoscopy is difficult, insert LMA/iGel device and ventilate – assistant call for help
- ☐ If still difficult, apply two-handed technique – release cricoid
- ☐ Once tube is in place, inflate cuff before ventilating
- ☐ Increase oxygen flow back to appropriate level

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POST INTUBATION

SEDATION:

- ☐ **Propofol 1% 5 - 20ml h^{-1}**
- ☐ **Midazolam 1 - 5mg h^{-1} with/without morphine 1 - 5mg h^{-1}**

SYRINGES/BURETTES LABELLED

LINES:

- ☐ **12F NASOGASTRIC TUBE.....CHECK**
- ☐ **CVC LINE ..... CHECK**
- ☐ **URINARY CATHETER .....CHECK**

VENTILATOR:

- ☐ **OXYGEN.....SpO_2 >90%**
- ☐ **TIDAL VOLUME (see over for V_T) 6ml kg-1**
- ☐ **PEEP (see over for PEEP chart).....START 10cm H_20**
- ☐ **CXR (ETT above carina, NGT midline, CVC) .....CHECK**

FLUIDS:

(MINIMAL to help oxygenation)

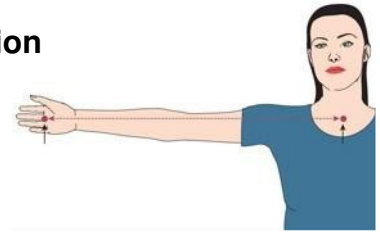
- ☐ **250 ml bolus if needed**
- ☐ **MAP (60-65mmHg or 70-75mmHg if PMHx of high BP) ..... NORADRENALINE (4mg in 50ml) labelled syringe**

LOW TIDAL VOLUME VENTILATION

This is a key evidenced based strategy that decreases mortality significantly in ARDS. Ventilate at 6-8ml kg^{-1} of PREDICTED body weight (PBW). Predicted body weight is determined from height.

Ascertain height by one of the following:

1. **Asking the patient how tall they are prior to intubation**
2. **Measure either from head to heel whilst supine**
3. **Measure demispan: double the distance from the root of the middle finger to the centre of the sternal notch. See figure.**



NIH PREDICTED BODY WEIGHT (PBW)/TIDAL VOLUME CHART													
MALES							FEMALES						
HEIGHT (cms)	PBW (Male)	4 *ml.kg^{-1}*	5 *ml.kg^{-1}*	6 *ml.kg^{-1}*	7 *ml.kg^{-1}*	8 *ml.kg^{-1}*	HEIGHT (cms)	PBW (Female)	4 *ml.kg^{-1}*	5 *ml.kg^{-1}*	6 *ml.kg^{-1}*	7 *ml.kg^{-1}*	8 *ml.kg^{-1}*
147	45.4	180	230	270	320	360	140	34	140	170	200	240	270
150	47.7	190	240	290	330	380	142	36.3	150	180	220	250	290
152	50	200	250	300	350	400	145	38.6	150	190	230	270	310
155	52.3	210	260	310	370	420	147	40.9	160	200	250	290	330
157	54.6	220	270	330	380	440	150	43.2	170	220	260	300	350
160	56.9	230	280	340	400	460	152	45.5	180	230	270	320	360
163	59.2	240	300	360	410	470	155	47.8	190	240	290	330	380
165	61.5	250	310	370	430	490	157	50.1	200	250	300	350	400
168	63.8	260	320	380	450	510	160	52.4	210	260	310	370	420
170	66.1	260	330	400	460	530	163	54.7	220	270	330	380	440
172	68.4	270	340	410	480	550	165	57	230	290	340	400	460
175	70.7	280	350	420	490	570	168	59.3	240	300	360	420	470
177	73	290	370	440	510	580	170	61.6	250	310	370	430	490
180	75.3	300	380	450	530	600	172	63.9	260	320	380	450	510
183	77.6	310	390	470	540	620	175	66.2	260	330	400	460	530
185	79.9	320	400	480	560	640	177	68.5	270	340	410	480	550
188	82.2	330	410	490	580	660	180	70.8	280	350	420	500	570
191	84.5	340	420	510	590	680	183	73.1	290	370	440	510	580
193	86.8	350	430	520	610	690	185	75.4	300	380	450	530	600
196	89.1	360	450	530	620	710	188	77.7	310	390	470	540	620
198	91.4	370	460	550	640	730	191	80	320	400	480	560	640

PEEP CHART

Titrate PEEP to FiO_2, aiming to keep peak pressures below 30cmH_20 if possible

FiO_2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0
PEEP	5	5-8	8-10	10	10-12	12-14	15	15