CLINICAL GUIDELINE
Emergency Department Guideline for Airway management in Adult and Paediatric patients with suspected COVID - 19

Western Health

COVID - 19

Be Safe -- Be Smart -- Be Kind

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Emergency Department Guideline for Airway Management in Adult and Paediatric patients with suspected COVID – 19

1. Overview:

To provide a guideline to Emergency staff managing both adult (Footscray, Sunshine and Williamstown) and paediatric (Sunshine Hospital) patients within Western Health Emergency Departments that may require urgent intubation during the COVID-19 Pandemic response period.

2. Applicability:

This guideline is applicable and essential knowledge information for all staff who work in the Western Health Emergency Department's during the COVID-19 Pandemic response period.

3. Responsibility:

Responsibility lies with the Division of Emergency, Medicine & Access Divisional Director and Clinical Services Director, the Directors of Emergency Medicine & Paediatric Emergency Medicine at the Footscray and Sunshine Emergency Departments, the Clinical Lead of the Williamstown Emergency Department, the Nurse Unit Managers for the Williamston, Footscray, Sunshine Emergency Departments and the Nurse Unit Managers Sunshine and Footscray, Short Stay Units.

4. Authority

Exceptions to this guideline can only be authorised by the Clinical Service Director and Divisional Director, EMA.

5. Associated Documentation:

This guideline aligns with the following WH documents available on the microsite

1) WH ED COVID Clinical Matrix Guide
2) WH COVID Clinical Guidelines for Doctors v9.4
3) WH Safe use of Respiratory therapy v4.0

6. Guideline Detail

NOTE: Paediatric specific guidance is outlined in beige and italicised.

6.1 General Principles

- The Duty Emergency Physician may override the following guideline in consultation with the Nurse in Charge on a case by case basis.
- During the COVID 19 pandemic, changes to usual practices are required maximise staff and patient safety.
- Intubation in ED is a high risk procedure. The COVID 19 pandemic is associated with additional risks associated with staff exposure, altered work environments, and changes to normal clinical practice. The risks to staff need to be considered alongside the risks to the patient.
- Intubation is an aerosol generating procedure (AGP) performed by staff who are wearing appropriate personal protective equipment.
- The choice of location and appropriate staffing for intubation may vary. It will be dependent on patient factors, availability of human resources and availability of critical care resources within the hospital.
- Intubation should occur in the highest-order engineered room available and/ or such that patient and staff safety is maximised.
- Protection of staff protection remains a key priority, even in the event of significant deterioration.
- Care must be taken when donning PPE and a spotter system should be used to ensure no breaches.
- Early identification of deterioration and planning for intubation is key to making this process safe.

6.1.2 Additional Paediatric Considerations

- *Paediatric intubation in the Emergency Department is a high-risk/low-frequency procedure.*
- *ALL paediatric patients requiring intubation during the COVID-19 pandemic period will be treated as suspected of having COVID-19 despite the most common indications for intubation in paediatric patients in the ED being status epilepticus and head injury with low GCS.*
- *Intubated paediatric patients are not admitted to Western Health and require transport to a Paediatric Intensive Care Unit (The Royal Children's Hospital or Monash Children's Hospital) by PIPER retrieval service. Occasionally, older adolescents can be admitted to a WH ICU by strict negotiation with the ICU consultant.*
- *Intubated paediatric patients requiring external transfer are likely to stay in the Emergency Department for longer than adult patients due to the need for transfer and the coordination of a retrieval team. Contact PIPER early in the sequence.*

6.2 Preferred Location for Intubations.

- The safest location to assess and resuscitate a patient (regardless of COVID risk/ status) is the Resuscitation area of the department. This is due to the space, familiarity of environment and location of equipment that may be required, as well as ease of communication with other parts of the department.

If a patient is stable but has been identified as likely to need intubation, attempts should be made to move the patient to a safer location within the hospital prior to intubation where possible.

Hierarchy of room preferences for an Emergency Department patient requiring Intubation		
Type of Patient in ED	**Sunshine Hospital**	**Footscray Hospital**
Adult - Unstable and/or undifferentiated patient	Hierarchy R3 R1 R4 Cubicle 23 SSU 1 (if required)	Resus 1
Adult - Suspected/ Confirmed COVID-19 patient with gradual respiratory system deterioration, relative hemodynamic stability deemed suitable for planned intubation	Not applicable	1. Isolation Room- ICU 2. Other negative pressure room in theatre/ward 3. Resus 1
Child	1. R 3 2. R 1 3. R 4 4. CH 01 – Neg Pr 5. Cubicle 23	Resus 1
Child with concerns of difficult airway	Consider theatre on discussion with anaesthetics	Resus 1

6.3 Personnel/Staffing

- Tracheal intubation is an aerosol generating procedure (AGP) which potentially exposes staff to risk. Only those directly involved in the process of airway management should be in the room.
- Staff risk is minimized by assembling the most experienced team available to facilitate tracheal intubation in the safest manner requiring the least attempts.
- If required, additional airway support is obtained by calling the Anaesthetist in charge (FH- 8345 6540, SH- 9055 3021). COVID 19 Critical Care Outreach team (in and out of Hours) is available to assist with difficult intubations.
- Decision making in regards to suitability for escalation of care will be done by ED in consultation with hospital guidelines and ICU (for adults) or PIPER (for paediatrics) when required.
- As a general principle, the most experienced team available should be assembled.
- ED consultant on-call overnight must be called for all COVID positive intubations
- A proposed allocation of staff is shown on the table below divided into Ideal and preferred Substitute.

Staffing Matrix mix for ED Intubation

Staffing Matrix mix for ED Intubation	
Role	Description
Airway Doctor	Emergency Physician/ *Paediatric Emergency Physician)* or most experienced doctor with airway experience • Performs upper airway intervention.
Airway Nurse	ED nurse (with mech vent accreditation) • To assist the Airway doctor, prepare equipment and monitoring, pass airway equipment and assist with BVM ventilation as required
Team Leader	Next most senior doctor available. • Coordinates team, manages drugs, and communicates with staff outside room as needed.
At least 2 additional staff (Scribe and Runner) situated in Anteroom in PPE	2 additional staff – at least one with resus experience. • Are able to source additional equipment from outside room, act as PPE “spotter”, scribe, and be able to enter room if requested.

6.4 Equipment

A standardized airway equipment box has been agreed on across all disciplines. (See separate Appendices for Adult and Paediatric specifics)

Important equipment information includes:

- ED will have a local store of 3 prepared boxes suitable for adult intubation available at each site.

Paediatric patients have prepared trays available at Sunshine.

- Suction and Yankeur sucker in each room are to be restocked and checked as per usual practice.
- A pre prepared BVM with bacterial/viral filter, etC02, and liquorice stick will be part of the equipment setup.
- The ED CMAC Video Laryngoscope will be used for intubations in ED.

The Paediatric ED Glidescope or CMAC will be used for paediatric intubations at Sunshine

- Standardised Cognitive Aids (see Appendices) will be visually displayed at all potential Intubation sites
- PPE will be provided and donned outside room.

Ventilator

- The ED Hamilton Ventilator will be used. Should the patient prove difficult to ventilate, an ICU ventilator (and appropriate staff to manage it) may be requested as per pre-COVID procedures.

The ED Hamilton Ventilator will be used for paediatric patients >20kg. If <20 kg, patients will require manual ventilation awaiting PIPER using a BVM or Neopuff.

Paediatrics

- *To substitute for Adult airway equipment box, Sunshine ED is using a combination of a Paediatric Airway Tray and equipment from an Airway trolley in Resus or Broselow Trolley in Paediatric Department*
  - *The Airway/Broselow trolleys should **NOT** be taken into the intubating cubicle*
- *Equipment will need to be gathered as per the checklist, removed from the Airway/Broselow trolleys and placed on a tray to take into the intubating cubicle.*
- *Paediatric Airway Tray x 3:*
  - *Contents: Non sized specific airway equipment (see Appendix G)*
  - *Checklist for equipment required from Broselow trolley*
  - *Location: 1 x Resus Store room, 1 x inside Cubicle CH01 Resuscitation trolley, 1 x inside A23 Anteroom.*
- *Combined Airway trolley*
  - *Contents: airway equipment for Paediatric and Adult patients including inline suction*
  - *Location: Resus 2*
- *Broselow trolley x 1:*
  - *Contents: age/size specific airway/intubation adjuncts and equipment.*

- *Location: Outside CH04 in Paediatric department*
- *The Broselow trolley should **NOT** be taken into the intubating cubicle*

Drugs

Footscray ED uses a standardised sealed drug pack – the "Emergency Intubation Pack." Standardized drug packs are not used at Sunshine ED - drugs should be decided by team leader in consultation with the airway doctor.

Drugs (see Appendix for full details)

- The induction agent in the pack is Ketamine.
- The NMBA is Rocuronium.
- Packs also include the required consumables.
- If a different induction agent or NMBA is required/requested by the physician leading the intubation, these can be obtained from regular stock (eg. Midazolam, Propofol, Suxamethonium).
- Vasopressors will be provided by ED as requested as part of the Pre-intubation outside room checklist.
- Packs are stored in the main S8 drug safe at Footscray ED.

Emergency Intubation Pack
Induction Agent ▪ Ketamine 200 mg/2 mL x1 + Sodium chloride 0.9% 10 mL x2 **Paralysis Agent** ▪ Rocuronium 50 mg/5 mL x3
Consumables ▪ 20 mL Luer lock syringe (clear) x1 ▪ Drawing up needle x1 ▪ Red plunger syringe 5 mL x3 ▪ 19G needle x3 ▪ Rocuronium label x3

6.5 Indications for Intubation.

Prior to intubation, consider the goals of care;

- Is intubation appropriate? Involve the Emergency Physician in decision making where it is uncertain.
- Consider
  - Whether an Acute Resuscitation Plan (ARP) or Advanced Care planning document exists.
  - The patients Clinical Frailty Score.
- If applicable, refer to additional guidance from Western Health Ethical Decision Making Framework. (This will only come into effect if required, and will be provided to you as appropriate)

ICU/PIPER should continue to be notified EARLY for any patient at risk of requiring HDU/ICU level of care to facilitate early transfer when possible.

The indications for intubation remain similar to usual practice. The timing of intubation is challenging. Whilst early intubation was thought to be beneficial, this strategy may introduce additional risk and harms to the patient and is not currently recommended.

Consider intubation when;

- There is worsening hypoxia refractory to oxygen therapy.
- Rapid progression over hours
- Evolving hypercapnia, increasing work of breathing, increasing tidal volume, worsening mental status.
- Haemodynamic instability or multiorgan failure.

Decreasing GCS

RR persistently within the Purple zone on Victor Charts

If additional airway support is felt necessary, contact the In-Charge Anaesthetist as per usual practice.

FOOTSCRAY	PHONE 8345 6540
SUNSHINE (All patients)	PHONE 9055 3021

6.6 Intubation

6.6.1 Preparation – Pre Intubation Checklist

Checklist to be completed using cognitive aid (*see Appendix – Intubation Checklist*) both Inside and Outside room.

Airway equipment must be kept protected both pre and post intubation.

Ensure all used equipment is placed in a way to minimise the chance of cross contamination. This includes the laryngoscope and suction catheters that may contaminate surroundings.

Checks OUTSIDE ROOM.

- ***TEAM***
  - Establish Team and roles.
  - Don PPE and Buddy Check.
  - Check communication device functioning.
- ***PATIENT***
  - Review potential airway difficulties, medication history and allergies, past medical history
  - Ensure haemodynamics optimised and deterioration anticipated
  - Ensure IV access x 2
- ***EQUIPMENT***
  - Setup airway trolley outside room.
  - Choose CMAC blade / *Glidescope blade*
  - Choose Induction/Paralysis drugs and doses.
  - Consider need for vasopressor.
  - Discuss and prepare post intubation plan including ventilator settings and sedation plan.
- ***PLAN***
  - Discuss failed intubation plans.

Checks INSIDE ROOM

- *Patient positioning (consider ramping)*
- *Turn videolaryngoscope on*
- *Ensure suction connected and on*
- *Connect monitoring*
- *Preoxygenate*
- *Confirm ETCO2*
- *Final checks.*

6.6.2 Intubation

Preoxygenation

- Mask-filter-$ETCO_2$-Laerdal bag with PEEP valve (set at 10 cm H20).
- Tight fitting mask, with two-hand grip.
- 45 degrees head up.
- NIV/ HFNO should be used for pre-oxygenation and could be continued until laryngoscopy post induction
- Apnoeic oxygenation is now considered a low risk AGP and recommended to prevent hypoxia

Rapid Sequence Induction

- Modified RSI (1.2 – 1.5mg/kg IBW Rocuronium OR 1.5mg/kg TBW Suxamethonium).
- Wait 60 seconds for paralysis for Rocuronium or fasciculations for Suxamethonium
- Avoid routine cricoid pressure
- 2-person gentle BMV during apnoea if risk of severe hypoxia.

Intubation

- Use video laryngoscopy for first attempt at intubation.
- If bougie used, remove through gauze to contain droplet spread
- Inflate cuff prior to ventilating.
- Connect BMV, and confirm position with ventilator waveforms and capnography, as well as chest movement and auscultation.
- If failed Intubation, process with planned rescue plans A suggested plan is as follows;
    - Plan B LMA (I-Gel in adults)
    - Plan C two handed BMV +/- OP Airway or NP Airway
    - CICO (Can't Intubate, Can't Oxygenate) algorithm approach if intubation fails.
        - Scalpel-bougie-tube technique (Adults, Paeds > 8yo)
        - *Use needle insufflation (Paeds <8 years old)*

Transfer to ventilator

- Prepare Inline suction if suctioning required.

  Check that the inline suction is appropriately sized for ETT

  Two paediatric sized inline suction catheters are available at Sunshine

  7Fr for ETT 3mm to 4mm

  10Fr for ETT 4.5mm to 5.5mm

- Turn off the oxygen flow to the self-inflating bag.
- Clamp the ETT using a chest drain clamp.
- Disconnect the ETT from the bacterial/viral filter.
- Take prepared circuit (including inline suction and filter) and connect to ETT.
- Unclamp ETT, turn ventilator on and commence ventilation.

Post-intubation

- Insert nasogastric tube (NGT) immediately post-intubation

- Arrange CXR to confirm ETT and NGT placement
- Avoid contamination from the laryngoscope blade. Place blade and handle (and C-MAC™ lead) into an open plastic bag or bin liner
- Clamp ETT during circuit disconnections for transfer, or leave filter attached to ETT
- Doff outside room/ante room (if not involved in transfer/ongoing direct care).

7 Williamstown Specific Intubation Guideline

Preparation for Intubation at Williamstown Emergency Department.

When the decision has been made by the Senior Medical Officer to intubate the suspected COVID patient and it is deemed medically unsafe to transfer patient without intubation the following process should be followed:

- ***Negative Pressure Isolation Cubicle 6*** is the preferred location for the intubation of suspected COVID patient. Patients to be taken directly from the Triage area to Cubicle 6 if possible to maintain isolation of suspected COVID patient.
- Area ***outside of cubicle 6 to act as an anti-room*** for preparation of staff and equipment both doors to remain closed at this time.
- ***PPE to be donned*** by all staff including yellow gown, N95 mask, full face shield and double gloves.
- Aprons also available for under the gowns and surgical caps. Full suit if preferred.
- ***Nurse In Charge*** to inform remaining staff of situation and delays, communicated to triage nurse with further communication to patients in the waiting room.
- ***Patient to receive oxygen therapy*** as required and IV access established including full septic work-up prior to intubation. Full PPE to be worn during this patient assessment period.

Personnel/Staffing

A delegation of Staff for Intubation team will allocated at beginning of each shift in preparation.

Roles include;

1. Team Leader/Airway Doctor,
2. Airway nurse
3. Anaesthetic drug administration role/ Second doctor or Senior nurse
4. Scribe
5. Runner (initially to collect all required equipment and then DON PPE to assist with intubation)

Scribe to remain outside cubicle 6 as PPE spotter and will communicate via monitor during the procedure. Scribe only to enter cubicle 6 if required for Resuscitation to bring Defibrillator into the cubicle. EMR drug chart to be completed following the procedure by medical staff. According to documentation by scribe.

Equipment:

Equipment to be set-up on three trolleys outside isolation cubicle will include:

- Intubation trolley including McGrath intubating equipment and iGels for airway rescue measures
- Intubation drug bag and IV Fluids with giving set.
- Hamilton's ventilator with ventilator circuit, viral filter and in-line suction attached.
- Double Oxygen connector required in Cubicle 6 as only one oxygen outlet. (Spare oxygen cylinder also on trolley in cubicle 6 as backup.)
- Air-viva set-up with viral filter and ETCO2 tubing

- IV cannulation /Circulation trolley for access
- Cardiac monitoring equipment already set-up in Cub 6. ETCO2 module to be sourced from Resus cubicle at the time of Intubation.
- Art line, CVC line and IDC set-up in boxes outside Cubicle 6 for use as required.
- Resuscitation trolley including Defibrillator to remain outside Cubicle 6 for the duration of the Intubation unless required.
- Communication device/White board markers/Laminated RSI checklists/ASA flowcharts

Prepared trolleys to be taken into the isolation room at the time of the intubation by the Airway Doctor, Airway Nurse and Drug administrator once the pre-intubation checklists have been completed by the Medical Team Leader.

Intubation of patient

As per the guideline set out by Footscray and Sunshine ED/Safe Airway Australia.

- Doffing of PPE to be observed by spotter staff on exiting the patient cubicle.
- All equipment cleaned as per protocol following the transfer of the patient.

Operational Considerations

- In the event of an intubation during business hours Nurse Unit Manager will assist on the floor.
- NIC to inform Access manager of procedure and need for patient transfer.
    - Post 14:30 or on the weekend/public holiday – the WTN AHA should be immediately notified of the intent or possibility of need to intubate. They will arrive and offer support to the department.
- Access Manager between 0800 and 1430 SH, post 1430 WTN to organise the ICU or critical care bed for patient that is being intubated.
- NIC to notify 000/MICA at the commencement of any intubation.
- CMO to handover to ICU staff in preparation for patient admission.
- AHA for assistance after 14.30 pm as required to manage department and transfer of patient.
- The CMO or senior ED clinician may override the clinical guidance as there is not an ED physician on call or attending.

NOTE: There is currently limited or no Anaesthetic support at Williamstown Hospital.

9 References

1. Consensus statement: Safe Airway Society principles of airway management and tracheal intubation specific to the COVID-19 adult patient group Med J Aust 2020; 212 (10): 472-481. || doi: 10.5694/mja2.50598 Published online: 5 May 2020
2. Australian and New Zealand Intensive Case Society (2020) ANZICS COVID-19 Guidelines). Melbourne: ANZICS Version 3. October 2020.
3. Australasian College for Emergency Medicine (2020) Clinical Guidelines for the management of COVID-19 in Australasian Emergency Departments v 5.1 21 December 2020.
4. National COVID-19 Clinical Evidence Taskforce https://covid19evidence.net.au/

10 Sponsor

Clinical Service Director of Emergency, Medicine and Access

11 Authorisation Authority

Clinical Service Director of Emergency, Medicine and Access

12 Appendix A – COVID-19 Airway Trolley Contents List

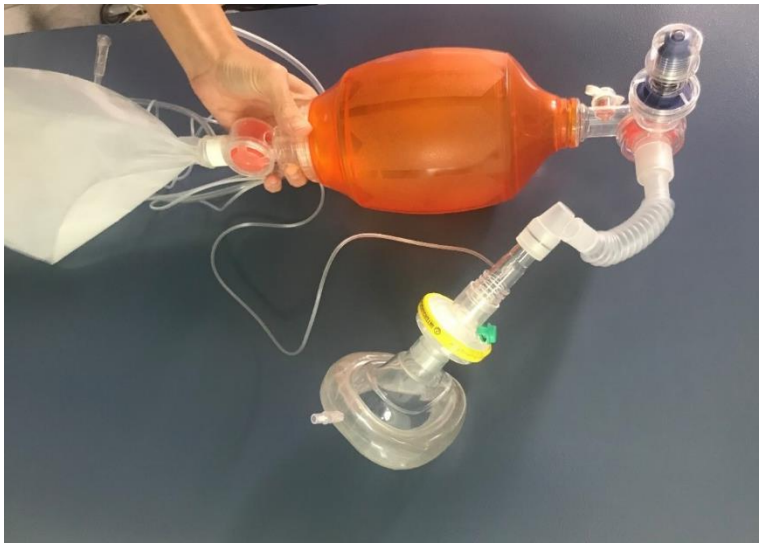
Top Shelf

Kit dump A3 laminated sheet (taped to left side of surface)

COVID-19 Airway Trolley A4 laminated sheet (taped to surface)

Dirty tray on the right

PLAN A -Intubation box



- Bag-Valve Mask -
  - preassembled in following order (see picture)
    - Bag Valve Mask
    - PEEP Valve (PEEP set to at least 10)
    - Liquorice Stick
    - In line etCO2
    - Bacterial/Viral Filter
    - Medium Sized Face Mask
- Laryngoscope handle
- Mac 3 and 4 blade (1 of each)
- Bougie 15Fr
- Stylet
- Cuffed ETT - Size 6, 7 and 8 (1 each)
- 10ml syringe
- Tube tie white tape
- Transpore tape or Sleek
- Lubricant sachet
- Forceps or clamp (for ETT) thoracic tube clamp
- Gauze Pack
- Salem Sump NG tube 14 Fr & spigot & lubricant & nasofix tape
- Inline/closed suction pack
- This contents list

All connections to be twisted on insertion to ensure tight

Bottom shelf

Plan B - LMA box

- Size 3, 4 and 5 igels (1 of each)
- Lube sachet

Plan C – Bag Mask Ventilation and adjuncts box

- Small/Medium/Large adult disposable facemask
- 80mm Green, 90mm Yellow and 100mm Red Guedel airways
- Size 6.0 nasopharyngeal airways x1
- Size 7.0 Nasopharyngeal airway x 1
- Lube sachet

Plan D – Surgical Airway Box

For CICO (Can't Intubate, Can't Oxygenate) scenarios

- Disposable size 10 scalpel
- Bougie 15Fr
- Size 6 ETT
- 10 ml syringe
- Chlorhexidine swab
- Gauze

13 Appendix B – COVID Intubation Box Content Visual

FED: COVID INTUBATION BOX CONTENTS

Use alongside Kit Dump poster

TAPED TO TOP OF BOX:

Preassembled BVM (see photo)

BVM + PEEP valve +Liquorice stick + Inline Capnograph + Viral filter (see photo outside BAR)

In separate labelled snap lock bags:

Plan A, B, C, D, Post-intubation, Circulation

Other: Whiteboard marker, Bluey x2 (at top)

PLAN A – Primary Strategy

- Laryngoscope Handle
- Laryngoscope blades: size 3 and 4
- Cuffed ETT: Size 6, 7 and 8
- Introducer/Stylet
- Bougie
- Lubricant sachet
- 10ml syringe x 2
- ETT tie + ETT Sleek tape
- ETT clamp (ICC tube clamp)
- Inline suction
- Gauze pack
- Extra viral filter

PLAN B - Supraglottic

- LMA (IGel): size 3, 4 and 5
- Lube sachet

PLAN C - BVM

- Small/Medium/Large Adult disposable facemask
- OP Airway (Guedel) : Size 2, 3, and 4
- NP Airway: size 6 and 7

PLAN D CICO

- Scalpel (long)
- ETT size 6.0
- Gauze pack

Post Intubation

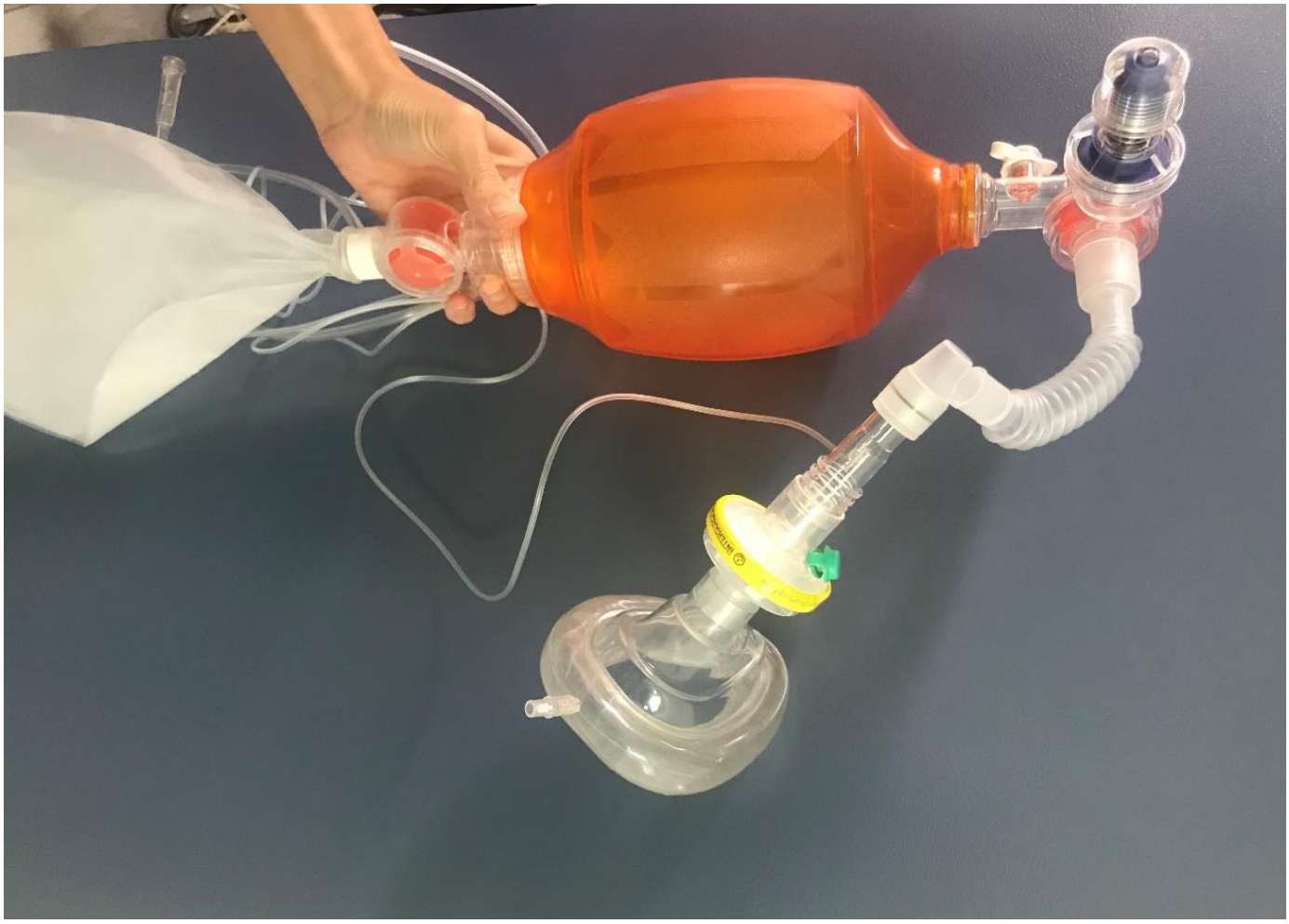
- NGT + Lube + Bag + 60ml syringe + Valve + Nose sticker
- Giving set for ongoing sedation

Circulation

- 1x IV cannula insertion pack (20g + 18g)

COVID ED Footscray Intubation Box Contents V7 2020_04_14

14 Appendix C – ED Bag Valve Mask Set up. (Poster)



- Bag Valve Mask
- PEEP Valve (PEEP set to at least 10)
- Liquorice Stick
- etCO2
- Bacterial/Viral Filter
- Medium Sized Face Mask

All connections to be twisted on insertion to ensure tight

15 Appendix D - Intubation Checklist

EMERGENCY COVID-19 INTUBATION CHECKLIST

CHECKS BEFORE ENTERING ROOM or CUBICLE

TEAM

- ❑ **Anaesthesia contacted if concerns?**
  Footscray - 83456540
- ❑ **Roles allocated?**
  Team Leader/drugs
  Airway Nurse
  Airway Doctor
  Scribe
  Runner (outside)
- ❑ **Don PPE & buddy check?**
- ❑ **Communication working?**

PATIENT

- ❑ **Difficult airway anticipated?**
- ❑ **Pre-oxygenation method?**
- ❑ **Haemodynamics optimised?**
- ❑ **Monitoring working?**
  $ETCO_2$, SpO_2, BP
- ❑ **IV access x2?**
  Fluid on pump set

EQUIPMENT

- ❑ **Drugs drawn up & doses chosen?**
  Induction drugs
  Vasopressors
  Post-intubation sedation
  (Paeds- use Monash Book for weight-based doses)
- ❑ **Intubation equipment ready?**
  Laid out as per kit dump
  ETT size chosen, tested
  BVM *with filter* checked
- ❑ **C-MAC?**
- ❑ **Ventilator settings?**

PLAN

- ❑ **Plans discussed?**
  Plan A – VL Intubation with bougie/stylet
  Plan B – iGel
  Plan C – BVM (2 person with OPA/NPA)
  Plan D – surgical airway
- ❑ **What is the trigger to move to Plan B?**
- ❑ **Any questions or concerns?**

VL = videolaryngoscope

FINAL CHECKS AT BEDSIDE

- ❑ **Patient position optimal?** Head up, ear-to-sternal notch
- ❑ **Suction checked?**
- ❑ **Fluid running easily?**
- ❑ **BVM with filter, O_2 connected at 15L/min?**
- ❑ **$ETCO_2$ trace?**
- ❑ **CMAC on?**
- ❑ **Pre-oxygenation optimal?** BVM, good seal confirmed with $ETCO_2$ trace
- ❑ **Everyone ready?**
- ❑ **Remember to DOFF safely with buddy check!**

COVID 19 Emergency Intubation Checklist, Western Health, 11/9/20

Western Health

COVID-19 INTUBATION CHECKLIST

Version 7

Western Health

CHECKS BEFORE ENTERING ROOM

TEAM

- ❍ **Contact Anaesthesia (if required)**
  - FH – 8345 6540
  - SH – 9055 3021
- ❍ **Allocate Roles**
  - Team Leader
  - Airway Doctor
  - Airway Nurse
  - Runner
  - Scribe
- ❍ **Don PPE in Anteroom & Buddy Check**

PATIENT

- ❍ **Patient Assessment**
  - Airway
  - Allergies
  - Medication
  - Past History
- ❍ **Haemodynamics optimised**
- ❍ **IV access**
  - 2 preferable
- ❍ **Positioning**
  - Head up 45°, Oxford Pillow/Ramp

EQUIPMENT

- ❍ **Set up Airway Trolley**
  - Select CMAC blade
- ❍ **Induction Drugs**
  - Ketamine *and* Rocuronium available in preassembled pack.
  - Alternatives on request
- ❍ **Vasopressor**
- ❍ **Post-Intubation Planning**
  - Ventilator Settings
  - Sedation plan

PLAN

- ❍ **INDUCTION PLAN**
  - Induction
  - Paralysis
  - Vasopressor
- ❍ **AIRWAY PLANS**

A – INTUBATION
- CMAC
- Stylet/Bougie

B – LMA (I-GEL)

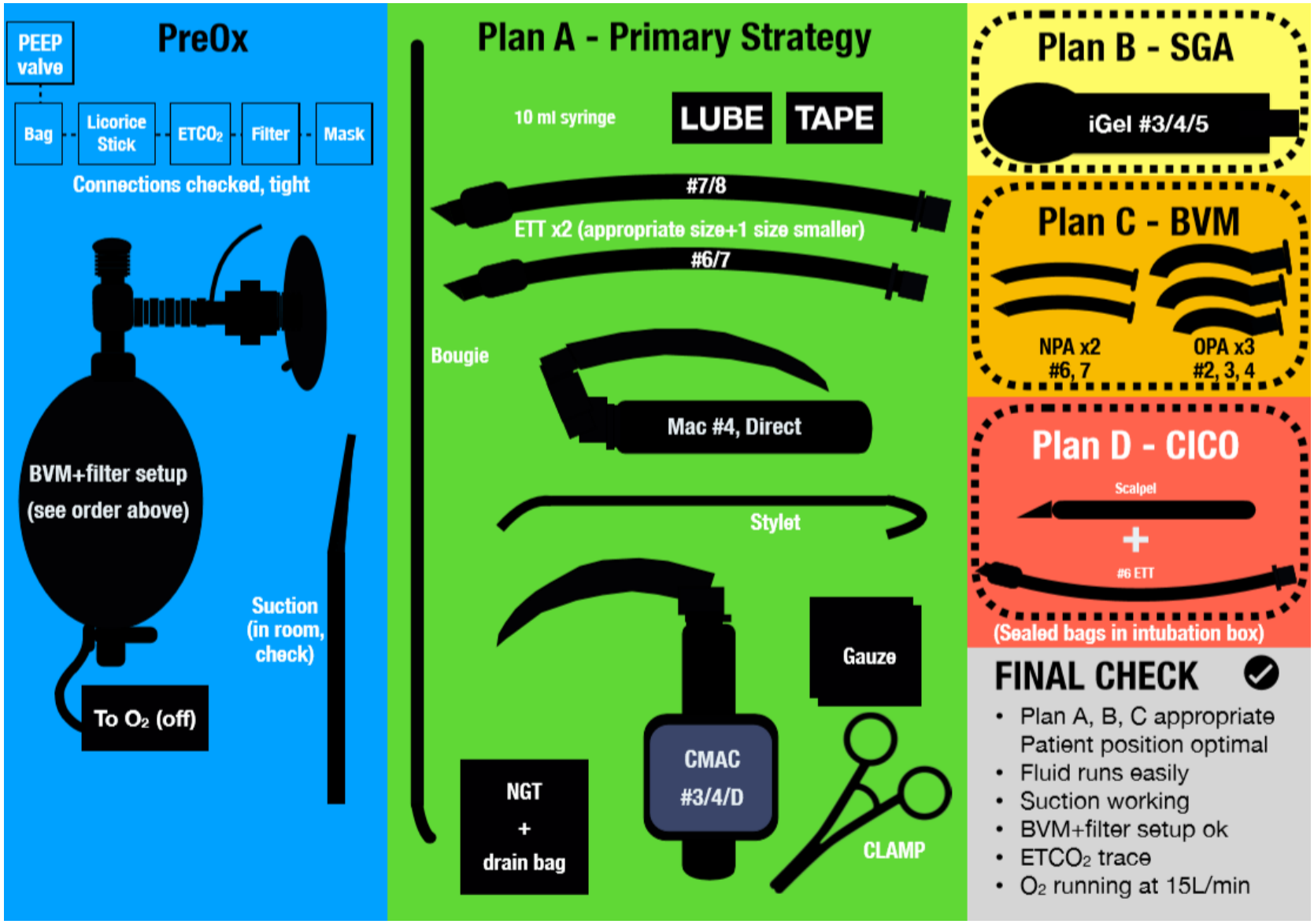
C – BVM VENTILATION
- 2 handed grip
- 2 person technique
- Consider OPA/NPA

D – SURGICAL AIRWAY
- Scalpel-Bougie-ETT

FINAL PRE-INDUCTION CHECKS INSIDE ROOM

- ❍ Patient Positioning Optimised
- ❍ Turn CMAC on
- ❍ Suction working
- ❍ Connect Monitoring
  - BP (1min cycle)
- ❍ Confirm $ETCO_2$ Trace
- ❍ Pre-oxygenation
- ❍ Mask-Filter-$ETCO_2$-PEEP valve-self inflating bag complete
- ❍ Oxygen 15l/min
- ❍ Fluid Running
- ❍ Induction Plan Clear
- ❍ Airway Plans Clear
- ❍ Everyone Ready

16 Appendix E COVID 19 Intubation Team Kit Dump Poster



16 Appendix F - Anaesthetic Medication Intubation Packs Emergency Intubation Packs (Footscray ED only)

General principles

- Tamperproof bags are to be used for storing medications required in each pack. These can be ordered via FMIS when needed (see below)

SATCHEL SECURITY CLEAR #1 - 117 S2S1 260 190 (PACKET 25)

Shopping Category	Medical Supplies.Sterilization indicators and controls	Supplier	SECURITY4TRANSIT	Supplier Site	PO OAKLEIGH
Supplier Item	1-117 S2S1 260 190	Internal Item Number	512848	Alias	
Comments	STOCK ITEM	HPV Code		Rebate Code	
Price	125.91 AUD	Agency Code	WH		

- The packs are to be stored in the S8 medication safe and accounted for in the designated S8 medication register
- The packs should be included in the Balance Check at each shift change as usual

Pack contents / labelling

Emergency Intubation Pack / Ketamine
Induction Agent ▪ Ketamine 200 mg/2 mL x1 + Sodium chloride 0.9% 10 mL x2 **Paralysis Agent** ▪ Rocuronium 50 mg/5 mL x3
Consumables ▪ 20 mL luer lock syringe (clear) x1 ▪ Drawing up needle x1 ▪ Red plunger syringe 5 mL x3 ▪ 19G needle x3 ▪ Rocuronium label x3

Making up a pack

1. Sign out ketamine from the S8 medication register - 2 RNs required as per hospital policy
    a. Entry to be noted as “for emergency intubation pack”
    b. The unique tamperproof bag number should be noted in the UR number column
2. Collect other required medications and consumables for the pack
    a. Out of fridge date for Rocuronium to be marked on the ampoule as usual
    b. Place separately in a plastic zip lock bag (from pharmacy)
        i. Rocuronium stickers to also be placed in the plastic zip lock bag

3. All medications and consumables to be placed in tamperproof bag and sealed
    a. Place labels on the bag, which lists the contents of the bag
    b. Consider measures required to safely store ampoules e.g. within a vial or with padding
    c. Write out of fridge date of Rocuronium on tamperproof bag - easier to visualise expiry and reduces unnecessary handling of each pack (Rocuronium has 3month expiry out of the fridge)
    d. Date packed and initials of those making up the pack to be noted on label
4. Sign the pack into the register
    a. Signed in as 1 unit for each pack
    b. Unique tamperproof bag number is to be recorded in the medication section at the top of the column
5. For each C+C, each pack is to be accounted for by checking that the bag number in the safe corresponds with what is entered in the register

Signing out packs for intubation purposes

1. The required pack(s) are to be signed out of the register when required
2. If unused, any remaining packs are to be signed back into the register at the earliest possible opportunity
    a. If a pack has been used, the UR for the patient it was used for is to be written against the entry used for signing the pack out. This should be recorded under the discards/comments column, along with any associated discards per legislative requirements

Accountability

For accountability purposes, staff performing the C+C must also check previous entries in the register (until the last C+C) to ensure that the packs signed out have either been:

- Signed back in if unused
- Matched with a UR number to confirm that the packed was used for patient intubation

If a pack cannot be accounted for:

- The persons who have signed out the unaccounted for pack must be contacted to account for the pack and ensure the necessary documentation

If the pack remains unaccounted for, a Riskman must be completed with subsequent follow up in accordance with OP-GC6 Medication Prescription, Supply, Storage and Administration procedure.

17 Appendix G Paediatric Airway Tray (Sunshine ED)

	ITEM	SOURCE	
☐	NGT 1 x 6 Fr, 1x 8Fr, drainage bag, 20ml syringe, valve, Litmus paper, Duoderm/fixomull for securing	In NGT bag in Tray	IN TRAY
☐	10ml syringe x 5	Tray	
☐	Tube tie twine / trache tape / Elastoplast	Tray	
☐	Sachet lubricant x 5	Tray	
☐	Oropharyngeal airways all sizes up to 2.	Tray	
☐	Nasopharyngeal airways – one of each	Tray	
☐	Needle cric kit for children under 8 years + scalpel for larger patients	Tray	
☐	Viral filters x 2 of each size	Tray	
☐	Yankauer suckers x 2	Tray	
☐	In line CO_2 monitor connector	Tray	
☐	Gauze x 5	Tray	
☐	Direct Laryngoscope Handle	Trolley (Airway R2 or Broselow)	NOT IN TRAY
☐	Laryngoscope Blades sized for patient	Trolley (Airway R2 or Broselow)	
☐	Cuffed ETT sized for patient	Trolley (Airway R2 or Broselow)	
☐	Bougie sized for ETT	Trolley (Airway R2 or Broselow)	
☐	Stylet sized for ETT	Trolley (Airway R2 or Broselow)	
☐	LMA sized for patient	Trolley (Airway R2 or Broselow)	
☐	Laerdal BVM and mask sized for patient	Trolley (Airway R2 or Broselow)	
☐	In-line suction catheter sized for ETT 7Fr = ETT 3mm - 4mm; 10Fr = ETT 4.5mm - 5.5mm	Trolley (Airway R2)	
☐	Glideoscope + all blades	Resus 2 Cubicle (blades on glideoscope, spares in DK office)	
☐	Paeds CMAC + CMAC Blades: Miller #0, Mac #2	CH 1 Cubicle (Blade in CH1 trolley)	

Remember

- Options
  - Ketamine 1-2 mg/kg
  - Rocuronium 1mg/kg or Suxamethonium 2mg/kg
  - Metaraminol 10microg/kg or Adrenaline 1mcg/kg (follow Monash book "push dose pressors" dilution)
  - Atropine 20mcg/kg
- Use the Monash Book outside the closed room prior to intubation to confirm doses, dilutions and to assist in planning