

Date:

Time:

Name of RT / Doctor:

Patient's sticky label

Non-Cardiac ERT / Cardiac ERT (circle one)

Extubation Readiness Test (ERT) Worksheet

Screen MV Patients Daily between 6am - 10am
Is SBS Sedation score -1 to +1?



Do not start SBT
Address sedation with ICU team

Yes

1. ERT Screening and Readiness Parameters

No planned procedure with GA in the next 24 hours?	<input type="checkbox"/> Yes <input type="checkbox"/> No																		
No increase in ventilator settings for the past 12 hours?	<input type="checkbox"/> Yes <input type="checkbox"/> No																		
No muscle relaxants for the past 12 hours for patients who have received continuous IV muscle relaxants for at least 24 hours?	<input type="checkbox"/> Yes <input type="checkbox"/> No																		
Spontaneous respirations within acceptable parameters? <ul style="list-style-type: none">Exhaled $V_T \geq 4$ mL/kg and $PIP \leq 20$ cm H₂OPEEP ≤ 8SpO₂ 92 – 97% on FIO₂ ≤ 0.5 in patients without congenital heart disease or patients with acyanotic heart defectSpO₂ $\geq 75\%$ on FIO₂ ≤ 0.4 in patients with cyanotic congenital heart diseaseRR within target range for age?<table border="1"><thead><tr><th>Age</th><th>RR</th></tr></thead><tbody><tr><td>< 1 year</td><td>< 30 – 40 /min</td></tr><tr><td>1 – 5 years</td><td>25 – 40 /min</td></tr><tr><td>5 – 12 years</td><td>20 – 25 /min</td></tr><tr><td>> 12 years</td><td>12 – 20 /min</td></tr></tbody></table>	Age	RR	< 1 year	< 30 – 40 /min	1 – 5 years	25 – 40 /min	5 – 12 years	20 – 25 /min	> 12 years	12 – 20 /min	<input type="checkbox"/> Yes <input type="checkbox"/> No								
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< 1 year	< 30 – 40 /min																		
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Acceptable blood gas and lactate < 2 mmol/L within last 12 hours and with pH > 7.3?	<input type="checkbox"/> Yes <input type="checkbox"/> No																		
Acceptable haemoglobin > 8 g/dL?	<input type="checkbox"/> Yes <input type="checkbox"/> No																		
Low dose of sedatives and adequate level of consciousness <ul style="list-style-type: none">State Behavioural Scale (SBS) sedation score -1 to +1Patient on less than 2 of these sedatives: <u>Midazolam</u> infusion ≤ 2 mcg/kg/min; <u>Morphine</u> infusion ≤ 20 mcg/kg/hr; <u>Fentanyl</u> infusion ≤ 3 mcg/kg/hr; <u>Ketamine</u> ≤ 10 mcg/kg/hrPatient to be able to follow commands. For patients who are unable to follow commands, there should be spontaneous eye opening and/or spontaneous limb movements	<input type="checkbox"/> Yes <input type="checkbox"/> No																		
Stable hemodynamically and with acceptable blood pressure and HR? <ul style="list-style-type: none">1-2 vasoactive drugs with no increase in rate for the last 12 hoursAdrenaline ≤ 0.1 mcg/kg/min <table border="1"><thead><tr><th>Age</th><th>Heart Rate</th></tr></thead><tbody><tr><td>< 1 year</td><td>110 - 160/min</td></tr><tr><td>1 – 5 years</td><td>95 - 140/min</td></tr><tr><td>5 – 12 years</td><td>80 – 120/min</td></tr><tr><td>> 12 years</td><td>60 – 100/min</td></tr></tbody></table> <table border="1"><thead><tr><th>Age</th><th>Systolic blood pressure (SBP)</th></tr></thead><tbody><tr><td>< 1 month</td><td>> 60 mmHg</td></tr><tr><td>1 month to 1 year</td><td>> 70 mmHg</td></tr><tr><td>> 1 year</td><td>SBP > 70 + (age in years x 2) mmHg</td></tr></tbody></table>	Age	Heart Rate	< 1 year	110 - 160/min	1 – 5 years	95 - 140/min	5 – 12 years	80 – 120/min	> 12 years	60 – 100/min	Age	Systolic blood pressure (SBP)	< 1 month	> 60 mmHg	1 month to 1 year	> 70 mmHg	> 1 year	SBP > 70 + (age in years x 2) mmHg	<input type="checkbox"/> Yes <input type="checkbox"/> No
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*Adequate cough, gag and secretions management <ul style="list-style-type: none">Suction not more often than every 2 hours unless otherwise agreed by ICU team	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Discuss with team to proceed																		
*Ensure that there is presence of endotracheal tube leak of at least 10% with PIP at 20 – 25 cm H ₂ O <ul style="list-style-type: none">In the absence of leak for patients intubated > 1 week, consider dexamethasone	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Discuss with team to proceed																		
RN aware of SBT and readily available to monitor patient?	<input type="checkbox"/> Yes <input type="checkbox"/> No																		

If all the above checks in section “1. ERT Screening and Readiness Parameters” are **YES**, begin **Spontaneous Breathing Trial (SBT)**

For NON-CARDIAC patients:

Perform SBT for 2 hours. Settings: Mode of Pressure Support Ventilation (Spont), current FIO₂, current PEEP and PS level based on ETT size
(ETT 3.0 – 3.5, PS = 10; ETT 4 – 4.5, PS = 8; ETT ≥ 5, PS = 6).
May titrate to a PS of 5 cm H₂O if patient tolerates initial PS setting for 1 hour.

FOR CARDIAC patients, perform cardiac SBT:

Begin SBT as per for NON-Cardiac patients with PS based on ETT size, current FIO₂ and current PEEP for 1 hour followed by SBT with PS = 0 for another 1 hour

If any checks above are **NO** (except for items with *), do **NOT** begin SBT and discuss with ICU team.



2. Monitoring Patient During SBT

If SBT not performed despite meeting screening criteria, indicate reason here:

SBT to be terminated immediately if patient displayed any of the following at any point during the SBT (place patient back on previous ventilator settings and inform ICU team):

Desaturation <ul style="list-style-type: none">SpO₂ < 92% in patients without congenital heart disease or patients with acyanotic heart defectSpO₂ decrease by > 5% from baseline in patients with cyanotic congenital heart disease	<input type="checkbox"/> Yes <input type="checkbox"/> No
RR increased above normal range	<input type="checkbox"/> Yes <input type="checkbox"/> No
Exhaled V _T < 4 mL/kg	<input type="checkbox"/> Yes <input type="checkbox"/> No
Respiratory distress indicated by accessory muscle use, diaphoresis, nasal flaring	<input type="checkbox"/> Yes <input type="checkbox"/> No
Hemodynamic compromise <ul style="list-style-type: none">HR ± 20% from baselineBP ± 20% from baseline	<input type="checkbox"/> Yes <input type="checkbox"/> No
Patient went into apnea with ventilator backup ventilation	<input type="checkbox"/> Yes <input type="checkbox"/> No
ETCO ₂ > 55 mm Hg or increase by 10 mm Hg or by 20% from baseline	<input type="checkbox"/> Yes <input type="checkbox"/> No



3. Post SBT

If all above checks in section “2. Monitoring Patient During SBT” are **NO** at the end of 2 hours of SBT, obtain blood gas. Inform ICU team of patient readiness for extubation, set time for extubation and decide on post-extubation respiratory support level.

Inform RN to hold feeds if not already done so. Ensure order to extubate is entered into patient’s electronic medical record before extubation can proceed.



If order to extubate not given, please document reason(s) in comments section and place patient back to previous ventilator settings

☐ Upcoming surgery or procedure (e.g. MRI) ☐ No provider to monitor extubation
☐ Excessive suctioning ☐ ICU team preference ☐ Others:



Comments: