



Acacium Group

**Safe Management of a Ventilated
Client During a Power Failure**

Procedure Reference | SOP VENT 12

Version | V4.1

Procedure Name	Safe Management of a Ventilated Client During a Power Failure
Purpose of Document	To ensure that the correct preparation, procedure & outcome are achieved by implementing a consistent and systematic approach to managing ventilated clients during a power failure in the community setting.
Target Audience	All Nurses & appropriately trained carers
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Equality Impact Assessment (EIA) Form	Acacium Group is committed to Equality, Diversity and Inclusion and in line with our values, we strive to ensure that everyone that is part of the Acacium community is not disadvantaged or discriminated against given their individual need or characteristics. To support this, an Equality Impact Assessment has been undertaken on this policy/procedure. This information is held centrally and can be requested from the Clinical Governance Team.
About Acacium Group	Details of all Acacium Group trading companies that this policy applies to are detailed within Appendix A

Document History			
Version	Date	Changes made/comments	By whom
V1	Dec 2016	Implementation of document history page	KNF/VM
V1	July 2018	Review	KMS/VM
V1.1	Feb 2020	Updated to new Template	CC
V2	Jun 2020	2 Yearly review	Clinical Advisory Group
V2.1	Oct 2020	Updated re rebrand	CC
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V4.1	Jun 2024	Reviewed and updated	Clinical Advisory Group

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1. Introduction

A ventilated child or adult requires access to ventilation as prescribed. Continued functioning of the ventilator must be maintained during power failures. Acacium Group staff must ensure they are familiar with manufacturer's instructions for use and that they follow the Safe Use of Medical Devices policy in the event that any part of a ventilator fails. Acacium Group staff must ensure that they are familiar with any contingency plans that are in place for the client in case of power failure. Contingency plans will be located in the clients Care Plans/documentation.

Acacium Group staff should also ensure that parents and carers are given every opportunity to provide direct care for their client and are involved in decision making around the care needs of the ventilated child or adult. In the event of a power failure, Acacium Group staff must however seek further advice if they deem the client to be at risk from decisions made by the parents and carers.

Each ventilated client should be referred to the electricity supplier, as having life sustaining equipment, this will give them access to priority telephone number for emergencies and prior notification of any planned electricity cuts.

2. Aim

A smooth transition from mains power to battery backup without interruption to the ventilation that the client requires.

3. Equipment

- Ventilator
- Ventilator external battery (if supplied)
- Spare ventilator
- Dry Circuit
- Oxygen (if applicable)
- Bag & Valve Masks
- Suction Unit (if required)
- Spare Suction unit (if supplied).
- Emergency tracheostomy box (if the client has a tracheostomy)
- Oxygen saturation monitor (if available)
- Clients Care Plan and Contingency Plan
- Torch (if provided)

* There may be instances where a client has a back up generator for use in emergency situations. This will be detailed in the care plan, along with the process to follow should this be in place.

4. Procedure

Safe management of a client during power failure

Action	Rationale
1. If you are alone, please go to point 2 and see point 9 for contacting office/ electricity supplier.	If you are working alone, you must ensure client safety first however if there are two or more people the competent person should remain with the client following steps 2 onwards to maintain client safety whilst the

	<p>If there are more than two people available, then nominate one person to contact the Electricity provider on the priority number to ascertain approximate length of power failure.</p> <p>NB: Explain that you are caring for a technology dependent patient.</p> <p>This person should then contact the office and escalate as per client/service user's care plan.</p>	other person contact the supplier to ascertain transfer to the agreed place of safety can be arranged.
2.	Always ensure that there is a available source of light (e.g. torch or phone torch).	To be able to see in event of power failure.
3.	<p>In the event of power failure, the ventilator will alarm and switch over to the internal/external battery (dependent on model) supply if connected.</p> <p>If the client has a spare battery this should be available for use and charged at all times.</p>	Ensure second battery is available should the power cut last longer than a few hours. Change to battery supply until power is restored.
4.	If the client has a spare/back up ventilator this should be considered for use if required.	<p>Spare/back up ventilators will be provided if the client is dependant on ventilation at all times.</p> <p>These ventilators should always be charged, checked and serviced and accessible at all times.</p>
5.	<p>The oxygen saturation monitor will automatically switch over to internal battery backup (please refer to the manufacturers guidelines for battery life).</p> <p>If Oxygen saturation monitor not working, or there are any signs that the client is struggling or deteriorating dial 999 immediately and observe the client's colour until paramedics arrive.</p>	Carry out spot checks on the client's saturations unless there is concern about the client's colour or condition.
6.	In the event that there is no internal/external battery available, and no back up ventilator available, immediately, CALL 999.	Arrange for emergency admission or place of safety as per Contingency to ventilate.
7.	The humidifier will stop working, as they do not have an internal battery. If the power cut lasts more than an hour consider changing to portable ventilator circuit (dry circuit) with HME in circuit if there is the facility to do so. Considered prescribed nebuliser therapy, if indicated, not all nebuliser machines have an	Maintain humidification.

	internal battery and may not be able to be used in a power failure.	
8.	If the portable nebuliser will not work connect nebuliser to oxygen cylinder if prescribed, using green/clear tubing. Ensure a flow of 6-8 to nebulise adequately.	Nebulise 2-3 hourly until power supply is restored (if documented in the care plan) If there is a prolonged power cut, this ensures that secretions do not become thick and unmanageable.
9.	The portable suction unit will work on internal battery backup (please refer to the manufacturers guidelines for battery life). If a backup suction machine is available, prepare for use. If you have concerns that the battery is running out, please dial 999 immediately and inform the office.	
10.	The oxygen concentrator will stop working so switch to cylinders.	Calculate number of hours supply in cylinders to determine when to move the client to hospital or the nominated place of safety. If you have concerns that the cylinders are running out, please dial 999 immediately and inform the office.
11.	Contact the Electricity provider on the priority number to ascertain approximate length of power failure. NB: Explain that you are caring for a technology dependent patient.	So a transfer to the agreed place of safety can be arranged. Power may be sourced from a neighbour/friend as a short-term solution.
12.	Contact the place of safety and pre-warn them that an admission may be required. If they suggest immediate admission dial 999.	So a suitable place of safety can be arranged for the client.
13.	If power cut is not from the power supplier and localised to the house contact an electrician. If client lacks capacity will need follow the escalation process for power supply to be reinstated arrange.	
14.	Maintain accurate notes on actions and timings and report in line with Acacium Group Incident reporting policy as soon as possible.	To ensure accurate nursing documentation and incident reporting procedures are followed.

5. Associated Policies / SOPs

Policies

CLIN 02 Assisted Ventilation Policy
CLIN 12 Safe Use of Medical Devices Policy
CLIN 19 Resuscitation Policy
Incident Reporting Policy

SOPs

SOP VENT 01 Tracheostomy Dressing Change (Adult & Child)
SOP VENT 02 Tracheostomy Care General Guidelines
SOP VENT 03 Humidification of a Client's Tracheostomy
SOP VENT 04 Tracheal Suctioning (Adult & Child)
SOP VENT 05 Tracheostomy Tube Care (Adult)
SOP VENT 06 Tracheostomy Tube Change (Adult)
SOP VENT 07 Tracheostomy Tube Change (Child)
SOP VENT 08 Administration of a Nebuliser through a Ventilator Circuit
SOP VENT 09 Assembling a Ventilator Circuit
SOP VENT 10 Cleaning the Ventilator Equipment
SOP VENT 11 Safe Management of a Ventilated Service User During Outings
SOP VENT 13 Safe Use of Battery Packs
SOP VENT 14 Assisted Airway Maintenance and Cough (Adult)
SOP VENT 15 BiPAP
SOP VENT 16 Oral and Nasal Suctioning
SOP VENT 18 CPAP
SOP VENT 19 Mechanical Cough Assist
SOP VENT 20 Changing Tracheostomy Cotton Ties (Child)
SOP VENT 21 Changing Tracheostomy Velcro Tapes (Child)
SOP VENT 22 Phrenic Nerve Pacing
SOP VENT 23 Laryngectomy Care General Guidelines
SOP VENT 24 Emergency Tracheostomy Tube Change (Adult)
SOP VENT 25 Emergency Tracheostomy Tube Change (Child)
SOP VENT 26 Nasopharyngeal Airway Management (Adult & Child)
SOP VENT 27 Nebuliser Therapy

6. References

- NMC Code of Conduct - Record Keeping & Consent 2015 Updated 2018 to include Nursing Associates
- Ventilator Safety - Lesley M. Williams; Sandeep Sharma Jan 2020
- Risk management of the home ventilator dependent patient - [A K Simonds](#) 2006

Appendix A: About Acacium Group

Acacium Group consists of a number of trading companies, each providing services within core niche areas of the health and social care industries. Therefore, as this document is a Group Policy, the Policy herein applies to all trading companies detailed below:

 Part of Acacium Group	 Part of Acacium Group
 Part of Acacium Group	 Part of Acacium Group