



Clinical Practice Procedures: Respiratory/Bag valve mask – Pocket BVM™ (pilot)

Policy code	CPP_RE_BVMP_0924
Date	September, 2024
Purpose	To ensure a consistent procedural approach to bag valve mask – Pocket BVM™ ventilation.
Scope	Applies to Queensland Ambulance Service (QAS) clinical staff.
Health care setting	Pre-hospital assessment and treatment.
Population	Applies to all ages unless stated otherwise.
Source of funding	Internal – 100%
Author	Clinical Quality & Patient Safety Unit, QAS
Review date	September, 2027
Information security	UNCLASSIFIED – Queensland Government Information Security Classification Framework.
URL	https://ambulance.qld.gov.au/clinical.html

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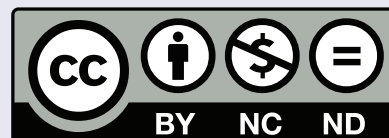
All feedback and suggestions are welcome. Please forward to: Clinical.Guidelines@ambulance.qld.gov.au

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Bag valve mask – Pocket BVM™ (pilot)

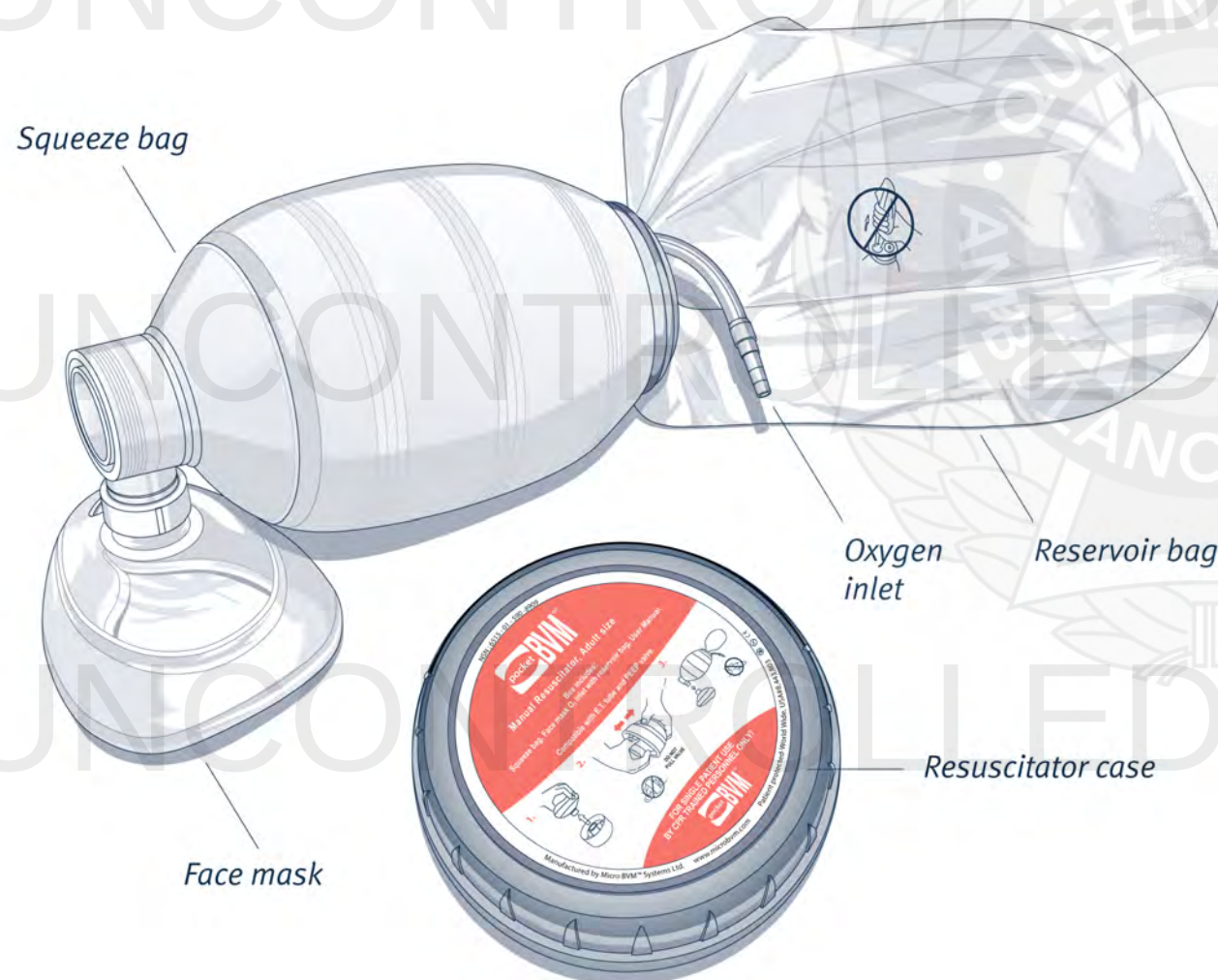
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The ability to oxygenate and ventilate the critically ill patient with a bag valve mask (BVM) is a life-saving skill. BVM ventilation assists in providing oxygenation and ventilation until a more definitive airway can be established.

The term intermittent positive pressure ventilation (IPPV) describes the process of providing ventilation to an apnoeic patient.

The Pocket BVM™ (Adult) is an innovative collapsible resuscitator that is supplied in a compact, durable case. Its contents includes a squeeze bag with an oxygen inlet, a face mask and a reservoir bag.^[1]

Bag valve mask – Pocket BVM™



Indications

- Acute respiratory distress, hypoventilation (RR less than 10/min) or cardio-respiratory arrest in adults requiring positive pressure ventilation.

Contraindications

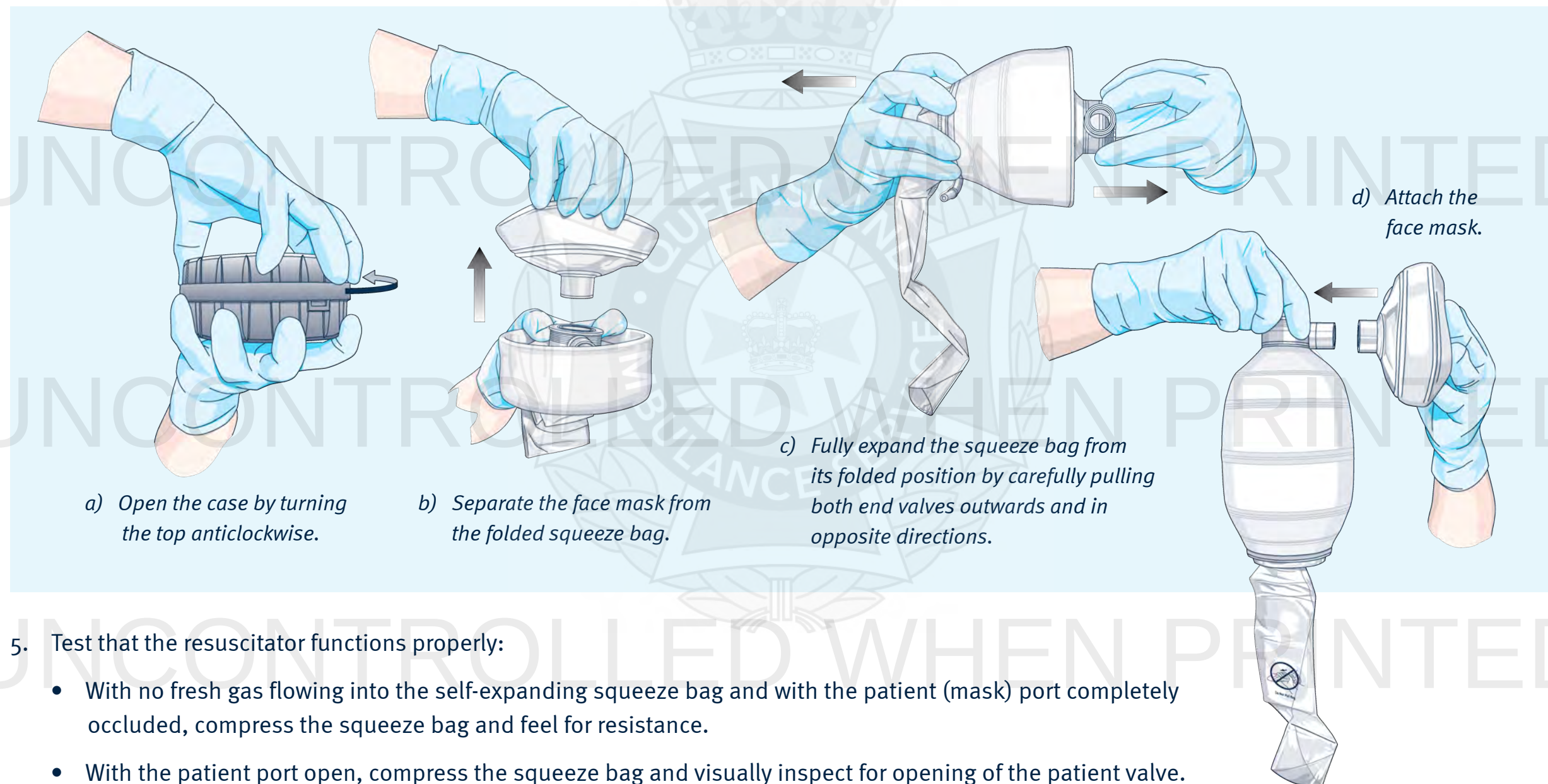
- Spontaneously breathing patients with an adequate tidal volume and an appropriate respiratory rate (RR 10/min or greater).

Complications

- Gastric inflation – that can cause regurgitation of stomach contents and airway soiling.
- Pulmonary barotrauma
- Undesirable cardiovascular effects such as hypotension, secondary to caval compression.

Procedure – Bag valve mask – Pocket BVM™ (pilot)

1. Determine the need for IPPV.
2. Continually monitor the patient's airway to ensure patency, apply basic airway management principles and progress to advanced airway techniques when appropriate.
3. Posture the patient appropriately for IPPV.
4. Prepare the Pocket BVM™ for use:



5. Test that the resuscitator functions properly:
 - With no fresh gas flowing into the self-expanding squeeze bag and with the patient (mask) port completely occluded, compress the squeeze bag and feel for resistance.
 - With the patient port open, compress the squeeze bag and visually inspect for opening of the patient valve.

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6. Connect the oxygen flow tubing to an oxygen source and adjust the oxygen flow to 15 L/min.
7. Position the mask to create an effective seal between the mask and the patient's face.
8. Gently compress the squeeze bag to deliver an appropriate tidal volume and observe the chest rise to confirm adequate ventilation.
9. Release the pressure on the squeeze bag to allow passive exhalation and re-expansion of the bag.
10. During ventilation, continually monitor:
 - Expiratory airflow through the valves
 - Signs of cyanosis
 - Adequacy of ventilation
 - Airway pressure
 - Tubing connections and correct functioning of all valves
 - Continuous supply of oxygen to the resuscitator and inflation of the reservoir bag.

Additional information

- The Pocket BVM™ is currently being piloted and is only authorised for use by clinicians from the:
 - Disaster Assistance Response Team;
 - Gold Coast Remote and Isolated Retrieval Team; and
 - Bike Response Team.
- For patients not requiring positive pressure ventilation, however requiring oxygen, the application of an appropriate oxygen mask is required.
- The QAS supplies one size (Adult) of Pocket BVM™ disposable (single use only) resuscitator.

SPECIFICATIONS

Body mass range	Approximate volume (stroke)
Greater than 40 kg	1 hand – 800 mL 2 hands – 1400 mL