

**Issue date**  
**7 October 2022**

**Distributed to:**

Chief Executives  
Directors of Clinical Governance  
Director, Regulation and Compliance Unit

**Action required by:**

Chief Executives  
Directors of Clinical Governance

**We recommend you also inform:**

Directors, Managers and Staff of:

- Anaesthetics, Recovery & Theatre Departments
- Intensive Care Units
- Emergency Departments
- Respiratory Medicine Units

Other relevant staff, departments and committees.

**Expert Reference Group****Content reviewed by:**

Medication Safety Expert Advisory Committee

**Clinical Excellence Commission**

Tel: 02 9269 5500

[Email](#)

[Internet Website](#)

[Intranet Website](#)

**Review date**  
**October 2023**

## Adaptors for administration of bronchodilators using metered dose inhalers via endotracheal tubes

**Background**

Clinicians are reminded to carefully select the adaptors required for the administration of bronchodilators using metered dose inhalers (MDI) via endotracheal tubes (ETT). Salbutamol is used off-label via the ETT for bronchospasm during anaesthesia. Recently, an incident occurred where an MDI was unable to be attached to a patient's ETT due to the lack of the correct adaptor being available. This resulted in an additional flexible tubing connector being required.

In 2021, salbutamol MDIs (Asmol<sup>®</sup>, Ventolin<sup>®</sup>) underwent a change in product design. The cannisters have a dose counter attached, making the adaptors used on the previous product design incompatible. Adaptors of different brands and sizes have been identified (listed below, not exhaustive):

Product	Supplier
Southmedic MDI adaptors (4 different sizes available)	Precise Medical Supplies
Spirale Drug Delivery System	Meditech Systems
Adaptor, Connector 22M-22F with MDI insert	Intersurgical Australia*
Adaptor, Connector 15M-15F with MDI insert	Intersurgical Australia*

**\*Please note** – although the adaptors available from Intersurgical Australia fit the new presentation of salbutamol MDIs, they **do not** activate the dose counter. The Precise Medical Supplies and Meditech Systems alternatives **do** activate the dose counter.

**Assessment**

Available adaptors differ in terms of design and available sizes, and connection compatibility with ETTs and ventilation circuits will be facility/unit specific.

**Clinical Recommendation**

Each facility/unit must conduct an assessment to determine the most appropriate brand and size of MDI adaptor is available to suit their current ventilation circuit set-up and endotracheal tube connector diameter.

**Required actions for the Local Health Districts/Networks**

1. Distribute this Safety Notice to all relevant clinicians and clinical departments where MDIs are used as part of ventilation circuits.
2. Include this Safety Notice in relevant handovers and safety huddles.
3. Undertake a local assessment to determine the most appropriate brand and size of MDI adaptor and ensure it is available.
4. Escalate any concerns to [CEC-MedicationSafety@health.nsw.gov.au](mailto:CEC-MedicationSafety@health.nsw.gov.au).
5. Report any incidents associated with these adaptors via the local incident management system ([ims+](#)) and to the [TGA](#).
6. Confirm receipt and distribution of this Safety Notice **within 72 hours** to [CEC-MedicationSafety@health.nsw.gov.au](mailto:CEC-MedicationSafety@health.nsw.gov.au)