



Clinical Practice Procedures: Respiratory/Chest seal

Policy code	CPP_RE_CS_0924
Date	September, 2024
Purpose	To ensure a consistent procedural approach to the use of the chest seal.
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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Chest seal

September, 2024

The HyFin® Vent Chest Seal is a compact, strongly adhesive, 3-channel vented dressing designed for the rapid treatment of an open pneumothorax or 'sucking chest wound' (SCW). It is supplied as a twin pack, each pack containing a dressing suitable for entry and exit wound application or multiple penetrating wounds.^[1]

A SCW occurs when the chest wall integrity is penetrated, resulting in the movement of air between the environment and patient's pleural cavity. If left untreated, air may enter the pleural cavity and not escape, causing a build up of pressure and tension pneumothorax.



The placement of a vented chest seal will improve respiratory function and reduce the risk of life-threatening complications.



Indications

- Open pneumothorax



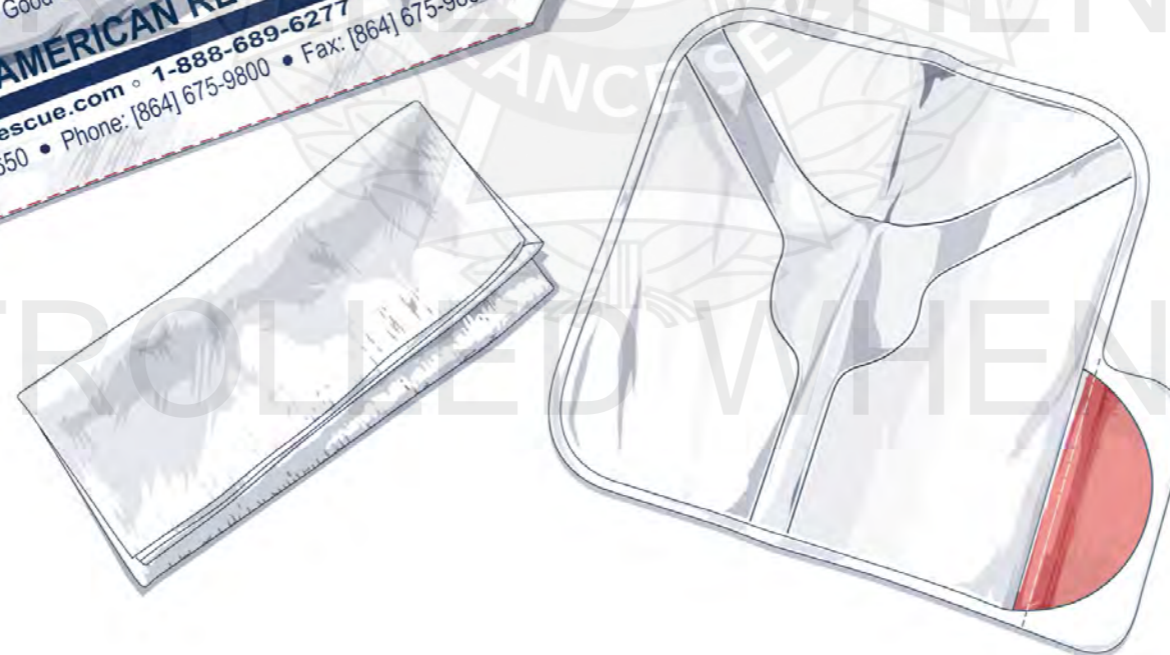
Contraindications

- Nil in this setting



Complications

- Occlusion of the 3-channel vented dressing causing a tension pneumothorax



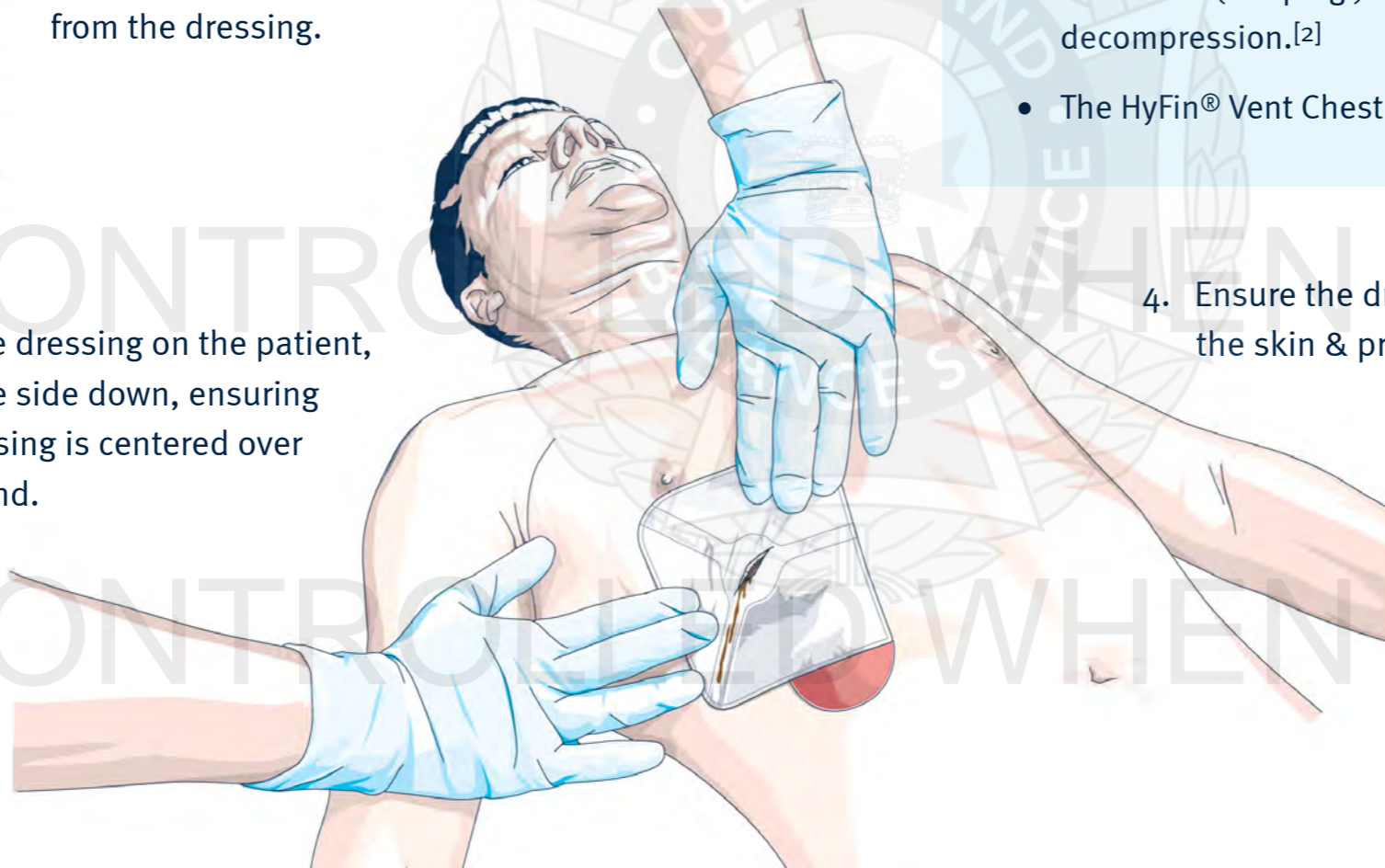
Procedure – Chest seal

1. Remove dirt/fluid from skin with supplied gauze.



2. Grip red tab and peel the clear liner from the dressing.

3. Place the dressing on the patient, adhesive side down, ensuring the dressing is centered over the wound.



4. Ensure the dressing makes good contact with the skin & press firmly to ensure good seal.

Additional information

- Queensland Police Service (QPS) officers are now equipped and authorised to apply the HyFin® Vent Chest Seal in emergency situations.
- The HyFin® Vent Chest Seal is an inventory item in the Queensland Police Service (QPS) Tactical First Aid Kit.
- Ensure the patient is regularly monitored for a tension pneumothorax. If a tension pneumothorax develops, immediately treat by removing or lifting one side of the chest seal ('burping') and/or performing chest decompression.[2]
- The HyFin® Vent Chest Seal is a latex free product.