Care of a Patient Requiring a Cervical (Philadelphia) Collar

| Cross references (including NSW Health/ SESIAHS policy directives) | SGSHHS CLIN035 Care of a Patient Requiring A Cervical Collar SGH Emergency Department Guide to the ‘Clinical Flowchart for the Clearance of a Suspected Cervical Spine Injury’ Spinal Clearance Management- Intensive Care Unit
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<tr>
<td>1. What it is</td>
<td>When, where and how to fit and care for Philadelphia collars.</td>
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<td>2. Employees it applies to</td>
<td>Medical officers, RNs &amp; Physiotherapists trained in collar care/fitting.</td>
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| 3. When to use it | 1. If a patient arrives in a Stifneck collar which is not fitted correctly it needs changing to a Philadelphia collar.
2. A Stifneck collar is kept in situ until the spine has been cleared according to ED protocol, if the spine cannot be cleared within 4 hours a Philadelphia must be fitted. |
| 4. Why the rule is necessary | Trauma patients often present to the Emergency Department (ED) with hard collars in situ. The hard or “Stifneck” collar is a one-piece polyethylene rigid collar available in six sizes stocked by Ambulance Service of NSW, but not St George Hospital. The St George and Sutherland Hospitals stocks Philadelphia collars. The Philadelphia collar is a two piece, closed cell foam hypoallergenic collar available in 20 sizes.
Complications of ill-fitting cervical collars include Pressure areas[1-2], raised intra-cranial pressure, decreased vascular drainage[3], movement of cervical spine, marginal mandibular nerve palsy[2, 4]. |
| 5. Who is responsible | The RN with allocated responsibility for the patient is responsible for assessing and coordinating collar management for the patient.
The treating medical team are responsible for the assessment and documentation in the clinical notes record of the need for cervical collar. |
| 6.1 Measurement and Sizing of Height: | Measure from the tip of the patient’s chin to the top of the sternum in a straight line (Figure 1 A). If the patient’s measurement falls between two consecutive sizes, applies the smaller size first. |
6.2 Measurement and Sizing of Circumference:
Measure around the patient’s neck (Figure 2 B). The measurement corresponds to the size CIRCUMFERENCE of the Collar. If the patient's measurement falls between two consecutive sizes, apply the larger size first.

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6.3 Select the properly sized collar.

6.4 Application process
Proper application of the Collar is as important as proper sizing for immobilisation and patient comfort. The two-piece design consists of a FRONT piece and BACK piece, which are packaged as a set. Always maintain the patient's head in neutral alignment.

- Request and instruct another staff member to maintain inline immobilisation.
- Remove Stifneck collar if one in situ.
- Ensure neck is free of debris, fluid, wounds are covered, skin is dry, jewellery is removed.
- Apply the BACK piece of the Collar to the back of the patient’s neck.
  - Centre the collar.
  - Ensure the back arrow points upward.
  - Maintain the patient’s head in neutral alignment.
  - Apply the FRONT piece of the Collar with the chin secured in the recess.

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Ensure the FRONT piece OVERLAPS the BACK piece

Ensure that the front arrow should point upward.

With Velcro hook and loop fasteners, tighten the Collar with a bilateral adjustment. This will secure the patient's cervical region in neutral alignment.

Ensures patient can open mouth, feels comfortable

Recheck neurologic status and note any alteration.

Documents procedure and skin status.

**6.5 Removal**
Before removing the Collar, mark the position of the Velcro strap location to ensure re-application maintains the proper fit.

With the Collar secured on the patient, unfasten the Velcro strap on the RIGHT side and then the LEFT side. Remove the Collar from the patient.
6.6 Notes
The front and back pieces of the collar should always be the same size. At NO time should sizes be mixed when fitting a philly collar to the one individual.

One hundred percent cotton collar liners are available for added patient comfort and absorption of moisture.

6.7 Cleaning
Proper hygiene and product cleaning are an important part of a patient's recovery. In addition, it will keep the patient clean, comfortable and prevent skin irritation.

After the Collar is removed, gently clean the patient's neck and face; observe for any signs of skin irritation or pressure areas. The patient's neck and face should be dried completely before the Collar is reapplied.

The entire Collar can be cleaned with mild soap and clean water. The Collar should be dried completely with a cloth or air-dried before it is applied to the patient. While a mild disinfectant is acceptable, do not use harsh chemicals or bleach.

Skin care and pressure area inspection is to occur twice a day. In patients that are bed bound, collar care needs to occur 4/24 and pressure area surveillance to occur twice daily.

For ill-fitting collars at SGH, contact the trauma case manager, Neurosurgical Registrar or Orthotist. At TSH, contact the TSH Emergency Department CNE /CNC.

A folded towel (height approximately 1-2 cm) can be placed underneath the adult patient’s head to assist in maintaining normal cervical spine alignment.

7. Compliance evaluation
Q1: Which patient requires a Philadelphia collar and in what timeframe?
A: Uncleared spine in 4 hours
Q2: The fitting of a Philadelphia collar
A: Regular audits by trauma service
Q3: The care of a Philadelphia collar
A: Pressure Injury surveillance by Trauma service and Wound CNC

8. Keywords
Cervical Spine, Collar, Trauma

9. External references
10. Relevant committee approval  
St George Hospital Trauma Committee

11. Patient information brochure (or related material)  
Not applicable

12. Consumer Advisory Group (CAG) meetings and secretariat  
Not applicable

I, Mary Langcake, Director of Trauma, of St George Hospital attest that this clinical business rule is not in contravention of any legislation, industrial award or policy directive.

Revision and approval history

<table>
<thead>
<tr>
<th>Date</th>
<th>Revision number</th>
<th>Contact Officer (Position)</th>
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<td>October 2010</td>
<td>0</td>
<td>CNC Trauma</td>
<td>October 2013</td>
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<td>August 2013</td>
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<td>CNC Trauma</td>
<td>August 2016</td>
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