



# Helmet Removal

## 1. Purpose

This CWI provides guidance on the correct technique to remove a full face motorcycle helmet.

SCOPE OF PRACTICE				
MICA <input checked="" type="checkbox"/>	ALS <input checked="" type="checkbox"/>	BLS <input checked="" type="checkbox"/>	CERT/ACO <input checked="" type="checkbox"/>	Patient Transport <input checked="" type="checkbox"/>

### Indications

- Conscious patient wearing full face motorcycle helmet with suspected spinal injury and/or complaining of cervical pain and unable to self-remove helmet.
- Unconscious patient wearing full face motorcycle helmet with suspected spinal injury.

### Contraindications

- Penetrating trauma through the helmet.
- Removal attempt increases neurological deficit.

### Clinical Precautions

- Ideally two paramedics are required for this task.
- Ensure equipment required for spinal immobilisation, once the helmet is removed, is prepared.

### Equipment Required

- Cervical collar.
- Spinal immobilisation equipment.




### Health, Safety and Welfare




- Apply standard precautions.
- Modify as informed by the dynamic risk assessment.
- It is recommended that paramedics wear gloves at a minimum.



## 2. Instructions

### 2.1 Standard helmet

KEY POINTS	EXPLANATORY NOTE	Y/N
<p><b>Prepare patient</b></p> <ol style="list-style-type: none"> <li>1. Reassure patient and explain the procedure. The patient is not to move head or assist with movement.</li> <li>2. Ideally position patient supine. This procedure can be modified to lateral position if airway concerns exist.</li> </ol>		
<p><b>Position Paramedics</b></p> <ol style="list-style-type: none"> <li>3. <b>Paramedic A:</b> Lay or kneel above patient's head and place hands on either side of the helmet to immobilise the head. Paramedic A is currently responsible for providing cervical spine manual axial in line stabilisation.</li> <li>4. <b>Paramedic B:</b> Kneel next to the patient's torso where the patient's head and neck can be comfortably reached.</li> </ol>	 <p>At this point, Paramedic A (right) provides cervical spine manual axial in line stabilisation.</p>	
<p><b>Prepare to remove the helmet</b></p> <ol style="list-style-type: none"> <li>5. This procedure requires coordination between the two operators. Designate a team leader to call movements. <b>Only the operator should move hands at any one time.</b></li> <li>6. <b>Paramedic A:</b> Slowly and carefully move the patient's head back as close to the neutral in-line position as the helmet will allow. Do not force against resistance or if patient complains of increased pain.</li> <li>7. <b>Paramedic B:</b> Lift/remove the face shield and remove patient's glasses if worn.</li> <li>8. <b>Paramedic B:</b> Undo or cut the helmet chin strap.</li> <li>9. <b>Paramedic B:</b> Place one hand on patient's mandible so the thumb is at the angle of the mandible on one side and the first two fingers are on the angle of the mandible at the other side.</li> <li>10. <b>Paramedic B:</b> Place other hand under the patient's neck making contact with the patient's occiput, or as close as the helmet will allow.</li> <li>11. At this point, <b>Paramedic B</b> takes over responsibility for patient cervical spine manual in line stabilisation.</li> </ol>	 	

<p><b>Remove the helmet</b></p> <ol style="list-style-type: none"> <li>12. <b>Paramedic B:</b> Resist all patient head movement as far as possible.</li> <li>13. <b>Paramedic A:</b> Move hands to wrap fingertips under the base of the helmet on either side and firmly grip edges. Some helmets will allow gentle outward stretching of the sides to loosen helmet.</li> <li>14. <b>Paramedic A:</b> Tilt the helmet backwards slightly to lift the chin section of the helmet to ensure it will be clear of the patient's chin and nose when the helmet is removed.</li> <li>15. <b>Paramedic A:</b> Pull the helmet backward in a straight curve towards self until the back of the helmet begins to push against the patient's occiput to avoid unnecessary neck flexion.</li> <li>16. <b>Paramedic A:</b> With helmet clear of nose, rotate helmet back in opposite direction following skull curvature.</li> <li>17. <b>Paramedic B:</b> Ensure occipital support for patient's head weight as helmet is removed.</li> </ol>	 	
<p><b>Spinal immobilisation</b></p> <ol style="list-style-type: none"> <li>18. <b>Paramedic A:</b> Re-takes over the role of manually immobilising the patient's head and cervical spine.</li> <li>19. <b>Paramedic B:</b> Place a folded towel behind the patient's occiput to maintain neutral position.</li> <li>20. <b>Paramedic B:</b> Apply appropriately sized cervical collar.</li> </ol>		

## 2.2 VOZZ helmet

KEY POINTS	EXPLANATORY NOTE	Y/N
<p><b>Note:</b> The VOZZ helmet is a 2-piece, full-face, dual-locking helmet. It does not have a chin strap, instead having a built-in chin cup designed to hold the helmet in situ. It can be separated into two pieces if a flat-blade screwdriver is available, however this will not often be the case. Below describes the procedure to open the helmet in a clam-shell fashion.</p>		
<p><b>Prepare patient</b></p> <ol style="list-style-type: none"> <li>21. Reassure patient and explain the procedure. The patient is not to move head or assist with movement.</li> <li>22. Ideally position patient supine. This procedure can be modified to lateral position if airway concerns exist.</li> </ol>		
<p><b>Position Paramedics</b></p> <ol style="list-style-type: none"> <li>23. <b>Paramedic A:</b> Lay or kneel above patient's head and place hands on either side of the helmet to immobilise the head. Paramedic A is currently responsible for providing cervical spine manual axial in line stabilisation.</li> </ol>		

24. **Paramedic B:** Kneel next to the patient's torso where the patient's head and neck can be comfortably reached.



#### Prepare to remove the helmet

25. This procedure requires coordination between the two operators. Designate a team leader to call movements. **Only one operator should move hands at any one time.**
26. **Paramedic A:** Slowly and carefully move the patient's head back to as close to the neutral in-line position as the helmet will allow. Do not force against resistance or if patient complains of increased pain.
27. **Paramedic B:** Lift/remove the face shield and remove patient's glasses if worn.
28. **Paramedic B:** Place one hand on patient's mandible so the thumb is at the angle of the mandible on one side and the first two fingers are on the angle of the mandible at the other side.
29. **Paramedic B:** Place other hand under the patient's neck making contact with the Pt's occiput, or as close as the helmet will allow.
30. At this point, **Paramedic B** takes over responsibility for patient cervical spine manual in line stabilisation.




Only one operator should move hands at any one time.



#### Remove the helmet

31. **Paramedic B:** Resist all patient head movement as far as possible.
32. **Paramedic A:** Depress red locking buttons under each side of the helmet.
33. **Paramedic A:** Release the patient's chin from the chin cup and open the helmet by lifting the face piece up.
34. **Paramedic B:** Ensure occipital support for patient's head weight as helmet is removed.



		
<p><b>Spinal immobilisation</b></p> <p>35. <b>Paramedic A:</b> Re-takes over the role of manually immobilising the patient's head and cervical spine.</p> <p>36. <b>Paramedic B:</b> Place a folded towel behind the patient's occiput to maintain neutral position.</p> <p>37. <b>Paramedic B:</b> Apply appropriately sized cervical collar.</p>		

### 3. Assessment

Candidate's name and date	Comments

Instructor's name	Satisfactory	
	<input type="checkbox"/> Yes	<input type="checkbox"/> No

<b>Document name</b>	<b>HELMET REMOVAL CLINICAL WORK INSTRUCTION</b>		
<b>Applies to</b>	<input checked="" type="checkbox"/> MICA <input checked="" type="checkbox"/> BLS	<input checked="" type="checkbox"/> ALS <input checked="" type="checkbox"/> CERT/ACO	<input checked="" type="checkbox"/> Patient Transport
<b>Document no.</b>	CWI/OPS/119	<b>Stored:</b>	CM: CWI/OPS/119
<b>Version:</b>	3.0	<b>Review:</b>	<input type="checkbox"/> Annual <input checked="" type="checkbox"/> 3-Yearly
<b>Division</b>	Medical Directorate		
<b>Responsible Executive</b>	Medical Director		
<b>Responsible Manager</b>	Manager, Clinical Practice Guidelines — 9840 3980		
<b>Review date</b>	By <b>August 2022</b> , or as required for accuracy.		
<b>Relevant National Safety and Quality Health Service Standards</b>	<b>To be completed by the National Standards Accreditation Lead:</b> <input type="checkbox"/> 1. Clinical governance <input checked="" type="checkbox"/> 2. Partnering with consumers <input type="checkbox"/> 3. Healthcare-associated infection <input type="checkbox"/> 4. Medication safety <input type="checkbox"/> 5. Comprehensive care <input type="checkbox"/> 6. Communicating for safety <input type="checkbox"/> 7. Blood management <input type="checkbox"/> 8. Recognising and responding to acute deterioration  <input type="checkbox"/> NSQHS standards are NOT applicable		
<b>Material related documents</b>	<ul style="list-style-type: none"> <li>N/A</li> </ul>		

## Version control and change history

Version	Date approved	Date superseded	Amendment
1.0	1 March 2011	28 September 2012	Unconfirmed.
2.0	28 September 2012	28 August 2019	Application of new template. Obsolete equipment removed. Addition of VOZZ helmet details.
3.0	28 August 2019	Current	

