

# Prone Position Ventilation QRG in Critical Care

## Key Points

1. The “swimming position” is advocated to minimise pressure injuries, nerve damage and risk to patient safety it also facilitates access to the patient’s face and tracheal tube.
2. Maintenance of the semi-prone position is recommended for 16-20 consecutive hours.
3. The Use of a Nimbus mattress and pressure relieving pads are recommended to minimise pressure injury to skin.
4. Four hourly position changes should be undertaken in accordance with this policy.
5. Completion of checklists is necessary pre-prone positioning and 4 hourly thereafter, these can be found in the appendices.

## Absolute contraindications to prone positioning

Shock - persistent Mean Arterial Pressure <65 mmHg  
Acute bleeding  
Poly trauma - unstable fractures e.g. spine, femur, pelvis, facial  
Spine instability \*\*  
Raised intracranial pressure >30 mmHg, or cerebral perfusion pressure <60mmHg  
Tracheal surgery or sternotomy within two weeks

## Relative contraindications to prone positioning

Recent Deep Vein Thrombosis <2 days  
Anterior chest drains  
Recent major abdominal surgery  
Recent pacemaker  
Severe burns  
Pregnancy - Please be aware - SRFT does not have an obstetrics dept. therefore there is no access to CTG monitoring.

## Equipment – in the prone positioning box/packs

Pillows for positioning under patient’s chest and lower legs  
Slide sheet  
Bed sheets  
ECG dots  
Emergency intubation kit available at bed space  
Pressure area protection – Form pads 10cm x10cm  
Lacrilube  
Tape for patient’s eyes  
Yellow paraffin for lips  
Print and complete the checklist pack from the appendix 1 and 2.

## Procedure – Turning Prone

### Pre-Procedure Action

Complete a pre-prone checklist in Appendix 1, to ensure thorough patient preparation is carried out.

DON'T FORGET – The airway box

### Team

5 person team

1 clinically appropriate team leader to co-ordinate manoeuvre (ensure airway trained doctor is aware)

4 people – to carry out the manoeuvre

4 Nurses/health care assistants with manual handling training and a good understanding of the prone positioning procedure

Team leader, with manual handling training and a good understanding of the prone positioning procedure



Team leader will coordinate the move and protect the airway at all times.



Leave the patient on their original mattress (although a nimbus is preferred). Slide the patient to one side of the bed. Please use a slide sheet.



Slide the patient to the side of the bed. Tuck a new bottom sheet and slide sheet in under the patient, but leave a long overhang.



Turn the patient onto their side facing the new sheet. Tuck their right arm underneath them.



Pull the old sheet out



Use the new sheet to slide the patient onto their front



Place the patient's head to the side, and their arms in the 'swimming' position - one arm up (patient looking at it), other arm down by their side.



Finally, support the patients' arm and leg with pillows in this prone position. Bend knee on same side as arm up



So, if head turned to the LEFT then left arm is up and left knee is flexed (while right arm is down and straight and right leg is straight)

If head turned to RIGHT then right arm is up and right knee is flexed (while left arm is down and straight and left leg is straight)

## Procedure – 4 Hourly Position Change

### Team

5 person team

1 clinically appropriate team leader to co-ordinate manoeuvre (ensure airway trained doctor is aware)

4 nurses who have a good knowledge of the procedure

Have an Airway box at the bedside



Remove the supporting pillows, slide the patient up until their head is above the head of the bed (supporting their head and airway).



Turn the patients head to the opposite side and slide back down the bed.



The patient's head should face their elevated arm and leg in the 'swimming' position, once again support with pillows



## Procedure - Turning Supine

### Team

5 person team

1 clinically appropriate team leader to co-ordinate manoeuvre (ensure airway trained doctor is aware)

4 nurses who have a good knowledge of the procedure

### Equipment

Slide sheet

Airway box



Slide the patient to one side of the bed. Tuck the bottom sheet in under the patient and place a new sheet next to this, but leave a long over hang.



Turn the patient onto their side and use the new sheet to slide the patient onto their back

## Appendix 1: Pre-Prone Checklist

Print and complete this document, file in patients' notes on completion.

Patient name and hospital number:		Date and Time :
Pre-prone position checklist		Tick or N/A
General	Assess for absolute and relative contraindications	
	Inform NOK	
	If feasible, consider subsequent prone positioning in the evening to reduce the need for significant position changes overnight.	
	Condition of patients skin should be documented	
Airway	Ensure orange airway box at bedside	
	Is a chest x-ray indicated before prone positioning?	
	ETT secure with ties (note length at teeth)	
	Suction oropharynx and trachea	
	Apply yellow paraffin to lips	
	Increase Fio2 to 100% pre-turn	
Eye Care	Apply Lubricant to eyes and tape eyes closed	
Lines/Tubing	Does the patient require a vascath? If so aim to place pre-prone positioning.	
	Disconnect all non-essential IV lines, place syringe drivers onto a mobile drip stand.	
	Ensure all IV lines are long in length to facilitate manoeuvre.	
	All wound drains and catheters in between legs/bag at foot of bed.	
	Chest drains, have a dedicated person whose role is to maintain the drain below the level of the patients' chest. If this cannot be achieved then clamp the drain for the manoeuvre. Unclamp as soon as possible.	
	New ECG stickers ready for use, place on patients' back.	
	Remove flowtrons for manoeuvre	
NGT	Document length of the NG tube.	
	Disconnect feed and aspirate NGT (restart once prone)	
	Remove Hollister, secure with tape	
Pressure Areas	Foam pads to nipples, knees and toes	
Miscellaneous	Ensure bottom of the bed is pulled out for toes	
	Place patient in the 'swimming' position once prone	
	Ideally patient should be on a nimbus mattress. This may not be feasible if patient is unstable.	
Drugs	Ensure adequate sedation, consider muscle relaxant.	
	Print and sign name:	

## APPENDIX 2 – 4 Hourly Position Check

Print and complete this document, file in patients' notes on completion.

Patient name and hospital number:		Date:					
Area	4 hourly position checklist	Tick as appropriate					
		Time of position check					
	Patient repositioned onto which side? (L/R indicate in box)						
Head/ Face	Eyes taped (Lacrilube applied 6 hourly)						
	Ears flat against bed/apply foam pad if needed.						
	NGT secure and away from face						
	ETT not compressing lips/apply yellow paraffin						
Neck	CVC tubing not underneath neck/apply foam pad if needed						
	Neck not hyper-extended						
Chest	Breasts flat against bed/apply foam pads if needed						
Drains	Drainage tubing free and entry site protected.						
Knees	Foam pads placed						
Pelvis	Male genitalia positioned between legs foam pad applied.						
	Catheter tubing in between legs/bag at foot of bed						
Feet	Flowtrons checked and repositioned						
	Feet not touching bottom of bed						
Arms	Swimmers position with one arm raised (document which L/R)						
	Wrists in neutral position						
	Hands free and fingers checked for pressure						
	Saturation probe moved onto another finger						
	No peripheral IV lines placed under patient						
Legs	Swimmers position with leg raised (document which L/R)						
Monitoring	ECG leads not underneath patient						
	Arterial line tubing not underneath patient						
	Nurses' Initial						

## Prone Position Ventilation QRG in Critical Care

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**Scope:** Critical Care, Division of Surgery and Tertiary Medicine, SRFT Critical Care

**Author:** Tricia Jordan, Advanced Critical Care Practitioner.

**Contact details:** [Tricia.jordan@srft.nhs.uk](mailto:Tricia.jordan@srft.nhs.uk)

**Author's Division:** Division of Surgery and Tertiary Medicine

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