

Turning an ICU Patient Prone

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March 2021	February 2025	2

Purpose

To describe the process to safely turn a critically ill patient from supine into the prone position and vice versa. Promoting safe practice in moving and handling techniques, reducing the risk of musculoskeletal injury to staff, enabling patients to be moved safely. This is to be used in conjunction with the moving and Handling people and objects policy.

Who Should Read this Document?

Senior clinicians and senior managers because they need to know their responsibilities and accountability in respect of promoting safe handling behaviours in their work place.

All Critical Care staff involved in moving and handling because they need to follow the Trust's Standard Operating Procedures in Moving and Handling People or Objects safely to protect the safety of patients and staff.

Key Messages

Avoid hazardous moving and handling as far as reasonably practical.

Assess all risks in relation to moving and handling people or objects where avoidance is not an option.

Reduce the risk of moving and handling as far as is reasonably practical by following the Standard Operating Procedures, these include ensuring staff are adequately trained in carrying out moving and handling activities safely, reducing the risk of injury to staff and patients.

Turning critically ill patients prone/supine is a high risk procedure both for the patient and the staff involved. This SOP describes the preferred manual handling method to turn ICU patients prone/supine.

Core Accountabilities

Owner	Sarah Fishwick
Review	Critical Care Protocol Group
Ratification	Deputy Chief Nurse – Bev Allingham
Dissemination	All ICU Staff Trust Documents/resource folders/vital signs
Compliance	The manual Handling Operation Regulations 1992 (amended 2002)

Links to Other Policies And Procedures

(R02) Prone Positioning Guideline in Intensive Care
 (R26) Prone Checklist
 Moving and Handling People and Objects Policy;
 Plus Size Moving and Handling Safe Operating Procedure;

Version History

1	February 2019	SOP Created
1.1	March 2021	Extended to May 2021
2	May 2021	Updated

The Trust is committed to creating a fully inclusive and accessible service. Making equality and diversity an integral part of the business will enable us to enhance the services we deliver and better meet the needs of patients and staff. We will treat people with dignity and respect, promote equality and diversity and eliminate all forms of discrimination, regardless of (but not limited to) age, disability, gender reassignment, race, religion or belief, sex, sexual orientation, marriage/civil partnership and pregnancy/maternity.

**An electronic version of this document is available on Trust Documents.
Larger text, Braille and Audio versions can be made available upon
request.**

Standard Operating Procedures are designed to promote consistency in delivery, to the required quality standards, across the Trust. They should be regarded as a key element of the training provision for staff to help them to deliver their roles and responsibilities.

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Standard Operating Procedure (SOP)

Turning an ICU Patient Prone

1. Introduction

Patients in Acute Respiratory Distress Syndrome (ARDS) with acute hypoxaemia have been shown to have improved outcome with the use of prone positioning (PROSEVA 2013). Turning critically ill patients prone/supine is a high risk procedure both for the patient and the staff involved. This SOP describes the preferred manual handling method to turn ICU patients prone/supine.

University Hospitals Plymouth NHS Trust

2. Definitions

Prone position - refers to the delivery of mechanical ventilation with the patient lying in the prone position i.e. the patient is lying on their stomach.

Manual handling - the transporting or supporting of loads, by human effort which includes any lifting, putting down, pushing, pulling, carrying or supporting a load by hand or by bodily force.

Risk – the chance that an event will occur that will impact adversely on the Trust’s objectives.

Hazard – a condition that gives rise to, or increases the risk of an adverse event occurring

Likelihood – a measure of the probability that the predicted event will occur

Consequence – a measure of the adverse impact of the predicted event, in terms of harm, loss or damage on people, property, or the Trust’s objectives

Incident – for the purposes of this procedure, is any unwelcome outcome arising from a manual handling action, regardless of the level of injury resulting

3. Regulatory Background

The PROSEVA trial had success with patients who had ARDS (American-European Consensus Criteria), P/F ratio <20 kPa, FiO₂ ≥ 0.6 and PEEP ≥ 5 cms /H₂O. The decision to turn the patient prone or to return the patient supine will normally be made by the duty ICU consultant.

Health and Safety of Work Act 1974

Management of Health and Safety at Work Regulations 1999

Manual Handling Operations Regulations 1992 (amended 2002)

Provision and Use of Work Equipment Regulations 1998

The Health and Social Care Act 2008 (Regulated Activities) Regulations 2014

4. Key duties

To safely turn a critical ill patient from supine into the prone position.

All staff are expected to take practical steps to minimise risk to themselves, patients and colleagues. Wherever there is doubt or uncertainty, staff are expected to seek assistance necessary to make the procedure safer.

All staff must report all manual handling incidents, in line with the Trust's Adverse Events policy.

Understand the Trust's procedural documents on managing manual handling risks and ensure that they have an up to date record of completion of required training, as detailed in the Trust's Workforce Induction and Training Policy.

Use only equipment and procedures for which they are trained and competent to use

Seek basic guidance from the manual handling key worker, or the manual handling team for specialist advice, for any situations where they are uncertain of the best approach to use.

Report discomfort or pain possibly associated with their work to their line managers and refer to the Staff to Occupational Health and Wellbeing department as appropriate in line with Trust policy

Ensure that they do not create hazards or increase risks as a result of their working practices and behaviours

5. procedure to follow to turn prone

Staff : Minimum of 5 handlers.

Senior ICU nurse with experience of proning with this technique must be present as well as a person experienced in advanced airway management. This person will be responsible for the patient's head and endotracheal tube and for coordinating the turn.

Position two/three handlers each side of patient (dependent on size of patient based on risk assessment).

Equipment : Large sliding sheet, clean sheet and (R26) Proning Checklist.

Complete Team Brief (plan procedure, safety checks and establish team leader/airway) and use (R26) Proning Checklist.

Place large sliding sheet under bed sheet with opening at top and bottom. Tuck patient's hands under their bottom.



Figure 1

Figure 2
Place a clean sheet with top folded back approximately 45cm on top of patient. Keep face uncovered.

If using pillows (discuss with duty consultant) place pillows between patient and top sheet. Pillows can be added after the patient is prone.

Aim to turn the patient keeping the ET tube upper most.



Figure 2

Figure 3
Tightly roll sheet edges together from patient's shoulders to feet. This will form a pasty like crimp.
Tuck the crimp that will pass underneath the patient in underneath the patient. Reversing the roll from that shown may help with this.
To enable a suitable bed height, smaller handlers should control the pelvis.
There is no need to slide the patient to the edge of the bed. This would put staff at risk of overreaching.



Figure 3

Figure 4

The two handlers adopting body weight transfer should reach across patient and grasp the rolled sheet securely at shoulder and pelvis level and prepare own stance to ensure that lunge position is adopted, in order to transfer body weight from front to back leg to provide effective power for movement.

Ensure that the handling sheet is not caught between the handlers and the bed.

The two handlers opposite should grasp the sliding sheet close to the patient's body at shoulder and pelvis level, and adopt lunge position as previously mentioned.



Figure 4

Figure 5

On command: "Ready, Steady, Turn" the two handlers holding the crimp of the pasty should transfer body weight backwards rolling the patient towards themselves to side lying.

At the same time the opposite handlers should transfer body weight, to pull on the side sheet to facilitate the turn to side lying.

All handlers re-evaluate their posture at this stage of procedure, allowing the handler at the top to alter hand position if required.



Figure 5

Figure 6

On command: "Ready, Steady, Turn" the handlers on the slide sheet should gently pull on the slide sheet to facilitate the turn to prone.

At the same time the handlers holding the crimp should guide the patient into prone position.



Figure 6

The folded 45 cm of the now bottom sheet can be pulled up with care under the patients head.

Figure 7

The patient should be positioned with head of bed tilted >15 degrees to reduce facial swelling, the arms in swimmers position. Patient's head can face either direction, commonly facing towards raised arm "Sniffing the armpit". A pillow is placed under the shins to reduce pressure on the dorsum of the foot.



Figure 7

Manual Handling Procedure to Return to Supine

The same procedure in reverse is used to return the patient to supine position. Complete Team Brief (plan procedure, safety checks and establish team leader/airway) and use (R26) Proning Checklist.





6. Document Ratification Process

The design and process of review and revision of this procedural document will comply with The Development and Management of Formal Documents.

The review period for this document is set as default of three years from the date it was last ratified, or earlier if developments within or external to the Trust indicate the need for a significant revision to the procedures described.

This document will be reviewed by the Critical Care Protocol Group and ratified by the Deputy Chief Nurse

Non-significant amendments to this document may be made, under delegated authority from the Clinical Director of ICU, by the nominated author. These must be ratified by the Deputy Chief Nurse and should be reported, retrospectively, to the Group or Committee

Significant reviews and revisions to this document will include a consultation with the Trust Moving and Handling Lead, Critical Care manual handling keyworkers and the Critical Care Protocol Group. For non-significant amendments, informal consultation will be restricted to the Trust Moving and Handling Lead, Critical Care manual handling keyworkers and the Clinical Director of ICU.

7. Dissemination and Implementation

Following approval and ratification, this procedural document will be published in the Trust's formal documents library and all staff will be notified through the Trust's normal notification process, currently the 'Vital Signs' electronic newsletter.

Document control arrangements will be in accordance with The Development and Management of Formal Documents.

The document author(s) will be responsible for agreeing the training requirements associated with the newly ratified document with the Deputy Chief Nurse and for working with the Trust's training function, if required, to arrange for the required training to be delivered.

8. Monitoring and Assurance

All appropriate staff receives mandatory training as per Moving and Handling People and Objects Policy.

Local monitoring will be conducted by ICU clinical Educators and Local Moving and Handling facilitator as per policy .

Moving and handling team regularly monitor incidents via Datix, in line with Moving and Handling People and Objects Policy reporting to the Health and Safety committee who have oversight.

Health and Safety Committee report directly to the Trust board. They are responsible for ensuring that the Trust maintains adequate arrangements to manage and mitigate the risks of injury arising from moving and handling.

9. Reference Material

Guerin C et al. The PROSEVA study Group. (2013) Prone Positioning in Severe Acute Respiratory Distress Syndrome. *New England Journal of Medicine*; 368: 2159-2168.

Beitler, JR., Shaefi, S., Montesi, S.B. et al (2014) 'Prone positioning reduces mortality from acute respiratory distress syndrome in the low tidal volume era: A meta-analysis'. *Intensive Care Medicine*. 2014 Mar; 40 (3):332-41. Doi: 10.1007/s00134-013-3194-3.

(R02) Prone Positioning Guideline in Intensive care

(R26) Proning Checklist.

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