

## NORTH EAST AND CUMBRIA BURN CENTRE

### ADMISSION POLICY

#### Aim

To enable burn patients in the North East and Cumbria to receive timely care in the most appropriate setting, as close to their home as possible.

#### Objectives

The North East and Cumbria Burn Centre will endeavour at all times to:

1. Provide care for all burn patients in Tyne & Wear, Northumberland, Cumbria and North Durham.
2. Provide Burn Centre level care to all patients in the North East and Cumbria with complex burns.
3. Ensure an open admission policy to avoid the need for longer distance transfers, wherever possible
4. Facilitate prompt transfer of patients, following initial stabilisation in local Accident & Emergency Department.
5. Advise and assist referring doctors with the initial management of patients with burns.

#### Process

1. **Initial point of contact:** As soon as the patient has been assessed and the need for transfer to the Burn Centre has been established, the referring doctor contacts the nurse in charge of Burn Centre:

- i. ADULTS 0191 282 5637
- ii. CHILDREN 0191 282 5001

The nurse takes details of the patient on an admission proforma.

2. **Minor superficial burn:** Small burns (<2%TBSA) in adults will be dressed and reviewed 48 hours later by the assessing doctor or another healthcare worker with experience in the management of minor burns. If the burn remains superficial, A&E or the Primary Care team will manage the patient. Additional advice can be obtained by telephoning the Burn Centre in Newcastle or the Burn Unit in Middlesbrough. Burns in children are more difficult to assess and the additional expertise of the Burn Centre or Burn Unit is likely to be required. The Burn Centre nurse will advise on appropriate initial management. If the referring doctor needs a medical opinion about the patient's management, the nurse will arrange an appointment 48 hours after injury in the plastic surgery trauma clinic:

Monday to Friday: 0830 hours on Ward 1, Royal Victoria Infirmary (children)  
1000 hours in outpatient clinic (adult)

Out of hours: Ward 1, Royal Victoria Infirmary (children)  
(by prior arrangement) Emergency Assessment Unit (EUA), Royal Victoria Infirmary (adult)

3. **Burn requiring admission:** If the patient is thought to need admission for B1\* level care, the Burn Centre nurse agrees transfer for assessment. The nurse will direct the patient to Ward 1 (children) or to the outpatient department (adults Monday to Friday in hours) or to EUA (out of hours). The nurse will telephone the assessment area to let them know that a patient will be arriving and inform the first-call burns/plastic surgery doctor. The duty

doctor will assess the patient and decide whether admission is necessary. If the patient has significant associated problems, such as a serious medical condition, and the burn is minor, it may be more appropriate to admit the patient under the medical team and arrange for the Burns Outreach Team to assist with management of the burn.

4. **Complex burn requiring Burn Centre admission:** If the patient is assessed to need B2\* level care and a bed is available, the Burn Centre nurse agrees transfer and informs the patient services co-ordinator (24300) and duty burns/plastic surgery registrar. The registrar will telephone the referring service to discuss the patient's assessment, initial management and transfer arrangements.
5. **Burn requiring PICU/ITU admission:** If the patient needs B3+\* level care, the Burn Centre nurse informs the nurse in charge of PICU/ITU and enquires about bed availability. The nurse in charge of the Burn Centre then telephones the duty consultant for burns/plastic surgery to inform them about the patient and asks them to speak directly to the consultant at the referring unit. If it is confirmed that the patient is likely to need a bed in PICU/ITU the duty burns/plastic surgery consultant will contact the PICU/ITU consultant to discuss the transfer. If a bed is available or can be made available, the PICU/ITU consultant will agree to accept the patient. The PICU/ITU consultant reserves the right to refuse admission for a patient where it is felt to be inappropriate, when the patient is unstable, or when the patient is clearly dying from an unsurvivable burn. The PICU/ITU consultant will contact the PICU/ITU consultant/anaesthetist at the referring hospital to discuss the patient's stabilisation and transfer.
6. **Multiple Burn Casualties:** If there are multiple burn casualties, likely to overburden the service, the nurse in charge of the Burn Centre will contact the duty burns/plastic surgery consultant, the duty PICU/ITU consultant and the site manager to discuss activation of the North East and Cumbria Mass Casualty Plan for Burns.
7. **If a bed is not available:** Burn Centre nurse takes the patient's details and informs the duty burns/plastic surgery consultant (B1+) who will liaise with the duty PICU/ITU consultant (B3+), if necessary. Wherever possible a bed will be made available. The nurse should contact the patient services co-ordinator (24300) for assistance in finding a bed. If necessary, an existing patient will be transferred to another bed in the Newcastle upon Tyne Hospitals Trust or to other parts of the Burn Network. The decision to refuse a patient will only be taken by the consultant on-call for burns/plastic surgery (B1 to B2) or duty PICU/ITU consultant (B3+). A written record will be kept of the patient and the reasons for refusal. This information will be collated and audited by the Director of the North East and Cumbria Burn Network.
8. **Advice and pre-transfer care:** The burns/plastic surgery duty doctor will contact the referring doctor where necessary to clarify the patient details and to assist with the pre-transfer management of the patient. Patients likely to require admission to PICU/ITU should be seen by a consultant anaesthetist/intensivist at the referring hospital prior to transfer.
9. **Comfort Care:** If a patient is thought by the referring doctor to require comfort care only and is being referred from outside Tyneside and Northumberland every effort should be made to keep the patient close to his family. If necessary, the duty plastic surgery consultant will attend the referring site to assess the patient and give advice.
10. **Patient with Inhalation Injury and NO cutaneous burn:** These patients should be managed close to home, where possible, with support and advice from the Burn Centre anaesthetists/intensivists where necessary. The decision to transfer the patient to the Burn Centre ITU is entirely the responsibility of the duty consultant in charge of the Burn Centre ITU.
11. **Pre-transfer assessment:** The referring doctor must ensure that the following have been carried out where necessary and that full documentation accompanies the patient:
  - Airway assessed and secured

- Cervical spine assessed and immobilised
- Oxygen administered to all burns >30%, all patients with suspected inhalation injury and whenever other clinical indications are present
- Two large bore IV cannulae inserted and IV fluid resuscitation commenced as per predicted requirement
- Urinary catheter inserted if burn >10% TBSA (child) or 15% TBSA (adult)
- Blood taken for full blood count, urea & electrolytes, carboxyhaemoglobin (if indicated and available – if not please send specimen with patient) plus others as indicated
- Primary and secondary survey carried out and documented
- Any x-rays required carried out and hard copy sent with patient if possible. If not, a written note of the result should be recorded in the patient's documentation.
- Tetanus prophylaxis given where indicated
- Adequate analgesia given and sent with patient for journey
- A suitable escort should be arranged as appropriate to the patient's needs

12. **Airway assessment:** Any patient with facial burns, a suspicion of inhalation injury or very extensive burns (>40% TBSA) must be assessed by a consultant anaesthetist and, if necessary, intubated prior to transfer.

13. **Inappropriate transfer:** Sometimes, a transfer is found to be inappropriate (e.g. over-estimated TBSA or only erythema). In such cases the duty SHO or SpR should arrange for the patient to be discharged home or transferred back to the referring hospital or admitted to another burn service in the Network, if that is deemed to be more appropriate. The patient (and carers) should receive a full explanation of the reasons for discharge or transfer. The patient's records should be passed to the Director of the North East and Cumbria Burn Centre for review and action.

14. **Management of burns outside the Burn Network:** The National Burn Care Review has given clear and unequivocal advice that patients with burns should not be managed outside the Burn Network. Patients with minor, superficial burns may be suitable for outpatient care by Accident & Emergency or in the community. Patients who require admission should be referred to the Middlesbrough Burn Unit or North East and Cumbria Burn Centre in Newcastle. This includes children and vulnerable adults where there is a suspicion of non-accidental injury. The North East and Cumbria Burn Network has extensive experience of managing such patients. Occasionally there are circumstances where the patient can be managed outside the Burn Unit/Centre with support from the Burns Outreach Team. For example, if a patient has a minor burn in association with a serious medical condition or other non-burn injuries then it may be more appropriate for the patient to be managed locally. The nurse in charge of the Burn Unit or Burn Centre will take details and contact the Burns Outreach Team, who will arrange to visit the patient and give advice, as necessary.

#### **Review of this policy**

Overall responsibility for the Burn Centre lies with the Director, who is responsible for the regular review of this policy and for dealing with any enquiries that arise from it.

**Mrs Sarah Pape**

**Director of North East and Cumbria Regional Burn Centre**

**Dept of Plastic Surgery**

**Royal Victoria Infirmary**

**Newcastle upon Tyne**

**NE1 4LP.**

**Secretary 0191 282 5336**

**DECT phone 0191 282 0177**

\* See Appendix for explanation of burn categories

## APPENDIX 1

### North East and Cumbria Burn Centre Action Plan for Burn Admission

Nursing Level	Criteria	Action	Inform
<b>BO</b>	Minor, superficial burn Does not require admission Outpatient assessment and treatment	<ul style="list-style-type: none"> <li>▪ Advise on initial care</li> <li>▪ Manage in primary care or A&amp;E if possible or</li> <li>▪ Arrange trauma clinic review @ 48 hours post-injury if medical advice required</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ward clerk ward 1 (child)</li> <li>▪ Receptionist Plastic Surgery Clinic (adult)</li> <li>▪ Ward 41 (adult out of hours)</li> </ul>
<b>B1</b>	May need admission for: <ul style="list-style-type: none"> <li>▪ Observation</li> <li>▪ Elevation</li> <li>▪ Pain relief</li> <li>▪ Nursing care</li> <li>▪ Physiotherapy</li> <li>▪ Surgery to deep burn &lt;3%</li> <li>▪ Social reasons</li> <li>▪ Antibiotics</li> </ul>	<ul style="list-style-type: none"> <li>▪ Send to:               <ul style="list-style-type: none"> <li>– Ward 1 (children)</li> <li>– Outpatients (adults in hours)</li> <li>– Ward 41 (adults out of hours)</li> </ul> </li> <li>▪ Assess bed state</li> <li>▪ Admit if necessary</li> <li>▪ Contact Burns Outreach Team if appropriate</li> </ul>	<ul style="list-style-type: none"> <li>▪ Duty SHO for burns &amp; plastic surgery</li> </ul>
<b>B2-/+</b>	Admission to Burn Centre for: <ul style="list-style-type: none"> <li>▪ Airway observation</li> <li>▪ IV fluid resuscitation</li> <li>▪ Circumferential burn</li> <li>▪ Age &lt;5y, &gt;65y</li> <li>▪ Chemical burn</li> <li>▪ Surgery for deep burn</li> <li>▪ High pressure steam burn</li> <li>▪ Significant medical problem</li> <li>▪ Associated injury</li> <li>▪ Blistering skin disorder</li> </ul>	<ul style="list-style-type: none"> <li>▪ Assess bed state</li> <li>▪ Arrange transfer to burn centre</li> </ul>	<ul style="list-style-type: none"> <li>▪ Duty SpR for burns &amp; plastic surgery</li> <li>▪ Duty PICU/ITU consultant if needs airway observation</li> </ul>
<b>B3+</b>	Admission to PICU/ITU: <ul style="list-style-type: none"> <li>▪ Intubated</li> <li>▪ Extensive burn</li> <li>▪ High tension electrical burn</li> <li>▪ Ionising radiation</li> <li>▪ Major trauma</li> <li>▪ Crush injury</li> <li>▪ Haemachromogenuria</li> <li>▪ Toxic shock syndrome</li> </ul>	<ul style="list-style-type: none"> <li>▪ Contact PICU/ITU to assess bed state</li> </ul>	<ul style="list-style-type: none"> <li>▪ Duty PICU/ITU consultant</li> <li>▪ Duty consultant for burns &amp; plastic surgery</li> </ul>

#### Action to be taken if no bed is available

- Take full details
- Inform duty consultant for burns & plastic surgery (B2) or duty PICU/ITU consultant (B3+). Consultant will liaise with Patient Services Co-ordinator and/or PICU/ITU consultant to attempt to free a bed.
- Only if this fails should the referring doctor be directed to the National Burn Bed Bureau.
- Send records of all patients refused admission to Director of Northern Burn Centre for review and action.