



**Benchmark: Humidity**

<b>Score relates to practice in (unit):</b>	
<b>Scored by:</b>	<b>Date scored:</b>
<p><b>Statement:</b> The skin is a vital organ often taken for granted. In infants &lt;30wks keratinisation has not yet occurred<sup>1</sup>, this leads to high levels of transepidermal water loss (TEWL) and the inability to maintain a normothermic state.</p> <p>Providing optimal, evidence-based environmental humidification to infants &lt;30wks is of vital importance.</p>	
<p><b>Standards:</b> All staff on neonatal units have a responsibility to ensure heat loss and TEWL are minimised with the use of environmental humidity in infants &lt;30wks</p>	
<p><b>Patient Group:</b> All neonates &lt;30 weeks within the neonatal unit</p>	
<p><b>Drivers for the development of the benchmark:</b>          Essence of Care          Improving quality (NSF)          Audit results          Increasing evidence base          Parental /professional concerns          Awareness of risk factors.</p>	
<p><b>Criteria for scoring:</b> Review the notes of a maximum of six babies &lt;30 weeks on the neonatal unit, observe practice and discuss with staff/parents. (If you have no patients &lt;30 weeks on your unit since last scored, discuss factors with 6 staff members)</p>	

Key Factors		Individual scores	Possible total
<b>F1</b>	There is an evidence-based guideline to support clinical practice		<b>3</b>
<b>F2</b>	Care		<b>3</b>
<b>F3</b>	Staff Education		<b>3</b>
<b>F4</b>	Parental Education and Information		<b>1</b>
<b>Overall Score</b>			<b>10</b>

**Factor 1: There is an evidence-based guideline to support clinical practice**

Evidence based practice guidelines ensure that care delivered to the infant is of the highest standard. Clinical guidelines are systematically developed statements to assist practitioner and patient decisions about appropriate health care for specific circumstances, statements about different aspects of the patients’ condition and the care to be given.

**Factor 2: Care**

Prevention of trans-epidermal water loss (TEWL) in <30week gestation infants contributes to maintenance of skin integrity. The pre-term infants’ skin is an ineffective barrier. This may result in increased risk of TEWL

**Factor 3: Staff Education**

Staff must have received education, and an update within the locally agreed time scale. All healthcare professionals should be able to provide appropriate humidity strategies to minimise TEWL and maintain a normothermic state in infants <30wks.

**Factor 4: Parental Education & Information**

The objective of information-giving to parents is to facilitate informed decisions about all aspects of their baby’s care.

Benchmarking Score Sheet: Humidity

Key factors & criteria	Notes 1	Notes 2	Notes 3	Notes 4	Notes 5	Notes 6
<p><b>1. There is an evidence-based guideline to support clinical practice:</b></p> <ul style="list-style-type: none"> <li>a) The guideline is evidence-based and referenced.</li> <li>b) The guideline is reviewed regularly according to Trust policy.</li> <li>c) Compliance with the guideline is audited.</li> </ul>						
<p><b>2. Care</b></p> <ul style="list-style-type: none"> <li>a) There is documented evidence that polyethylene bags are used at the delivery of infants <math>\leq 32</math> weeks gestation. (If discussing, staff are aware of the need to place infants <math>\leq 32</math> weeks gestation into polyethylene bag.)</li> <li>b) There is documented evidence that the correct pathway of humidity for the correct gestation is used: (If discussing, staff are aware of the different pathways they would need to use) <ul style="list-style-type: none"> <li>• <math>&lt; 27</math> weeks = 80% to commence with, then wean over 4 weeks</li> <li>• 27-29+6 weeks = 80% to commence with, then wean over 2 weeks</li> </ul> </li> <li>c) Double walled incubators are used to care for the infants 30 weeks gestation or less.</li> </ul>						
<p><b>3. Staff Education</b></p> <ul style="list-style-type: none"> <li>a) Evidence-based educational resources on the use of humidity in infants <math>&lt; 30</math> weeks are available to all staff.</li> <li>b) Staff are instructed in use of equipment</li> <li>c) Staff are competent in the use of humidification</li> </ul>						
<p><b>4. Parental Education and Involvement</b></p> <ul style="list-style-type: none"> <li>a) There is evidence that parents have been signposted to information on humidity (either documented or through discussion with parents).</li> </ul>						

Statements to justify scores/local action plans:

## References

1. Modi, N. (2004) Management of fluid balance in the very immature neonate. *Archives of disease in Childhood, Fetal and Neonatal* edition. Vol 89 pg. 108-111.
2. Department of Health (2010) *Essence of Care*.
3. Department of Health (2003) *National Service Framework for Children*.
4. AWHONN (2013) Evidence-based Clinical Practice Guideline – Neonatal skin care. 3<sup>rd</sup> Ed.
5. Department of Health (2009) Toolkit for high quality neonatal services. London, Department of Health
6. Clinical Guidelines Education Team (2001) *Implementing Clinical Guidelines: A Resource for the Health Care Team*. Bailliere-Tindall. Edinburgh.
7. Resuscitation Council UK (2021) *Newborn resuscitation and support of transition of infants at birth Guidelines*