



*Topic Expert Group: Medical care and clinical practice*

**Postnatal support of transition and resuscitation**

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*Target group*

Newborn infants, pregnant women with risk factors, their partners, and parents

*User group*

Healthcare professionals, neonatal units, hospitals, and health services

*Statement of standard*

Support of postnatal transition to extrauterine life is based on internationally consented guidelines, which are based on scientific evidence, and is performed in an appropriate structured and equipped environment by trained personnel.

*Rationale*

Postnatal adaptation to extrauterine life is a complex process during which air breathing is established and circulatory changes take place. Difficulties may occur with transition in situations such as preterm birth and following perinatal asphyxia. These situations account for much of the associated neonatal mortality and morbidity. (1–4) Certain problems that arise during birth may be anticipated. (5) Transition should be supported appropriately and formal resuscitation instituted when necessary. High-risk deliveries should be attended by individuals trained in advanced resuscitation, but all healthcare professionals attending deliveries should be trained in basic neonatal resuscitation techniques.

The International Liaison Committee on Resuscitation (ILCOR) provides comprehensive recommendations for the management at transition and resuscitation of the newborn infant, which are adapted by international bodies such as the European Resuscitation Council. (6–8) These recommendations are updated regularly, translated and adapted by the respective regional or national organisations.

Training in the practical skills of resuscitation should be undertaken in all maternity settings, including all responsible disciplines, using a neonatal resuscitation courses (see TEG Education & training).

*Benefits*

*Short-term benefits*

- Reduced mortality and morbidity (6,8)

*Long-term benefits*

- Improved neurodevelopmental outcome (6,8)



### *Components of the standard*

<b>Component</b>	<b>Grading of evidence</b>	<b>Indicator of meeting the standard</b>
<b>For parents and family</b>		
1. Pregnant women with risk factors and their partners are informed by healthcare professionals and counseled before birth. (see TEG Birth & transfer)	B (High quality)	Patient information sheet
2. Parents are informed by healthcare professionals about the possible need for support at transition and the risks thereof in infants at high-risk for resuscitation.	B (Moderate quality)	Patient information sheet
3. Parents are invited to be present during resuscitation. (8–10)	A (High quality)	Guideline
4. Parents are provided with opportunities to debrief following a resuscitation of their infant.	B (High quality)	Clinical record, parent feedback
<b>For healthcare professionals</b>		
5. A guideline on resuscitation, including post-resuscitation care, is adhered to by all healthcare professionals. (6,8)	B (High quality)	Guideline
6. Training on current resuscitation recommendations, guidelines and local equipment is attended by all responsible healthcare professionals using accredited courses. (6,8) (see TEG Education & Training)	A (Moderate quality) B (High quality)	Training documentation
7. Equipment needed for resuscitation is regularly checked.	B (High quality)	Audit report
<b>For neonatal unit</b>		
8. A guideline on neonatal resuscitation, including post-resuscitation care, and arrangements for transfer to expert services where necessary, is available and regularly updated. (6,8)	B (High quality)	Guideline



9. Information to support emergency calls is clearly displayed within the delivery suite and neonatal unit to cover: <ul style="list-style-type: none"> <li>• further help (manpower)</li> <li>• consultation (knowledge)</li> <li>• neonatal transport</li> </ul>	B (High quality)	Guideline
10. Team debriefing after resuscitation is provided.	B (High quality)	Healthcare professional feedback
11. Healthcare professionals trained in resuscitation are available throughout the 24 hours.	B (High quality)	Audit report

**For hospital**

12. Training on resuscitation including simulation scenarios is ensured.	B (High quality)	Training documentation
13. Facilities for appropriate resuscitation and for resuscitation training (e.g. mannequins for simulation) are provided. (11,12)	A (High quality) B (High quality)	Audit report

**For health service**

14. A national guideline on neonatal resuscitation is available and regularly updated.	B (High quality)	Guideline
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*Where to go – further development of care*

<b>Further development</b>	<b>Grading of evidence</b>
For parents and family N/A	
<b>For healthcare professionals</b>	
• Video recording of transition management is conducted and structured feedback is given. (13)	B (Moderate quality)
• Provide emergency telemedicine consultation for neonatal resuscitation. (14)	A (Low quality)



#### For neonatal unit

- Establish debriefing rounds for resuscitation situations, including interdisciplinary work with psychologists. B (Moderate quality)
- Establish regular quality meetings within one week after delivery to check defined quality parameters of pre- and postnatal management (lung maturation, admission temperature etc.) together with nurses, midwives, obstetricians, neonatologists, psychologists. B (Moderate quality)

#### For hospital

- Establish the chance of bonding with the mother immediately after successful support of postnatal transition. B (High quality)

#### For health service

- Support research into new techniques and approaches for neonatal resuscitation. B (High quality)

### *Getting started*

#### **Initial steps**

##### For parents and family

- Parents are verbally informed by healthcare professionals about resuscitation.

##### For healthcare professionals

- Offer prenatal counseling by neonatologists.
- Attend training on basic neonatal resuscitation.
- Establish centralisation for high-risk deliveries in advance.

##### For neonatal unit

- Develop and implement a guideline on resuscitation.
- Develop information material on neonatal transition phase and potential resuscitation for parents.
- Provide adequate training for healthcare professionals.

##### For hospital

- Support healthcare professionals to participate in resuscitation training.
- Support healthcare professionals in implementing measures for quality improvement.

##### For health service

- Develop and implement a national guideline on neonatal resuscitation.

### *Source*

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### *Lifecycle*

5 years/next revision: 2023

### *Recommended citation*

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