

Thermal care for newborns

Thermal care visual guide to complement the WHO guidelines

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Introduction

- A significant number of the 2.5 million annual neonatal deaths has been associated to hypothermia. High prevalence of hypothermia in low- and middle-income countries (LMICs) is well known.¹
- The World Health Organization thermal care guide for neonates has been in place for many years with low progress in many countries.²

Objective

To develop a simple material with pictograms for health personnel to provide better neonatal thermal care in LMICs to complement the current WHO thermal care on temperature monitoring, prevention, and management of neonatal hypothermia.

Methods

- Needs assessment: Online survey of 55 neonatal care professionals
- Literature review: Comprehensive review on the effectiveness, usability, and affordability of devices
- Device use assessment: Retrospective cross-sectional registry data in Burkina Faso

Results

- 1) Inadequate understanding of **cold stress** among neonatal care professionals
- 2) **Missed opportunities** to prevent hypothermia by simple clinical hand touch of the feet temperature
- 3) Very **short warming device use** of low birthweight babies compared to general recommendations based on these findings was developed below visual guide (figure 1) complementing WHO steps

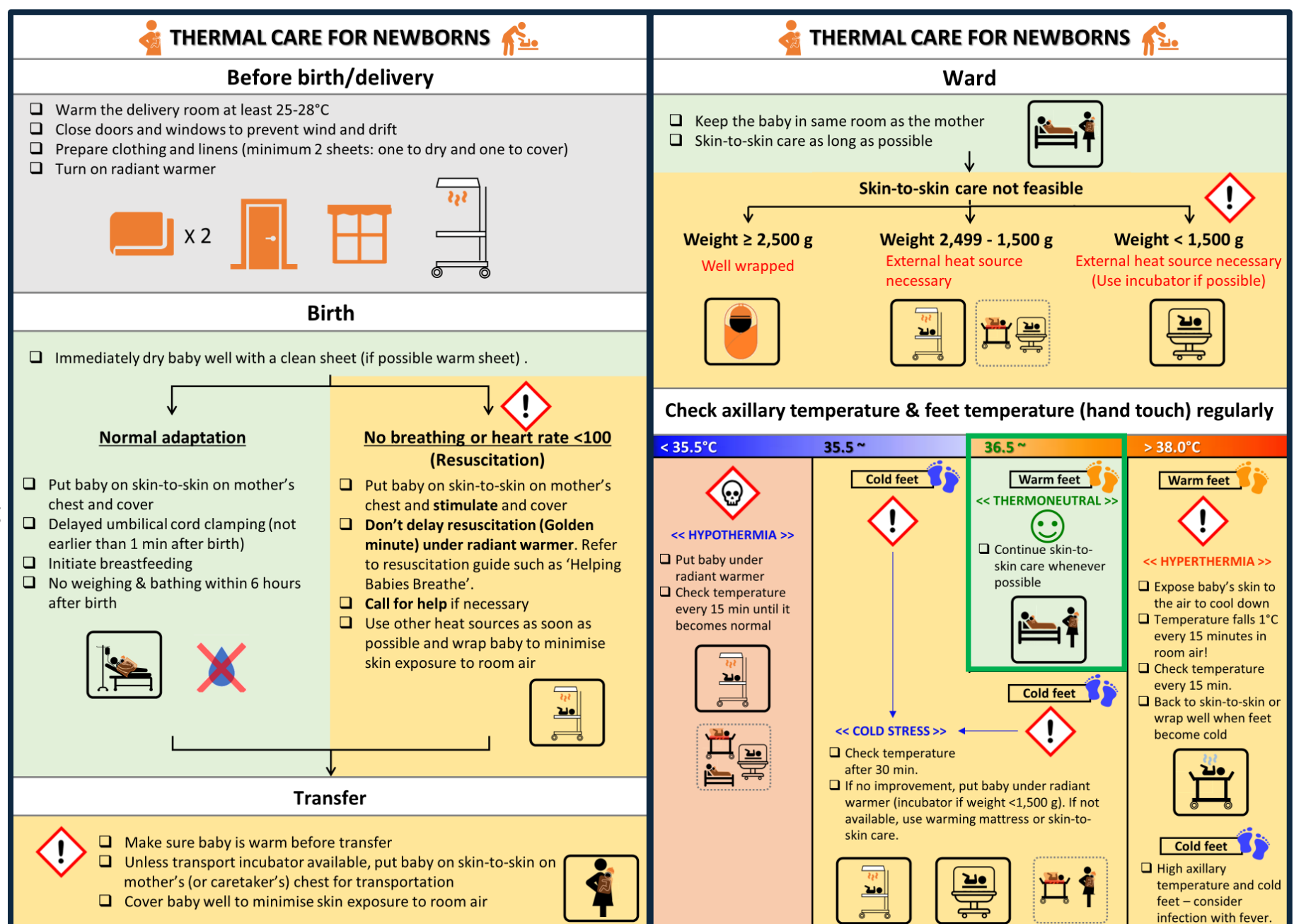
Figure 1. Thermal care visual guide

For details, please access below link.



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<https://drive.google.com/file/d/1F9NX1Gg2G9wft0ZzfTIWnwnzlc9hrCx/view?usp=sharing>



Conclusions

- Hand touch is the simplest and cheapest temperature monitoring but underestimated.
- Fitting hand-touch to the current WHO guidelines is innovative as it builds on acquired knowledge.
- This simple strategy needs to be tested through a rigorously designed RCT in LMICs.

References:

1. Lunze K, et al. BMC Med. 2013 Jan 31;11(1):24.
2. Gebeyehu NA, et al. PLoS One. 2022;17(5):e0265411.

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