

Interventions to prevent hypothermia at birth in preterm and or low birth weight infants.

Find out more:

http://cochranelibrary-wiley.com/doi/10.1002/14651858.CD004210.pub5/abstract

Problem:



World-wide, preventing hypothermia

(abnormally low body temperature) at birth remains a challenge.

Solution:



Immediate intervention at birth

For every 100 babies treated with plastic wrap or bag:

Barriers to heat loss (18 studies): plastic wraps or bags, caps of various materials.

External heat sources (3 studies): thermal mattress, skin-to-skin care.

Combinations (4 studies): plastic bag +/- thermal mattress; thermal mattress vs plastic wrap.

How confident are we in our findings?

 $\oplus \oplus \oplus \oplus \Theta$ Moderate-guality evidence (GRADE) showed that low cost plastic wraps or bags (compared to routine care) keep preterm babies warmer and lead to higher temperatures on admission to NICU with less hypothermia and fewer temperatures outside the range of normothermia. Extremely preterm babies appear to benefit the most.



Key Stats:



0.58°C Higher mean core body temperature [13 studies; 1633 babies]

50 will experience hypothermia compared to **74** if not treated... [10 studies; 1417 babies]

... but, approximately 5 will be overly warm compared to 1 if not treated [12 studies; 1523 babies]



Results across all studies show no reduction in deaths and only limited improvement in shortterm complications or illnesses normally associated with being too cold.

Care must be taken, particularly when combining interventions, to avoid the unintended effect of making babies too warm, which may be harmful.

Trusted evidence. Informed decisions. Better health.



McCall EM, Alderdice F, Halliday HL, Vohra S, Johnston L. Interventions to prevent hypothermia at birth in preterm and/or low birth weight infants. Cochrane Database of Systematic Reviews 2018, Issue 2. Art. No.: CD004210. DOI: 10.1002/14651858.CD004210.pub5.