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

Problem:
World-wide, preventing hypothermia (abnormally low body temperature) at birth remains a challenge.

Solution:
Immediate intervention at birth
- 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?

Moderate-quality 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]

For every 100 babies treated with plastic wrap or bag:
- 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 short-term 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.

Find out more: