The Hierarchy of Evidence

The Hierarchy of evidence is based on summaries from the National Health and Medical Research Council (2009), the Oxford Centre for Evidence-based Medicine Levels of Evidence (2011) and Melynyk and Fineout-Overholt (2011).

I Evidence obtained from a systematic review of all relevant randomised control trials.

II Evidence obtained from at least one well designed randomised control trial.

III Evidence obtained from well-designed controlled trials without randomisation.

IV Evidence obtained from well designed cohort studies, case control studies, interrupted time series with a control group, historically controlled studies, interrupted time series without a control group or with case- series

V Evidence obtained from systematic reviews of descriptive and qualitative studies

VI Evidence obtained from single descriptive and qualitative studies

VII Expert opinion from clinicians, authorities and/or reports of expert committees or based on physiology

Melynyk, B. & Fineout-Overholt, E. (2011). *Evidence-based practice in nursing & healthcare: A guide to best practice (2nd ed.).* Philadelphia: Wolters Kluwer, Lippincott Williams & Wilkins.

National Health and Medical Research Council (2009). *NHMRC levels of evidence and grades for recommendations for developers of guidelines* (2009). Australian Government: NHMRC. http://www.nhmrc.gov.au/_files_nhmrc/file/guidelines/evidence_statement_form.pdf

OCEBM Levels of Evidence Working Group Oxford (2011).*The Oxford 2011 Levels of Evidence*. Oxford Centre for Evidence-Based Medicine. http://www.cebm.net/index.aspx?o=1025

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Reference ***(include title, author, journal title, year of publication, volume and issue, pages)***	**Evidence level (I-VII)**	**Key findings, outcomes or recommendations**
Auckland District Health Board Newborn Services – Thermal Environment and Growth in Preterm Infants (2001).	VII	Outlined the importance of a neutral thermal environment and the effects that the thermal environment has on both mortality and metabolic rate in preterm infants.
Gray, P., & Flenady, V. (2011) Cot-nursing versus incubator care for preterm infants. Cochrane Database of Systematic Reviews 2011, Issue 8. Art. No.: CD003062. DOI: 10.1002/14651858.CD003062.pub2	I	Cot nursing using heated water filled mattresses has similar effects to incubator care in regards to temperature stability and weight gain.
Mercy Hospital for Women - Thermoregulation of the Neonate Clinical Guideline (2009).	VII	The importance of using Servo control when nursing a preterm infant less than 1000 grams within an incubator and the nursing management required when caring for preterm infants on Servo control.
Merenstein, G., & Gardner, S., Handbook of Neonatal Intensive Care, 7th Edition, 2011.	VII	Discussed recommendations for preterm infant thermoregulation; including modes of heat loss, management of preterm infants in incubators and radiant warmers and the effects of an inadequate thermal environment (including cold stress).
New, K., Flenady, V., & Davies, M. (2011). Transfer of preterm infants from incubator to open cot at lower versus higher body weight. Cochrane Database of Systematic Reviews 2011, Issue 9. Art. No.: CD004214. DOI: 10.1002/14651858.CD004214.pub4	I	Medically stable infants can be transferred to an unheated open cot at 1600 grams without adverse effects on temperature stability or weight gain.

The Royal Children's Hospital, Melbourne – Temperature Management Clinical Guideline (2014).	VII	Pre-existing thermoregulation guideline created for the entire RCH population, with a section on preterm infants and the use of incubators. Provided a base to expand on during production of this specific Preterm Infant guideline.
The Royal Women's Hospital, Melbourne – Thermoregulation for a Baby Clinical Guideline (2014).	VII	Medically stable infants can be transferred to an unheated open cot at 1600 grams without adverse effects on temperature stability or weight gain. Criteria for transferring medically stable infants was adapted to suit our population of infants, in particular those requiring surgical interventions.
Pate, M. (2001). Thermoregulation. In Curley, M., & Moloney-Harmon, P. (Eds.), Critical Care Nursing of Infants and Children (pp. 443 – 459). Philadelphia: W.B. Saunders Co.	VII	The effects of cold stress including the physiological cascade of events and the importance of considering this when caring for a preterm infant.
Sinclair, J. (2002). Servo-control for maintaining abdominal skin temperature at 36C in low birth weight infants. Cochrane Database of Systematic Reviews 2002, Issue 1. Art. No.: CD001074. DOI: 10.1002/14651858.CD001074	I	Compared to setting a constant incubator air temperature of 31.8C, servo-control of abdominal skin temperature at 36C reduces the neonatal death rate among low birth weight infants.
World Health Organisation (1997). Thermal Protection of the Newborn: A Practical Guide. Retrieved from: http://passthrough.fw-notify.net/download/016828/http://apps.who.int/iris/bitstream/10665/63986/1/WHO_RHT_MSM_97.2.pdf	VII	Thermal guidelines for management of preterm and term infants – including actions when hypothermia or hyperthermia present.