

# 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](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>

Databases searched:	<input type="checkbox"/> CINAHL (Ebsco)	<input type="checkbox"/> Medline (Ebsco)	<input type="checkbox"/> Pubmed (NLM)	<input type="checkbox"/> Nursing (Ovid)	<input type="checkbox"/> Emcare (Ovid)	<input type="checkbox"/> Other List: _____
Keywords used:	Cuddle cot, paediatric death, home after death, techni-ice, post mortem care, bereavement care, hospice, home, cooling mattress					
Search limits:	2000-2021					
Other search comments:	Seeking access to national and international guidelines from other Paediatric Centers around after death care at home					

**Guideline Title: After death care at home with Techni-Ice****Author(s): Jess Rowe (Melissa Heywood and Gemma Sutton)**

Reference (include title, author, journal title, year of publication, volume and issue, pages)	Evidence level (I-VII)	Key findings, outcomes or recommendations
Hackett, J., Beresford, B. (2021). 'Cold bedrooms' and other cooling facilities in UK children's hospices, how they are used and why they are offered: A mixed methods study 1	IV	<b>10 Hospices in UK interviewed on the variety of cooling options they provide both in hospice and at home. All Hospices reported positive feedback from families around use of cooling for preserving body and giving family time. Only 2 discussed offered at home with cooling blankets/devices but all Hospices said it should be offered more.</b>
Malcolm, C., Knighting, K. (2021). 'What does effective end-of-life care at home for children look like? A qualitative interview study exploring the perspectives of bereaved parents', Palliative Medicine, Vol. 35(8) 1602–1611	IV	<b>13 bereaved parents of 10 children interviewed on their home-based end-of-life care. Value of cooling blankets to help preserve body and allow for time noted to be beneficial as part of a program of services that can be provided through a supported home-based program.</b>
Hackett, J., Heavey, E., and Beresford, B., (2022). 'It was like an airbag, it cushioned the blow': A multi-site qualitative study of bereaved parents' experiences of using cooling facilities. Palliative Medicine, Vol. 36(2) 365–374	IV	<b>22 Bereaved parents (25% reply rate), discussed the positive impact having time with their child after death in a cooling facility provided them. Discusses the limitation to data collection as home services provided by hospitals in relatively new and infrequent – more research needed in this area.</b>
Tatterton, M., Honour, A., Billington, D., Kirkby,, L., Lyon, J.A., Lyon, N., Gaskin, J., 'Care after death in children's hospices: recommendations for moving and handling, and for managing physiological deterioration'. Nursing Children and Young People. doi: 10.7748/ncyp.2022.e1412	IV	<b>Review of a survey sent to 54 UK Children's Hospices reviewing their policies on the handling and care provided to the child after death. Minimal handling of the body and the use of cooling blankets as soon as possible after death were two key discussion points to assist in families having quality time with a child after death.</b>
Forrester, L. (208). 'Bereaved parents' experiences of the use of 'cold bedrooms' following the death of their child'. International Journal of Palliative Nursing, Vol. 14(12) 578-85	IV	<b>Single centre study in UK. Surveys sent to all families offered cooling device, either air conditioner or cooling mattress, at home for their children as part of after death care. 16 (50% reply rate) families replied, all stating the positive experience it provided them.</b>

Chambers, L., (2019) 'Caring for a child at end of life', Together for short lives, UK.	VII	<b>UK Guideline developed to provide evidence based guideline for health professionals providing end of life care to children. Discusses the importance of cooling process for integrity of the body and to assist optimising family time in hospital and at home.</b>
Butler AE, Copnell B., and Hall, H. (2017). 'Welcoming expertise: Bereaved parents' perceptions of the parent-healthcare provider relationship when a critically ill child is admitted to the paediatric intensive care unit'. <i>Aust Crit Care</i> 2017; 32:34–39	IV	<b>Experiences of the parent-healthcare provider relationship of 26 bereaved parents from Australian PICUs. What communication tools helped their experience during their child's death and what can be improved. Importance of closed-loop communication, honesty, consistency, parents need to learn the hospital system.</b>
Butler AE, Copnell B., and Hall, H. (2019). 'When a child dies in the PICU: Practice recommendations from a qualitative study of bereaved parents', <i>Pediatric Critical Care</i> , vol 20, number 9, 447-451	IV	<b>Key advice from bereaved families (26) of their experience of their child's death in Australian PICUs. Recommendations for improvements of what care is provided during and after a child's death in ICU.</b>
Butler, A.E., Hall, H., Willetts, G., and Copnell, B. (2015). 'Family Experience and PICU Death: A Meta-Synthesis', <i>Pediatrics</i> , 136, 961-973.	V	<b>Systematic review of best available evidence, which explore the family experiences of their child's death in PICUs internationally. Reclaiming of parenthood (parent's role during the admission, during the death and parenting after death) was the main theme. Discusses the after-death care of the child and families, including the role of giving the family time with their child.</b>
Genevro, J.L., Marshall, T., and Miller, T. (2004). 'Report on bereavement and grief research'. <i>Death Studies</i> , 28(6), 491-575.	V	<b>85 page documented comprehensively discussing bereavement and grief resource but clearly states not intended to be used for the development of CPGs. Moreso to highlight current themes and disagreements in the area (such as the complexities of grief and what directly impact how a family with respond to the death of a loved one)</b>
Children's Health Queensland Hospital and Health Service (2021). Techni Ice Use in After Death Care, Queensland Health	VII	<b>Queensland Health Clinical Guideline to use of Techni-ice in after death care, including considerations, preparation and disposing of product after use.</b>
Techni-Ice (2022), Techniice Standard 2 Ply Disposable Dry Ice Packs – Hydration Instructions, <a href="https://www.techniice.com/Disposible-Dry-Ice-Packs-Hydration-Instructions">Disposible Dry Ice Packs Hydration Instructions (techniice.com)</a>	VII	<b>Instructions on hydration of technilce and ongoing storage</b>