



## **Guideline 10.6 Family Presence during Resuscitation**

### Summary

#### **To whom does this guideline apply?**

This guideline applies to adults, children and infants (including neonates and newborns) requiring resuscitation.

#### **Who is the audience for this guideline?**

This guideline is for use by health professionals however, principles of this guideline may have applicability to bystanders, first aiders or first responders.

#### **Summary of Recommendations**

The Australian and New Zealand Committee on Resuscitation (ANZCOR) makes the following recommendations:

1. ANZCOR suggests that family members be provided with the option to be present during out-of-hospital or in-hospital resuscitation [Adult CoSTR 2022, weak recommendation, very low certainty of evidence; Neonatal CoSTR 2021, weak recommendation, very low certainty of evidence]. When offering families the choice to be present during resuscitation, cultural, religious or other sociological or health equity factors should be considered and accommodated [Good Practice Statement].
2. Institutional guidance documents about family presence during resuscitation should be developed to guide and support healthcare provider decision-making, and to manage communication and care of families who are present during resuscitation [Adult CoSTR 2022, Good Practice Statement].
3. When implementing family presence during resuscitation, healthcare providers should receive preparation to enable optimal management of the patient, family, and themselves [Adult CoSTR 2022, Good Practice Statement]. Methods to enhance provider preparation may include (but are not limited to) education to enhance knowledge, experiential learning or skills training, role modelling, cultural awareness and safety, and techniques to optimise resource use.
4. Consideration should be given to follow-up of patients, families and healthcare providers both soon after the resuscitation event and in the longer term [Good Practice Statement].

## Guideline

Depending on context, family presence during resuscitation may be inevitable, incidental or invited. Given the sudden nature of resuscitation from cardiac arrest, serious illness or injury, and the threat to patient survival,<sup>1-4</sup> family members may wish to be present during resuscitation.<sup>5</sup> There are many influences<sup>6,7</sup> on whether families wish or do not wish to be present during resuscitation: family choice must be respected and families supported whether they choose to be present or not.

This guideline is supported by:

- two International Liaison Committee on Resuscitation (ILCOR) systematic reviews (one pertaining to adult resuscitation<sup>6</sup> and the other pertaining to paediatric and neonatal resuscitation<sup>7</sup>),
- two ILCOR Consensus on Science and Treatment Recommendations publications related to adult<sup>8</sup> and neonatal<sup>9</sup> resuscitation, and
- a survivor and family-performed systematic review and qualitative meta-synthesis.<sup>10</sup>

These documents are limited to resuscitation from cardiac arrest; however, principles of this guideline may apply to resuscitation situations where cardiac arrest has not occurred (such as respiratory failure, trauma, or shock). In this guideline, family presence during neonatal, paediatric, and adult resuscitation, and care needs of families of those in cardiac arrest will be addressed in the sections to follow.

## 1.0 | Family Presence during Neonatal Resuscitation

The ILCOR systematic review on family presence during paediatric or neonatal resuscitation<sup>9</sup> identified seven studies related to resuscitation of newborn infants at birth.<sup>11-17</sup> A further study related to neonatal resuscitation<sup>18</sup> was included in the CoSTR.<sup>9</sup> The following summation is drawn from the ILCOR CoSTR on family presence during neonatal resuscitation.<sup>9</sup> Newborn resuscitation is unique in that the person giving birth is always present at least initially; in many cases they are conscious and in some cases they are under anaesthesia.

## 1.1 | Patient outcomes

The effect of family presence during neonatal resuscitation on patient outcomes (short and long term) is unknown as no patient outcomes were reported in this systematic review.<sup>7</sup>

## 1.2 | Family outcomes

Family presence during neonatal resuscitation was mostly positive for families present during stabilisation or resuscitation of their newborn.<sup>11-17</sup>

Qualitative themes included:

- the unique experience and perspective of fathers/partners,
- parents felt that being present provided reassurance and opportunities for involvement and communication, but also reported reservations about the emotional toll of witnessing a resuscitation,
- the need for staff training in support and debriefing of parents, and
- polarized emotions ranging from desperation to see the baby immediately, to fear of witnessing their baby in situation they would rather have avoided.

## 1.3 | Healthcare provider outcomes

There are no reports of detrimental effects of family presence during neonatal resuscitation on health providers. All four studies reporting provider outcomes were surveys of providers<sup>13,15,18</sup> or parents.<sup>16</sup> Healthcare providers perceived that family presence during neonatal resuscitation reduced workload,<sup>18</sup> some providers were concerned that less experienced professionals may feel increased pressure with families present,<sup>13,15</sup> however increased pressure was not raised as a concern in a survey of healthcare providers regarding their workload.<sup>18</sup> The potential impact of family presence on staff performance was raised as a concern by parents in one study.<sup>77</sup>

## 2.0 | Family Presence during Paediatric Resuscitation

The ILCOR systematic review on family presence during paediatric or neonatal resuscitation<sup>9</sup> identified 31 studies related to paediatric resuscitation (11 related to actual resuscitation,<sup>19-29</sup> and the remainder were surveys of general patient populations,<sup>30-32</sup> healthcare providers' opinions, attitudes or beliefs in response to hypothetical scenarios<sup>24,26-28,33-46</sup>). The following summation is drawn from the ILCOR systematic review.<sup>9</sup>

## 2.1 | Patient outcomes

The effect of family presence during paediatric resuscitation on patient outcomes is unknown as no patient outcomes were reported in this systematic review.

## 2.2 | Family outcomes

Family presence during the resuscitation of their child was a helpful experience for parents. In the eight studies focused on family opinion,<sup>19-23,30-32</sup> parents who were present during their child's resuscitation believed their presence brought their child comfort and helped them to adjust to the loss of their child. Qualitative themes included parents' desire to be present, understand what was happening, have physical contact with their child, and witnessing the resuscitation helped them to know that all had been done.<sup>20-22</sup> In the single study comparing experiences of parents who had been present versus not, 40% of those not present were not invited to be present during cardiopulmonary resuscitation (CPR) and 10% declined to be present when invited (the remaining 45% were not in the hospital at the time of CPR, in remaining 5% the reasons were unclear).<sup>23</sup> Of those that were absent (regardless of reason), 55% wished they had the opportunity to be there.<sup>23</sup>

## 2.3 | Healthcare provider outcomes

The effect of family presence during paediatric resuscitation on healthcare provider experience was varied across 23 studies.<sup>24-29,33-49</sup> Agreement with and acceptance of family presence during resuscitation ranged from 15%<sup>29</sup> to more than 60%.<sup>40,42,43,45</sup> Agreement with, and confidence, in facilitating family presence during paediatric resuscitation was higher in health professionals who had past experience of inviting families to be present. The most common provider concerns were psychological trauma for parents, risk of interference with clinical care, and stress on the resuscitation team. Provider opinion studies (which did not all require past experience of family presence during resuscitation) found overall acceptance ranged from 35 to 85%.<sup>24,26,28,33-46</sup> There were no differences between physicians and nurses, however acceptance was more positive amongst clinicians with experience of family presence during resuscitation and among senior clinicians.<sup>34,36,38</sup> Hypothetical concerns were team stress, potential for distraction, adverse psychological impact on parents/family members and the potential for litigation.

## 3.0 | Family Presence during Adult Resuscitation

The ILCOR systematic review on family presence during adult resuscitation<sup>6</sup> identified 31 studies (five studies reported on out-of-hospital resuscitation,<sup>50-54</sup> 24 studies reported on in-hospital resuscitation,<sup>55-78</sup> and one study reported on both in- and out-of-hospital resuscitation<sup>79</sup>). The following summation is drawn from the ILCOR CoSTR on family presence during adult resuscitation.<sup>8</sup>

## 3.1 | Patient outcomes

The effect of family presence during adult resuscitation on patient outcomes was varied.

Survival at a range of timepoints was the most commonly reported outcome. Four studies compared family presence versus no family presence: in three studies, family presence made no significant difference to survival (return of spontaneous circulation (ROSC),<sup>76</sup> 28-days<sup>51</sup> and 30-days<sup>78</sup>) and in one study family absence decreased ROSC and survival to discharge.<sup>66</sup>

## 3.2 | Family outcomes

There were mixed results for depression<sup>50,51,60,74</sup> and post-traumatic stress disorder (PTSD),<sup>51,52,60,74</sup> but family presence during resuscitation was associated with reduced anxiety or anxiety-related symptoms.<sup>50,51,74</sup> Family member experience of presence during resuscitation was mixed.<sup>53,57,62,68,69,72,75,77,80</sup> The major themes were families:

- would witness resuscitation again,<sup>57,72</sup>
- believed it enabled management of their grief<sup>57</sup> and adjustment to their family member's death,<sup>72</sup> and
- believed was important and helpful to be present.<sup>69</sup>

Regret was minimal in both families who were<sup>51,62,80</sup> and were not<sup>51</sup> present during resuscitation of a family member. Some studies reported negative outcomes with families feeling that:

- resuscitation was brutal and dehumanising,<sup>53</sup> distressing,<sup>53,77</sup>
- concerned about removing thoughts of the resuscitation,<sup>77</sup>
- resuscitation was too long<sup>72</sup> with excessive or unnecessarily heroics,<sup>53</sup> and
- they were afraid of disrupting or interfering with the resuscitation process<sup>77</sup> or losing emotional control.<sup>77</sup>

## 3.3 | Healthcare provider outcomes

Providers had varied experience with, and perceptions of, family presence during resuscitation. Between 35% and 63%.<sup>69,71,78</sup> of providers reported experience with family presence during resuscitation, but few had experience inviting families to be present.<sup>55,56,73,78</sup> Providers had mixed experiences of family presence during resuscitation. Negative experiences were related to aggressive or disruptive family members, and provider concerns about psychological trauma for family members.<sup>65,70</sup> The factors influencing provider experience of family presence during resuscitation included:

- need to balance compassionate care and technical competence,<sup>70,79</sup>
- professional practice and responsibilities,<sup>70</sup> and

- shift from patient to family care and guilt associated with resuscitation termination.<sup>54</sup>

Experience alone was not sufficient for effective family support,<sup>54</sup> and that there was a need for provider training for managing family presence, a family support person during the resuscitation, and unit based policies or protocols for family presence during resuscitation.<sup>54-56,64,67,71</sup> Provider perceptions of family presence during resuscitation were largely positive with three-quarters of providers supporting family presence during resuscitation,<sup>69,72</sup> and two thirds believing their performance was not impaired by family presence.<sup>57,72</sup> Few providers had negative perceptions of family presence during resuscitation but concerns included hindered clinical performance,<sup>67</sup> interruptions or interference with care,<sup>67,71</sup> and impaired team communication.<sup>71</sup> Anxiety was higher in providers when families were present compared to not present<sup>59</sup> but family presence was not associated with increased stress.<sup>51,58</sup>

Providers reported stark differences in the dynamic between families and healthcare providers relative to resuscitation context (out-of-hospital versus in-hospital).<sup>79</sup> During out-of-hospital resuscitation, family presence was a spontaneously occurring event, families played an active role, had the freedom to enter, stay or leave, were empowered and less impacted by professional dominance.<sup>79</sup> The role of family support was integrated into provider practice, and family presence was accepted as the norm.<sup>79</sup> During in-hospital resuscitation, family presence was a planned event occurring by invitation or demand, families were often in a separate location, access was restricted and controlled by healthcare providers, and when present, families were an observer role.<sup>79</sup> The role of family support was deferred to personnel external to the resuscitation, and family presence was dependent on professional judgment and provider preferences.<sup>79</sup>

## 4.0 | Family care needs

A survivor and family-performed scoping review of 41 studies focused on family care needs identified ten themes and five domains:<sup>81</sup>

- focus on the family member in cardiac arrest: survival as a mutual goal,
- collaboration of the resuscitation team and family, supported presence or absences, physical closeness, shared information, and decision making,
- consideration of family context: discretion in initiating resuscitation (respecting advanced care directives and avoiding futile or unwanted resuscitation), cultural context,
- family post-resuscitation needs information, debriefing, and follow-up, and
- dedicated policies and procedures, support and direction.

## 5.0 | Knowledge Gaps

There are a number of knowledge gaps related to family presence during resuscitation:

- how to best prepare families who wish to be present during resuscitation,

- impact of the nature of resuscitation on patient, family, or providers such as patient characteristics, precipitating events/ illness, bystander CPR or resuscitation setting,
- cultural, religious, or other sociological or health equity factors that may influence attitudes and behaviors regarding family presence during resuscitation,
- impact of guidance documents (policies, protocols, guidelines) or family support personnel,
- cost-effectiveness of resourcing the resuscitation setting to accommodate family presence, and
- patient, family, and responder outcomes from family presence during resuscitation occurring prior to arrival of healthcare professionals (for example, in the context of bystander CPR)

## Abbreviations

<b>Abbreviation</b>	<b>Meaning/Phrase</b>
ANZCOR	Australian and New Zealand Committee on Resuscitation
CoSTR	Consensus on Science with Treatment Recommendations
CPR	cardiopulmonary resuscitation
ILCOR	International Liaison Committee on Resuscitation
PTSD	Post-traumatic stress disorder
ROSC	Return of spontaneous circulation

## References

1. Yan S, Gan Y, Jiang N, et al. The global survival rate among adult out-of-hospital cardiac arrest patients who received cardiopulmonary resuscitation: a systematic review and meta-analysis. *Crit Care* 2020;24(1). DOI: 10.1186/s13054-020-2773-2.
2. Gräsner J-T, Herlitz J, Tjelmeland IBM, et al. European Resuscitation Council Guidelines 2021: Epidemiology of cardiac arrest in Europe. *Resuscitation* 2021;161:61-79. DOI: 10.1016/j.resuscitation.2021.02.007.
3. Fennessy G, Hilton A, Radford S, Bellomo R, Jones D. The epidemiology of in-hospital cardiac arrests in Australia and New Zealand. *Int Med J* 2016;46(10):1172-1181. DOI: 10.1111/imj.13039.
4. Kiguchi T, Okubo M, Nishiyama C, et al. Out-of-hospital cardiac arrest across the World: First report from the International Liaison Committee on Resuscitation (ILCOR). *Resuscitation* 2020;152:39-49. DOI: 10.1016/j.resuscitation.2020.02.044.
5. Oczkowski SJ, Mazzetti I, Cupido C, Fox-Robichaud AE. The offering of family presence



- during resuscitation: a systematic review and meta-analysis. *J Intensive Care* 2015;3(1):41. (journal article). DOI: 10.1186/s40560-015-0107-2.
6. Considine J, Eastwood K, Webster H, et al. Family presence during adult resuscitation from cardiac arrest: A systematic review. *Resuscitation* 2022;180:11-23. DOI: <https://doi.org/10.1016/j.resuscitation.2022.08.021>.
  7. Dainty KN, Atkins DL, Breckwolfdt J, et al. Family presence during resuscitation in paediatric and neonatal cardiac arrest: A systematic review. *Resuscitation* 2021;162:20-34. DOI: 10.1016/j.resuscitation.2021.01.017.
  8. Eastwood K, Considine J, Zelop C, et al. Family presence during adult resuscitation: A Consensus on Science with Treatment Recommendations. Brussels, Belgium. Retrieved 12 January 2023 from <https://costr.ilcor.org/document/effect-of-family-presence-during-resuscitation-in-adult-cardiac-arrest-on-patient-family-and-health-care-provider-outcomes-eit-tfsr>: International Liaison Committee on Resuscitation (ILCOR) Basic Life Support Task Force, 2022.
  9. Dainty KN, Atkins DL, Breckwolfdt J, et al. Family presence during resuscitation: A Consensus on Science with Treatment Recommendations. Brussels, Belgium. Retrieved 12 January 2023 from <https://costr.ilcor.org/document/systematic-review-nls-family-presence-during-resus-neonatal-costr>: International Liaison Committee on Resuscitation (ILCOR) Basic Life Support Task Force, 2021.
  10. Douma MJ, Graham TA, Bone A, et al. What are the care needs of families experiencing cardiac arrest care? A survivor and family-performed systematic review and qualitative meta-synthesis protocol. *International Journal of Qualitative Methods* 2021;20:16094069211048600.
  11. Arnold L, Sawyer A, Rabe H, et al. Parents' first moments with their very preterm babies: a qualitative study. *BMJ Open* 2013;3(4):e002487. DOI: 10.1136/bmjopen-2012-002487.
  12. Harvey ME, Pattison HM. Being there: a qualitative interview study with fathers present during the resuscitation of their baby at delivery. *Archives of Disease in Childhood - Fetal and Neonatal Edition* 2012;97(6):F439. DOI: 10.1136/archdischild-2011-301482.
  13. Harvey ME, Pattison HM. The impact of a father's presence during newborn resuscitation: a qualitative interview study with healthcare professionals. *BMJ Open* 2013;3(3):e002547. DOI: 10.1136/bmjopen-2013-002547.
  14. Lindberg B, Axelsson K, Öhring K. The birth of premature infants: Experiences from the fathers' perspective. *Journal of Neonatal Nursing* 2007;13(4):142-149. DOI: <https://doi.org/10.1016/j.jnn.2007.05.004>.
  15. Yoxall CW, Ayers S, Sawyer A, et al. Providing immediate neonatal care and resuscitation at birth beside the mother: clinicians' views, a qualitative study. *BMJ Open* 2015;5(9):e008494. DOI: 10.1136/bmjopen-2015-008494.
  16. Sawyer A, Ayers S, Bertullies S, et al. Providing immediate neonatal care and resuscitation at birth beside the mother: parents' views, a qualitative study. *BMJ Open* 2015;5(9):e008495. DOI: 10.1136/bmjopen-2015-008495.
  17. Katheria AC, Sorkhi SR, Hassen K, Faksh A, Ghorishi Z, Poeltler D. Acceptability of bedside resuscitation with intact umbilical cord to clinicians and patients' families in the United States. *Frontiers in Pediatrics* 2018;6 (Article). DOI: 10.3389/fped.2018.00100.
  18. Zehnder E, Law BHY, Schmölzer GM. Does parental presence affect workload during neonatal resuscitation? *Archives of Disease in Childhood - Fetal and Neonatal Edition* 2020;105(5):559. DOI: 10.1136/archdischild-2020-318840.
  19. Ebrahim S, Singh S, S. Parshuram C. Parental satisfaction, involvement, and presence after pediatric intensive care unit admission. *Journal of Critical Care* 2013;28(1):40-45. DOI: <https://doi.org/10.1016/j.jcrc.2012.05.011>.
  20. Maxton FJC. Parental presence during resuscitation in the PICU: the parents' experience.



- Journal of Clinical Nursing 2008;17(23):3168-3176.  
(<https://doi.org/10.1111/j.1365-2702.2008.02525.x>). DOI:  
<https://doi.org/10.1111/j.1365-2702.2008.02525.x>.
21. McGahey-Oakland PR, Lieder HS, Young A, Jefferson LS. Family Experiences During Resuscitation at a Children's Hospital Emergency Department. *Journal of Pediatric Health Care* 2007;21(4):217-225. DOI: <https://doi.org/10.1016/j.pedhc.2006.12.001>.
  22. Stewart SA. Parents' Experience During a Child's Resuscitation: Getting Through It. *Journal of Pediatric Nursing* 2019;47:58-67. DOI: <https://doi.org/10.1016/j.pedn.2019.04.019>.
  23. Tinsley C, Hill JB, Shah J, et al. Experience of Families During Cardiopulmonary Resuscitation in a Pediatric Intensive Care Unit. *Pediatrics* 2008;122(4):e799-e804. DOI: 10.1542/peds.2007-3650.
  24. Carroll DL. The effect of intensive care unit environments on nurse perceptions of family presence during resuscitation and invasive procedures. *Dimensions of Critical Care Nursing* 2014;33(1):34-39. (Article). DOI: 10.1097/DCC.000000000000010.
  25. Curley MAQ, Meyer EC, Scoppettuolo LA, et al. Parent presence during invasive procedures and resuscitation: Evaluating a clinical practice change. *American Journal of Respiratory and Critical Care Medicine* 2012;186(11):1133-1139. (Article). DOI: 10.1164/rccm.201205-0915OC.
  26. McClenathan CPTBM, Torrington COLKG, Uyehara CFT. Family Member Presence During Cardiopulmonary Resuscitation: A Survey of US and International Critical Care Professionals. *Chest* 2002;122(6):2204-2211. DOI: <https://doi.org/10.1378/chest.122.6.2204>.
  27. McLean J, Gill FJ, Shields L. Family presence during resuscitation in a paediatric hospital: health professionals' confidence and perceptions. *Journal of Clinical Nursing* 2016;25(7-8):1045-1052. (<https://doi.org/10.1111/jocn.13176>). DOI: <https://doi.org/10.1111/jocn.13176>.
  28. Tripon C, Defossez G, Ragot S, et al. Parental presence during cardiopulmonary resuscitation of children: the experience, opinions and moral positions of emergency teams in France. *Archives of Disease in Childhood* 2014;99(4):310. DOI: 10.1136/archdischild-2013-304488.
  29. Vavarouta A, Xanthos T, Papadimitriou L, Kouskouni E, Iacovidou N. Family presence during resuscitation and invasive procedures: Physicians' and nurses' attitudes working in pediatric departments in Greece. *Resuscitation* 2011;82(6):713-716. DOI: <https://doi.org/10.1016/j.resuscitation.2011.02.011>.
  30. Boie ET, Moore GP, Brummett C, Nelson DR. Do Parents Want to Be Present During Invasive Procedures Performed on Their Children in the Emergency Department? A Survey of 400 Parents. *Annals of Emergency Medicine* 1999;34(1):70-74. DOI: 10.1016/S0196-0644(99)70274-X.
  31. Dwyer TA. Predictors of public support for family presence during cardiopulmonary resuscitation: A population based study. *International Journal of Nursing Studies* 2015;52(6):1064-1070. DOI: <https://doi.org/10.1016/j.ijnurstu.2015.03.004>.
  32. Isoardi J, Slabbert N, Treston G. Witnessing invasive paediatric procedures, including resuscitation, in the emergency department: A parental perspective. *Emergency Medicine Australasia* 2005;17(3):244-248. (<https://doi.org/10.1111/j.1742-6723.2005.00730.x>). DOI: <https://doi.org/10.1111/j.1742-6723.2005.00730.x>.
  33. Beckman AW, Sloan BK, Moore GP, et al. Should parents be present during emergency department procedures on children, and who should make that decision? A survey of emergency physician and nurse attitudes. *Academic Emergency Medicine* 2002;9(2):154-158.
  34. Bradford KK, Kost S, Selbst SM, Renwick AE, Pratt A. Family Member Presence for Procedures: The Resident's Perspective. *Ambulatory Pediatrics* 2005;5(5):294-297. DOI:

<https://doi.org/10.1367/A04-024R1.1>.

35. Corniero P, Gamell A, Parra Cotanda C, Trenchs V, Cubells CL. Family presence during invasive procedures at the emergency department: What is the opinion of Spanish medical staff? *Pediatric Emergency Care* 2011;27(2):86-91. (Article). DOI: 10.1097/PEC.0b013e3182094329.
36. Egemen A, Ikizoglu T, Karapinar B, Cosar H, Karapinar D. Parental Presence During Invasive Procedures and Resuscitation: Attitudes of Health Care Professionals in Turkey. *Pediatric Emergency Care* 2006;22(4) ([https://journals.lww.com/pec-online/Fulltext/2006/04000/Parental\\_Presence\\_During\\_Invasive\\_Procedures\\_and.5.aspx](https://journals.lww.com/pec-online/Fulltext/2006/04000/Parental_Presence_During_Invasive_Procedures_and.5.aspx)).
37. Enriquez D, Mastandueno R, Flichtentrei D, Szyld E. Relatives' presence during cardiopulmonary resuscitation. *Global Heart* 2017;12(4):335-340. e1.
38. Fein JA, Ganesh J, Alpern ER. Medical Staff Attitudes Toward Family Presence during Pediatric Procedures. *Pediatric Emergency Care* 2004;20(4):224-227. (Review). DOI: 10.1097/01.pec.0000121241.99242.3b.
39. Fulbrook P, Latour JM, Albarran JW. Paediatric critical care nurses' attitudes and experiences of parental presence during cardiopulmonary resuscitation: A European survey. *International Journal of Nursing Studies* 2007;44(7):1238-1249. DOI: <https://doi.org/10.1016/j.ijnurstu.2006.05.006>.
40. Jarvis AS. Parental presence during resuscitation: attitudes of staff on a paediatric intensive care unit. *Intensive and Critical Care Nursing* 1998;14(1):3-7. DOI: [https://doi.org/10.1016/S0964-3397\(98\)80029-3](https://doi.org/10.1016/S0964-3397(98)80029-3).
41. O'Brien MM, Creamer KM, Hill EE, Welham J. Tolerance of family presence during pediatric cardiopulmonary resuscitation: A snapshot of military and civilian pediatricians, nurses, and residents. *Pediatric Emergency Care* 2002;18(6):409-413. (Article). DOI: 10.1097/00006565-200212000-00002.
42. Perry SE. Support for parents witnessing resuscitation: nurse perspectives. *Nursing Children and Young People* 2009;21(6).
43. Sacchetti A, Carraccio C, Leva E, Harris RH, Lichenstein R. Acceptance of family member presence during pediatric resuscitations in the emergency department: Effects of personal experience. *Pediatric Emergency Care* 2000;16(2):85-87. (Article). DOI: 10.1097/00006565-200004000-00004.
44. Jones BL, Parker-Raley J, Maxson T, Brown C. Understanding Health Care Professionals' Views of Family Presence During Pediatric Resuscitation. *American Journal of Critical Care* 2011;20(3):199-208. DOI: 10.4037/ajcc2011181.
45. Zavotsky KE, McCoy J, Bell G, et al. Resuscitation team perceptions of family presence during CPR. *Advanced Emergency Nursing Journal* 2014;36(4):325-334. (Review). DOI: 10.1097/TME.0000000000000027.
46. Lam DSY, Wong SN, Hui H, Lee W, So KT. Attitudes of doctors and nurses to family presence during paediatric cardiopulmonary resuscitation. *Hong Kong Journal of Paediatrics* 2007;12(4):253-259. (Article) (<https://www.scopus.com/inward/record.uri?eid=2-s2.0-35648997514&partnerID=40&md5=c382b7b23b96a11557337233d03fc240>).
47. Crowley L, Gallagher P, Price J. To stay or not to stay: children's nurses' experiences of parental presence during resuscitation. *Nursing Children and Young People* 2015;27(3).
48. Jones M, Qazi M, Young KD. Ethnic Differences in Parent Preference to Be Present for Painful Medical Procedures. *Pediatrics* 2005;116(2):e191-e197. DOI: 10.1542/peds.2004-2626.
49. Kuzin JK, Yborra JG, Taylor MD, et al. Family-Member Presence During Interventions in the Intensive Care Unit: Perceptions of Pediatric Cardiac Intensive Care Providers. *Pediatrics* 2007;120(4):e895-e901. DOI: 10.1542/peds.2006-2943.

50. Metzger K, Gamp M, Tondorf T, et al. Depression and anxiety in relatives of out-of-hospital cardiac arrest patients: Results of a prospective observational study. *Journal of Critical Care* 2019;51:57-63. DOI: 10.1016/j.jcrc.2019.01.026.
51. Jabre P, Belpomme V, Azoulay E, et al. Family Presence during Cardiopulmonary Resuscitation. *New England Journal of Medicine* 2013;368(11):1008-1018. DOI: 10.1056/nejmoa1203366.
52. Compton S, Grace H, Madgy A, Swor RA. Post-traumatic stress disorder symptomology associated with witnessing unsuccessful out-of-hospital cardiopulmonary resuscitation. *Academic Emergency Medicine* 2009;16(3):226-229. DOI: 10.1111/j.1553-2712.2008.00336.x.
53. De Stefano C, Normand D, Jabre P, et al. Family presence during resuscitation: a qualitative analysis from a national multicenter randomized clinical trial. *PLoS One* 2016;11(6):e0156100. DOI: 10.1371/journal.pone.0156100. eCollection 2016.
54. Bremer A, Dahlberg K, Sandman L. Balancing between closeness and distance: emergency medical services personnel's experiences of caring for families at out-of-hospital cardiac arrest and sudden death. *Prehosp Disaster Med* 2012;27(1):42-52. DOI: 10.1017/S1049023X12000167.
55. Axelsson ÅB, Fridlund B, Moons P, et al. European cardiovascular nurses' experiences of and attitudes towards having family members present in the resuscitation room. *Eur J Cardiovasc Nurs* 2010;9(1):15-23. DOI: 10.1016/j.ejcnurse.2009.10.001.
56. Badir A, Sepit D. Family presence during CPR: a study of the experiences and opinions of Turkish critical care nurses. *International Journal of Nursing Studies* 2007;44(1):83-92. DOI: 10.1016/j.ijnurstu.2005.11.023.
57. Belanger MA, Reed S. A rural community hospital's experience with family-witnessed resuscitation. *J Emerg Nurs* 1997;23(3):238-239.
58. Boyd R, White S. Does witnessed cardiopulmonary resuscitation alter perceived stress in accident and emergency staff? *Eur J Emerg Med* 2000;7(1):51-53. DOI: 10.1097/00063110-200003000-00010.
59. Celik C, Celik GS, Buyukcam F. The witness of the patient's relatives increases the anxiety of the physician, but decreases the anxiety of the relatives of the patient. *Hong Kong J Emerg Med* 2021;28(6):338-345. DOI: 0.1177/1024907919860632.
60. Compton S, Levy P, Griffin M, Waselewsky D, Mango L, Zalenski R. Family-witnessed resuscitation: bereavement outcomes in an urban environment. *J Palliat Med* 2011;14(6):715-721. DOI: 10.1089/jpm.2010.0463.
61. Ganz FD, Yoffe F. Intensive care nurses' perspectives of family-centered care and their attitudes toward family presence during resuscitation. *J Cardiovasc Nurs* 2012;27(3):220-227. DOI: 10.1097/JCN.0b013e31821888b4.
62. Giles T, de Lacey S, Muir-Cochrane E. Factors influencing decision-making around family presence during resuscitation: a grounded theory study. *J Adv Nurs* 2016;72(11):2706-2717. DOI: 10.1111/jan.13046.
63. Giles T, de Lacey S, Muir-Cochrane E. How do clinicians practise the principles of beneficence when deciding to allow or deny family presence during resuscitation? *Journal of Clinical Nursing* 2018;27(5-6):e1214-e1224. DOI: 10.1111/jocn.14222.
64. Hassankhani H, Zamanzade V, Rahmani A, Haririan H, Porter JE. Family support liaison in the witnessed resuscitation: A phenomenology study. *Int J Nurs Stud* 2017B;74:95-100. DOI: 10.1016/j.ijnurstu.2017.06.005.
65. Hassankhani H, Zamanzadeh V, Rahmani A, Haririan H, Porter JE. Family Presence During Resuscitation: A Double-Edged Sword. *J Nurs Scholarsh* 2017A;49(2):127-134. DOI: 10.1111/jnu.12273.
66. Krochmal RL, Blenko JW, Afshar M, et al. Family presence at first cardiopulmonary resuscitation and subsequent limitations on care in the medical intensive care unit.

- American Journal of Critical Care 2017;26(3):221-228. DOI: 10.4037/ajcc2017510.
67. Magowan E, Melby V. A survey of emergency department staff's opinions and experiences of family presence during invasive procedures and resuscitation. *Emerg Nurse* 2019;27(3):13-19. DOI: 10.7748/en.2019.e1908.
  68. Masa'Deh R, Saifan A, Timmons S, Nairn S. Families' stressors and needs at time of cardiopulmonary resuscitation: a Jordanian perspective. *Glob J Health Sci* 2014;6(2):72. DOI: 10.5539/gjhs.v6n2p72.
  69. Meyers TA, Eichhorn DJ, Guzzetta CE, et al. Family presence during invasive procedures and resuscitation: the experience of family members, nurses, and physicians. *Am J Nurs* 2000;100(2):32-43.
  70. Monks J, Flynn M. Care, compassion and competence in critical care: A qualitative exploration of nurses' experience of family witnessed resuscitation. *Intensive and Critical Care Nursing* 2014;30(6):353-359. DOI: 10.1016/j.iccn.2014.04.006.
  71. Oman KS, Duran CR. Health care providers' evaluations of family presence during resuscitation. *J Emerg Nurs* 2010;36(6):524-533. DOI: 10.1016/j.jen.2010.06.014.
  72. Post H. Sudden death in the emergency department: Survivors speak of their presence during resuscitation. *Care Giver* 1986;3(1):152-156. DOI: 10.1080/10778586.1986.10767528.
  73. Sak-Dankosky N, Andruszkiewicz P, Sherwood PR, Kvist T. Factors associated with experiences and attitudes of healthcare professionals towards family-witnessed resuscitation: a cross-sectional study. *J Adv Nurs* 2015;71(11):2595-2608. DOI: 10.1111/jan.12736.
  74. Soleimanpour H, Tabrizi JS, Rouhi AJ, et al. Psychological effects on patient's relatives regarding their presence during resuscitation. *J Cardiovasc Thorac Res* 2017;9(2):113-117. DOI: 10.15171/jcvtr.2017.19.
  75. Wagner JM. Lived experience of critically ill patients' family members during cardiopulmonary resuscitation. *American Journal of Critical Care* 2004;13(5):416-20.
  76. Wang CH, Chang WT, Huang CH, et al. Factors associated with the decision to terminate resuscitation early for adult in-hospital cardiac arrest: Influence of family in an East Asian society. *PLoS One* 2019;14(3):e0213168. DOI: 10.1371/journal.pone.0213168.
  77. Weslien M, Nilstun T, Lundqvist A, Fridlund B. Narratives about resuscitation - Family members differ about presence. *Eur J Cardiovasc Nurs* 2006;5(1):68-74. DOI: 10.1016/j.ejcnurse.2005.08.002.
  78. Waldemar A, Bremer A, Holm A, Strömberg A, Thylén I. In-hospital family-witnessed resuscitation with a focus on the prevalence, processes, and outcomes of resuscitation: A retrospective observational cohort study. *Resuscitation* 2021;165:23-30. DOI: 10.1016/j.resuscitation.2021.05.031.
  79. Walker WM. Emergency care staff experiences of lay presence during adult cardiopulmonary resuscitation: a phenomenological study. *Emerg Med J* 2014;31(6):453-8. DOI: 10.1136/emered-2012-201984.
  80. van der Woning M. Relatives in the resuscitation area: a phenomenological study. *Nurs Crit Care* 1999;4(4):186-192.
  81. Douma MJ, Graham TAD, Ali S, et al. What are the care needs of families experiencing cardiac arrest?: A survivor and family led scoping review. *Resuscitation* 2021;168:119-141. DOI: <https://doi.org/10.1016/j.resuscitation.2021.09.019>.

## About this Guideline

<b>Search date/s</b>	Family presence during adult resuscitation - Systematic review: 10 May 2022 <sup>6</sup>  Family presence during paediatric and neonatal resuscitation - Systematic review: 3 August 2019, updated 14 June 2020 <sup>7</sup>
----------------------	--

**Question/PICO/  
SPIDER:**

**Family presence during neonatal resuscitation<sup>9</sup>**  
Population: In neonates requiring resuscitation in any setting  
Intervention: Does family presence during resuscitation  
Comparators: Compared to no family presence during resuscitation  
Outcomes: Result in improved patient outcomes (short and long term), family-centered outcomes (short and long term, perception of the resuscitation), and health care provider-centered outcomes (perception of the resuscitation, psychological stress)  
Study Designs: Randomized controlled trials (RCTs) and non-randomized studies (non-randomized controlled trials, interrupted time series, controlled before-and-after studies, cohort studies, qualitative) are eligible for inclusion. Unpublished studies (e.g., conference abstracts, trial protocols) are excluded.  
Timeframe: All years and all languages are included as long as there is an English abstract  
PROSPERO Registration CRD42020140363  
All included studies were from the United Kingdom, United States of America or Canada.

**Family presence during adult resuscitation<sup>8</sup>**  
Population: Adults requiring resuscitation for cardiac arrest in any setting.  
Intervention: Family presence during resuscitation  
Comparators: Family not present during resuscitation  
Outcomes:  
· Patient outcomes (short and long term): return of spontaneous circulation, survival (to hospital admission, hospital discharge/30-days, 3 months, 6 months, 1 year), survival with good neurological outcomes (at same time points), depression and anxiety.  
· Family (or significant other) outcomes (short and long term): PTSD, coping, perception of the resuscitation, depression and anxiety amongst family members, complicated grief syndrome.  
· Health care provider outcomes: perception of the resuscitation, performance, perceived futility in some circumstances, psychological stress including projection to provider's own family.  
Study Designs: Randomized controlled trials (RCTs) and non-randomized studies (non-randomized controlled trials, interrupted time series, controlled before-and-after studies, cohort studies) were included, and unpublished studies (e.g., conference abstracts, trial protocols) were excluded.  
Timeframe: All years and all languages were included as long as there was an English abstract.  
PROSPERO Registration CRD42021242384  
Included studies were from United States of America (n=7), United Kingdom (n=4), Iran (n=3); two studies each from Turkey, Australia, France, and Sweden; and one study each from Taiwan, Switzerland, Jordan, Ireland, Israel. One study spanned several Europe countries.

**Patient care needs<sup>10,81</sup>**  
Sample: Persons experiencing cardiac arrest care of a family member in any setting, both in and out of hospital.  
Phenomena of Interest: Cardiac arrest care begins with collapse, abnormal breathing, or physiologic monitor alarm and continues until the family member's body is inaccessible or the family member's status becomes more certain, that is, they emerge from coma. The needs of families including formal and informal services and tangible and intangible supports. This may include information, presence, resources, and follow-up.  
Design: Meta-synthesis of research using interviews, focus group discussions, observation, and indepth or key informant interviews.  
Evaluation: Narrative findings describing family members' experience of cardiac arrest and any care needs, preferences, or wishes they express.  
Research type: Qualitative research, and no time or language restrictions.  
Included studies were from United States of America (n=11), Sweden (n=8), United Kingdom (n=4), two studies each from France, Norway, Belgium, and one study each from Poland, Finland, Canada Hong Kong, Denmark, Korea, Australia, Japan, Iran, Spain and Switzerland.

<b>Method:</b>	This Guideline was developed under the processes outlined in Guideline 1.4. Evidence review included: review of the ILCOR systematic reviews and published CoSTRs (including peer-review and draft version on website).
<b>Primary reviewers:</b>	Julie Considine, Kathryn Eastwood, Kevin Nation, Janet Bray, Judith Finn, Peter Morley, Jason Acworth, Tracy Kidd, Helen Liley, Marta Thio, Craig Ray, Andrew Tongs, Anthony Cameron
<b>Other Consultation:</b>	N/A
<b>Approved:</b>	July 2023
<b>Guidelines superseded:</b>	Guideline 10.6 August 2016