Safe Sleep and the LMC

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MoH Safe Sleep – How to protect your baby:

- Put your baby to sleep on their back with their face up.
- Ensure your baby's face is clear of bedding and they can't get trapped or strangled. Avoid using pillows and bumper pads; don't put baby down on soft surfaces; make sure there are no loose blankets; remove any cords from bedding; ensure there are no gaps in their bed. (*Unintentional suffocation)*
- Your baby is safest in their own bed (a cot, bassinette, wahakura or pepipod) and in the same room as their parent/caregiver (when the parent/caregiver is also asleep). Babies shouldn't sleep in bed with another person (either adult or child).
- Your baby should be smokefree in the womb and after birth. Also make sure friends and family don't smoke around baby.
- If possible, breastfeed your baby.

Definition of co-sleeping and bed sharing

- Co-sleeping This term should be avoided.
- Bed sharing is defined as the parent **sleeping** with the infant on the same sleeping surface (usually a mattress). A key feature is that the parent is asleep.

Bed sharing and risk of SUDI

- Infants of mothers who smoke or smoked in pregnancy
- Maternal alcohol, drugs, excessive tiredness
- Maternal obesity
- Vulnerable babies, e.g. preterm, LBW
- Young infants, especially less than 3 months

Infants not at risk

- Infants placed back in cot after breastfeeding in parental bed
- Infants in the same bed as an awake mother

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Bed sharing when parents do not smoke: is there a risk of SIDS? An individual level analysis of five major case–control studies

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ABSTRACT

Objective: To resolve uncertainty as to the risk of Sudden Infant Death Syndrome (SIDS) associated with sleeping in bed with your baby if neither parent smokes and the baby is breastfed.

Design: Bed sharing was defined as sleeping with a baby in the parents' bed; room sharing as baby sleeping in the parents' room. Frequency of bed sharing during last sleep was compared between babies who died of SIDS and living control infants. Five large SIDS case–control datasets were combined. Missing data were imputed. Random effects logistic regression controlled for confounding factors.

Setting: Home sleeping arrangements of infants in 19 studies across the UK, Europe and Australasia.

Participants: 1472 SIDS cases, and 4679 controls. Each study effectively included all cases, by standard criteria. Controls were randomly selected normal infants of similar age, time and place.

Results: In the combined dataset, 22.2% of cases and 9.6% of controls were bed sharing, adjusted OR (AOR) for all ages 2.7; 95% CI (1.4 to 5.3). Bed sharing risk decreased with increasing infant age. When neither parent smoked, and the baby was less than 3 months, breastfed and had no other risk factors, the AOR for bed sharing versus room sharing was 5.1 (2.3 to 11.4) and estimated absolute risk for these room sharing infants was very low (0.08 (0.05 to 0.14)/1000 live-births). This increased to 0.23 (0.11 to 0.43)/1000 when bed sharing. Smoking and alcohol use greatly increased bed sharing risk.

Conclusions: Bed sharing for sleep when the parents

ARTICLE SUMMARY

Article focus

- Is there a risk of Sudden Infant Death Syndrome (SIDS) due to bed sharing when the baby is breastfed, the parents do not smoke, and the mother does not use alcohol or illegal drugs?
- At what age is it safe to bed share?
- How is the risk of SIDS associated with bed sharing affected by other factors?

Key messages

- When the baby is breastfed and under 3 months, there is a fivefold increase in the risk of SIDS when bed sharing with non-smoking parents and the mother has not taken alcohol or drugs.
- Smoking, alcohol and drugs greatly increase the risk associated with bed sharing.
- A substantial reduction in SIDS rates could be achieved if parents avoided bed sharing.

Strength and limitations of this study

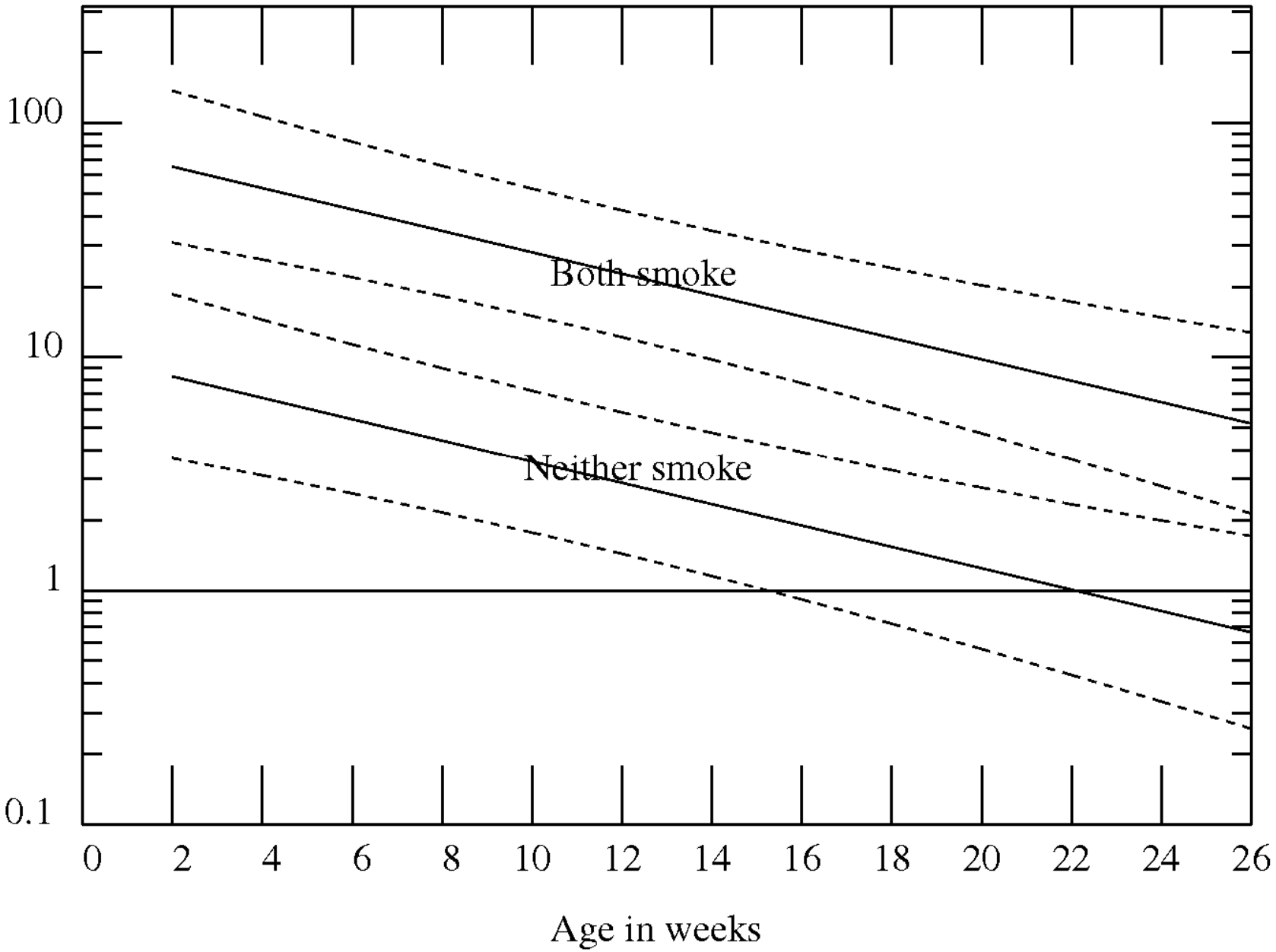
- This is the largest ever analysis of individual records of 1472 SIDS cases and 4679 controls from five major case–control studies.
- Questions on the mother's alcohol use in the last 24 h and illegal drug use were not asked in three of these studies.
- Imputation of missing data enabled a combined analysis of all the data. The analysis gives unbiased, efficient models that describe the data accurately, especially in key areas.

Bed sharing when parents do not smoke: Is there a risk of SIDS?

Carpenter et al, BMJ Open 2013

- Combined data from 5 case-control studies
  - ECAS (excluding CESDI), 1992 to1996
  - Scottish 1996–2000
  - New Zealand 1987–1990
  - Irish 1994 to 2003
  - GeSID 1999 to 2003
- 1472 cases and 4679 controls

Bed Sharing Odds Ratios by age



Estimated SIDS rate per 1000 live births for selected groups (mother 26-30yrs, 2nd child, birthweight 2500-3499g; SIDS rate=0.5/1000)

Risk factor present Feeding	Smoking	Room but not bed sharing	Bed sharing	Ratio of rates
Breast	None	0.08	0.23	2.7
Bottle	None	0.13	0.34	2.7
Breast	Mother	0.13	1.27	9.7
Breast	Both parents	0.24	1.88	7.7
Bottle	Both parents plus alcohol	1.77	27.5	16.0

If parents follow our SIDS prevention messages the SIDS rate is very low.

If they bed share but otherwise do the right things the risk is increased almost 3 fold.

The combination of parental smoking, bed sharing AND alcohol is lethal (2.8/100).

If you add other factors the risk becomes even higher:

- Birthweight of 2.25.kg
- Mother aged 18 years
- Maternal smoker
- Partner smokes
- 2+ units of alcohol
- Bottle feeding
- Bed sharing

Risk >100/1000, i.e. 10%

Bed sharing and risk of SUDI

- Infants of mothers who smoke or smoked in pregnancy
- Maternal alcohol, drugs, excessive tiredness
- Maternal obesity
- Vulnerable babies, e.g. preterm, LBW
- Young infants, especially less than 3 months
- There is a small increased risk when the mother does not smoke in infants <3 months of age.

Why is this issue important

- Although mortality has dropped dramatically, SUDI continues to be the major cause of death in the postneonatal age group. Kills about 60 babies p.a. in New Zealand
- 50-70% of SUDIs are occurring in a bed sharing environment, and this reaches 90+% in the first month of life. (In a 10 year review in Auckland 64% were bed sharing and this was 92% in those less than one month of age.)

Role of obstetric hospitals/birthing units

- Need to model appropriate infant care practices
- Avoid mixed messages

  e.g. Encourage mother to breastfeed in bed, then expect mothers to listen to advice not to bed share when they go home
- Consider use of pepi-pod or wahakura in selected families

Role of LMC

- Need to concentrate on the established risk factors: bed sharing, smoking, sleep position and the protective effects of room sharing and breastfeeding
- Need to ask about where baby is breastfed during the day and night, and discuss strategies to avoid mother falling asleep (alarm, partner, chair)
- Need to provide anticipatory guidance for the unsettled baby at night

FINAL CONCLUSIONS

- The MoH recommendations on Safe Sleep are evidence based.
- SUDI is preventable
- Application of what we currently know could eliminate SIDS (reduce it to 5-6 deaths per annum)