



Sudden Unexpected Deaths in Infancy (SUDI) - Part 1

Fast facts*

SUDI includes deaths that are later explained by natural or external causes, and deaths that remain unexplained after investigation (this is the largest group).

Queensland has a consistently high post-neonatal (28 days to 364 days) Infant Mortality Rate, currently 30% higher than the rest of Australia.

51% of the post-neonatal infant deaths reviewed were categorised as Sudden Unexpected Deaths in Infancy (SUDI).

62% of SUDI occurred in regional or remote parts of Queensland. However Queensland also has the highest major city infant mortality in Australia (based on AIHW data).

Infants of Aboriginal and/or Torres Strait Islander families were over-represented in the SUDI group (23%).

Smoking in pregnancy was reported for 65% of SUDI.

46% of families where SUDI occurred were already known to Child Protective Services (e.g. for older siblings).

90% of SUDI occurred during sleep.

At least one unsafe sleep factor was present for every SUDI which occurred - 86% had 2 or more risk factors such as soft bedding, or sharing a sleep surface in a household with smokers.

Elisha's story

Baby Elisha was born at 38 weeks weighing 2730 grams. Her mother, Lara, attended her first antenatal appointment when she was 21 weeks pregnant.

Lara had reduced her cigarette smoking during pregnancy from 15 down to 5 per day. This pregnancy was the fourth for Lara, aged 26, her two older children to a previous partner were aged 8 and 7 years. There has been 2 previous notifications to Child Safety Services regarding the care of these two children when they were toddlers. Both children lived with Lara and her new partner, Troy, and their child aged 2 years. Troy's mother, her partner and Troy's brother also lived in the house.

Elisha's birth was uncomplicated and she was discharged home with Lara 8 hours after her birth. The midwife arranged a follow up visit at home, however no one was home when she visited. Lara's only further contact with health care providers was to a GP when Elisha was 8 weeks old for her immunisations. Elisha was still being exclusively breast fed and generally progressing well.

At the age of nine weeks Elisha and her siblings spent most of the day at a local shopping centre. Elisha fed and slept regularly in her pram during the day and was fed between 8 and 9 pm and put to sleep on the mattress on the floor in her parent's bedroom. Lara re-joined the adults and consumed 2-3 beers whilst watching 2 movies. She heard Elisha crying at 3am and returned to the bedroom where she lay down to breast feed. Elisha was propped on a pillow facing her mother. Both then fell asleep. Troy observed Lara and Elisha asleep side by side when he came into the room to sleep at about 4 am. Troy also slept on the mattress next to Lara.

Lara was woken up by her toddler at 7am. Lara turned to look at Elisha who was now lying face down on the pillow and appeared lifeless. She woke Troy who called 000. He took Elisha to the kitchen where Troy's brother commenced CPR following instructions from the call centre.

Lessons learnt

Often multiple risk factors are present when SUDI occurs. These may include:

- Smoking in pregnancy and/or after birth
- Late or minimal antenatal care
- Previous family involvement with Child Protection Services
- Crowded housing
- Carers have a history of substance use

For SUDI there is rarely a single cause of death in isolation; more often there is a complex interplay of multiple risk factors.

Peak time for SUDI is around 2 months of age. Infants often appear well and are developing normally.

The family environment where SUDI occurs is frequently complex.

Models of care to engage these at-risk families are needed.

Unsafe sleep environments are frequently identified when SUDI occurs.

A risk minimisation approach is useful if bed sharing is likely to occur. This approach aims to reduce the possibility of harm to infants whilst sharing a sleep surface. See [Red Nose](#) and [UNICEF](#).

QPQC actions

Review of [Queensland Health's Safe Sleep Guidelines](#) and consultation with clinicians to develop a suite of innovative resources to implement best practice in SUDI prevention.

Research project – *Measuring the effectiveness of the Pepi Pod® program in reducing infant mortality in Queensland.*

Multi-agency work regarding improving the investigation of SUDI.

Consultation role in service delivery development and reviews.

For further information email QPQC@health.qld.gov.au or visit www.childrens.health.qld.gov.au/chq/health-professionals/qppc

* Based on review of Post-Neonatal Infant Deaths in Qld in 2013