



FINDING OF INQUEST

An Inquest taken on behalf of our Sovereign Lady the Queen at Adelaide in the State of South Australia, on the 21st day of October 2009 and the 30th day of September 2010, by the Coroner's Court of the said State, constituted of Mark Frederick Johns, State Coroner, into the deaths of Naomi Bankseka Kade, Jaia Denise Nelson, James Samuel Cleland, Diesel Jay Phelan and Hannah Nicole Francis.

The said Court finds that Naomi Bankseka Kade aged 10 months, late of 33 Ridley Grove, Woodville Gardens, South Australia died at Woodville Gardens, South Australia on the 15th day of July 2007 as a result of undetermined, consistent with overlaying.

The said Court finds that Jaia Denise Nelson aged 3 weeks, late of 14 Mann Terrace, North Adelaide, South Australia died at North Adelaide, South Australia on the 9th day of August 2007 as a result of undetermined, possible overlaying.

The said Court finds that James Samuel Cleland aged 4 months, late of 44 Gooronga Drive, Craigmore, South Australia died at Craigmore, South Australia on the 18th day of September 2008 as a result of an undetermined cause.

The said Court finds that Diesel Jay Phelan aged 3 months, late of 156 Piccadilly Road, Piccadilly, South Australia died at Piccadilly, South Australia on the 23rd day of November 2008 as a result of an undetermined cause.

The said Court finds that Hannah Nicole Francis aged 1 month, late of 13 Paltridge Street, Whyalla Norrie, South Australia died at Whyalla Hospital, Wood Terrace, Whyalla, South Australia on the 29th day of November 2008 as a result of (attributed to) suffocation.

The said Court finds that the circumstances of their deaths were as follows.

1. **Introduction**

- 1.1. This Inquest investigated the cause and circumstances of the death of 5 infants. In each case the child was sleeping in the same bed as an adult, a situation which is referred to in this finding as 'co-sleeping'.

2. **Naomi Bankseka Kade**

- 2.1. Naomi Bankseka Kade was born on 15 September 2006. She died on 15 July 2007 at the age of 10 months. An autopsy was conducted by forensic pathologist, Dr John Gilbert, who provided a report giving the cause of death as 'Undetermined. Consistent with overlaying'¹, and I so find. Dr Gilbert commented that Naomi had reportedly had a recent mild cold and cough. She was put to bed by her grandmother at approximately 6pm on 14 July 2007 and was joined in bed by her grandmother at approximately 10pm. At approximately 10am on 15 July 2007 Naomi was found cold and lifeless lying supine next to her grandmother on the bed. Her grandmother's arm was noted to be covering Naomi's nose and mouth. It was difficult to wake Naomi's grandmother up and she appeared obtunded, apparently due to medication believed to endep (amitriptyline). Naomi's grandmother was subsequently taken to hospital. Naomi was declared life extinct at 1129 hours on 15 July 2007 by an ambulance paramedic. Established rigor mortis was noted and crime scene investigators noted marks consistent with impressions from a coarse knitted fabric over the palm of Naomi's right hand and over her right cheek. The autopsy examination disclosed no anatomical cause for her death and toxicological examination of her blood showed no alcohol or common drugs. No anatomical, toxicological, neuropathological, biochemical or metabolic cause of death was identified. Dr Gilbert commented as follows:

'Co-sleeping with an adult is a risk factor for sudden unexpected infant death. The risk is increased if the adult is intoxicated or otherwise obtunded. The reported finding of the deceased with her nose and mouth obstructed by her obtunded grandmother's hand or arm raised the possibility that the death resulted from airway obstruction complicating co-sleeping. There are no pathognomonic anatomical findings in such deaths.'²

¹ Exhibit C3a, page 1

² Exhibit C3a, page 2

3. Jaia Denise Nelson

- 3.1. Jaia Denise Nelson was born on 18 July 2007. Jaia died on 9 August 2007 and was 3 weeks old at the time of her death. An autopsy was conducted by forensic pathologist, Dr John Gilbert, who provided a report in which he gave the cause of death as ‘Undetermined. Possible overlaying’³, and I so find. Dr Gilbert noted that Jaia was born 10 days prematurely. Until the time of her death she had been breastfed. On 9 August 2007 at approximately 7:25pm she was found unresponsive by her grandmother while wrapped in a blanket and lying supine on a bed shared with her mother. Police attending the scene noted that Jaia’s mother appeared to be hysterical and smelled of alcohol. She subsequently attended the Royal Adelaide Hospital where a blood alcohol concentration of 0.194% was reportedly recorded at 9:45pm. She was said to have a history of depression and alcohol abuse.
- 3.2. Although Jaia was reportedly found in a face up position, a pattern of intense fixed lividity was noted over the anterior aspect of the body, over the upper chest and over the right side of the face. This finding indicated that Jaia had spent at least some time in a face down position after death. The autopsy examination disclosed no clear anatomical cause for the death and a toxicological analysis of her blood was negative. Microbiology, virology and metabolic studies were non-contributory and no significant neuropathological abnormalities were identified. Once again Dr Gilbert commented that co-sleeping with an adult is a risk factor for sudden unexpected death in infancy. The risk of death is increased if the adult is intoxicated. Jaia showed no overt asphyxial signs but this did not exclude the possibility of overlaying or airway obstruction.

4. James Samuel Cleland

- 4.1. James Samuel Cleland was born on 4 May 2008. He died on 18 September 2008 at the age of 4½ months. An autopsy was conducted by forensic pathologist, Dr Karen Heath, who gave the cause of death as ‘undetermined’⁴, and I so find. Dr Heath made the following observations in her autopsy report. James was breastfed at 1930 hours on 17 September 2008, after which he was wrapped and placed on his back on an adult king size bed. His mother checked on him at shortly after 8pm when he was reportedly asleep and breathing. He slept in the bed overnight with his mother and 4

³ Exhibit C14a

⁴ Exhibit C39a

year old sibling, with his head placed between the two pillows on which his mother and sibling were lying. At approximately 0415 hours on 18 September 2008 his mother awoke and tried to feed him, but found him to be cold and unresponsive. He was reportedly lying slightly on his left side facing into the pillow on which she had been lying. She noted blood on that pillow. The ambulance service was called and James' mother attempted cardiopulmonary resuscitation however he was declared deceased on arrival by the ambulance service.

- 4.2. James had been admitted to the Lyell McEwin Hospital on 14 June 2008 with a diagnosis of upper respiratory tract infection and again on 13 August 2008 with a diagnosis of viral pneumonia which was later diagnosed as respiratory syncytial virus. He had been noted to have a runny nose on 17 September 2008 but no fever or other symptoms and was otherwise well.
- 4.3. Dr Heath found no anatomical abnormalities at autopsy. There were no significant underlying organic diseases which could have caused or contributed to the death and studies including radiology, microbiology, bacteriology, metabolic studies and virology failed to reveal any abnormalities. Neuropathological examination showed features that did not contribute to death. His blood toxicology was negative. Dr Heath commented that although these features would be consistent with the diagnosis of Sudden Infant Death Syndrome (SIDS), the possibility of suffocation due to overlaying whilst co-sleeping, or from the pillows placed on either side of the head of the deceased cannot be excluded.

5. Diesel Jay Phelan

- 5.1. Diesel Jay Phelan was born on 17 August 2008. He died on 23 November 2008 at the age of 3 months. An autopsy was conducted by forensic pathologist, Dr Neil Langlois, who provided a report which gave the cause of death as 'undetermined'⁵, and I so find.
- 5.2. Dr Langlois noted that Diesel had been breastfed by his mother at 0200 hours and was put down to sleep in the same bed as his mother. It was a queen size bed with two doonas. Diesel's mother woke at 1100 hours and found him to be deceased. Some resuscitation was performed by her, but not by attending ambulance officers as there

⁵ Exhibit C49a

were signs of rigor mortis. Diesel had apparently had a cold two weeks after his birth but had subsequently been well. Diesel's mother had been brought to the attention of child protection authorities due to concerns regarding her ability to care for him because of drug and alcohol addictions. However, in statements to the police, she denied being affected on the night of Diesel's death.

- 5.3. Dr Langlois said that the post-mortem examination, including radiological, histological, microbiological, biochemical and toxicological tests did not reveal a cause of death. Dr Langlois said that he could not ascribe Diesel's unexplained death to SIDS due to a potentially unsafe sleeping environment, namely bed sharing.

6. Hannah Nicole Francis

- 6.1. Hannah Nicole Francis was born on 8 October 2008. She died on 29 November 2008 at the age of 7 weeks. An autopsy was conducted by forensic pathologist, Dr Karen Heath, who provided a report in which she gave the cause of death as 'attributed to suffocation'⁶, and I so find. Dr Heath commented that Hannah was reportedly breastfed at approximately 0300 hours on 29 November 2008. Her father was lying on the sofa with Hannah lying on his chest in an effort to settle her. He subsequently fell asleep and woke up at approximately 0930 to 0940 hours on 29 November 2008 to find Hannah lying between the pillow and the back of the couch. She was unresponsive. The ambulance service was called and on arrival they noted that Hannah had a congested face with lividity and crease marks on the right side of the face and rigor in the arms and legs. She was taken to Whyalla Hospital but was dead on arrival. Medical staff noted that her pupils were fixed and dilated and there was rigor mortis. Hannah had no significant medical problems since birth.
- 6.2. Dr Heath found no anatomical abnormalities at autopsy and specifically there were no underlying organic diseases present which could have caused or contributed to death. Studies including radiology, microbiology, bacteriology and virology failed to reveal any abnormality. Neuropathological examination showed cerebral congestion but no evidence of hypoxic ischaemic brain damage. APP immunostaining showed subtle abnormalities of uncertain significance. An incidental finding at autopsy was reflective of an intercurrent viral infection that Dr Heath did not think contributed to death. Dr Heath said that although these features would be consistent with a

⁶ Exhibit C59a

diagnosis of SIDS, the circumstances of death suggested that suffocation was more likely, with Hannah being found face down with her face being pressed into the back of a soft-cushioned sofa. As there are no definitive anatomical markers for suffocation in infancy, this diagnosis remains presumptive. There was no evidence of injury and Hannah appeared well-nourished and well cared for.

7. **Professor Byard's evidence**

- 7.1. Professor Roger Byard gave expert evidence for the assistance of the Court. Professor Byard is a forensic pathologist with Forensic Science SA and a co-author of *Sudden Death in Infancy, Childhood and Adolescence*⁷. Professor Byard is the Marks Chair of Pathology at the University of Adelaide. His expertise in the area of sudden death in the young is beyond question. Professor Byard gave evidence and also helpfully provided certain written material⁸.
- 7.2. Professor Byard spoke of 'preventative pathology' where he takes cases that come into the mortuary to consider what happened in the particular case, what mechanisms of death might have occurred and how steps might be taken to prevent similar events in future. Professor Byard commented that co-sleeping in certain societies and cultures is common and for generations these cultures have not experienced any problems. However, in Western society the situation is different. This is a function of modern Western society in which bedding tends to be softer than some traditional Asian societies and parents tend to be heavily built, if not obese, and often affected by alcohol or other drugs. Professor Byard emphasized that while co-sleeping is a practice to be avoided in Western society, paradoxically room sharing is a good thing. He said that this is probably because infants are more stimulated when sharing a room and as a result they do not sleep quite so deeply. As a result, the infant will not experience deep sleep and the risk of SIDS is reduced. It would seem reasonable therefore to place an infant in a cot beside the parental bed so that the infant is protected in a safe environment but is still able to interact closely with the parents and be available for breastfeeding if necessary. The emphasis should be on 'room

⁷ Cambridge University Press 1994

⁸ An extract from *Sudden Death in the Young* '3rd Edition', Exhibit C71
Article - Lack of Consistency in Safe-Sleeping Messages to Parents, Exhibit C71a
Article - Infant Asphyxia, Soft Mattresses and the 'Trough' Effect, Exhibit C71b

sharing' and not 'bed sharing'⁹. Professor Byard makes the point that a balance needs to be achieved between:

'... increasing the possibility of smothering and reducing the risk of SIDS, and until we can more accurately predict vulnerable infants and identify situations of high risk, this is probably the safest option. [Professor Byard] has no doubt, however, that certain infants taken into the parental bed will not survive the night.'¹⁰

Professor Byard comments in Exhibit C71 that while it is difficult to know what the precise mechanisms of death are due to some of the findings at autopsy being non-specific, there are increasing numbers of infants dying in parental beds and:

'... it cannot be denied that accidental smothering must account for a certain percentage. Blaire et al. (2006a) have shown an increase in cosleeping SIDS deaths from 12-50% over the past 20 years (1984-2003) in the United Kingdom, a trend that was noted in South Australia in the early 1990s where cosleeping deaths increased from 7.5% (1983-1990) to 32.3% (1991-1993) (Bourne, Beal & Byard, 1994).'¹¹

7.3. Professor Byard helpfully referred the Court to a brochure published in the United Kingdom by the Foundation for the Study of Infant Deaths¹². The brochure contains the following messages:

'Sleep safe, sleep sound, share a room with me.

The safest place for your baby to sleep is in a crib or cot in a room with you for the first six months.'

The brochure goes on to contain further information as follows:

'It is especially dangerous for your baby to sleep in your bed

if you (or your partner):

- are a smoker, even if you never smoke in bed or at home
- have been drinking alcohol
- take medication or drugs that make you drowsy
- feel very tired

or if your baby:

- was low birth weight (less than 2.5kg or 5½lb)
- was premature (born before 37 weeks)'

and:

'Never sleep with your baby on a sofa or in an armchair'

⁹ Exhibit C71, page 28

¹⁰ Exhibit C71, page 28

¹¹ Exhibit C71, page 27

¹² Exhibit C71c

and:

'Don't forget, accidents can happen too:

You might roll over in your sleep and suffocate your baby, or your baby could get caught between the wall and the bed, or could roll out of your bed and be injured'

- 7.4. These messages are all extremely sensible and I commend them. Professor Byard made the point that he would argue that the upper limit of 6 months as quoted in that pamphlet is too young, bearing in mind that in one of the cases under consideration in this Inquest¹³ the child was older than 6 months of age. In my view, while there is no absolute cut-off age, a pamphlet such as the one referred to above might more helpfully refer to the first 12 months of a child's life.

8. Conclusions and recommendations

- 8.1. The message to be drawn from these five tragic deaths is that the risk of sudden, unexplained death in infancy is greatly increased where a child sleeps in the same bed with one or more parents or other adults, whether the mechanism of death is asphyxia due to overlaying, bedding or otherwise. On the other hand, there are benefits to parents sharing a room with an infant where the infant is sleeping in a safe cot expressly designed for that purpose.
- 8.2. I recommend that the Minister for Health consider these findings and consider the promulgation of a pamphlet such as Exhibit C71c with an appropriate adjustment of the age referred to therein from 6 months to 12 months.

¹³ That of Naomi Kade who was 10 months

Key Words: Infant Deaths; Safe Sleeping Practices; Asphyxia/Suffocation

In witness whereof the said Coroner has hereunto set and subscribed his hand and

Seal the 30th day of September, 2010.

State Coroner

Inquest Number 25/2009 (0979/2007, 1130/2007, 1358/2008, 1728/2008, 1763/2008)