QUEENSLAND COURTS

OFFICE OF THE STATE CORONER

NON-INQUEST FINDINGS OF THE INVESTIGATION INTO THE DEATH OF BABY T

CITATION:	**Investigation into the death of Baby T**
TITLE OF COURT:	Coroner's Court
JURISDICTION:	Brisbane
FINDINGS OF:	Mr John Lock, Deputy State Coroner
CATCHWORDS:	CORONERS: Death of a baby, baby slings.

Introduction

Baby T was three weeks old. The baby's mother was a non-smoker and non-drinker.

Baby T was born by an uncomplicated Caesarean section. Baby T was feeding and sleeping normally and was being breastfed. The mother took the baby to her GP for a scheduled 10 day appointment and had made appointments for six-week scheduled injections. Baby T had a slight cold but was improving.

Events of the day

Baby T and mother and father were at a shopping centre. The mother was carrying Baby T in an infant sling over her shoulder and the baby had been breastfed. The sling the baby was in was purchased over the Internet and had been used for an older sibling.

The family started the day normally and they made an arrangement to meet the mother's brother at the shopping centre for an early lunch.

They took the escalator to the second level and Baby T's mother sat down on the seats and started to breastfeed. For all this time Baby T was placed in an over the shoulder carry sling. Baby T was held within the sling on the mother's chest and was positioned across the mother's body with the head slightly higher than the feet.

The family continued to move around the centre and then the father noted one of the baby's arms was sticking out of the sling and appeared pale. The mother noted that the baby was not moving and then noticed blood and froth around the nose and mouth.

Baby T's father called 000 and they attended at the Police Beat in the shopping centre. Police commenced CPR at about 11:11 hours until Queensland Ambulance Service (QAS) arrived. The QAS were called at 11:06 hours and arrived at 11:13 hours. Resuscitation continued and the baby developed spontaneous cardiac activity at 11:35 hours, approximately 30 minutes after QAS had first been called. Baby T was then transferred to hospital.

A paediatric specialist advised police there were no obvious signs of injuries or indications of violence. Testing indicated Baby T had suffered significant brain damage from the period of impaired blood and oxygen supply (hypoxic ischaemic encephalopathy). Testing had shown evidence of an infection with respiratory syncytial virus (RSV).

There were no signs of clinical improvement and active treatment was ceased. Baby T died shortly afterwards.

CCTV footage has been obtained and shows the baby alive and moving and corroborates the versions supplied by the parents.

Autopsy Examination

A full autopsy examination was ordered. An external examination found a well nourished baby with no injuries. There were no abnormal features to suggest an underlying syndrome. An internal examination found swelling of the brain but no other findings suggestive of underlying syndrome, and no injuries.

Histology of the lungs showed changes consistent with resolving RSV infection and secondary bacterial infection. This had not progressed to pneumonia. There was also acute inflammation in the upper airways but this would have developed after admission to hospital. All other test results were non-contributory.

The pathologist considered that the immediate cause of death was hypoxic ischaemic encephalopathy resulting from the cardiorespiratory arrest.

The underlying cause of the cardiorespiratory arrest was most likely asphyxia, resulting from a combination of factors.

Firstly, this included the infant sling as it was very likely this contributed to the development of asphyxia, by causing a degree of suffocation by impeding the baby's ability to breathe.

Secondly, there was a history of recent cold like symptoms, and RSV was identified with inflammatory changes consistent with resolving RSV pneumonia. This was considered to have reduced respiratory reserve, which in normal circumstances may not have been significant, but was significant in combination with other factors.

Thirdly, as the baby was lying against the mother's body this may have also increased the likelihood of asphyxia. Asphyxial deaths in infants typically leave no signs that can be detected on post-mortem examination.

Report of Office of Fair Trading

The coroner was aware that deaths had previously been attributed to infant slings, and safety warnings had been issued in Australia and other countries. The coroner referred the issue of the safety of baby sling carriers to the Office of Fair Trading (OFT), which has responsibility for product safety regulation in Queensland and works closely with other state agencies and the Australian Competition and Consumer Commission (ACCC).

Current Safety Initiatives

The report noted there is a considerable amount of safety information available to consumers on the safe use of baby sling carriers. A number of current USA, Canadian and Australian government and some industry initiatives appear to present similar consumer safety messages associated with the product. These are:

- Keep the child’s face and especially nose and mouth uncovered at all times.

- Avoid the child being curled into the 'C' position where the child's chin touches the chest and blocks the airways.
- Show caution and seek medical advice about using baby sling carriers for premature infants, if they have a cold or a low birth weight.
- Regularly check the child to ensure the child has not slipped into the pouch covering the child's nose and mouth.
- Reposition the child after breast feeding to keep the nose and mouth clear.

Australia

The national product safety regulator the ACCC has issued a number of warnings and alerts in relation to the safety of baby sling carriers since 2010. These include the publication of a brochure and information contained in the 'Keeping Baby Safe booklet', which can be accessed via the following link:

http://registers.accc.gov.au/content/index.phtml/itemId/1047880

The Product Safety Australia website also contains information on the safety of baby sling carriers which can be viewed via the following link:

http://www.productsafety.gov.au/content/index.phtml/itemId/989114

The ACCC has been actively involved in an international collaboration on baby sling carrier safety as part of a pilot project to align product safety standards across international boundaries. The ACCC has provided the coroner with information on this international collaboration project.

Queensland

The Queensland OFT has embarked upon a significant industry and consumer education campaign which will be commenced in early 2014 and be run over a 12 month period. This was prompted not only by the three infant deaths since 2010 but also by marketplace surveys that showed a general lack of awareness by industry about safe use and other research which revealed conflicting safety information is being provided to consumers which is likely contributing to unsafe use. The campaign will rely heavily on expertise from industry and community partners and those that are part of the Queensland Consumer Products Injury Research Advisory Group (such as Kidsafe Qld, Centre for Accident Research and Road Safety – Queensland, ACCC and the Queensland Injury Surveillance Unit).

The campaign's target audience will be prospective and new parents and suppliers of baby sling carriers. This includes online suppliers.

The campaign will predominantly focus on social media activities and other internet channels (such as parenting blogs). Some of the proposed activities include:

- Integrating safe-use information on baby sling carriers within OFT's Community Engagement activities;
- Encouraging industry (including market traders and known internet

suppliers) to incorporate a standardised safe use message at point of sale.

- Developing and launching a You -Tube video on safe use of baby sling carriers.
- Developing safety posters and a 7 Safety Steps themed brochure for dissemination to key stakeholder groups.
- Wide use of social media, the OFT's website and parenting blogs.
- National participation from other regulators will be encouraged.
- Existing local and national networks will be relied on to disseminate clear consistent messages about safe use.

The OFT has also issued a number of warnings about safety slings and has developed a draft 7 Safety Steps brochure of safe sling use which form part of the education campaign in 2014. The seven safety messages are:

1. Ensure you can see the baby's face, especially the nose and mouth, at all times and that the face remains uncovered by the sling or your body. Babies have suffocated while using slings.

2. Ensure the baby's chin is up and away from their body, as any pressure on the chin can close the airway. Put the baby in a slanted or upright position. This will give the baby a straight, flat back with head support, the chin up and the face clearly visible.

3. When bending over, support the baby with one hand behind his or her back and bend at the knees, not at the waist.

4. Always check your sling before placing your baby in it. Check the seams and look for any signs of wear and tear that could potentially cause harm to your baby.

5. Regularly check the baby. Babies can be in distress without making any noise or movement.

6. Be alert to your own safety – slings can affect the way you move, particularly on stairs. Be alert for things that may fall on the baby, for example hot drinks.

7. Follow instructions for use and pay attention to any weight or age restrictions. Consult a doctor before using a sling with a premature baby.

Summary and conclusions

In its summary and conclusions the OFT advised as follows:

Banning baby sling carriers or particular types of baby sling carriers or regulating for performance requirements does not appear justified. However, some intervention to raise awareness about the risk associated with baby sling carriers in a clear and consistent manner both to consumers and industry would appear to be justified.

The incorrect positioning of the infant in a sling appears to be a significant factor in suffocation.

Some slings that have a deep pouch that an infant can slide into may not be as safe as others that hold the child in a more vertical position. The two slings involved in the deaths in Queensland in 2010 and 2013 are the pouch type.

There may be a benefit in developing a standardised safety message that all those interested in the safety of infants can adopt based around the work undertaken internationally by Australia, USA and the European Union.

Armed with the safety knowledge it is a relatively simple task to use a sling safely with the simple message of keeping the infants face and mouth uncovered and keeping the baby's back straight.

The apparent large number of baby sling carriers sold second hand, handed down or sold via the internet should be taken into consideration when developing consumer education programs.

There may be a lack of awareness of the suffocation risk if an infant is being carried close to the body with the face and mouth either covered by fabric or pressed against the carrier's body.

Falls are the most common injury to infants associated with baby slings.

The development of an Australian Standard based upon the American Society of Testing and Materials (ASTM) standard may be successful in providing a safety benchmark for industry. However, Australian suppliers can already use the ASTM standard as a benchmark should they choose to do so.

There may be a benefit in educating industry in terms of what constitutes a 'safer' sling (i.e. one that allows the child to remain as flat as possible or vertical and have the face, especially nose and mouth, uncovered at all times and free from gaps where the child can fall through or trap the head).

There may be benefit in mandating requirements for slings to have permanent and standard safe use instructions and hazard identification if industry is unwilling to do this voluntarily.

Improved and standardised warnings would have a minimum cost impact on business but could have a high impact on safe use by parents and caregivers.

Standardised warnings can also be promoted in education campaigns across a number of government and non-government agencies that have an interest in child safety.

Some research suggests it is common for consumers to seek information about baby sling carriers from the internet, which should be taken into account when developing education programs.

Conclusions

Baby T died from asphyxia whilst placed in an infant sling. This event would not have been foreseeable by the parents. There have been three deaths in Australia over a number of years in similar circumstances, but it is a rare event. There are other risks associated with infant slings and there have been mixed messages regarding their use. It is considered there are also many benefits for parent and child in their use if done safely.

It is clear that the product safety issues regarding the use of infant slings has been the subject of considerable development by many overseas and Australian agencies specialising in product safety. A number of local and international initiatives are being progressed or developed. I consider that these agencies are best placed to progress this work.

On that basis I do not propose to hold an inquest because the investigation has revealed sufficient information to enable me to make findings about Baby T's death and there does not appear to be any prospect of making any other recommendations that are not already being undertaken that would reduce the likelihood of similar deaths occurring in future or otherwise contributing to public health and safety.

John Lock
Deputy State Coroner
25 March 2014
Brisbane