



STATE CORONER'S COURT OF NEW SOUTH WALES

Inquest:	Into the death of child JT
Hearing dates:	7-11 July 2008, 2 December 2015, 6 April 2018
Date of findings:	6 July 2018
Place of findings:	State Coroners Court, Glebe
Findings of:	Deputy State Coroner E. Truscott
Catchwords:	Coronial Law-Cause and manner of death-
File number:	2005/371947
Representation:	Counsel Assisting Chris McGorey instructed by Crown Solicitors Office
Findings:	"JT died aged 21 months on 19 March 2005 in Singleton, NSW, as a consequence of Amitriptyline toxicity having been deliberately administered anti-depressant medication containing Amitriptyline by a known person".
Recommendations:	That the Commissioner of Police NSW and the Ministry of Health NSW in consultation with the State Coroner's Office develop protocol, procedures and instructions for the making of Orders for the taking of femoral blood samples prior to transfer of the deceased to the Forensic Services, particularly in the case of a child's whose death is sudden, unexplained or not immediately apparent.

REASONS FOR DECISION

INTRODUCTION

1. This inquest concerns the death of a 21 month old boy named in these proceedings but identified in this judgment as "JT". JT was born 5 June 2003. He was the much loved son of parents B and P. He was cared for by both his mother and father who had separated.
2. JT died in the afternoon of 19 March 2005 at Singleton. At the time of his death, JT was in the care of his mother's then boyfriend CK. JT's mother had left JT asleep in a bed in CK's unit while she took other children to the park and then to the shops to buy items for dinner.

PROCEDURAL HISTORY

3. This inquest proceeded by way of hearing before the then State Coroner (since retired) between 7 and 11 July 2008.
4. Numerous persons testified in the hearing. On 11 July 2008, CK was called to give evidence as the final witness in those proceedings. CK took an objection to giving evidence on the basis that his answers might tend to incriminate him (as was his right). The objection was upheld and he was excused.
5. Her Honour suspended the inquest and referred a known person to the Director of Public Prosecutions pursuant to s. 19 of the then *Coroners Act 1980* (since repealed). Her Honour did not make formal findings as to manner and cause of death at that time although reasons were provided for the referral.
6. By letter dated 11 December 2014, the Director of Public Prosecutions confirmed that all criminal proceedings against the known person had been completed and finalised, with the relevant charges having been withdrawn.

7. The inquest was resumed pursuant to s. 79 of the *Coroners Act 2009*: see cl. 14(1) of Schedule 2 (savings, transitional and other arrangements) regarding the current Act applying in relation to inquests that were part completed before repeal day.
8. Written notifications of the resumed inquest were forwarded to CK advising him of this hearing and inviting him to attend or participate if he so wished. He did not attend (as was his right).
9. Further evidence was given on 2 December 2015 and the inquest was adjourned for further investigations in relation to some forensic matters. On 6 April 2018 evidence obtained during the adjournment was tendered and Counsel Assisting made closing submissions. CK was again given notice of the resumed hearing and his right to participate if he wished. CK again did not attend (as was his right).

OVERVIEW

Background

10. In mid-2004 JT and his mother moved into a unit in Boonal Street, Singleton. CK lived in the same unit complex and he and B commenced a relationship in late 2004. JT stayed with his father some days during the week. On Wednesday 16 March 2005, during the period he was staying with his father, JT attended his general practitioner at Singleton Heights Medical Centre. The records noted that he presented for a regular check-up and the only observation noted was that he had a small mosquito bites.
11. P returned JT to B on Thursday 17 March 2005. B later described JT as being
“a bit sick” when he returned from his father “...basically...fine...he had a bit of a cold...and he was a little bit sick but other than that he was fine”. She later said he had a:

“...[r]unny nose, little bit of coughing, no, he wasn’t chesty or anything like that but you could tell he was sort of coming down with a cold or, he had cold, flu, sort of cold-like symptoms. Generally not eating as much as he usually does...”
12. On Friday 18 March 2015 B and JT stayed the night at CK’s unit. CK’s children, JK (11 years), Jack (8 years) and JaK (6 years) also stayed the night. CK’s unit had two bedrooms. B and CK slept in the main bedroom. JT slept in a bed in the other room, variously referred to as the children’s room or spare room. JaK and Jack

slept on a mattress in the lounge room. JK slept on his own mattress either in the lounge room or in the children's room.

Saturday 19 March 2005

13. B was made aware that JT was awake about 9.15. She said he was crying because he wanted to come to her in CK's bedroom. She said that JT came to the bedroom door and CK got up and took him back into the bedroom. Shortly thereafter B got up and went into the other bedroom to attend to JT. She said that she does not know whether CK got up to JT during the night or before that time. She said that JT and she shared a chocolate milk and he had a little piece of pancake for breakfast. She then gave him his morning bath.
14. B's 4-year-old daughter JN was dropped off to her by B's sister. JT remained on the lounge inside CK's unit while B intermittently supervised and played with the older children outside. B thought that JT seemed "sort of wobbly on his legs" but at the time she thought it could be due to him sitting on the lounge for a long time. B said that JT seemed "drowsy".
15. Sometime between 11 and 12 noon CK cooked chips for the children's lunch and JT had half a chip. CK said that he made toasted sandwiches at about 12.30 and JT ate a little bit. B said that JT drank some water from a cup during the day and he may also have had some milk from a bottle that B had prepared for him while he lay on the lounge.
16. About midday when JT was laying on the lounge he vomited. B was playing outside with the older children and CK's daughter told her that JT had vomited. B came in to attend to JT. CK was washing the dishes in the kitchen. JT was on the sofa with vomit in his mouth and clothing. B undressed him and took his stained top and pants to her unit and left them soaking in a basin of water. She bathed JT in the bath in CK's unit and dressed him in clean clothes and nappy, she placed JT back on the lounge and he fell asleep.
17. At about 2-2.30 pm B put JT into the bed he had slept in the previous night. She left the unit at about 4.45. Between the time she had put JT to bed and the time she left the unit she had checked on him 3 times and he remained asleep. B returned to the unit at about 6.15 pm. While B and some of the children were absent CK and JK remained in the unit. JK was playing his PlayStation in the lounge-room. CK was not in the unit between about 5.15-5.30 pm as he had used

a public telephone to call MS. The reason CK used the public telephone was because he did not apparently have credit on his mobile phone.

B's return to CK's Unit

18. While B was returning to CK's unit, she had given the keys to JaK to open the door. Upon opening the door B heard screaming or swearing coming from the unit. She ran in dropping her shopping inside. She was in the living room and CK popped his head around the corner and said "Something's wrong with JT". She later told police "...he popped his head around the brick wall which is near the bathroom door; CK said to me "he's in here". CK was not even in the bedroom where JT was lying when he said this to me. I took a couple of steps and immediately dropped the shopping bags and ran into the second bedroom where JT was lying, I ran into the bedroom behind CK.
19. JT was lying naked on the bed and CK was performing mouth to mouth resuscitation. B took over from CK and briefly gave mouth to mouth resuscitation and then 2 compressions on his chest. She then lifted JT off the bed and carried him out of the unit running across the road to the hospital. She said that JT's eyes were "sort of flickering" but then "started to go to the back of his head". She thought his colour appeared normal. JT appeared to burp when she lifted him up and he wasn't completely limp as she ran to the hospital. She noticed he was not breathing.
20. On the way to the hospital B stumbled or fell at least once while she had JT in her arms but she fell on her elbows. Ms Frost, a nurse at the hospital saw B stumble and said that JT did not appear to hit the ground.

Singleton Hospital

21. Ms Frost attended JT and notes that he was not breathing... Ms Frost described JT as appearing pale and cyanosed and she saw "...that the child's body and hair was not wet". She noticed there was still a bit of warmth to his skin but that he felt limp as she carried him into casualty.
22. Hospital records indicate that JT arrived at Singleton Hospital at about 6:23 pm.
23. Dr Sarah Giller examined JT. She observed he wasn't breathing, had no pulse, that his body was warm to touch and that his pupils were fixed and dilated.

24. In her written statement, Dr Giller expressed that she did not think that JT was “cyanosed” though that description was recorded in the triage record. In her opinion that reference was not correct. Dr Giller noted there was no frothing at JT’s mouth (possible indicator of drowning) and that his body and head were dry.
25. Medical staff commenced CPR on JT with chest compressions and oxygen ventilation. Ms Frost asked B at some point what had happened and was told that “...JT fell out of the bath so [CK] put him on the bed and he has been like this ever since...”
26. Attempts to resuscitate JT were unsuccessful and ceased at about 6:55 pm.
27. Ms Frost recalled seeing “small bruising” under JT’s eyes during CPR. Another nurse, Barbara McGrath, recalled seeing a mark on the left side of JT’s nostril near the bridge of his nose.
28. Robyn Benbow, a registered nurse, was present with B after resuscitation attempts were ceased. She recalled B saying “he’s got marks there” and pointing to the top of JT’s forehead between the skin and hairline. Ms Benbow saw “slight marks”. In her view those weren’t caused by medical staff during the resuscitation.

Police attendance

29. CK remained at his unit with the children when B ran to the hospital. He stayed, changed clothing and attended the hospital but returned to his unit to check on his children before again returning to the hospital. On his second attendance CK learned JT had not been revived. CK returned to the unit with B’s sister NS who collected JN. CK called his family and his children’s mother to collect them. CK was later collected by his sister’s de facto partner TG and taken to their home.
30. Police were notified of JT’s death at about 7:14 pm. Constables Duncan and Parkinson arrived at the hospital at about 7:30 pm and spoke with medical staff. They then attended on B in her unit who was with her sister. Afterwards, they attended CK’s unit which was about 8:28 pm. The unit was locked and no one was home. CK attended the unit with his mother, an aunt and another sister at about 8:45 pm. He provided Constable Duncan a key to enter the unit.
31. Detective Adam Walsh arrived and the police entered CK’s unit at about 9pm. Detective Walsh inspected the unit and made a number of observations in the bathroom including:

- the bath being about half full with water,
 - there was no water on the bathroom floor,
 - an empty methylated spirits bottle resting on the bath edge (used for water play), and
 - two small brown red stains on the floor in front of the toilet.
32. In the children's bedroom he observed one mattress with a blue face cloth on it and a blue blanket half on and off the bed. JT's shirt and shorts were in the hallway.
33. CK gave a brief account to Detective Adam Walsh and left at about 10:45 pm. He did not enter the unit during this attendance.
34. Crime scene photos were taken in the early hours of Sunday 20 March 2005.
35. A photograph of the bath showed two plastic cups on the bath edge, with one positioned at either end of the bath. There were no other items in the bath at that time with the exception of a large number of blue fibres in the water, which had not been noted by the police until a later date.
36. Police locked the unit and left in the early hours of Sunday 20 March 2005. CK retained a key to his unit but stayed with family for some weeks.

Subsequent police attendance between 21 and 24 March 2005

37. On Monday 21 March 2005, using a key provided by CK's mother police returned to the unit and took three samples of the bath water.
38. On 24 March 2005, Detective Walsh examined the crime scene photographs and noticed that the photograph of the bath showed a large number of blue fibres in the bathwater. He accessed the unit. The water was still in the bathtub as it had been on 19 March 2005. Detective Walsh recovered "blue fibres" from the bottom of the bath.
39. Detective Walsh also seized a blue bath mat from a basket between the toilet and the bathtub.

CK's account about what happened on 19 March 2005

40. The police interviewed CK a number of times including:

- An audio taped interview conducted by Detective Walsh outside the unit on 19 March 2005.
- A recorded interview conducted by police at Singleton Police Station about 4:20 am on Sunday 20 March 2005.
- A video recorded walkthrough with police at the unit on 19 April 2005.
- A recorded interview conducted by police at Singleton Police Station on 23 November and 26 November 2005 respectively.

CK's version of events is as follows:

41. About 40 and 60 minutes after B left the unit to go to the shops JT woke crying. CK went into the bedroom and found JT's pants, shirt (from stomach area down to his pants) and nappy to be soaking wet describing that JT smelt "pissy".
42. CK decided to give him a bath. JT hopped off the bed and walked to the bathroom door unaided. CK undressed him at the bathroom door, leaving JT's clothes and nappy in the hallway. CK put him into the bath. The water was a bit over JT's belly button when he sat in the bath.
43. JT played in the bath using either one or both plastic cups to tip water over himself and in front of himself. CK described that JT was "...muckin' around, he's laughin'..."
44. CK sat on the toilet watching him. He also cleaned JT by sponging him and getting him to stand so he could wash his legs. He used soap to wash his back and hair and used a cup to wash the soap out of his hair.
45. After being washed by CK, JT continued sitting up in the bath playing with the cups. JT appeared fairly alert.
46. JK, who was playing the PlayStation in the lounge room, then called out to CK. CK left the bathroom and walked to the lounge room. When he left the bathroom, JT was sitting at the non-tap end of the bath facing towards the taps. He was "stirring the cups and that" at the time.
47. After leaving the bathroom, CK watched JK playing the PlayStation in the lounge room. He possibly sat down for a short period and may have taken a sip of his coffee at this point. The time away from the bathroom varies between 40 seconds to 90 seconds. (When first questioned by Det. Walsh on 19 March 2005, CK said

“about 40 seconds”. On 20 March 2005, he said between about 40 seconds and “a minute, may have been a minute, or something”. During the video walkthrough on 19 April 2005 he estimated it was no longer than a minute and a half). During the time CK was away he did not hear any noise coming from the bathroom.

48. CK returned to the bathroom and he saw that JT was face down in the water. CK immediately thought JT had hit his head and fallen but he didn't know what had occurred. CK grabbed JT from the bath and carried him to the children's bedroom. He placed JT on the same bed JT had slept in the previous night. JT was “soaking wet” and was “pretty floppy” but appeared to support himself a little at this point.
49. During his interview on 20 March 2005, CK stated that when he put JT on the bed:

“...he didn't look real good, I, I think he was tryin' to open his eyes and that, and I was, and I started giving him mouth to mouth, and he was like, spittin' a lot of water and that out, and um, I even put, I remember I put me finger, I thought I'd put my finger in his mouth make sure he weren't swallowin' his tongue - - - [JT] bit me.”
50. CK initially couldn't get his finger out of JT's mouth for a brief period because of the bite.
51. During the video walkthrough on 19 April 2005, CK stated that when he laid JT on the bed “...he still had his eyes all moving and that” and “...his eyes were sort of just rolling and his eyelids were lifting up a little bit”. CK commenced CPR and called out to JK to grab him a cold washer to put on JT's face.
52. During the video walkthrough on 19 April 2005, CK described blowing into JT's mouth a couple of times and giving him about five pushes or pumps. By the second push JT was spitting out a lot of phlegm. CK used the face cloth to wipe JT's face and turned him over because there was “heaps of stuff coming out of his mouth...water and phlegm”. JT felt like he was still alive at this point and that CK tried blowing in his mouth 3 or 4 times and doing compressions. (In his interview on 20 March 2005 he stated he did this to “cool him down a little” In the interview on 23 November 2005, CK confirmed he used the face cloth to wipe vomit from JT's mouth which he described was black or brown in colour. CK confirmed that the blue face-washer depicted in the crime scene photograph was the one he used to wash JT's face.)

53. CK told JK to get help. JK came back soon after and said B was coming. B then entered the room and she took over CPR. When B picked JT up it appeared that JT was supporting himself a bit.
54. During his interview on 23 November 2005, CK was asked about the periods of time that passed. He estimated he had been doing CPR on JT for about 1 minute, and that JT had been out of the bath for 1 or 2 minutes, before B arrived home.
55. In his interview on 20 March 2005, CK stated that B "...sorta asked what happened, I said I found him like this in the bath".
56. During the walkthrough on 19 April 2005, police put to CK that B told hospital staff that JT had either fallen in the bath or fell out of the bath. CK stated "I just said I found him in the bath, that's what I told her, I found him in the bath floatin'. That's all I said to her". He denied telling B that JT had fallen over in the bath.
57. CK did not disclose that he had left his unit for about 15 minutes to call MS until he was presented with evidence of that call during an interview with police on 23 November 2005.

Other evidence relevant to CK's account

58. JT's clothes, located in the hallway, were examined for the presence of urine. Urine was not detected on the clothing.
59. The nappy found in the hallway was found to have traces of urine and Amitriptyline.
60. Detective Walsh did not observe water on the bathroom floor when he inspected the bathroom at about 9 pm on 19 March 2005.
61. The water samples taken from the bath on 21 March 2005 were analysed. There were no traces of soap or synthetic detergent detected in those samples. It was noted the "...analytical procedure could have been more sensitive to the presence of soaps and detergents had a larger...sample been available".
62. Traces of Amitriptyline were detected in the bath water samples.
63. In relation to the face cloth, "very faint light brown patches" were detected but amitriptyline was not.

64. Detective Walsh did not observe plastic cups to be in the bath when he entered the unit on 19 March 2005. Crime scene photographs taken on 20 March 2005 also show the cups were not in the bath at the time the photograph was taken. CK told police on 20 March 2005 he had not touched anything in his unit apart from moving the shopping that was dropped by B. CK was asked on 23 November 2005 about how the plastic cups came to be out of the bath given his description of JT playing with them. He responded "I don't really know" and "I may have walked back in there and I may have took 'em out, you know, after, after I've come back from, after (B's sister) and that's come over with..."
65. CK was covertly recorded discussing the plastic cups with his mother after the interview on 23 November 2005. In that conversation he stated to the effect "...Like we did go back in that room, that night after it happened..." to which his mother replied "I can't...I can't remember". CK then stated "I do know that we pulled 'em out of the bath so I'm going (to) say that, so I'm going (to) say that we went back and pulled 'em out of the bath".
66. Though CK probably did not have an actual recollection, as at 23 November 2005, of taking the plastic cups out of the bath, he seemed to be aware that the relevance of the cups not being in the water was such that required an explanation which he was prepared to give despite his prior statements on the matter.

JK's account

67. JK, who was then 11 years of age, was in the loungeroom playing PlayStation. It appears that the only time JK was aware that there was anything amiss was when CK was in the bedroom with JT and called out to JK to bring a face washer. When JK came into the room he says that he saw his father trying to resuscitate JT. He said that he saw CK use the face washer to wipe JT's body and then B came home. What occurred between the time CK went into the bedroom and then called out for a face washer was only told to JK by his father.
68. JK told police that JT had woken and that his dad gone in to check on him. However he himself did not hear JT wake up. JK initially described his dad picking "...him up and put him in the bath". He then clarified that he hadn't seen that occur. JK stated he was told "... (JT) done a wee all over the bed" and that "he (CK) put him into the bath". His father had told him that when he came out to watch him play the PlayStation.

69. JK described his father watching him play the PlayStation in the lounge room for about 5 minutes. He said that his dad then went into the bathroom. His dad told him that JT was “floatin” upside in the bath. His dad had gotten JT out and tipped him on his side and water came out of his mouth. JK clarified he did not actually see any of this occur.
70. JK saw his dad “resuscitatin” JT in the bedroom but hadn’t seen his father carry him from the bath to the bed. JK saw his father “blowin in his mouth” on the bed and also “pressin his heart”. He was asked to get a wet washer, which he did and then B came home. JK had seen his father use the washer to wipe JT’s body.

Autopsy on 20 March 2005

71. Dr Kevin Lee performed an autopsy on Sunday 20 March 2005. Various samples were taken for testing including a sample of JT’s blood taken post mortem that was sent for toxicological analysis. Dr Lee was unable to obtain a sample from the femoral area so extracted blood from the cardiac sac. No anatomical cause for death was found.
72. A small quantity of bloody material was detected near the anal opening during autopsy.

Toxicology results

73. A certificate of analysis issued showed Amitriptyline was detected post-mortem in JT’s blood (1.3 mg/L), liver (3.2 mg/kg) and stomach and contents (7.3 mg/kg in 19 mg; equivalent to about 0.1 mg). Nortriptyline was also detected in the blood at less than 0.1 mg/L.
74. Amitriptyline is contained in ENDEP medication, an anti-depressant medication only available by prescription.
75. On 8 April 2005 Dr Kevin Lee advised the police of the toxicology results to the effect: “[the] toxicology results have shown that JT had an anti-depressant in his system when he died”.

ENDEP medication (Amitriptyline) found in CK’s unit on 8 April 2005

76. The police executed a search warrant at CK’s unit at about 5:45 pm on 8 April 2005. The unit was locked and unoccupied. As an order for deferred service of the occupier’s notice had been made the search was conducted without the knowledge of CK or his family.

77. The police located a "Chemworld" paper bag in the back-right hand side of the top shelf of the wardrobe in CK's bedroom. It contained a "Chemart Mall Pharmacy" paper bag as well as a box of the antidepressant ENDEP 50 x 50 mg tablets. Inside the box there were two blister packets with 16 tablets (34 tablets had been removed). Dr Paul Innis, Singleton Medical Centre, had prescribed the medication to CK on 22 January 2004. Chemart Pharmacy, Singleton had issued the medication on 11 February 2004.
78. Other medication was located in the paper bags including a box of an antidepressant called Avanza, with one tablet remaining (prescribed 26 October 2002), one box of an antibiotic called Doryx with 47 tablets remaining (prescribed 12 October 2004 by Dr Richard Marshall). Subsequent fingerprint analysis identified CK's fingerprints on the paper bags.
79. The approximate height of the top shelf (where the medication was located) was approximately 2.1 to 2.2 metres high, which was beyond the natural reach of JT who was approximately 96.6 cm tall at the time.
80. An empty box of Doryx was also located on the floor of the wardrobe under a bag. Police also located in CK's bedroom a prescription from Dr Innis for ENDEP dated 12 January 2004. There was one refill remaining on that prescription. Police seized various liquids and containers from the residence for analysis. No Amitriptyline was detected during later analysis.
81. A statement was later obtained from Dr Paul Innis confirming he had prescribed ENDEP medication to CK in January 2004. He also stated that Singleton Medical Centre records showed that Dr Marshall also issued a prescription for ENDEP to CK on 4 August 2004. CK's Medicare records indicate that CK filled ENDEP medication on only one occasion- being that prescribed by Dr Innis on 22 January 2004 and filled 11 February 2004. Police obtained records from pharmacies in 2005 that CK was thought to have or could have attended. There is no known record of ENDEP medication being issued to CK other than the packet of 50 tablets on 11 February 2004.

CK's denial of administering ENDEP to JT account regarding his ENDEP medication

82. CK denied administering the drug to JT. He has stated he does not know how it came to be in JT's system. The issue of whether JT could have found a loose tablet in the unit and ingested it without discovery is, on the evidence, remote. On 18 April 2005, police advised CK, his mother and B that the "toxicology results

showed JT had an antidepressant in his system when he died". This was the first-time police revealed this information to anyone outside the investigating team.

83. When CK was told this, he did not volunteer to police that he had previously been prescribed antidepressant medication and that he had antidepressant medication in his unit on the day JT died. During the walkthrough the following day, on 19 April 2005, CK was asked what medication he had in the unit on 19 March 2005 and he replied "...I was on some sleeping tablets...Endeds (sic)".
84. CK indicated the medication would have been kept on the top shelf next to the plates in his kitchen. The kitchen cupboard where CK indicated the medication had been stored was approximately 1.5 to 1.7 metres above ground level (again above the natural reach of JT).
85. It was then that the police informed CK that they had earlier located ENDEP medication in his wardrobe. Police asked him to explain this discrepancy. CK stated "...I dunno, maybe I have sat it up there...because it has been up there before too,...I'll try and keep 'em up high..." He further stated that he hadn't taken the tablets for a couple of months prior to 19 March 2005. He told police that he had had boxes of ENDEP medication before which he had finished. (This is not consistent with the Medicare records). He stated he would have finished those boxes before getting another prescription made out. (In a recorded conversation with B on 20 April 2005, CK stated he hadn't obtained a script for ENDEP for "...over 15 months..." which is inconsistent with Dr Marshall's August 2004 prescription but consistent with the Medicare records relating to Dr Innis's prescription of 22 January 2004).
86. Police asked him how he thought JT came to have the drug in his system. CK stated "No, I don't know how he would have done it, 'cause as I say, my, my tablets have always been sitting up high, and none of the kids, like, none of the kids really know about it, like, not even my kids, you know".
87. CK told police in a later interview (23/11/05) he didn't remember putting the medication in his wardrobe and that when he did the walkthrough on 19 April he believed the ENDEP would have been in the kitchen cupboard. He said he had only ever taken that medication when it was in the kitchen and that it had always been kept up high and never left lying around within reach of children.

88. The evidence suggests that sometime prior to the police discovering the ENDEP in the wardrobe, CK has moved it from a cupboard in the kitchen to the wardrobe. The only rational inference open on the evidence is that CK himself moved that medication as on his account he was the only person in the unit who knew of its existence (B told police she was not aware of its existence, which was confirmed by CK).
89. If, after being advised by the police of the toxicology test result CK and his mother attended the premises they would have discovered that the ENDEP had been removed. However, they both denied to the police that they had at any time returned to the unit in relation to the ENDEP. Despite CK telling the police he hadn't used the ENDEP for 15 months and that none of his children were even aware of it, the notion that JT had found a tablet and ingested it was discussed by CK with B and later with his mother and family.
90. During a covertly recorded conversation on 20 April 2005, B questioned CK about how JT came to have the drug in his system. CK stated "...I don't know...I don't know if I've had any ever lyin' on the floor, or dropped any, like I don't know but, I know I had never ever given him any...." He also stated:
- "...I don't know like...have I ever dropped any like, I don't know, because I did have, times there, that I was like, I, I'd try to overdose meself, I had fuckin' heaps of them there at one stage...I don't even know like, ever picked up any that...and I have not seen, I have not seen another one like it..."
91. In the inquest hearing on 8 July 2008, CK's sister SK, testified about CK attempting to overdose on an earlier occasion. She said she went to his unit and found him passed out on his bed and "tablets everywhere". The tablets were "all over his bed and on the floor". The reference to CK attempting to overdose appears to be a reference to an incident that occurred well before he commenced a relationship with B and reference to this seems more designed to suggest the possibility of a stray tablet arising from that incident which lacks any plausibility.

Other persons present in the unit on 19 March 2005

92. On 4 May 2005 B provided a statement to police that she had never been on antidepressant medication and was not aware of the existence of the ENDEP medication in CK's unit as at 19 March 2005. B's account is consistent with what CK told police, namely that B didn't or probably didn't know about his ENDEP medication at that time.

93. B denied giving any medication to JT on 19 March 2005.
94. B recalled seeing Heron tablets on the bench near the fridge. On one occasion, a couple of months prior to JT's death she saw a paper chemist bag, with a Chemworld Chemist sign on the front of it, on the bench near the fridge. She didn't know what medication was inside it. She asked CK to move it to keep it out of reach of children.
95. CK's 3 children were each interviewed by the police twice. None of CK's children appeared to have any knowledge of the existence of the ENDEP medication or similar medication in their father's unit.

Condition of CK's unit

96. There is evidence identifying that CK regularly vacuumed his unit and that it was generally tidy. Detective Walsh described CK's unit on 19 March 2005 as appearing cluttered but tidy. SK (CK's sister) told police CK regularly vacuumed his unit. His other sister RT told police that CK's unit was generally kept "tidy". B told police that she frequently vacuumed CK's unit including under the children's beds and she had never seen any loose tablets lying around.
97. Crime scene photographs taken on 20 March 2005 depict some of the floor, including that in the children's bedroom. Though the floors appear to be clean the photographs do not show the entirety of the floor space or that inside cupboards or wardrobes.

MS's evidence that CK had previously advocated the use of dispensing sleeping tablets to young children

98. MS had formed a friendship with CK a few months prior to March 2005 and they became involved in a relationship a month or so after JT's death. They had a child born in mid-2006. MS was interviewed and provided a written statement to police in 2005. She made another statement on 13 June 2008 in which she made a number of adverse allegations about CK, including his treatment of her daughter who was about 4 years old when their child was born and his inability to cope with their baby crying. Particularly relevant, she said that about a year prior to JT's death she and CK had a conversation where she told him she was having difficulties with her daughter's sleeping (she would have been 3 years old at the time). MS said in her statement that CK suggested she crush a sleeping tablet and put it in a drink to give to the child.

99. MS says she did not remember the incident at the time she was interviewed by the police in 2005 and it was only in June 2007 when, at the suggestion of her family lawyer, she was writing down everything about her relationship with CK and the children that she recalled it. She said she recognised the significance of this conversation, said she spoke with her lawyer and her family and then called the police, but they did not get back to her until shortly before the inquest commenced in June 2008.
100. I place little, if any weight on this evidence, given the circumstances of how it arose and the delay involved. Failing to recollect that conversation in 2005 in the circumstances of JT's death is difficult to reconcile.

ENDEP MEDICATION IN THE UNIT

The significance of CK's return to the unit prior to the walkthrough on 19 April 2005

101. On 21 and 22 November 2005 police obtained statements from TG (then de facto partner of SK). In his first statement, TG stated:

"I am not sure if it was this particular night 19 March 2005 night or the next night but I am aware that a conversation took place between (CK's mother) her son CK and sister (SK) about a certain prescribed medication which (CK) had at his unit. The medication involved an anti-depressant which was prescribed to (CK) and which (CK) kept out of the reach in the wardrobe of this bedroom...This particular conversation involved (mother) and (CK) going to (CK's) unit and checking to see if the anti-depressant medication was not accessible to small children - - - I know for a fact that (CK's mother) and CK drove to (the) unit to check this medication but I cannot say for certain if they found the medication - - -"

102. On 23 November 2005 the police obtained a statement from SK in which she stated:

"I cannot tell you for certain it could have been the following night or a few nights later, (CK) and mum came to my house, mum said to me in front of (CK) "The Police told (CK) and I that toxins had been discovered in JT's body and that these toxins were anti-depressants."

103. According to SK, CK said "I haven't taken them for ages, they are up in my bedroom wardrobe, a child couldn't reach them". Her mother then said "I think we should go down and check to make sure they are up high". They then drove to

CK's unit and discovered the anti-depressants were gone. Her mother told her later that same day that CK's anti-depressants had been taken for testing.

104. On 23 November 2005, CK's mother was questioned by police about her knowledge of CK's antidepressant medication. She stated she had no knowledge of that medication. She denied having been told the results of the toxicology (despite police evidence that she was present when they told CK about those results on 18 April 2005). She denied being aware that the police had found ENDEP medication in CK's unit.
105. Later that day CK and his mother had a conversation about having attended CK's unit to look for the medication and the police questioning of his mother. This conversation was covertly recorded. In that conversation CK confirmed he had denied to the police that he had gone to the unit. CK then stated "Yeah, but we did, didn't we?" and his mother stated "We did go back and look for it". Three days later both CK and his mother told the police that after they had become aware of the toxicology result they had attended the unit to check that the medication was out of reach of children.
106. The fact that CK returned to the unit with his mother in relation to the ENDEP and then both having lied to the police about having done so indicates that CK appreciated the significance of the ENDEP and was concerned it would be located. Only after they became aware that family members had told the police of their return to the unit in relation to the ENDEP did they admit having done so. CK's mother maintained a denial that she ever learned about the toxicology result which is inconsistent with police evidence and the family statements.
107. Whether they did go to the unit after rather than before (or indeed before and after) the toxicology results were told is not possible, on the evidence, to determine. However, the explanation their purpose was to ascertain if the medication was in a location inaccessible to children is, in my view, disingenuous.
108. CK's statement that the medication was in the kitchen cupboard is consistent with B's statement that she saw medication in the Chemworld bag in the kitchen and told CK to keep it out of reach of the children. If CK attended the unit on 18 April he was aware it had been located and removed so when the following day he told the police it was in the kitchen cupboard he knew it was not. He also knew it was not in the wardrobe but did not nominate that as a place he had put it.

109. There are two possible explanations for his answer. One, that he and his mother did not attend after being told about the toxicology results in which case CK did not know the police had located the ENDEP in the wardrobe. If so, he nominated the kitchen cupboard knowing that he had moved it to wardrobe.
110. The second explanation is that CK and his mother did go to the unit after learning that the police were aware that JT had amitriptyline in his system. CK discovered that the ENDEP had been removed from his wardrobe and he was seeking to distance himself from having moved it from the kitchen to his wardrobe. The evidence in relation to this aspect is not able to be resolved but I think it is likely that CK knew of the relevance of the ENDEP with respect to JT, before being told of the toxicology result, and moved the ENDEP from the kitchen to the wardrobe. When he and his mother learned that the toxicology result showed the drug in JT's body, they attended the unit to remove and dispose of it but the police had already located it.

Identifying who touched the ENDEP blister packs

111. In 2006, tape lifts were taken from the ENDEP blister packets and a DNA analysis undertaken. At that time NSW Police had a buccal sample from CK which they used for the purposes of DNA comparison.
112. Ms Virginia Friedman of the Forensic & Analytical Science Service stated in a certificate of analysis dated 21 June 2006 that:

“The DNA recovered from one of the ‘Endep’ tablet strips (item 18ai) is a mixture originating from a least three individuals. CK has the same profile (in the Profiler Plus System) as the major component of this mixture. This major profile is expected to occur in approximately 1 in 790 million individuals in the general population. Neither JT nor MH can be excluded as contributors to the mixture.
113. B and her family members were excluded as contributors to the mixture.
114. The ENDEP blister packs underwent further forensic testing in 2016. A DNA analysis was carried out of tape-lifts taken from the ENDEP blister packs by Ms Virginia Friedman of the Forensic & Analytical Science Service.
115. With respect to “Tablet strip A”, Ms Friedman stated:

“The DNA recovered is a mixture that originates from at least three individuals. JT cannot be excluded as a contributor to this mixture. Assuming there are three contributors, it is greater than 140 million times more likely to obtain this mixed profile if it originates from JT and two unknown, unrelated individuals, rather than three unknown, unrelated individuals in the Australian population. Individual ‘A’ cannot be excluded as the major contributor. The DNA from the additional contributor/s is not suitable for comparison due to the low level and complexity.”

116. The person identified as “Individual A” in the recent analysis is not identified in Ms Friedman’s report and she was unable to compare CK’s 2005 sample as it had been destroyed in accordance with section 88 of the *Crimes (Forensic Procedures) Act 2000*.
117. NSW Police sought CK’s consent to provide another buccal swab in 2017. As was his right, CK declined to do so. The NSW Police then unsuccessfully applied to the Local Court for an order authorising police to carry out a second or subsequent forensic procedure on CK. Notwithstanding that CK’s DNA was not available for comparison in the recent analysis, his DNA was identified as a likely contributor during the analysis carried out in 2006. The reasonable inference is that CK is Individual ‘A’ being the person who could not be excluded as the major contributor.
118. Ms Friedman provided opinions in relation to the results of the analysis of the “Tablet strip A”. In her opinion, likelihood ratios with a value over a million provide ‘extremely strong’ support for the contention that JT more likely than not was a contributor to the DNA recovered from the relevant tape-lift.
119. It is possible that JT’s DNA came to be on the blister packet by him touching it directly or by way of secondary transfer, such as by someone touching JT and then touching the blister packet. When individuals have been in direct or indirect contact with each other in social or household environments, the possibility of secondary transferred is considered to be a reasonable one.
120. The presence of CK’s DNA on the blister packet is unremarkable given his admitted prior use of that medication. The evidence is insufficient to resolve whether JT’s DNA is on the items regardless of whether it is direct or indirect transfer.

JT’S BATHING AND UNSUCCESSFUL RESUSCITATION

CK's explanation for bathing JT is not supported by analysis of JT's clothing and the bath water

121. CK told the police that the reason he put JT in the bath was to wash him as he had smelt "pissy" from having wet himself. He told his son that JT had wet the bed and he had put him in the bath. He told the police JT's shirt and nappy were heavy with urine yet there was no evidence of urine in the bed, on any of the clothing that JT had been wearing, and rather than his nappy being heavy there were only traces of urine.
122. CK said that he washed JT's hair and body with soap, but when subject to analytical testing no soap was identified in the water.
123. The evidence raises the question whether CK put JT in the bath not because JT had wet himself and the bed – which is not supported by the findings of the analysis of the clothing, bedding and nappy – but rather in an attempt to revive him.

CK's description of JT waking up, walking normally and playing happily in the bath

124. CK said that JT was playing and alert and was able to walk and stand while CK removed his clothing. It is a description inconsistent with a child being affected by Amitriptyline which is more closely analysed when addressing the pharmacological expert evidence.

Origin and explanation of blue fibres located on JT and in the bathwater

125. The police and Dr Lee observed that there were many blue fibres under JT's armpit however those fibres were never seized. The police also observed many blue fibres in the bath water. Indeed, the video footage shows that when CK had his walkthrough with police and he was in the bathroom demonstrating what he says occurred in the bath, he remarked on the number of blue fibres and he then proceeded to fill a container with water a number of times and wash them away.
126. The contradictory evidence above and the presence of the blue fibres give rise to a consideration as to whether CK placed JT in the bath for a purpose other than what was put forward by CK. Such as whether it was to revive JT when CK realised his condition was worsening or for the purposes of providing an alternate explanation for JT's condition. In consideration of this, the question raised is whether prior to placing JT in the bath, CK had removed JT's clothing laying him naked on or under a blue blanket which shed numerous fibres onto JT's body which were later released into the bath water.

127. The sample of water taken by police in March 2005 contained the blue fibres and though the water sample was analysed the blue fibres were not.
128. In March 2016 Dr Susan Bennett, a Forensic Scientist, analysed the blue fibres (X0001017250) and compared the sample fibres to fibres against the blue bedspread (X0001014490), the blue face washer (X00001014489), the blue bath mat (X0001017249) and the blue track pants (X0001017001).
129. Dr Bennett excluded the blue washer, bath mat and track pants as sources of the blue fibres.
130. Dr Bennett selected 120 fibres from the remaining fibres in the bath water for comparison with the blue bedspread. Of that sample, 73 fibres were indistinguishable from the blue fibres of the bedspread. In her opinion, these findings strongly support the hypothesis that the blue bread spread was the source of a significant number of the fibres recovered from the bath water.
131. B confirmed to police that she emptied the bathwater after she bathed JT when he had vomited earlier in the day. She told police that she did not see any sign of blue fibres in the bath at that time.
132. According to CK, prior to JT entering the bath he was wearing a nappy, long black pants and a green coloured t-shirt which B had put him to bed in. There is no evidence that there were any blue fibres on any of the clothing JT was wearing. Dr Bennett was asked to comment on whether it would be possible for a large number of fibres from the bedspread to be transferred to the bath water, assuming JT was clothed when in contact with the bedspread, and his clothing removed prior to him entering the bath.
133. Dr Bennett carried out experiments to assess how many fibres the blue blanket could be expected to shed. She found that the blanket shed a large number of fibres in a short amount of time. Further she noted studies that showed that fibres can form balls of fibres or pills that can transfer as a single unit. If the recovered fibres from the bath were transferred as a result of that type of transfer, it would explain why the fibres were located close together. It was also possible that a ball of fibres transferred from JT's head hair as there were hairs recovered with the fibres.
134. Dr Bennett concluded there were many possible scenarios to explain the presence and number of the fibres recovered from the bath. In her opinion it is equally

likely that clothing was worn when in contact with the blanket compared to a scenario where clothing had not been worn.

135. The existence of the blue fibres in the bath is suspicious. However, having regard to Dr Bennett's opinion, an inference cannot be safely drawn either way as to whether the fibres were deposited via JT's hair as opposed to his skin (assuming he had not been wearing clothes on the bed prior to entering the bath).

The lack of explanation and significance of blood on JT, in the bathroom and on the bedding

136. The bloodstains on the bathroom floor underwent DNA analysis and were matched to JT. A trace of blood was also detected on the sheeting on JT's bed. The DNA analysis matched that to JT. It is not known, from the forensic analysis alone, when or how those stains came to be on the bathroom floor or JT's bed.
137. Detective Walsh raised the hypothesis that the blood might have been left on the floor as a consequence of CK performing CPR on JT on the bathroom floor. The blood on the bedding may or may not have got there in a similar fashion after JT was taken into the children's room by CK. CK has denied performing CPR on JT in the bathroom. He maintained he carried JT from the bath to the bedroom. Accordingly, the significance of the blood remains unexplained.

Unexplained injuries

138. JT was observed to have other injuries during autopsy. Numerous bruises were observed. Some of these were typically associated with normal toddler activity. However there were a large number of widespread scalp bruises that, in the pathologist's view, were not consistent with that activity. The bruises were considered to be of varying age but generally fresh.
139. At the inquest hearing on 9 July 2008, after being referred to the evidence about B falling as she ran to hospital, Dr Lee testified:

“Well, I think once again there's a little difficulty with some of these injuries because, as I said, we have a bruise, a curved bruise over the left ear; we have a curved bruise over the right ear. Very easy to accept that a single bruise to one part of the head can occur as a result of a fall – it's something I would see probably every day of my working life – but to have it occurring on both sides is suggestive once again of two similar forms of impacts on either side of the head, which is harder to interpret.

The bruises of the remainder of the scalp were in the frontal area and once again it's possible, entirely possible for that to be a fall or a single impact in a forward direction with being carried but once again, it becomes a little more difficult as the number of bruises increases."

140. Parallel straight injuries were observed on JT's feet. In Dr Lee's view, these were consistent with repeated heavy and probably sliding contact with a straight sharp object that produced bruising and superficial incision. The precise cause of that has never been established.
141. In Professor Lyons' opinion, the marks on the feet were healing and were not likely caused on the day of JT's death. Moreover the scalp bruises and injuries to JT's feet were not consistent with normal toddler activity. He considers these to be "unusual injury patterns..." that have not been satisfactorily explained.
142. Deep injuries were also observed within JT's chest at the junction of the right atrium and inferior vena cava as well as deep bruising of the proximal jejunum, central pancreas bruising and bruising of the upper mesenteric root. In Dr Lee's opinion, this bruising was of the form that can be expected to occur in heavy upper abdominal compression. Dr Lee also testified at the inquest hearing on 9/7/08:

"I think it's probably more would be an injury that I would say could possibly be CPR. I certainly can't exclude that it could be CPR but it would probably also be fair to say that in the instances of small children sustaining injuries like this it would probably be far more likely, in my experience, for those bruises to be produced by something like a fist blow, so that it's rather than resuscitation, it's trauma."
143. In Professor Lyons' opinion, the bruising of the mesentery appears significant and other mechanisms causing such an injury (other than resuscitation) should be given consideration including applications of blunt force trauma to the front of the abdomen.
144. Associate Professor Gunja, a senior specialist in Emergency Medicine at Westmead Hospital, opined that vigorous CPR performed on JT could explain the bruising to the mesentery.
145. JT's parents B and P were questioned about these injuries in 2015. B was not aware how JT had bruising to his scalp. She did recall seeing a bruise on the side of his forehead at hospital but was not aware how that was caused. B did not

remember seeing the marks on JT's feet prior to his death. P was not able to assist in explaining these injuries. No such injuries were noted by the doctor P had taken JT to prior to returning him to B's care on 17 March 2005.

146. Dr Giller was asked to comment on JT's bruising and whether that could have resulted from treatment administered at Singleton Hospital on 19 March 2005. Dr Giller testified:

"I think certainly the bruising on his thorax would be consistent with chest compressions that we performed during CPR, and the bruising between his angle of his jaw and the point of his jaw could have been from us thrusting his jaw to obtain an airway, but all of the other abrasions and bruises, I can't explain as a result of a resuscitation".

147. The available evidence does not permit a finding to be made as to the exact cause of JT's bruises, abdominal bruising or feet injury. Though the injuries were not causative of JT's death, they do raise a question as to whether JT suffered physical ill-treatment, and by whom, within the short time frame prior to his death.

KEY FINDINGS

Where did the amitriptyline come from?

148. It is not difficult to find that the source of the amitriptyline was from the ENDEP prescribed to CK. The issue is whether JT ingested it accidentally or whether he had been administered it deliberately by CK.

Amitriptyline post-mortem concentration

149. According to the description of events provided by CK, when JT woke he did not appear effected by any medication, he "hopped" off the bed and stood without assistance whilst CK removed his clothing and nappy. He played with cups while sitting in the bath water which was between his navel and chest. Whilst he sat on the toilet CK was watching JT "laughing and playing" and then CK left the room to watch his son playing on the PlayStation. On that version, there is little to explain why or how 90 seconds later JT was found floating in the bath and was unable to be revived after the application of immediate resuscitation.
150. A significant difficulty in determining the role of the amitriptyline has been due to the unavailability of a femoral artery sample of blood to obtain a reliable reading of the concentration of amitriptyline. Due to the circumstances of JT's arrival at

the hospital, there was no cause for the hospital to take a sample of blood to determine a course of treatment.

151. A sample was not taken until the following day after JT had been transferred from Singleton Hospital to the Department of Health Forensic Services in Newcastle. By the time Dr Lee examined JT, there had likely been a degree of post mortem redistribution of the drug in JT's tissues and blood. Dr Lee was unable to take a sample from the femoral artery, the preferred location to provide a more reliable sample. Rather he withdrew a sample from the blood contained in the cardiac sac. He also took a sample from stomach and another from JT's liver tissue.
152. In addition to the level of amitriptyline in the samples taken by Dr Lee, there were also the findings of trace amitriptyline on the clothing JT was wearing when he vomited about midday, as well as the traces located in the bath water.
153. The concentration of the amitriptyline identified in the toxicology results identified amitriptyline blood concentration of 1.3 mg/L, Nortriptyline <0.1mg/L. The concentration in the liver tissue was 3.2mg/kg and the stomach and contents 7.3mg/kg.

When did JT ingest amitriptyline?

154. Traces of amitriptyline were detected around the neckline and waistline of JT's clothing which had been located soaking in the basin of B's unit after he had vomited between about midday and 2 pm, which suggests he would have ingested the substance sometime in the morning.
155. According to B, JT was quiet, inactive and appeared drowsy during the morning period. This is consistent with JT being affected to some degree by amitriptyline at that time. At autopsy Dr Lee, Forensic Pathologist, noted that there were no food or drug residues in the stomach contents, just a thin layer of mucus. According to a report of an expert pharmacologist, Dr Drummer, the absence of significant amitriptyline in JT's stomach contents tended to point against a recent ingestion prior to death.
156. This suggests that JT did not ingest any further amitriptyline after he was moved from the sofa to the bed by his mother between 2 and 2.30 pm. Though I am satisfied JT ingested the ENDEP sometime during the morning on 19 March 2005, the exact time cannot be determined. Further, it is not possible to determine whether JT ingested the amitriptyline at the one moment or whether he ingested

it over a period of time, for instance, if it had been crushed and put in a bottle of milk in the morning which he consumed over some time and/or was refilled.

How much amitriptyline did JT ingest?

157. Determining the Amitriptyline blood concentration at the time of JT's death to determine the role it played and to determine, with other evidence, whether it was administered to him, rather than JT having accidentally ingested it, has been the focus of analysis by a number of experts in this inquest. More recently, reports prepared by Dr Drummer and Dr Gunja have sought to clarify these issues.

Dr Lee's opinion

158. In his initial report Dr Lee reported that there was no anatomical evidence on autopsy to determine a cause of death. He recommended a full forensic pharmacological assessment. Reports were obtained from Dr Lindsay Murray and Professor Olaf Drummer. Upon reviewing those reports Dr Lee provided a final report dated 1 June 2006 in which he identified the cause of death as amitriptyline toxicity. He explained his reasoning as follows:

“Given there is no anatomical cause of death, in the sense that there is no natural disease or injury sufficient to cause death, and given the fact there has been sufficient resuscitation to mask any findings relating to drowning, the presence of a potentially fatal level of the drug Amitriptyline has to assume major significance.

It is well recognised in that high levels of drugs, particularly those likely to cause alterations of consciousness, are potentially hazardous in a watery environment, and are associated with a greatly increased chance of drowning, due to an inability to save oneself through reduced co-ordination and consciousness.

This would be markedly increased in the instance of a small child, in whom the chances of accidental drowning whilst unsupervised are already high.”

Dr Lindsay Murray's opinion

159. Dr Lindsay Murray, a Consultant Emergency Physician and Clinical Toxicologist, provided an expert opinion about the post mortem blood results and he gave evidence in the 2008 inquest proceedings. In his view, a blood level of 1.3 mg/L measured in post-mortem blood was sufficient to cause JT's death. He described a course of events inducing coma and/or cessation of respiration leading to

cardiac arrest. Alternatively, he posited, it may have resulted in severe drowsiness, possibly leaving JT unable to sit up in the bath or having been at greater risk of drowning if unsupervised. However, he was of the view that JT would not have been capable of walking to the bathroom nor would he have been able to sit up in the bath playing with cups with that level of Amitriptyline concentration.

160. In Dr Murray's view, JT would have needed to ingest more than 150 mg of amitriptyline to achieve a concentration at that level. That would equate to three or more of the 50 mg tablets.
161. Dr Murray gave evidence in the inquest hearing on 11 July 2008. He was asked to explain the difference in his expertise (as a clinical toxicologist) compared to Dr Drummer (forensic toxicologist). In essence, he agreed his expertise was directed to a "living patient".
162. Dr Murray was asked in what areas he would defer to the opinion of a forensic toxicologist. He testified it would be "...in terms of the interpretation of blood levels, particularly those – and tissue levels of drugs, particularly those collected after death and whether they might be responsible for death or how they compare to other cases where death has occurred."

Professor (Dr) Olaf Drummer's opinion

163. Professor Olaf Drummer, a Forensic Pharmacologist and Toxicologist, has provided expert opinions in this matter in relation to a number of issues raised in 2005 and later after the inquest was resumed in 2015.
164. In his first report dated 16 November 2005, Professor Drummer stated "...the concentration of amitriptyline is borderline, i.e. high end of therapeutic and potentially fatal. It is therefore impossible to be certain as to the actual role of this drug on the death of JT". He concluded that report by stating it was "therefore impossible from a toxicological perspective to be certain as to the actual role of this drug on the death of JT".
165. Professor Drummer provided supplementary reports in 2015. He explained that post-mortem redistribution ("**PMR**") must be taken into account when interpreting post mortem Amitriptyline blood concentrations.

166. PMR occurs when a drug diffuses (spreads out) from tissues with higher concentration to blood at a lower concentration. This is known to occur with respect to Amitriptyline.
167. The PMR effect may be amplified when a post mortem blood sample is sourced from the heart (as in this case) rather than the femoral (leg) artery. Blood taken from this source is sensitive to post-mortem changes leading to large elevations in post-mortem blood concentrations.
168. The liver concentration (3.2 mg/kg) was lower than what is normally seen in adults following a fatal overdose of amitriptyline but similar to that seen for therapeutic use. The liver is also not immune to post-mortem changes.
169. The blood concentration taken post-mortem “may be several-fold higher than what it was at the point of his death”. It was not possible to estimate the dose or amount of the drug ingested from a single post-mortem measurement even when there is no redistribution. Calculation from a single measurement when redistribution might have occurred could result in a misleading over-estimate of dose.
170. Professor Drummer gave evidence in the inquest on 2 December 2015. He said that the blood concentration of amitriptyline post mortem can, on average, be about three times the concentration that would have existed at the time of death. In some instances that increase could be lower and in some (possibly extreme) instances it could be as much as a “tenfold” increase. Numerous factors can potentially impact on the extent of the increase.
171. Professor Drummer said in evidence (again while emphasising the imprecision of attempting to interpretation the blood concentration at death using the post-mortem results):

“... So we don’t have information there so if I assume that they are like small adults, I’m making a big assumption there. If you take the view that the concentration of blood is tenfold higher than what it was at the time of death then I’d be more of the view that it’s you know, one pill or less than one pill rather than more than one pill...”
172. Professor Drummer agreed that a living adult who consumed one 50 mg tablet of amitriptyline would generally be expected to have an amitriptyline concentration of 0.1 mg/L after about 6 hours. If the ten-fold PMR increase were applied to an adult, who at the time of death had a blood concentration of 0.1 mg/L, the adult

would be generally expected to have post-mortem concentration in the vicinity of 1.3 mg/L (the concentration JT was found to have).

173. Applying that analysis to a child, numerous other variables are in play. Firstly, a child JT's age is only 15 kilograms (compared to a standard adult male weighing 80 kilograms). An adult might be expected to process amitriptyline more effectively. Secondly, in JT's case, it would also depend on him not losing too much of the drug when he vomited at lunch time assuming he only took or was administered one dose before lunch.
174. On the above analysis, conservatively factoring in the "ten-fold" PMR effect, the evidence provides support that JT had ingested at some point at least one ENDEP 50 mg tablet, or an equivalent amount thereto, sometime(s) on 19 March 2005.

Associate Professor Dr Naren Gunja's opinion

175. Associate Professor Naren Gunja is a Clinical and Forensic Toxicologist and Senior Specialist in Emergency Medicine.
176. Dr Gunja has clinical experience in treating patients in Emergency Department settings. Dr Gunja provided a number of expert toxicologist reports. He opined that JT ingested more than one tablet of ENDEP. Drs Gunja and Drummer discussed their respective opinions and indicated areas upon which agreement was and was not reached between them.
177. In his supplementary report dated 19 November 2017, Dr Gunja stated:

"I accept that amitriptyline has a wide variation in post-mortem redistribution (PMR). This would suggest that the postmortem concentration of 1.3 mg/L might result from ingestion of a single tablet of amitriptyline and extensive PMR. The post-mortem result confirms that JT ingested amitriptyline, likely within the previous 24 hours prior to death.

My contention that JT may have ingested more than one tablet is largely derived from:

- The minimum dose that is likely to cause death directly from amitriptyline itself (which is > 10 mg/kg), i.e. at least 3x 50mg tablets
- The ingestion of amitriptyline before his vomit around midday, confirmed by amitriptyline detected in the tracksuit stains

- The time course and symptoms JT exhibited during the hours of 11am and 6pm, which are consistent with a larger ingestion than just one tablet – that being vomiting, prolonged drowsiness and possibly coma

I agree with Professor Drummer that the post-mortem concentration (1.3 mg/L), in and of itself, does not indicate an ingestion of greater than one tablet of amitriptyline (50 mg).”

178. As can be seen, whilst accepting the validity of Dr Drummer’s opinion that one 50 mg tablet may account for JT’s post-mortem result (based solely on the post-mortem result), Dr Gunja considered other evidence concerning JT experiencing prolonged drowsiness and vomiting as being suggestive or at least consistent with JT having ingested more than one 50 mg tablet.

179. In his supplementary report post his discussion with Dr Gunja, Dr Drummer stated *inter alia* that:

“I stand by my original opinion that up to one 50 mg tablet of amitriptyline could explain the results in baby JT. One tablet, and possibly one tablet partly absorbed, given the episodes of vomiting is likely to cause some sedation, but the degree and length of time will depend on too many factors to provide any specificity here.”

180. Dr Drummer also stated, with respect to Dr Gunja’s opinion (referred to above):

“Associate Professor Naren Gunja in his most recent report (November 19) suggests that, notwithstanding the issue over the interpretation of the toxicology results, JT had more than likely ingested, or given, more than one amitriptyline tablet. He bases this on the apparent time course and symptoms JT exhibited during the hours of 11am and 6pm, which he inferred were consistent with a larger ingestion than just one tablet, that being vomiting, prolonged drowsiness and possibly coma. *It is my understanding that evidence from his mother was that [JT] was tired and lethargic all day, but when placed in the bath in the late afternoon he was playing with 2 plastic cups and splashing around. If this is true in my view this is not a symptom of extreme drowsiness.* The fact that he slept at around 2.30 pm for a period should not of itself infer he was in a coma since kids of this age often have a sleep during the day. The fact that amitriptyline will cause sedation, particularly in a young child of 15 kg will

make it easier for him to have a sleep. However, in my view this is not proof of ingestion of more than one tablet. Adults, and almost certainly children, will vary in their response to a dose of this drug (and other drugs), hence it will be very difficult to infer a dose irrespective of what is believed from the witnesses in terms of [JT]'s actions." (italics added)

181. As can be seen in the above passage, Dr Drummer considered that the account of JT playing with the cups in the bath (if true) counted against the hypothesis of JT exhibiting symptoms consistent with a larger ingestion than just one tablet. To be clear, and without criticism of Dr Drummer in this respect, the account of JT playing in the bath with cups is that given by CK and not by B. For the reasons give below I do not accept CK's account about those matters.

Overall conclusion as to the amount Amitriptyline ingested by JT

182. The divide between the experts about the likely amount of amitriptyline is irresolvable to the extent the only finding which can be made is that the forensic evidence establishes that at some time in the morning of 19 March 2005 JT ingested at least about 50 mg of Amitriptyline.
183. Having regard to the evidence of JT experiencing prolonged drowsiness and vomiting (including sleeping a number of hours in the afternoon) taken together with the Dr Gunja's opinion that the toxicology results and the evidence of JT's presentation, though it is insufficient to positively find that JT ingested more than one tablet of 50 mg ENDEP, it does support a finding that the effects of at least a single dose of up to 50 mg of ENDEP had a profound effect on JT. That effect was to such an extent that Dr Gunja relied on it and the toxicology result to suggest that the quantity ingested could have been as much as three times that which would normally be taken by an adult without the same toxic effect. I accept Dr Gunja's opinions about the same and, to the extent those opinions differ to that by Dr Drummer, I prefer the opinions expressed given by Dr Gunja.
184. I consider it is reasonable to find that the effects of a dose of 50 mg of amitriptyline is likely to be considerably more profound on a 15 kg individual than on an 80 kg individual. As Dr Drummer concluded there are too many variable factors to take into account to determine the degree and effect of sedation, however, in my view, it tends to suggest CK's description of JT at about 5.30 pm as alert and playful and without affect as untenable.

185. Other than identifying a cause of death, the amount of amitriptyline ingested is significant in considering whether JT was deliberately administered the drug in that the more taken the less likely that JT had found a loose tablet. The evidence does not support a finding in relation to this aspect.

How did JT come to have amitriptyline in his system?

186. No one reported witnessing anyone giving JT a tablet or some other type of medication on 19 March 2005. There is no evidence to suggest that there were tablets within reach of any child or that there was much likelihood of a stray tablet being found and ingested by JT.

Possible explanations

187. The most plausible possibilities are that:

- a. an adult or child deliberately gave JT at least one 50 mg tablet or an equivalent amount thereof (possibly crushed up and mixed with into a drink) and the person did so knowing it was ENDEP medication;
- b. an adult or child deliberately administered the drug to JT but he or she was mistaken about what drug it was or did not realise it had sedating effects and or was not to be administered to young children (e.g. mistook it for other medication); or
- c. JT accidentally ingested the drug in some other way, such as finding a tablet on the floor or gaining access to a packet of ENDEP;

noting that no person has given evidence or an account of doing either (a) or (b) above or seeing tablets on the floor or JT picking up a tablet as per (c).

CK's Children

188. CK's children were interviewed in 2005 and disclosed no knowledge of the ENDEP medication.

189. It is difficult to conceive that CK's children, at their ages, would have given JT a tablet or that JT would have simply swallowed the same. It is even less conceivable that a child would have crushed a tablet up and placed that in JT's food or drink (if that was the means by which JT ingested the same).

B's lack of knowledge and involvement

190. B denied knowledge of the existence of the ENDEP medication in the unit at the time of JT's death, which was confirmed by CK. She denied giving JT any medication. When told by police of JT's post mortem blood results, B soon after confronted and, in essence, interrogated CK about the same. Her conduct was consistent with her not knowing of the existence of the ENDEP medication or of JT consuming any tablet or medication on the day of his death. I accept B's evidence that she did not give JT medication on the day of his death including ENDEP tablets.

CK's account

191. CK has denied administering ENDEP to JT at any time and there is no evidence of CK ever admitting to giving that medication to JT during intercepted telephone calls and covertly recorded conversations.

CK's credit

192. There are significant concerns about the credibility and reliability of CK's accounts. Including:

- a. That he was resuscitating JT in the bedroom when B returned home (B says she saw CK standing in the vicinity of the bathroom doorway and hallway).
- b. He omitted to tell police that he was absent from the unit for about 15 minutes whilst call MS from a pay phone on 19 March 2005 only disclosing it when he was confronted by police about it – the timing of his return to the unit, if his version that JT awoke is correct, would have coincided with the time he said the reason he went into the bedroom was because he heard JT crying and saw him standing at the bedroom door.
- c. CK returned to his unit with his mother to search for his ENDEP medication and omitted to tell police that fact prior to the commencement of his walk through on 19 April 2005.
- d. CK indicating to the police during his walkthrough on 19 April 2005 that his ENDEP medication was on the top shelf in his kitchen. CK must have

known this was not true as he had put it in the wardrobe and he had discovered the night before that it had been removed.

- e. In November 2005 CK discussed with his mother (in covertly recorded conversations) what he would say to police about how the plastic cups came to be out of the bath; this shows that he appreciated the relevance of his evidence that JT was playing in the bath with the cups and that he knew the cups were found outside the bath. The recordings indicated that CK (along with his mother) was prepared to collude and tailor his evidence.

CK's knowledge of the ENDEP and opportunity to administer it to JT

- 193. CK was the only adult in the unit on the day of JT's death that knew of the presence of the ENDEP medication in the unit. He had opportunity to administer the medication to JT without B's knowledge, including when he made JT's bottle in the morning before bringing him to B who was still in bed.

Remoteness of JT finding a "stray tablet" or being mistakenly administered ENDEP

- 194. B did not know that there was ENDEP in the Chemworld bag she saw in the kitchen. On his own version, and consistent with B's evidence that she told him to keep the Chemworld bag out of reach it was likely in the kitchen. If CK had not used the ENDEP for over 15-months, then it is unlikely to have been left out and available for a child to access the packet or locate a stray tablet.
- 195. Even assuming the validity of the evidence that CK did attempt suicide, and that tablets were inadvertently scattered at the time of that attempt, I am comfortably satisfied that the Amitriptyline in JT's system did not stem from a loose tablet being on the floor or elsewhere in the unit and it being found either by JT or some other child. That is not a reasonable possibility taking account the amount of time that passed between the purported suicide attempt and JT's death, the absence of any adult reportedly sighting a loose tablet in the unit after this purported attempt and the fact of it being regularly cleaned by CK and others (including B).
- 196. Evidence about there being many tablets everywhere when CK attempted suicide was, in my view designed to embellish the possibility of a stray tablet to distance CK from having deliberately administered the ENDEP to JT. At no time has CK suggested that he had the Chemworld bag out in a location accessible to any child on the day of JT's death.

Accidental administration

197. There is no evidence (cogent or otherwise) to suggest that JT ingested the tablet in circumstances where he was given the ENDEP having mistaken it for some other medication. I am comfortably satisfied this does not constitute a reasonable hypothesis for how JT came to have the Amitriptyline in his system.

Finding

198. Having regard to the above evidence, the only rational explanation for how JT came to have Amitriptyline in his system on 19 March 2005 is that CK administered JT at least one 50 mg tablet or equivalent thereof (probably in crushed form). I am unable to definitively find what his motivation was for doing so, although I consider it likely that it was done to produce a subdued or sedated effect in JT rather than to cause permanent or lasting harm.

How affected was JT Amitriptyline prior to death?

199. In the opinion of Dr Gunja, if JT's cardiac arrest at or before 6:20 pm was a consequence of amitriptyline poisoning, it is "likely that in the preceding hour he would have been comatose or at least deeply drowsy and unable to sit up". He would have presented with significantly reduced gross motor skills and likely with no ability to perform fine motor tasks. To a layperson this would have appeared as "sleeping, unconscious or extremely drowsy".
200. In Dr Gunja's opinion, assuming the amitriptyline poisoning did occur, JT would have been "very drowsy and unable to sit up in a bathtub," which could have contributed to drowning. JT may also have experienced convulsions in the hours preceding his death (involving obvious jerky movements of his body and limbs).

What happened prior to B's return?

201. Within a short time of B returning to the unit she picked JT up and ran to the nearby hospital. JT was reported as warm when he arrived at the hospital at about 6.23 pm. However, the attending doctor noted at the inquest in 2008 that JT had no brain activity and was determined to be dead on arrival.
202. The evidence that JT presented with prolonged drowsiness during the morning, vomited around midday then fell asleep is uncontroversial. Whether he ever woke

is the question totally reliant on accepting CK's version of events. On that version JT slept awoke shortly as after 5.30 pm and he appeared to be perfectly fine.

203. CK claimed that it was only about 2 minutes before B arrived home that he had found JT submerged face down in the bathwater and placed JT on the bed. He said that he pumped a couple of times on his stomach and blew into his mouth a couple of times.
204. I do not accept CK's account of how JT appeared at the time nor his account of how JT came to be in the bath. CK's account about this is implausible in numerous respects, including as follows.
205. Although it is not possible to ascertain JT's precise Amitriptyline/ blood concentration, I am satisfied he had amitriptyline in his system which caused him from the morning to be drowsy and wobbly on his feet, vomit at midday and fall asleep shortly thereafter. It is implausible that he woke from his sleep showing no signs of the reduced motor skills, lack of alertness and balance he had exhibited some few hours before. For JT to have played in the bath as described by CK, it would have required a remarkable and implausible turnaround in his condition.
206. Likewise it is difficult to conceive that JT went from alert and playing in the bath (with no signs of impairment) to being face down in the water within a tiny window of time (whilst CK was reportedly out of the bathroom). CK's account about this is also not plausible.
207. There is an absence of evidence to corroborate CK's account about the circumstances surrounding JT being bathed. Rather, the evidence tends to contradict CK's account. Those contradictions including: the clothes and bed were not wet with urine, there was no soap in the bath, the plastic cups were not in the bathwater when police attended that evening. Moreover the observations of B that JT, whilst damp to touch, had dry hair (which is consistent with the observation of hospital staff that JT's body and hair were dry when he attended there). This is not to say that JT was not wet from being in the bath, his hair was very fine in any event, but it does suggest that he had been out of the bath for a longer period than the couple of minutes suggested by CK or that he had not been face down in the bath water as described by CK.
208. In light of the toxicological evidence and contradictory evidence identified above I do not accept CK's version of events. CK has not told the police the truth that JT woke up and I consider him to have lied as to the reasons and circumstances as to

why and how JT came to be in the bath. I do not accept that JT sat in the bath and played with cups.

209. I am satisfied JT was deliberately administered ENDEP medication. It is far more likely that he was given a bottle of milk containing a crushed tablet in the morning so that he would be subdued while he was in CK's unit. The evidence surrounding CK's attendance at the unit in relation to the ENDEP and his apparent preparedness to collude with his mother about what to tell the police satisfies me that CK's account is not reliable at all. I am satisfied that CK was aware JT was suffering the effects of Amitriptyline and he attempted to conceal the true course of events leading to JT's death.
210. Moreover, being satisfied that CK was aware that JT was affected by the ENDEP medication he had knowingly had earlier administered to JT, including its impact on his level of consciousness, I do not accept that JT had a drowning incident. The evidence of CK's son that CK was in the lounge room shortly before CK raised the alarm about JT is consistent with orchestrating events and explanations to make it appear that JT's condition was attributable to accidental drowning.
211. Traces of Amitriptyline and blue fibres, from the blanket, were found in the bathwater. I am satisfied from that evidence that JT came into contact with water in the bath prior to B's unit. I do not accept CK's account for why and how JT came into contact with that bathwater. I am satisfied that JT did not consciously enter the bath himself but was placed in the water by CK for an unknown period of time during which time JT was not conscious and not capable of sitting upright on his own let alone laugh and play with cups.

Findings as to Cause and Manner of death

Cause of Death

212. Professor John Pearn, a professor in paediatrics, identified three possibilities as to JT's cause of death:
- a. JT died as a consequence of cardiotoxicity from amitriptyline alone;
 - b. JT died as a consequence of drowning alone (amitriptyline played no role in that); or
 - c. JT died as a consequence of having a high blood level of amitriptyline and cerebral hypoxia from immersion.

213. In Professor Pearn’s opinion, it was not possible “to be scientifically certain which of these possibilities existed.”
214. Dr Kevin Lee, in his final pathologist report, specified the cause of death to be Amitriptyline toxicity. Dr Lee concluded there was no identifiable signs of drowning found at the time of autopsy but that given the extensive resuscitation attempts such signs would not be expected to be identifiable. Dr Lee testified at the inquest hearing on 9 July 2008 that he “...certainly cannot exclude drowning” but if drowning occurred he considered the amitriptyline substantially contributed to that result.
215. Dr Lee considered the opinions of Dr Murray and Dr Drummer before providing his final report. However Dr Lee did not address the difference of opinion that arose between those experts or identify whether he attributed more weight to one opinion over the other.
216. Professor Lyons has reviewed the autopsy findings and the expert opinions given by Dr Murray, Dr Drummer and Professor Pearn. In his opinion “...there were a number of pathological processes acting at the time of death that may have contributed to death, but that a formal cause cannot be ascribed.”
217. Dr Gunja in his final report expressed the following opinion as to the possibility of drowning alone:

“It is entirely possible that JT drowned in the bath and amitriptyline had no part to play in his death. He may have ingested amitriptyline many hours earlier and its effects resolved by the time he entered the bath. This is scenario A as posed in your letter (page 2, dated 20 October 2017).

My opinion is that scenario A is less likely due to the following:

- JT’s vomiting, drowsiness and incoordination are suggestive of clinically significant effects of amitriptyline.
- Amitriptyline ingestion is, for all intents and purposes, confirmed by its presence in the post-mortem samples – the level in JT’s blood at the time of death is likely to be at least at therapeutic levels seen in adults. In a child, not regularly on amitriptyline, this constitutes a significant concentration that would cause clinically apparent effects – that of drowsiness,

urinary retention (and eventual incontinence) and motor incoordination.

- The time between ingestion and possible drowning is under 6 hours, which is within the timeframe of amitriptyline's duration of effect for drowsiness and motor incoordination.

I believe that amitriptyline ingestion was either contributory or causative to JT's death. This is consistent with scenarios B or C in your letter. While all three scenarios are possible, I think either scenario B or C are more likely."

218. Counsel Assisting submits that I would ultimately prefer the opinion evidence of Dr Gunja above and find that JT either died of cardiotoxicity from Amitriptyline alone or as a consequence of having amitriptyline and cerebral hypoxia from immersion (with the amitriptyline playing a causative role in the cerebral hypoxia and or in causing cardiotoxicity).
219. In relation to the cause of JT's death, I conclude as follows.
220. A finding that JT died solely as a consequence of amitriptyline toxicity involves a rejection of much of CK's evidence about his observations of JT and his reasons as to why he put JT in the bath, and his description of what occurred in the bath, namely using soap to wash JT and then leaving him playing and laughing in the bath. A finding that JT died of amitriptyline toxicity alone involves a finding that he did not wake up at all and his entering the bathwater was because CK was attempting to revive him and/or to stage an accidental drowning scenario knowing that the cause of JT's unconsciousness was due to the morning's administration of amitriptyline.
221. A finding that JT died solely of drowning is completely reliant on accepting CK's version because there is no available forensic evidence supportive or contradictory of a drowning. However, it is not difficult to reject drowning as a singular cause of death given B's description of JT's day until she left the unit and the toxicology result.
222. A finding that JT became submerged due to the effects of Amitriptyline would involve accepting that JT was fine, laughing and playing as if unaffected from Amitriptyline and he either had a sudden onset of drowsiness or a seizure or an imbalance so significant and sudden that he became submerged and quickly drowned, so submerged that despite immediate recovery and resuscitation he was not able to be revived.

223. For the reasons articulated above I do not accept the version put forward by CK as a true and accurate description of events. Accordingly I do not accept that JT was found submerged in the bath after being left there playing with the cups. Indeed, given that I think it is more likely than not that CK administered the ENDEP to JT, he would have been aware and concerned that JT was suffering the effects more than intended or expected and when it became patently obvious that the bath was not going to revive him it has become a convenient instant explanation as to JT's loss of consciousness, which only came under scrutiny once the toxicology results were known.
224. I am satisfied that the possible causes of death involving (a) JT dying solely as a consequence of drowning (without Amitriptyline playing a role) and (b) JT dying as a consequence of a combination of Amitriptyline toxicity and drowning do not constitute reasonable possibilities. I am satisfied that JT died as a consequence of Amitriptyline toxicity alone

Findings as to manner and cause of death

225. Pursuant to s 81(1) of the *Coroners Act 2009* my findings as to manner and cause are as follows that:

“JT died aged 21 months on 19 March 2005 in Singleton, NSW, as a consequence of Amitriptyline toxicity having been deliberately administered anti-depressant medication containing Amitriptyline by a known person”

Recommendations

226. This case highlights the need to address the impact of Post Mortem Redistribution affecting the accurate sampling of blood concentrations at time of death. The importance of a blood sample being taken from a child's femoral artery as soon as possible in the case of a sudden and/or unexplained death should be raised with the NSW Forensic Service, Police Operations and the State Coroner's Office to create a protocol whereby such a sample can be authorised and taken as soon as possible rather than waiting for the deceased to be conveyed to the metropolitan or as in this case, the regional Forensic Services facility for post mortem examination.
227. With the benefit of hindsight, and without any criticism being directed to Singleton Hospital or the first attending police, Singleton Hospital or the attending police might have sought the approval of a Coroner to take such a sample from JT soon after he was pronounced dead on 19 March 2005.

228. I accept Counsel Assisting's submission that a recommendation ought to be made in this regard.
229. Counsel Assisting also submits that the procedures and instruction to pathologists performing autopsies in the case of a child's suspicious death should also be reviewed, noting that the pathologist in this case sourced a blood sample from JT's heart area (which is more susceptible to PMR). I do not think such a review is necessary as I am of the view that NSW pathologists are highly skilled and that the protocol is, when possible followed. There is no evidence that Dr Lee did not attempt to source the femoral artery in this case before extracting the sample from the cardiac sac.

Police investigation

230. I accept Counsel Assisting's submission in relation to the NSW Police investigations conducted in this matter. Over a decade has passed since JT's death and the police commitment to investigating JT's death has continued despite the unsuccessful referral by Her Honour in 2008. I commend the police officers involved particularly the Detective Sergeant Quigg.

JT's Family

231. I don't think that this Inquest has given JT's parents and family any further answers or comfort. I understand that when the Inquest was suspended in 2008, the family held certain expectations which did not come to fruition. When I resumed the inquest in 2015, the issues raised by Dr Lyons were very distressing. It had been hoped that more would have been gained during the adjournment to seek any advancement on the drug/blood concentration information and carry out further analytical tests and review the circumstances surrounding events before JT was taken to hospital. I am sorry that there has been little advancement. Again can I express my gratitude for your patience and pass on my condolences to you.

E Truscott
Magistrate sitting as Deputy State Coroner