



IN THE CORONERS COURT
OF VICTORIA
AT MELBOURNE

Court Reference: COR 2014 0201

FINDING INTO DEATH WITHOUT INQUEST

Form 38 Rule 60(2)

Section 67 of the Coroners Act 2008

Findings of:	Caitlin English, Coroner
Deceased:	Baby W
Date of birth:	12 January 2014
Date of death:	13 January 2014
Cause of death:	1(a) Intrauterine pneumonia and meconium aspiration complicating intrauterine growth in the setting of maternal amphetamine use
Place of death:	Bendigo Health, Maternity Ward Room 16

Introduction

1. Baby W was born on 12 January 2014 in an ambulance after her mother went into spontaneous labour at 9.00pm at 37+5 weeks gestation.
2. The ambulance transported Baby W and her mother to Bendigo Health Emergency Department. On arrival, a neonatal Code Blue was called as Baby W was covered in meconium, had minimal respiratory effort and appeared cold and pale.
3. Following resuscitative efforts, Baby W's condition stabilised but subsequently deteriorated. A decision was made to palliate Baby W as she was unlikely to survive. Baby W died in her mother's arms the following morning on 13 January 2014 at 6.21am.

The coronial investigation

4. Baby W's death was reported to the Coroner as it was unexpected and fell within the definition of a reportable death in the *Coroners Act* (2008).
5. The role of a coroner is to independently investigate reportable deaths to establish, if possible, identity, medical cause of death and surrounding circumstances. Surrounding circumstances are limited to events which are sufficiently proximate and causally related to the death. The purpose of a coronial investigation is to establish the facts, not to cast blame or determine criminal or civil liability.
6. As part of the investigation into Baby W's death, I referred the matter to the Coroners Prevention Unit (CPU), Health and Medical Investigation Team to review Baby W's mother's ante-natal care during pregnancy. The CPU is a specialist service created for coroners in order to provide them with assistance during the course of an investigation. The CPU reviews particular types of deaths and assists the coroner in developing prevention-focused recommendations.
7. Statements were obtained from Baby W's mother's GP, health practitioners at Bendigo Health and from the Operations Manager, Child Protection at the Department of Health and Human Services (DHHS). Further, an expert report was obtained from Dr Yvonne Bonomo, Medical Head of the Women's Alcohol and Drug Services at the Royal Women's Hospital. A medical investigator's report was prepared by Dr

Heinrich Bouwer, the forensic pathologist who examined Baby W. The materials also include a toxicology report and a neuropathology report by Dr Linda Iles. Medical records were also obtained from Bendigo Health, Tristar Medical Group, Eaglehawk Medical Group and Ambulance Victoria (AV). Baby W's mother was asked but did not wish to provide a statement for the investigation.

8. I have based this finding on the evidence contained during the course of the investigation, namely the above-mentioned statements, expert reports and medical records. In the coronial jurisdiction facts must be established to the standard of proof which is the balance of probabilities.¹
9. I take into account section 8 of the *Coroners Act 2008*, particularly section 8(e) and the public interest in protecting the personal information of Baby W's mother, and have redacted her and Baby W's identities for distributing this Finding and publishing it on the Internet.

Background – medical engagement during pregnancy

10. Baby W's mother was aged 23 and pregnant with her second child. Her pregnancy care when she was pregnant with her eldest child in 2008 was shared between Dr Patrick Duane and Bendigo Health.
11. Baby W's mother had a medical history which included substance abuse of methamphetamine. She had also suffered from anxiety and depression since 2007 and had been engaged with Bendigo Child & Adolescent Mental Health Service.
12. On 9 July 2013 Baby W's mother had an appointment with Dr Ismail at Tristar General Medical Practice in Eaglehawk and her second pregnancy was confirmed by obstetric ultrasound. At that time, she was 11 weeks pregnant with a due date of 28 January 2014.
13. The pregnancy results were copied to Dr Duane at Eaglehawk Medical Group. Baby W's mother did not attend appointments on 11 June, 18 July and 15 August 2013.

¹ This is subject to the principles enunciated in *Briginshaw v Briginshaw* (1938) 60 CLR 336. The effect of this and similar authorities is that coroners should not make adverse findings against, or comments about, individuals unless the evidence provides a comfortable level of satisfaction as to those matters taking into account the consequences of such findings or comments.

14. In September 2013 Baby W's mother transferred her medical care to Tristar General Medical Practice from Eaglehawk Medical Group and attended an appointment on 11 September 2013. She had a morphology ultrasound on 12 September 2013 at 20 weeks gestation which was normal. Baby W's mother did not attend scheduled appointments on 16 September and 25 November 2013.
15. Baby W's mother re-engaged with Dr Duane at Eaglehawk Medical Group on 22 November 2013 at 30 weeks gestation. She denied active drug use. She did not attend an appointment on 6 December 2013.
16. Baby W's mother subsequently attended an appointment with Dr Duane on 20 December 2013. A Group B Streptococcus (GBS) swab was taken (the results of which were negative), blood tests arranged, and an obstetric ultrasound showed acceptable foetal growth.
17. Dr Duane referred Baby W's mother to Bendigo Health the same day, and she attended in the afternoon of 20 December 2013 at 34+3 weeks gestation, which was her first direct contact with an obstetric service during pregnancy.
18. During Baby W's mother's 'booking in' appointment at Bendigo Health, she reported periodic attendances at the GP, and using amphetamines daily throughout pregnancy although she gave up for a period in July.² She declined a referral to the Maternal Services Program.
19. Baby W's mother did not attend an ante-natal appointment at Bendigo Health on 23 December 2013, and her mother rang and explained she was unwell.
20. On 24 December 2013 she attended for a CTG which monitors foetal heart rate, which was normal, and she was assessed by an obstetrician prior to leaving the clinic.
21. On 30 December 2013 Baby W's mother did not attend an ante-natal appointment, however she attended on 2 January 2014. A further CTG was normal and she was provided with a pathology slip to test for gestational diabetes.
22. Baby W's mother did not attend an appointment on 9 January 2014.

² Progress note dated 20 November 2013, Bendigo Health Medical Records.

Circumstances in which the death occurred

23. On 12 January 2014 at approximately 9.00pm, Baby W's mother went into spontaneous labour at 37+5 weeks gestation. An ambulance was called at 9.27pm.
24. Baby W's mother's membranes ruptured shortly before arrival of paramedics at 10.37pm. The liquor was noted to be meconium stained.
25. After Baby W's mother was loaded into the ambulance, Baby W was delivered without assistance at 10.55pm.
26. According to the AV documentation, Baby W had a normal heart rate and some soft, spontaneous crying shortly after birth, but remained extremely pale and limp despite oropharyngeal suction and intermittent positive pressure ventilation on the way to Bendigo Hospital.
27. Her Apgar scores were 5 at 1 minute and 3 at 5 minutes.³ According to the AV Electronic Patient Care Report the ambulance departed at 11.01pm and Baby W and her mother were transported to the Bendigo Health Emergency Department (ED).⁴
28. On arrival to the ED a Neonatal Code Blue⁵ was called as Baby W was covered with meconium, had minimal respiratory effort and appeared cold and pale. Her birth weight was 2780 grams.⁶ Her heart rate was acceptable at over 100 beats per minute. Her cord was clamped and cut and she was moved to a resuscitation cot. Cardiopulmonary Resuscitation (CPR) was commenced and an intraosseous needle was inserted. Adrenaline, aramine and normal saline fluid boluses were administered.⁷ Baby W was intubated and ventilated, and umbilical venous and arterial lines were inserted by the paediatrician attending the resuscitation. Thick meconium was aspirated from the endotracheal tube.

³ Apgar scores are a measure of a neonate's physical state after birth (specifically heart rate, colour, respiratory effort, response to stimulation and tone). Scores range from 0 (poor condition) to 10 (good condition). A score of 7 or higher is considered normal and a score of 3 or less is considered low. A score of 3 or less at five minutes of life and beyond is abnormal and associated with adverse neurological outcomes and increasing mortality.

⁴ The AV times do not match the Bendigo Hospital records with the first blood gas sample recorded at 10.45pm on 12 January 2014.

⁵ A Code Blue alerts the team of medical and nursing staff skilled in neonatal resuscitation.

⁶ This weight is on the 10th percentile according to World Health Organization growth charts.

⁷ Adrenaline increases the strength and frequency of heart contractions and increases blood pressure. Aramine (metaraminol) is a vasoconstrictor medication that supports circulation by increasing blood pressure.

29. Baby W was transfused with red blood cells, fresh frozen plasma and cryoprecipitate to correct her severe anaemia and clotting abnormality. Intravenous antibiotics were given to treat for presumed sepsis.
30. Baby W appeared to stabilise but subsequently deteriorated. Her heart rate periodically dropped to 60 beats per minute and she intermittently required cardiac massage to maintain circulation. A chest x-ray identified a right sided pneumothorax.⁸ A right intercostal catheter was inserted to relieve this.
31. Full resuscitation efforts continued for over six hours and were unable to stabilise Baby W. A decision was made to palliate Baby W, as she was unlikely to survive transportation to Melbourne. She was extubated at 5.55am and remained in her mother's arms until she was declared deceased at 6.21am on 13 January 2014. The DHHS Child Protection service was notified of the death.

Post mortem examination

32. On 17 January 2014, Forensic Pathologist Dr Heinrich Bouwer at the Victorian Institute of Forensic Medicine, conducted a post mortem examination. Dr Bouwer completed a report, dated 11 July 2014 in which he formulated the cause of death as '*I(a) Intrauterine pneumonia and meconium aspiration complicating intrauterine growth restriction in the setting of maternal amphetamine use*'.⁹
33. I accept Dr Bouwer's opinion as to the medical cause of death.
34. Baby W's lungs revealed widespread atelectasis, focal intra-alveolar haemorrhage and meconium in the distal airways with an early acute neutrophilic infiltrate.

⁸ A pneumothorax is caused by the escape of air into the space around the lung within the thorax, which causes the lung to collapse. The pocket of air may progressively inflate and compress the heart and opposite lung, leading to circulatory collapse and respiratory failure. An intercostal catheter is a plastic catheter inserted between the ribs to remove the air that has collected.

⁹ Intrauterine pneumonia refers to inhalation of infected amniotic fluid with subsequent establishment of an infection in the lung tissue.

35. Toxicological analysis of post mortem specimens taken from Baby W identified methylamphetamine, amphetamine, morphine, midazolam, desmethylvenlafaxine, metoclopramide and lignocaine.¹⁰

Chronology of Department of Health & Human Services (DHHS) and Bendigo Health involvement

36. DHHS Child Protection (CP) received a report on 8 April 2013 in relation to Baby W's mother's eldest daughter. The report alleged that Baby W's mother was using methamphetamine and Valium¹¹ to excess, rendering her unable to care for her eldest daughter. CP sought a protection order in the Bendigo Children's Court which was granted on 27 June 2013.¹²
37. On 22 August 2013, Baby W's mother advised CP, during a home visit, that she was 20 weeks pregnant. Baby W's mother did not comply with the request to complete a supervised urine drug test within 24 hours.
38. Further phone requests and letters requesting a urine drug screen were ignored prompting an announced home visit by DHS on 4 October 2013. A urine sample was provided by Baby W's mother on 5 October 2013.
39. The results were positive for amphetamine and methamphetamine.¹³ According to DHHS, upon receipt of the results, CP contacted the maternity service at Bendigo Health for information regarding antenatal drug and alcohol care and advice on how CP could support Baby W's mother's pregnancy. Telephone advice was provided by Ms Monique Rosenbauer,¹⁴ the Bendigo Health maternity support worker.¹⁵ Ms Rosenbauer advised that Baby W's mother should book into the hospital as soon as possible and would be considered for care by a caseload midwife through the

¹⁰ Methyl amphetamine and amphetamine indicate maternal use and would not have been given during the resuscitation. Metoclopramide is an antiemetic and desmethylvenlafaxine is an antidepressant metabolite. These were likely from maternal use as they are not used in neonatal resuscitation.

¹¹ The trade name for diazepam, a benzodiazepine.

¹² Statement of Veronica Martin, DHHS, dated 20 October 2015.

¹³ See Dorevitch Pathology Report dated 8 October 2013, Child Protection File. Both results showed levels greater than 2000ug/litre.

¹⁴ Ms Rosenbauer, a social worker, is also a registered nurse and manages the Bendigo Health maternal support program.

¹⁵ The date of this advice is unknown, but according to Veronica Martin's statement it occurred following the receipt on 8 October 2013 of the results of the positive drug screen, so possibly 9 October 2013.

Bendigo Health 'Mamta Program',¹⁶ where she would see the same clinician each visit who would monitor and support her pregnancy.¹⁷

40. On 9 October 2013, following a home visit to Baby W's mother, CP made a report regarding her unborn baby (unborn report).¹⁸ The report was made because of Baby W's mother's admission to methamphetamine use in the early stages of the pregnancy and urine screens which detected her amphetamine use.
41. On 15 October 2013 CP conducted a home visit during which they discussed with Baby W's mother her failure to contact the Bendigo Health maternity service. They discussed the harmful effects of amphetamine and methamphetamine use on an unborn child and again requested her to contact the Bendigo Health maternity service.
42. On 18 October 2013, CP contacted Bendigo Health and made a maternity appointment for Baby W's mother for that day and the following day, in case she was unable to attend. Baby W's mother did not attend either appointment.
43. On 19 October 2013, CP formally advised Bendigo Health maternity services in writing that CP held significant concerns for the health and wellbeing of Baby W's mother's unborn child.¹⁹ However, according to Bendigo Health the first contact by DHHS was on 25 November 2013, when they received an email from CP outlining their concerns.
44. On 15 November 2013 CP conducted a further home visit to Baby W's mother.

¹⁶ Mamta is a caseload model of midwifery care that offers continuity of care throughout pregnancy, birth and the postnatal period. This model of care is offered to women across all risk levels in collaboration with the medical team. Midwives work in small teams of two or three to ensure women have an opportunity to get to know their carer. Women who are booked into the Mamta model will be allocated to a midwife and other team members will be called as back-up midwives.

¹⁷ A more appropriate model of care was the Complex Pregnancy Care program.

¹⁸ *Children, Youth and Families Act 2005* Section 29 states: '... a person may make a report to the Secretary, before the birth of a child, if the person has a significant concern for the wellbeing of the child after his or her birth.' However, if the mother is not willing to co-operate with Child Protection, she cannot be compelled to accept advice and assistance or services to which she is referred. Child Protection may convene a case conference with the relevant professionals to determine the process for re-reporting closer to or at the time of the child's birth.

¹⁹ Statement of Veronica Martin, DHHS, dated 20 October 2015.

45. On 24 November 2013, Baby W's mother was asked to complete a further urine drug test. The results, received on 9 December 2013, were positive for amphetamine and oxazepam.²⁰
46. On 29 November 2013 and 13 December 2013, Bendigo Health Maternity Service program report emailing DHHS informing them that Baby W's mother was still not booked in at Bendigo Health. The maternity program requested a letter from DHHS for the Bendigo Health medical record in case Baby W's mother presented in labour or birthed without having previously made contact with Bendigo Health.
47. On 18 December 2013 CP made two appointments from Baby W's mother to attend an appointment at the Women's Health Centre in Bendigo on 18 and 19 December 2013. Baby W's mother did not attend either appointment.
48. On 18 December 2013 CP conducted a home visit to Baby W's mother.
49. On 19 December 2013 CP wrote to Bendigo Health maternity services advising of the unborn report and that a Pre-Birth case conference '*will be organised in the very near future.*'²¹
50. The first attendance by Baby W's mother at Bendigo Hospital was on 20 December 2013.
51. On 27 December 2013 Baby W's mother advised CP she had attended an ante-natal appointment at Bendigo Health Maternity Service. She was invited to attend a case plan meeting for her eldest daughter on 30 December 2013 however she did not attend. CP attempted to contact Baby W's mother by telephone and text on 31 December 2013, 6 January 2014 and on 7 January 2014. Baby W's mother contacted CP on 8 January advising she and the baby were well. CP arranged for a home visit on 14 January 2014.
52. There is a discrepancy in the evidence as to when CP contacted Bendigo Health. CP appears to have made telephone calls during in October 2013 and indeed spoke to Monique Rosenbauer and scheduled appointments on Baby W's mother's behalf.

²⁰ See Case Note dated 14 January 2014, Child Protection File.

²¹ Letter from Penny Larke, Advanced Child Protection Practitioner, DHHS, to Monique Rosenbauer, Bendigo Health, dated 19 December 2013.

However Bendigo Health states the first contact from CP was by email on 25 November 2013 when they received an email outlining CP concerns.

Review of DHHS and Bendigo Health involvement

53. DHHS was asked to advise why the 'Pre-birth case conference' did not occur. After reviewing the electronic records, DHHS advised

*'there is no case note or indication as to why a pre-birth case conference did not proceed as foreshadowed.'*²²

54. DHHS was also asked if CP complied with DHHS practice and procedure regarding the unborn report made 9 October 2013. DHHS advised:

'In the absence of the co-operation or consent of [Baby W's mother], there was little the Department could do prior to [Baby W]'s birth other than what was undertaken as described by Ms Martin in her statement.

...Whilst the child is in utero, an unborn child report cannot be classified as a protective intervention report and an investigation cannot be undertaken until after the child's birth.

*...Practice guidelines at the time included the need for consent from the mother as the mother's involvement is voluntary, sharing information with reporters, pre-birth case conferences, and the engagement of a practice leader to support decision making. In reviewing the file, it appears that an unborn report was registered and that there was contact with [Baby W's mother] to attempt to facilitate her engagement in ante-natal care. [Baby W's mother] indicated she was receiving support from her general practitioner and advised the Department that she had attended an ante-natal appointment...'*²³

55. The first attendance by Baby W's mother to Bendigo Health was on 20 December 2013.

²² Statement of Kim Grindlay, DHHS, dated 11 July 2018

²³ Statement of Kim Grindlay, DHHS, dated 11 July 2018

56. Ms Rosenbauer commented the focus was on the pregnancy, therefore Bendigo Health did not give active consideration to referring or consulting with a specialist pregnancy drug support service. Further Ms Rosenbauer commented,

'Given the difficulty Bendigo Health staff encountered with the patient's erratic compliance with keeping her appointments and her decision to decline the offer of follow up support from the MSP (Maternity Service Program), any action by Bendigo Health staff to encourage the patient to accept a referral to a specialist drug support agency would be likely to threaten the ongoing engagement of the patient with Bendigo Health. As noted earlier, Bendigo Health was anxious to facilitate that ongoing engagement in the interests of both the patient and her unborn child.

In these circumstances, Bendigo Health did not give active consideration to referring the patient to a specialist pregnancy drug support service.

*...the primary focus of Bendigo Health was to foster and maintain an ongoing engagement between the patient and Bendigo Health in the very short time available following the patient's initial contact. Obtaining the consent and active cooperation of the patient to participation in a case conference was not the primary focus of Bendigo Health.'*²⁴

57. Ms Rosenbauer commented that, given there was no specialist pregnancy drug support service available in Bendigo,²⁵ along with the imminent Christmas holiday break, it was highly unlikely that an appointment with a specialist drug support service would be available if Baby W's mother had elected to accept an offer of a referral. Further, a referral would have required patient consent and co-operation.
58. Bendigo Health noted the potential for breaching confidentiality by involving other health professionals in Baby W's mother's case without her consent. The *Children, Youth and Families Act 2005* imposes limitations particularly regarding information sharing amongst health professionals in the absence of maternal consent.

²⁴ Statement of Monique Rosenbauer dated 4 May 2015.

²⁵ The nearest specialist pregnancy drug support services were physically located in Melbourne at The Royal Women's Hospital, Mercy Hospital for Women and Monash Medical Centre.

59. Bendigo Health noted the situation regarding the exchange of information to be unsatisfactory and a significant impediment to implementation of early intervention initiatives, and supported amendment of the Act.
60. DHHS agreed with Bendigo Health that the law generally does not allow most agencies to share information with each other about vulnerable children the parents' (and if old enough, the child's) consent.
61. DHHS has advised that the *Children Legislation Amendment (Information Sharing) Act 2018* will allow a group of prescribed entities to share information to promote a child's wellbeing or safety. Organisations that provide services to parents, children and families will be able to share information with each other proactively or on request in order to promote a child's wellbeing or safety or manage a family violence risk. Reforms like this one will enable the types of information sharing recommended by Bendigo Health.²⁶
62. With respect to the unborn report, significant limitations exist within the current scope for DHHS involvement in the circumstance of an unborn report. The mother in an 'unborn report' cannot be compelled to comply with advice or referral to services.
63. Many and various steps were taken by CP to ascertain more information about the professionals and services engaged with Baby W's mother up and to including the time of Baby W's birth however all engagement by Baby W's mother was voluntary and not statutorily mandated.
64. DHHS advises that the DHHS Child Protection Manual in relation to unborn reports was updated on 23 November 2017 however the current practices and procedures in relation to unborn reports are substantially similar to those that were in place in 2013.

Substance use and pregnancy

65. The most significant contributory factors to Baby W's death were the absence of ante-natal care and Baby W's mother's drug use during pregnancy.
66. Methamphetamine use is an emerging problem in rural and metropolitan Victoria, with evidence of increasing purity, fatal overdose and arrests for possession and

²⁶ Statement of Mick Naughton, Director, Children and Families Policy, DHHS, dated 16 February 2018.

trafficking in the last decade.²⁷ The number of deaths in Australia associated with methamphetamine use doubled between 2009 and 2015. Toxicity was the most frequent cause of death, but deaths by suicide, accident and natural disease made up more than half of the deaths in this period.²⁸

67. Methamphetamine has a substantial and increasing burden on individual and community health as evidenced by methamphetamine related violence, family breakdown and crime in addition to escalating demands on ambulance services and emergency departments.²⁹
68. The obstetric management of women who are addicted to methamphetamine is clearly challenging. Methamphetamine use during pregnancy is associated with intrauterine growth restriction and increased neonatal and maternal morbidity and mortality secondary to pre-eclampsia, placental abruption, preterm birth and stillbirth.³⁰ The foetus and neonate are less able to clear methamphetamine from their circulation and may be at risk of intoxication and withdrawal after delivery.³¹
69. According to the Royal Australian College of Obstetricians and Gynaecologists' (RANZCOG) endorsed substance use in pregnancy clinical guideline,³² substance use is associated not only with adverse pregnancy outcomes, but with a cascade of health, legal, social, and financial problems that adversely affect the welfare of the mother and child. For these reasons, broad psychosocial assessment is necessary to help

²⁷ Penington Institute, 'Impacts of Methamphetamine in Victoria: A community assessment'. Report for the Victorian Department of Health, June 2014. Accessed 19 November 2014. Available online from www.penington.org.au.

²⁸ Shane Darke, Sharlene Kaye and Johan Dufrou, 'Rates, characteristics and circumstances of methamphetamine-related death in Australia: a national 7-year-study' (2017) 112(12) *Addiction* 2191.

²⁹ Penington Institute, 'Impacts of Methamphetamine in Victoria: A community assessment'. Report for the Victorian Department of Health, June 2014. Accessed 19 November 2014. Available online from www.penington.org.au.

³⁰ Chang G. Overview of illicit drug use in pregnant women. UpToDate. Last updated 17 October 2014. Accessed 19 November 2014.

³¹ Jenner L and Lee N. Treatment Approaches for Users of Methamphetamine: A Practical Guide for Frontline Workers. Australian Government Department of Health and Ageing, Canberra, 2008. Accessed 19 November 2014. Available online from

[http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/8D2E281FAC2346BBCA25764D007D2D3A/\\$File/tremeth.pdf](http://www.nationaldrugstrategy.gov.au/internet/drugstrategy/Publishing.nsf/content/8D2E281FAC2346BBCA25764D007D2D3A/$File/tremeth.pdf)

³² The RANZCOG website provides a list of clinical guideline statements. The advice in this guideline has been formally endorsed by RANZCOG, after it has undergone a formal endorsement process.

understand the reasons for the woman's substance use for the purpose of addressing these issues.³³

Opportunities for prevention

70. Baby W's mother presented with challenging behaviours which related to substance use in pregnancy. She had a lack of engagement in attending regular pregnancy reviews and poor compliance with the re scheduling of pregnancy appointments. Despite this, there were several indicators for risk of harm to allow for the sharing of information and appropriate staff conferencing between DHHS child protection, the Bendigo Health maternity services and the GP to ensure that relevant medical, mental health and psychosocial concerns were exchanged in order to ensure the safety of the unborn baby.³⁴
71. Bendigo Health did not seek advice or consult with specialist alcohol and drug pregnancy services due to concerns with the need for consent to share information, their tenuous relationship with Baby W's mother given her reluctance to engage and the potential to adversely impact their engagement with her. In addition, given the proximity to Christmas, it was assumed an appointment with a specialist service in Melbourne would not be available.
72. Baby W's mother was already referred to Child Protection and a protection application had been granted with respect to her eldest daughter in respect of Baby W's mother's methamphetamine and diazepam use.
73. An 'unborn report' pursuant to section 29 of the *Children Youth & Families Act 2005* was made on 9 October 2013.
74. An expert report was obtained from Dr Yvonne Bonomo, Medical Head of the Women's Alcohol and Drug Service (WADS) at the Royal Women's Hospital to address opportunities for systemic improvements

³³ Minozzi S. Psychosocial treatments for drugs and alcohol abusing adolescents. Cochrane Database of Systematic Reviews. 2011 Issue 3.

Royal Australian College of Obstetricians and Gynaecologists. Clinical Practice Guideline 'Substance Use in Pregnancy.' Endorsed July 2011. Accessed 23 December 2014.

³⁴ Under the Children, Youth and Families Act 2005 reports and referral to Community Child and family Services (Child FIRST) can be made during the pregnancy with an intervention plan developed.

75. In her report she noted much of the onus to engage in antenatal care was put on Baby W's mother and referred to a punitive rather than supportive framework used which focussed on urine drug screens.
76. The death of Baby W presents several opportunities for reviewing and further developing current national,³⁵ state,³⁶ and professional body³⁷ resources to assist those health professionals and services associated with antenatal care and substance use during pregnancy.
77. In particular, those working in a rural setting could benefit from education and the support provided by the state-wide services such as the Women's Alcohol and Drug Service (WADS).³⁸ The WADS team advocate that comprehensive support from a multidisciplinary team is critical in reducing the harms associated with alcohol and drug use in pregnancy. The service is available for telephone consultation and, in particular, an obstetrician is available for case discussion 24 hours a day.
78. In her report, Dr Bonomo included current best practice in the care of pregnant women with past or current substance use and in particular polydrug use and methamphetamines.
79. The death of Baby W presents an opportunity to promote systematic risk assessment of substance use by pregnant women and individualised collaborative care planning.
80. Dr Bonono and Dr Lynch from the Women's Alcohol and Drug Service at the Royal Women's Hospital also gave advice during the course of the coronial investigation regarding the formulation of recommendations to improve the provision of ante-natal care for mothers who use illicit substances during pregnancy.

³⁵ New South Wales Department of Health, 'National clinical guidelines for the management of drug use during pregnancy, birth and the early development years of the newborn' (2006).

³⁶ Relevant Victorian Department of Human Services guidelines.

³⁷ The Royal Australian College of General Practitioners and the Royal Australian and New Zealand College of Obstetricians and Gynaecologists.

³⁸ WADS is the only state-wide drug and alcohol service, providing specialist clinical services and professional support in the care of pregnant women with complex substance use and alcohol dependence. WADS offer access to a 24-hour obstetric service, and utilise a multidisciplinary team approach to advance women's health and well-being and the medical needs of their infants. WADS is located at The Royal Women's Hospital in Melbourne.

Finding

81. I find that Baby W died on 13 January 2014 at Bendigo Hospital from Intrauterine pneumonia and meconium aspiration complicating intrauterine growth in the setting of maternal amphetamine use in the circumstances described above.

RECOMMENDATIONS

Pursuant to section 72(2) of the *Coroners Act 2008*, I make the following recommendations connected with the death:

To Safer Care Victoria

1. That Safer Care Victoria Maternity and Newborn Clinical network replicate the 'Substance Use during Pregnancy' information³⁹ currently located in the electronic neonatal handbook within the electronic Maternity handbook. The 'Substance Use during Pregnancy' information highlights the necessity of assertive follow up by primary care providers,⁴⁰ which includes checking on referrals made on behalf of pregnant women using substances to establish the woman attended the maternity service for pregnancy care. The 'Substance Use during Pregnancy' information includes what to do when a woman has not attended their appointments or pregnancy care.

To the Victorian Department of Health and Human Services

2. That the Victorian Department of Health and Human Services articulates referral pathways to suitable home visitor services or outreach workers to follow up with the pregnant woman at home or wherever she might be found when a she fails to attend pregnancy care. The 'Substance Use during Pregnancy' information includes direction on how and when to share information about high risk individuals to relevant agencies or organisations. This includes an explanation to the woman when a consultation with a specialist service or other support worker is required.

³⁹ The Victorian Department of Health and Human Services. 'Neonatal eHandbook'. 2016. Accessed on 26 February 2018 at www2.health.vic.gov.au.

⁴⁰ The initial point of contact for a substance using pregnant woman may include GPs, child protection, alcohol and drug workers, psychiatrists, midwives and allied health workers.

3. That the Victorian Department of Health and Human Services undertake research to establish the current rate and timing of risk screening for substance use by pregnant women.
4. That the Victorian Department of Health and Human Services support maternity services in educating staff on how to frame the risk enquiry questions for substance use and the appropriate response upon disclosure.
5. That the Victorian Department of Health and Human Services undertake a review to identify opportunities in program delivery to improve early intervention by outreach services for women who are pregnant and use substances. This focus on early intervention will help to improve pregnancy outcomes and prevent the severity of parenting difficulties.

To the Royal Australian College of General Practitioners

6. That the Royal Australian College of General Practitioners develop a RACGP website link to the 'Substance Use during Pregnancy' information.

I direct this finding be published on the Internet.

I direct that a copy of this finding be provided to the following:

Senior next of kin

Dr Patrick Duane, Eaglehawk Medical Group

Tristar General Medical Practice

Ambulance Victoria

Mr Jack Squires, Bendigo Health

Royal Australian and New Zealand College of Obstetricians and Gynaecologists

Dr Theresa Lynch, Royal Women's Hospital

Department of Health and Human Services Maternity & Newborn Services

Adjunct Professor Tanya Farrell, Chair, Consultative Council on Obstetric and Paediatric Mortality and Morbidity

Constable Bianca Cola, Bendigo Uniform, Coroner's Investigator, Victoria Police

Signature:



CAITLIN ENGLISH

CORONER

Date: 5 October 2018

