



# MAGISTRATES COURT of TASMANIA

## CORONIAL DIVISION



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### Record of Investigation into Death (Without Inquest)

*Coroners Act 1995  
Coroners Rules 2006  
Rule 11*

I, Stephen Carey, Coroner, having investigated the death of Katrina Maree Hay

#### **Find that:**

- (a) The identity of the deceased is Katrina Marree Hay;
- (b) Ms Hay died in the circumstances described in this finding;
- (c) Ms Hay died as a result of acute right heart failure (cor pulmonale) following intravenous drug use (crushed tablet injected intravenously);
- (d) Ms Hay died on 4 October 2013 at the Royal Hobart Hospital;
- (e) Ms Hay was born in Hobart on 17 August 1978 and was aged 35 years at the time of her death;
- (f) Ms Hay was a married mother of four children who was unemployed.

#### **Circumstances Surrounding the Death:**

Ms Hay was the daughter of Sally Lynette Hay and Valic Laduzko. She attended high school in Hobart and as a teenager fell pregnant with her first child, Joshua Hay. She finished college (years 11 and 12) via correspondence whilst parenting Joshua. She entered a troubled relationship with Christopher Andrew Allen from around 1997 through until 2010. Mr Allen is a person with a long history of mental health issues, drug abuse and criminal activities. It is believed that during this time Ms Hay's use of drugs increased. Mr Allen was the father of three of Ms Hay's children, she was mother of four: Joshua James Hay (DOB 24/03/1995), Brodie Christopher Allen (DOB 07/06/1999), Makayla Marree Allen (DOB 06/11/2003) and Amber Lee Allen (DOB 06/07/2001).

Ms Hay relinquished care of her children to the State due to her own drug abuse and also the difficult relationship she was in with Mr Allen.

Approximately 18 months prior to her death, Ms Hay commenced a relationship with Christopher Ronald Welsh which started as a friendship when they met at the Drug and Alcohol Services, St Johns Park, New Town. They eventually resided together at 2/6 Gargano Court, West Moonah and both were known to be heavy users of illicit drugs.

In January 2013 Ms Hay received an amount of money as an inheritance from her father's estate following which for a period of time Ms Hay and Mr Welsh went on a "binge" on illicit drugs, spending an estimated amount of between \$10,000.00 and \$15,000.00 on drugs. In

March 2013, which was during the binge period, Ms Hay became aware that she was pregnant and she attempted to reduce the amount of drugs that she was taking.

Following this period, it is reported that Ms Hay “settled down” and she commenced preparations for the birth of her child. Periodic antenatal checks reported that the child’s development was progressing satisfactorily.

On 2 October 2013 Ms Hay reported suffering contraction pains after she consumed her dose of prescribed methadone at Drug and Alcohol Services. She complained of pains across her abdomen and this incident followed a report by Mr Welsh that she had been unwell for the previous 4 days. Mr Welsh concedes that at approximately 6:30pm on 2 October 2013, he obtained a single Xanax tablet from an acquaintance and gave half of this tablet to Ms Hay who swallowed it with some water. After taking the tablet, Mr Welsh says that Ms Hay appeared comfortable and relaxed for approximately 2 to 3 hours. However, after this time she became noticeably unwell and also vomited. Mr Welsh called an ambulance. Whilst awaiting the arrival of the ambulance, Ms Hay complained of difficulty breathing and upon arrival of the ambulance, she actually collapsed onto the floor.

Ms Hay was conveyed by ambulance to the Emergency Department, Royal Hobart Hospital, where it was determined that she was showing signs of hypertension and cardiogenic shock. Ms Hay’s unborn baby suffered foetal distress arising from the effects of Ms Hay’s cardiogenic shock, hypertension and increase in the lactate levels and passed away in utero while at the Emergency Department during the evening of 3 October 2013. Ms Hay’s own condition was also deteriorating and she was transferred to the Intensive Care Unit. Ms Hay’s baby was left in utero with the view that it would be surgically removed when she was in a more stable condition and well enough to withstand the procedure. Ms Hay’s condition did not improve and she passed away at 5:10am on 4 October 2013. Assessment during her stay in the Intensive Care Unit both by echocardiography and clinical evaluations revealed that Ms Hay had suffered right sided heart failure and severe pulmonary hypertension followed by asystolic cardiac arrest leading to death.

Dr Ritchey, Forensic Pathologist, carried out an autopsy, during which an external examination of Ms Hay identified multiple needle puncture marks of the arms and neck. His opinion as to cause of death was acute right heart failure caused by intravenous drug use, in particular crushed tablets being injected intravenously. These findings were consistent with the investigation reports that Ms Hay had an extensive history of illicit drug use including the injection of illicit drugs, she was suffering chronic Hepatitis C and at the time of her death had been on the methadone program for some time

### **Comments and Recommendations:**

The circumstances of Ms Hay’s death are not such as to require me to make any comments or recommendations pursuant to section 28 of the *Coroners Act 1995*.

This tragic outcome highlights again the danger and life threatening risk of injecting tablet form medication. At autopsy Ms Hay’s lungs were shown to be markedly congested and microscopic sections of the lungs revealed florid deposition of microcrystalline cellulose within the small blood vessels and capillaries of the lung. There was also granulomatous inflammation within the lung with pulmonary foreign body giant cells containing refractile microcrystalline cellulose from previous remote episodes of injecting crushed tablets.

These findings are explained by Dr Ritchey in the following terms:

“Microcrystalline cellulose is used as a binder in many tablet form medications. It is insoluble in water. When injected intravenously the material is primarily filtered out within the first capillary bed encountered along the path of blood flow, typically the small blood vessels in the lungs. When chronic, granulomatous inflammatory reaction (foreign body giant cell reaction) attempts to clear the foreign debris. The presence of widespread granulomas within the lung interstitium causes increased pulmonary artery pressure (pulmonary hypertension). Repeated bouts of injection of foreign material may cause abrupt decreased blood flow through the lungs causing marked acute increased pulmonary artery pressure and acute right sided heart failure, a condition termed cor pulmonale. Acute right heart failure was the mechanism of death in this woman.”

Medication in tablet form is therefore totally unsuitable to be injected and is likely to cause the circumstance that led to Ms Hay’s death. All persons and agencies having contact with people with a history of drug abuse who are at risk of or who may well be misusing tablet medication in this form must highlight to those persons the very real risk of death in such practice.

This is the second death relating to intravenous use of tablet form medication in which Mr Christopher Welsh was in a relationship with and participated in illicit drug use activity with the deceased person. I recommend that Tasmania Police and the Alcohol and Drug Service maintain an ongoing oversight of his drug taking activities.

I wish to convey my sincere condolences to the family of Ms Hay.

**Dated:** 9 October 2015 at Hobart in the state of Tasmania

**Stephen Carey**  
**Coroner**