

In the matter of the Coroner's Inquest into the  
death of Joshua Tam at the Lost Paradise  
Festival on 29 December 2018

## Submission to the Coroner on behalf of the Tam family

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# Submission to the Coroner on behalf of the Tam family

## 1 Introduction

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On 29 December 2018, Julie and John Tam were awoken with news that their son Joshua had passed away whilst attending the Lost Paradise festival.

Josh was not the only young person to have died at a music festival last summer. The number of deaths at music festivals in NSW alone last summer has appropriately and fortunately sparked some level of alarm in the community and has at least led to this Inquest where the causes and potential solutions can be canvassed.

It would be all too easy to dismiss the deaths as drug related, and to respond simply by repeatedly encouraging drug abstinence while at the same time ramping up the efforts of drug enforcement agencies to prevent access to drugs at festivals.

However, there are at least 2 reasons why the issues are not so simple:

- 1 Encouraging young people to abstain from drugs can only go so far, as society has seen with encouraging abstinence from other risky activities which young people persist with such as smoking, alcohol, unsafe sex and speeding. Some young people will make poor decisions and take risks at certain periods of their lives. Yes we should tell everyone that there are no safe drugs, and hope that young people won't take risks, but as a civilised society we should do what we reasonably can to try to keep our young people safe from ill-thought decisions during that period of their lives – the reality is that we need a multi-faceted response that educates and encourages young people to avoid taking risks and at the same time minimises the risks and provides a safety net to the extent possible for when inevitably someone's child, brother or sister will make a bad decision;
- 2 While drugs were apparently a factor in the music festival deaths, other factors such as alcohol and the heat were also direct contributors, which then brings into the discussion secondary factors such as the conditions under which the festivals are conducted, the availability of water and shade, the ability to contact others when in distress and the proximity to medical attention.

This submission does not profess to have all the answers. The Tam family hopes that the Coroner will go some way toward identifying at least some of the answers, but in this submission we have outlined for consideration the ideas that Josh's mates have told us that they believe might have made a difference to Josh's fate on 29 December last year.

Whatever the Coroner's recommendations, we believe it is critical that the conditions upon which music festivals are approved and conducted include the recommended harm minimisation measures identified by the Coroner, since it is likely that those deriving the commercial benefit from the festivals should bear significant responsibility for the safety of the event. Imposing conditions on the holding of festivals, including the centralisation of approval for music festivals, is the most direct and effective way in our view to bring about a change in the unacceptable pattern of events at music festivals.

## 2 Summary of key issues

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### 2.1 Key issues for festivals

The key issues which we believe ought to be considered by the Coroner – based on feedback from Josh's mates who have attended music festivals – are:

- (a) Inability to make contact with others (friends, medical authorities) if in distress, due to:
- (1) lack of adequate mobile phone coverage and internet access/reception at festivals. This is probably due to a combination of the lack of phone coverage infrastructure in remote locations and the number of people in attendance attempting to access social media. This is not merely a “first world problem” of being unable to post on social media – it is a safety issue because attendees in need of help (or who are looking for their friends who might be in need of help) are unable to contact each other or the authorities to alert them of a potential issue or track the location of each other. Josh’s mates said they searched for him for some time before finally being able to make phone contact – by this stage the police were answering Josh’s phone at the hospital. Potential solutions to this issue are addressed below under headings 3 and 4;
  - (2) lack of access to electricity or other methods of charging mobile phones leads to depleted phone batteries, which negates or limits the ability of attendees to remain contactable even when the service is available. Potential solutions to this issue are addressed below under heading 5;
- (b) dehydration heatstroke (hyperpyrexia) and over hydration (hyponatraemia). Potential solutions to this issue are addressed below under heading 6 below; and
- (c) increased risks associated with the consumption of alcohol mixed with caffeinated beverages. Potential solutions to this issue are addressed below under heading 7.

We have also made some general suggestions based on observations of other music festivals held around the world.

## 2.2 Education and Pill testing

We believe that education campaigns (similar to effects of smoking, drink driving etc) are an essential part of the solution, including school-based programs and messaging at festivals themselves (at entry and throughout the venue including big screen signage and ‘infomercials” and announcements by on stage artists). We will leave it to the experts to design the effective education programs, but perhaps “Grim reaper” style programs might help persuade kids that no drug is safe, and that ‘recreational’ drug use can still kill you.

We also consider it would be useful to include in the education campaign the increased risks of MDMA toxicity to certain sections of the population such as those who are overweight or of Asian descent (as they can be poor metabolizers of Enzyme CYP2D6 which metabolizes MDMA).

We also consider pill testing could be part of the solution, and ought to be trialed in Australia, as we understand it has had success overseas. It will be important for the public to understand that pill testing is primarily (as it has been explained to us) a driver to encourage youth to speak to come to a location (for pill testing) which will provide an opportunity for a drug educator to speak to the person and inform them there is no safe drug, and that after the test no drugs are deemed ‘safe’ or returned to the person after testing. It is not, as some may think, about categorizing the pills are either ‘safe’ and ‘unsafe’ and simply removing the unsafe pills from circulation.

However, as we understand others who are expert in these areas will be separately making a submission to or are giving evidence to the Coroner, we have not attempted to address these issues in this submission.

## 3 Infrastructure – Reception and Internet Access Solutions

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### 3.1 Temporary mobile coverage enhancements

Adequate mobile phone reception and WiFi reception needs to be available at Music Festivals. It is insufficient that only customers of one network (i.e. Telstra) have access to reasonable mobile coverage. Temporary mobile coverage enhancements include the use of temporary cell towers and personalised Wi-Fi networks in order to boost mobile phone reception.

Such enhancements are already used at major sporting, music and cultural events across Australia, including the Melbourne Grand Prix, New Year's Eve celebrations, Splendor in the Grass, Sydney City to Surf and the Royal Easter Show.<sup>1</sup>

The enhancements were trialed at the Meredith Music Festival in Meredith, Victoria, and also at the Roskilde Festival in Denmark, (capacity 130,000 patrons over 8 days) with positive results (see email exchange in Annexure A):

*"In connection with Roskilde Festival, the telecommunications/data infrastructure of our telecom providers is upgraded so that we allow our participants to have unlimited opportunity to talk and write together. The infrastructure is so strong we do not find it difficult to communicate by phone during the Roskilde Festival."*

### 3.2 Cel-Fi Smart Repeaters (CSRs)

CSRs are powered hardware units which are placed indoors to provide mobile coverage, increased mobile data speeds and extend mobile phone battery life.

A CSR operates by amplifying and disbursing an existing mobile signal within a defined area, enabling mobile devices connected to a particular carrier to receive improved reception. CSRs have been approved by Optus, Vodafone and Telstra for use across their 3G and 4G networks in Australia.

At present, CSRs are aimed toward residential consumers, and therefore the scale of coverage provided would have to be increased dramatically to effectively improve coverage at a festival. If this was achieved, they would provide an alternative to portable towers.<sup>2</sup>

### 3.3 Conclusion on mobile phone connectivity

It is recommended the Coroner consider imposing a mandatory requirement on authorities which approve music festivals that a condition of approval is that one or more of the abovementioned communication solutions are installed to ensure guarantees connectivity between attendees.

The degree to which the above solutions are required will depend on several factors, including the duration of the event, the number of individuals in attendance, the remoteness and size of the event location and the existing mobile phone coverage.

## 4 Other Forms of Communication and Location Services

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An App is the modern way of communicating and it could not be very difficult to require festivals to include functionality within an App for the event to enable patrons to create a group of friends in attendance and be able to communicate with each other and track

<sup>1</sup> <https://www.telstra.com.au/business-enterprise/solutions/professional-media/mobile-special-events>

<sup>2</sup> <https://www.powertec.com.au/improve-mobile-coverage>

each other's locations while at the festivals and push safety notifications out to attendees. Looking after your friends is essential to harm minimization. Below are some commercial available solutions.

#### 4.1 Search Party App

The Search Party App is an application for iOS devices that enable users to contact friends, pinpoint locations (within two metres) and direct dial emergency services. The application has live GPS tracking which provides 10 millisecond updates and also features a Help button which instantly notifies connected users. The App requires mobile phone coverage, however is apparently capable of operating with minimal coverage and in an overloaded network area.

#### 4.2 Fire Chat App

The Fire Chat App is a peer-to-peer networking application which does not require mobile phone coverage or WiFi. The application can be used on aeroplanes, cruises and other locations where network coverage is typically unavailable.

Additionally, the application creates a mesh network using Bluetooth and peer-to-peer WiFi within smartphones to transmit messages and pictures offline between devices (eg when they are within 200 feet of each other). This network grows stronger when more users are participating.<sup>3</sup> The application was previously utilised at the Burning Man festival in Black Rock Desert, USA.<sup>4</sup>

#### 4.3 Wearable technology

We also propose that Personal Safety Devices (**PSDs**) in the form of wristbands that measure body temperature be issued to festival goers by festival organisers as the entry ticket. In high temperatures and crowded environments, particularly when someone is under the influence of alcohol and/or drugs (e.g. MDMA, etc.), it can be difficult to ascertain whether your body temperature is reaching dangerous levels. The proposed PSDs would be designed to monitor body temperatures so festival goers are alerted if their body temperature begins to reach dangerous levels. Although a suitable cost-effective device is not currently available a prototype similar to personal fitness wristbands could be explored which could:

- Enable users to track each other's locations;
- Measure body temperature
- Sends an alert to the wearer if body temperature was elevated – and sent an alert to the wearer's nominated friends in the event the alert was not acknowledged by the wearer.

If available, such wristbands could be issued by festival organisers at the security admission wristband for entry to the festival, if it became mandatory to issue such devices to festival goers. Perhaps this technology could be incorporated into the cashless wristbands issued to enable patrons to purchase alcohol at the festival?

#### 4.4 Conclusion on Apps connecting friends

Festival organisers could be required to include functionality in their event App or advertise such connectivity solutions with the marketing of the festival and on big screens at the festival to encourage attendees to keep in touch with their friends.

<sup>3</sup> <https://www.lifewire.com/best-walkie-talkie-apps-4177105>

<sup>4</sup> <https://venturebeat.com/2015/09/01/firechat-lets-burning-man-2015-attendees-create-their-own-wireless-network-on-the-playa/>

It is recommended the Coroner consider imposing a mandatory requirement on authorities which approve music festivals that a condition of approval is that the organisers advertise peer-to-peer tracking apps and other identified products prior to the festival taking place and throughout the festival. Website such as Moshtix and Ticketek, could be utilised to promote and spread awareness about the features and benefits of downloading the apps to keep festival attendees in touch with each other and safe.

*Note: Neither the Tam family nor any of its known associates has any interest or connection with the apps or products mentioned in this submission – they have simply been identified by research and suggested as some of the options.*

#### 4.5 Buddy System

The buddy system was defined as early as 1920 by Merriam-Webster (2019) as “...an arrangement in which two individuals are paired (as for mutual safety in a hazardous situation)”. It is used primarily as one on one peer support to promote mutual safety and can be used in numerous settings. For example, it is widely used in work places, the military, schools and promoted in safety programs such as the “Daniel Morcombe Foundation” and “safety4kids” organisation.<sup>5</sup>

By providing individual support in large groups, it is more likely that one buddy in the pair will notice signs of change or concern and be able to respond, support and act to protect the other buddy from potential harm. Had Joshua not been disconnected from his friends, who may have noticed a change in his demeanour and sought medical assistance earlier, the outcome may well have been very different. Early intervention can save lives. Promotion of this strategy at festival events should be encouraged.

As a minimum requirement, there should also be emphasis on ‘Rovers’ who essentially act as a ‘buddy’ to patrons, who walk around festivals looking out for patrons who appear unwell and require medical assistance. Similar to the buddy system, ‘Rovers’ is premised on early intervention.

## 5 Alternatives to Phone Chargers

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### 5.1 Portable LED manual hand crank charger USB generator

Portable mini emergency hand-cranking dynamo chargers convert mechanical energy into electric energy. This energy can then be used as a power supply for mobile phones or other digital devices. The hand crank chargers provide an alternative for individuals who do not have access to electricity to charge their mobile phone. Furthermore, the mini size and light weight design means they are easy and convenient to carry around. As a cost of only \$6, these devices ought to be made available for sale at festivals.

## 6 Dealing with heat

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### 6.1 High temperature conditions to be reviewed

The most common cause of MDMA related medical emergencies and fatalities is heatstroke. An average dose of MDMA inhibits the body’s natural thermoregulation and causes a person’s body temperature to rise one degree on average.<sup>6</sup> Hyperpyrexia (a body temperature over 40 degrees Celsius) is one of the most severe complications of

<sup>5</sup> <https://www.danielmorcombe.com.au>.

<sup>6</sup> Liechti, M. E. (2014) Effects of MDMA on body temperature in humans. *Temperature (Austin, Tex.)*, 1(3), 192-200 doi:10.4161/23328940.2014.955433.

recreational MDMA use. Hyperpyrexia may lead to organ failure and death when body temperatures are not immediately lowered.

When other factors common for summer music festivals are involved in MDMA consumption, namely high temperatures during the summer months when festivals are typically held in the open sun at remote, often windless, country locations in crowded spaces and with high levels of physical exertion – the risk increases. On the 29<sup>th</sup> of December, the day Josh died, the temperature in Glenworth Valley where the Lost Paradise Festival was held rose to 38 degrees Celsius. At the very least, festivals should not be held in extremely remote areas or in gullies where there is no breeze and temperatures are likely to be increased.

According to a study published in the Journal of Neuroscience conducted by researchers at the National Institute on Drug Abuse's Intramural Research Program (NIDA IRP),<sup>7</sup> even moderate doses of MDMA saw drug-induced, fatal brain hyperpyrexia during conditions of social interaction and in warm environments. Additionally, moderately hyperpyrexia body temperatures (temperatures above 38.0°C) occur frequently when MDMA is consumed in higher doses, even in the absence of physical activity and high temperatures.<sup>8</sup>

Heatstroke hospitalizations are common at raves, night clubs and music festivals even in the absence of drug consumption.<sup>9</sup> Thus, it is important that safety protocols are established at these kinds of events to address the risks associated with the heat. Reviewing the time of year at which festivals are held, offering plentiful shade (even an increased number of chill rooms), providing free and easily accessible water and electrolytes can all reduce the risk of heatstroke.

There is no information or evidence which suggests that the temperature is taken into account when considering the location of a festival in Australia (unlike festivals held overseas such as the Burning Man which is held in August to avoid the high desert temperatures). Festivals are often allocated as 'seasons'. A common and obvious one is 'Summer Music Festival Season'. It can be hard to get artists over to Australia considering the time, travel and costs. Artists work towards a season so they can travel around to different cities and festivals and get all performances done within a week or two. It is not financially viable to go back and forth from Australia to America/Europe and it typically depends on the artist and getting the best arrangement rather than the temperature and location.

Additionally, the local council plays a key role in determining where festivals will be held. Each local council, in each region, has their own permit process (eg 'entertainment permit', etc.). Therefore, entertainment permits in regional and rural towns may be different to those issued in city locations (eg the Splendour in the Grass festival at Byron Bay in New South Wales versus Rabbit Eat Lettuce festival in Warwick). Generally, the service of alcohol at these festivals requires separate liquor licensing permits. At the very least, Councils in smaller towns and communities need to be assisted with the conditions they ought to be required to impose on the festivals held within their jurisdiction. Preferably, as submitted in section 9 below, the approval process ought to be centralised.

## 6.2 Should festivals be cancelled for safety reasons if the temperature gets too high?

We recommend that the scheduling of Music Festivals during the Australian summer be reviewed. As a minimum, we recommend local government authorities which approve festivals are provided guidance on the temperatures at which it should be required that

<sup>7</sup> Kiyatkin, E. A., Kim, A. H., Wakabayashi, K. T., Baumann, M. H., & Shaham, Y. (2014). Critical Role of Peripheral Vasoconstriction in Fatal Brain Hyperthermia Induced by MDMA (Ecstasy) under Conditions That Mimic Human Drug Use. *The Journal of Neuroscience*, 34(23), 7754 doi:10.1523/JNEUROSCI.0506-14.2014.

<sup>8</sup> Liechti, M. E. (2014) Effects of MDMA on body temperature in humans. *Temperature (Austin, Tex.)*, 1(3), 192-200 doi:10.4161/23328940.2014.955433.

<sup>9</sup> Sferios E, and Wooldridge M, (2019). MDMA-Related Deaths: Stop Calling Them Overdoses. DanceSafe. Retrieved from: <https://dancesafe.org/mdma-related-deaths-stop-calling-them-overdoses>.



festivals need to be halted for the safety of attendees. A step further includes the encouragement of Music Festivals to be held during Winter. In fact, as submitted below, we believe that approval for music festivals ought to be centralised within State Government for consistency (and development of a centre of excellence of experience on such conditions).

Loop Australia have advised that while music festivals have been cancelled due to fire warnings, there is no record of any music festival ever being cancelled or delayed due to high temperature alone due to the risk of attendees overheating.

As part of considerations for what should be required of festival organisers, and how to strike a balance which protects their commercial interests if the festival needs to be cancelled due to high temperatures, we note insurance companies offer several benefits for festival/event cancellation, including “extreme weather”:<sup>10</sup>

YOUR POTENTIAL RISK

Extreme Weather	Staging Collapse	Public Transport Failure	Venue Damage
Terrorism	Technical Failure	Denial of Access	Power Failure
National Mourning	Communicable Disease	Earthquake	Non-Appearance of Key Performer
Damaged Equipment	Crowd Surge	Bushfire	Volunteers

### 6.3 Availability of shade and water

Josh’s mates say that water was selling at the Lost Paradise Festival for \$5 per bottle. They say they did not see any tap water or other free sources of water available in the festival area, despite claims in the Ts&Cs for the festival that free drinking water would be available.

We recommend access to freely available or nominally priced cool water and drinks with added electrolytes at festivals, which is not sold for profit

We also recommend a requirement for there to be a certain square meterage of shade per attendee to ensure that there is plenty of shade for attendees to cool down. The availability of chill out zones which are separate and away from tents which serve alcohol would ideally provide access to:

- (a) free water (or at least water at cost price and not sold for profit);
- (b) basic health care supplies (eg sunscreen, band aids, ear plugs, vomit bags, snack foods, condoms, sanitary products and blankets);
- (c) dedicated space which provides low light space that is free from noise and visual disturbance. Ideally there would be an increased number of ‘chill out’ zones which would have water spray mists keeping those under them cool; and
- (d) harm reduction messaging and resources regarding drug and alcohol safety.

<sup>10</sup> <https://www.ozprize.com.au>,  
[https://www.jltentertainment.com.au/musicandevents?gclid=Cj0KCQjwkoDmBRCCARIsAG3xzI\\_IDOiPvTrGtoe0R9BktXTd0HxUB6cOE37jVV6Q43a3eLwm7nw9b3AaAg8HEALw\\_wcB](https://www.jltentertainment.com.au/musicandevents?gclid=Cj0KCQjwkoDmBRCCARIsAG3xzI_IDOiPvTrGtoe0R9BktXTd0HxUB6cOE37jVV6Q43a3eLwm7nw9b3AaAg8HEALw_wcB),  
[https://www.srgsport.com.au/products?gclid=Cj0KCQjwkoDmBRCCARIsAG3xzI-vHOVvudUOVzKZptMzi8Mp2Ular85AQJWc9BIFPqeOQVrD1Ew8LysaAll7EALw\\_wcB](https://www.srgsport.com.au/products?gclid=Cj0KCQjwkoDmBRCCARIsAG3xzI-vHOVvudUOVzKZptMzi8Mp2Ular85AQJWc9BIFPqeOQVrD1Ew8LysaAll7EALw_wcB).

## 6.4 Excessive water consumption

Although heatstroke and dehydration are the most common cause of MDMA medical emergencies, water retention and subsequent low sodium levels (hyponatraemia) have also contributed to mortality. In environments of high activity such as dance festivals participants may in fact overcompensate and drink too much water. Early warning signs of exercise associated hyponatraemia (EAH) may include bloating, puffiness, nausea, vomiting and headaches. More serious signs and symptoms can develop as a result of brain swelling and include altered mental state such as confusion, agitation, seizures, breathing difficulties due to fluid on the lungs, loss of consciousness and death.<sup>11</sup>

It is difficult to state a specific volume for everyone due to gender, body weight and environmental circumstances. However, the average water intake is recommended at one glass (~250 millilitres) every hour when not active and two glasses every hour when active. Kidneys can only excrete a maximum of 1 litre per hour so exceeding this amount risks hyponatraemia.<sup>12</sup> Drinking sports drinks with added electrolytes may not reduce the risk of hyponatraemia if excessive amounts of water are still consumed.

New South Wales Health recommended that:

- (a) for single day events there should be:
  - (1) minimum of 2 litres of free drinking water available per person or at a rate calculated at 500mL per hour, whichever is greater; and
  - (2) one water outlet per 500 people. A water outlet is an access point to a drinkable water source. For example, there may be multiple water outlets per water source.
- (b) For overnight or camping events: the suggested requirements are 20 litres of water per person, per day, 4 litres of which are specifically potable water for drinking.

These requirements may vary depending on previous experience and weather. In locations where potable water supplies are limited, non-potable water may be utilised for toilet flushes, and signs should reflect this so patrons are aware.

## 6.5 Recommendations to limit excessive water consumption

Harm reduction strategies such as education on appropriate water intake levels are essential to prevent hyponatraemia complications from MDMA use. Expert advice should be sought to determine more accurate recommended quantities. Secondly, increased education and equipping medical personnel on site at festivals to manage complications serves to reduce excessive water consumption.<sup>13</sup> Swift identification of MDMA related hyponatraemia symptoms as listed above is required combined with the availability of hypertonic fluid resuscitation to reduce brain oedema.

## 6.6 Emergency health care

Access to on-hand emergency and critical care trained health care professionals is required at Music Festivals. The minimum requirement should include those trained in the management of airways and intubation as well as drug overdose, particularly MDMA. It is insufficient to simply have first aid officers on site. Triage abilities are essential and should be required as part of the medical team at festivals.

<sup>11</sup> Baggott, M. J., Garrison, K. J., Coyle, J. R., Galloway, G. P., Barnes, A. J., Huestis, M. A., & Mendelson, J. E. (2016). MDMA Impairs Response to Water Intake in Healthy Volunteers. *Advances in Pharmacological Sciences*, 2016, 11 doi:10.1155/2016/2175896.

<sup>12</sup> Semeco A. (2017). What happens if you drink too much water? *Medical News Today*. Retrieved from: <https://www.medicalnewstoday.com/articles/318619.php>.

<sup>13</sup> Moritz, M. L., Kalantar-Zadeh, K., & Ayus, J. C. (2013). Ecstasy-associated hyponatremia: why are women at risk? *Nephrology Dialysis Transplantation*, 28(9), 2206-2209 doi:10.1093/ndt/gft192.

Regulations should be strengthened regarding not only the qualifications of doctors but also the medications that doctors onsite should have on hand, including the quantities likely required per numbers in attendance. It should not be left to the discretion of doctors hired or contracted to provide emergency care at a festival event, who have limited parameters at their disposal.

Another feature of medical tents should be the ability to cool down patients who present with high temperatures, as those affected by MDMA are likely to be. Ice baths or refrigeration trucks, perhaps even intravenous means to cool the patients quickly could save lives. Our primary concern for Josh is that when he finally did present to medical assistance they didn't have the means to stabilise his temperature prior to transporting him in an ambulance – we understand that cooling blankets had little to no effect on reducing his temperature by the stage he had reached. Would rapid cooling baths or refrigerated vehicles have stabilised his temperature sufficiently to avoid him going into cardiac arrest? We will likely never get the answer to this.

Moreover, access to on-hand emergency health care can also be affected by the presence of police in the vicinity of medical tents. The presence of police does not create a sense of trust in patrons to seek medical assistance during the event, particularly if the patron is under the influence of an illegal drug.

Education should also be provided to those (e.g. police officers, etc.) who assist on-hand emergency health care professionals with patients who present as under the influence of illicit substances such as MDMA. As a minimum the education should include the fact that restraining a patient under the influence of MDMA puts the body under considerably more pressure and greatly increases the body temperature of an already overheated patient. In turn, this leads to increased potassium levels and cardiac arrest. It is imperative that sedation (e.g. via intramuscular ketamine) is adopted as a first line response until the person can be managed without physical restraint.

The location of festival events in close proximity to emergency health facilitates for urgent transfer and further sodium level testing and supportive treatment is also critical. Accordingly, the location of the venue at which the music festivals are licensed to be held should also be the subject of review (eg no festival to be held more than say 5km from a regional hospital).

Registered ambulance services (such as St Johns Ambulance) in addition to private emergency medicine contractors ought to be present on site throughout the festival, not only for events with over 10,000 patrons. The regulations around how many patrons need to be in attendance prior to requiring an ambulance be in attendance should be lowered. Private medical contractors ought to have a prescribed minimum level of experience and be trained in the sort of emergencies which experience has informed the profession will occur regularly at festivals.

In circumstances where the location of a festival event remains remote, event organisers should consider having access to Careflight helicopters to assist with evacuating critically ill patients.

## 7 Alcohol Mixed With Caffeinated Beverages at Festivals

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### 7.1 Risks

A World Health Organisation narrative review in 2014 looked at the risks, adverse health effects, and policy options of energy drink consumption.<sup>14</sup> Primarily the risks are related to caffeine overdose that can cause cardiac symptoms of fast heart rate, high blood

<sup>14</sup> Breda JJ, Whiting SH, Encarnação R, Norberg, S., Jones, R., Reinap, M., & Jewell, J. (2014, October 14) Energy drink consumption in Europe: a review of the risks, adverse health effects, and policy options to respond *Frontiers in Public Health*. Retrieved from: <https://www.frontiersin.org/articles/10.3389/fpubh.2014.00134/full>.

pressure; electrolyte disturbance due to dehydration and vomiting; central nervous system stimulation, seizures and sometimes death.

Mixing alcohol with energy drinks (AmED) is common practice with young adults (71%).<sup>15</sup> This can be especially prevalent and problematic at multi-day music festivals, where attendees are encouraged to party for days on end. Drinking large quantities of caffeine containing energy drinks reduces drowsiness providing the opportunity to continue drinking alcohol. The caffeine gives the consumers a false positive perception about the effects of alcohol but does not reduce the impairment effects associated with alcohol such as reaction time and motor coordination.<sup>16</sup>

Research in Australia also links AmED with high-risk behaviour such as fighting, drink-driving and consumers more likely to have a higher breath alcohol concentration and use illicit drugs.<sup>17</sup> A more recent survey in NSW of over 3000 young adults showed approximately 40% of drinkers reported AmED use in the past 12 months. One sixth of respondents drinking in the past 12 hours also reported AmED consumption. AmED users were more likely to be younger, male and to conduct riskier substance use practices.<sup>18</sup>

## 7.2 Recommendations

We recommend the Coroner consider banning or limiting the sale or distribution of the offending caffeinated beverages at music festivals, to be replaced with drinks that contain high levels of electrolytes.

Alternatively, authorities which approved festivals ought to require festival organisers to promote awareness of individual energy drink consumption and potential risks in material associated with and at music festivals. Tools available on websites such as <https://www.caffeineinformer.com> are free, easily accessible and easy to use.

# 8 Safety Measures Used at Major Music Festivals

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## 8.1 Amnesty Bins

Renowned festivals; Coachella (America), Tomorrowland (Belgium) and Glastonbury Festival (UK), in conjunction with the respective police departments at the festivals, allow “amnesty boxes” or “amnesty bins” at the entrances of the festivals. The amnesty bins allow people to dispose of drugs and other contraband items. Should the festival goer dispose of the item in these boxes they are not subject to penalties, whether disciplinary (ie in the form of being disallowed entrance to the event) or legal (ie offence related action).<sup>19</sup>

By way of example, in March 2016, Los Angeles County adopted measures designed to improve the safety at “mass gathering events.” These include limiting events to people over 18, placing “amnesty boxes” at the entrances for people to give up illegal substances without penalty, and requiring organizers to provide educational material on

<sup>15</sup> Zucconi S, Volpato C, Adinolfi F, Gandini E, Gentile E, Loi A, et al. Gathering Consumption Data on Specific Consumer Groups of Energy Drinks. Parma: Supporting Publications (2013).

<sup>16</sup> Varvil-Weld L, Marzell M, Turrissi R, Mallett KA, Cleveland MJ. Examining the relationship between alcohol-energy drink risk profiles and high-risk drinking behaviors. *Alcohol Clin Exp Res* (2013) 37:1410–6 doi:10.1111/acer.12102.

<sup>17</sup> Pennay, A., Lubman, D., & Miller, P. (2011). Combining energy drinks and alcohol - a recipe for trouble? *Aust Fam Physician*, 40(3), 104-107.

<sup>18</sup> Pennay, A., Peacock, A., Droste, N., Miller, P., Bruno, R., Wadds, P., . . . Lubman, D. (2018). What do we know about alcohol mixed with energy drink (AmED) use in Australia? Expanding local evidence. *Public Health Research & Practice*, 28(3).

<sup>19</sup> Ali Tadayon, 'Coachella 2017: How amnesty boxes keep drugs out and people safe according to police' *The Press Release* (Online) April 21 2017 < <https://www.pe.com/2017/04/21/coachella-2017-amnesty-boxes-keep-drugs-out-and-people-safe-police-say/>>.

the dangers of alcohol and drug use. If event organizers fail to meet the requirements, the county will have the authority to shut down the event.<sup>20</sup>

A copy of the adopted measures can be found here - <http://file.lacounty.gov/SDSInter/bos/supdocs/101786.pdf>

None of this is to say that drugs are tolerated at overseas music festivals. For example, Tomorrowland also has a strict zero – tolerance drug policy, yet allows the use of amnesty bins at the festival. Article 17 of the General Terms and Conditions for Tomorrowland states that:

*17.1 Tomorrowland applies a Zero -Tolerance policy concerning drugs*

...

*17.3 All visitors will be given the opportunity to leave any drugs in Special amnesty bins before entering the Festival Grounds without facing any (legal) consequences.<sup>21</sup>*

Dr Garrett McGovern, a specialist in addiction treatment at the Priority Medical Clinic in Dublin, Ireland, explained two functions of “amnesty bins”. Firstly, often the fear of getting searched by police or security at festival entrances causes drug users to consume the full quantity of drugs they have on them. This could lead to serious health issues or a potential overdose. However, with the amnesty boxes the patron can now safely dispose of their drugs, without penalty.<sup>22</sup>

Secondly, the substances placed in the amnesty boxes can then be analysed to ascertain what the actual level of drug is, in terms of purity. It also allows a “real time feel” for what type of drugs are at the festival. As Harm Reduction Victoria Chairman Bill O’Loughlin said “it gives them [police] unique access to the drugs that are in circulation.”<sup>23</sup> Consequently, this knowledge strengthens police and emergency services responses to certain incidents with greater clarity of the current pattern of drug use at the festival.<sup>24</sup>

Amnesty Boxes have been effectively implemented in Canada, the US and the UK.<sup>25</sup>

Currently within the Australian music festival scene, amnesty bins are **NOT** provided to festival goers. Festivals such as ‘Splendour in the Grass’, ‘Falls Festival’ and ‘Groovin in the Moo’ do not give patrons the ability to self-monitor and safely dispose of banned items before entering the festival in this manner.

The discussion around the use of “amnesty bins” at Australian festivals has been prevalent for many years now. In 2016, Harm Reduction Victoria Chairman Bill O’Loughlin said amnesty bins were a good “halfway measure” and stated that the amnesty bins could help prevent drug related overdoses.<sup>26</sup> Australian Drug Foundation

<sup>20</sup> <https://www.promises.com/blog/could-amnesty-boxes-help-curb-music-festival-drug-overdoses/>

<sup>21</sup> <https://www.tomorrowland.com/en/festival/tickets/general-terms-conditions>

<sup>22</sup> Hajar Akl, ‘Special drug ‘amnesty bins’ at festivals and clubs proposed’, *Irish Times* (Online) 29 August 2017 <<https://www.irishtimes.com/culture/music/special-drug-amnesty-bins-at-festivals-and-clubs-proposed-1.3202615>>.

<sup>23</sup> Benjamin Preiss, ‘Pressure mounts to introduce drug amnesty bins at festivals’ *The Age* (Online) 31 January 2016 <<https://www.theage.com.au/national/victoria/pressure-mounts-to-introduce-drug-amnesty-bins-at-festivals-20160131-gmhwoi.html>>.

<sup>24</sup> Hajar Akl, ‘Special drug ‘amnesty bins’ at festivals and clubs proposed’, *Irish Times* (Online) 29 August 2017 <<https://www.irishtimes.com/culture/music/special-drug-amnesty-bins-at-festivals-and-clubs-proposed-1.3202615>>.

<sup>25</sup> Hajar Akl, ‘Special drug ‘amnesty bins’ at festivals and clubs proposed’, *Irish Times* (Online) 29 August 2017 <<https://www.irishtimes.com/culture/music/special-drug-amnesty-bins-at-festivals-and-clubs-proposed-1.3202615>>.

<sup>26</sup> Benjamin Preiss, ‘Pressure mounts to introduce drug amnesty bins at festivals’ *The Age* (Online) 31 January 2016 <<https://www.theage.com.au/national/victoria/pressure-mounts-to-introduce-drug-amnesty-bins-at-festivals-20160131-gmhwoi.html>>.

chief executive John Rogerson said he would also support trialling amnesty bins at festivals.<sup>27</sup>

While in February 2019, the NSW Government released the 'Guidelines for Music Festival Organisers: Festival Harm Reduction' (**Guidelines**). The Guidelines recommend the use of secure medical waste bins in the onsite medical centre to enable people to safely throw out unwanted drugs or drugs they may have found. The Guidelines also state that these bins should be in a discreet area to provide privacy and clearly labelled as clinical waste bins.<sup>28</sup> These examples highlight the multiple ways "amnesty bins" can be implemented into the Australian Music Festival scene.

Throughout Australian music festivals, Police are present at all times during the event. Therefore, incorporating the use of "amnesty bins" at the entrance to festivals would be an inexpensive and simple task. The amnesty bins allow:

- (a) a festival goer to safely dispose of their drugs instead of consuming large amounts at once, and
- (b) drug experts and officials to analyse the contents of substances deposited into the bins.

However, the biggest hurdle to implementing amnesty bins at Australian music festivals is legislation. Currently in NSW under section 10 of the *Drug Misuse and Trafficking Act 1985* (NSW), a person who has a prohibited drug in his or her possession is guilty of an offence. In other words, if a festival goer puts prohibited drugs in the amnesty bins, the police must arrest them for possession. Therefore, legislative reform would be required to effectively implement "amnesty bins" in Australian festivals.

Nonetheless "amnesty bins" are currently implemented at overseas festivals and this safety mechanism is a low cost but highly effective protocol which could be implemented into the Australian music festival scene.

## 8.2 Surveillance

One of the key safety procedures implemented at Coachella is the widespread use of surveillance. To ensure the safety of patrons and staff at the Coachella Music Festival, the entire venue is under video surveillance. There cameras placed throughout the festival for the safety of attendees and multiple layers of security involved in the event, all of which have different responsibilities.<sup>29</sup> There are also surveillance cameras situated in trees at Coachella which are used to monitor patron behaviour.

Similarly, Tomorrowland has used IP video surveillance cameras to ensure the safety of artists and attendees. The security specialists (DCNS) engaged by the organisers of Tomorrowland (ID&T Belgium) installed a fiber optic backbone network and other Wi-Fi networks to control the cameras from a central control point. The Communications Director of ID&T Belgium explained that the use of a central control point and Panasonic surveillance cameras enabled all events at the festival to be quickly detected and responded to. A good network with reliable equipment is of great importance to provide assurance of safety and control in a festival. In 2014, Panasonic provided 30 IP video surveillance cameras which were used at the Tomorrowland festival,<sup>30</sup> and is an example of a music festival working with a surveillance company to ensure the safety of attendees.

A further example of the use of surveillance as a safety procedure is the Ultra Music Festival in Florida. Since 2016, Ultra Music festival has implemented a surveillance

<sup>27</sup> Benjamin Preiss, 'Pressure mounts to introduce drug amnesty bins at festivals' *The Age* (Online) 31 January 2016 <<https://www.theage.com.au/national/victoria/pressure-mounts-to-introduce-drug-amnesty-bins-at-festivals-20160131-gmhwoi.html>>.

<sup>28</sup> <https://www.health.nsw.gov.au/aod/Publications/music-festival-guidelines.PDF> )

<sup>29</sup> Mary Carreon, 'Coachella sets the standard of security in high risk festival environment', *OC Weekly* (Online) April 16 2018 < <https://ocweekly.com/coachella-sets-the-standard-of-security-in-high-risk-festival-environment-2>>.

<sup>30</sup> <https://www.digitalsecuritymagazine.com/en/2014/07/23/el-festival-de-musica-electronica-tomorrowland-se-protege-con-camaras-ip-de-panasonic>

procedure at the entry points to the festival. A combination of surveillance cameras were installed with recording and playback options. This footage viewed at an onsite Command Centre with the entire event recorded. The effectiveness of this safety measure is evidenced by a considerable decrease in arrests, with almost a 50% reduction in arrests at the 2017 event. Ultra Music festivals Chief of Security stated that the use of the surveillance has “provided the Ultra Music festival Command Centre the ability to view the entry points and determine problems quickly, enabling resources to be directed when needed”. This safety mechanism allowed the festival to link the video capabilities with their onsite security plan, resulting in improved situational awareness and their safest event yet.<sup>31</sup>

All these festivals implement a comprehensive surveillance procedure as a mechanism to ensure the safety of festival goers. The comprehensive surveillance allows security observers to detect any potential safety risks and react with immediacy.

Surveillance is currently already implemented at many Australian Music Festivals. Last year Australian music festivals ‘Splendour in the Grass’ and ‘Falls Festival’, held at Byron bay, both installed CCTV equipment throughout the festival. One of the main purposes of the installation was to support medical and security staff in identifying, highlighting and directing key personnel when incidents occurred at the festival.<sup>32</sup>

We recommend that the Coroner consider whether surveillance at music festivals for safety reasons ought to be mandated as part of the conditions of approval.

### 8.3 Emergency response procedures

The Island Vibe Festival is a local example of effective emergency response procedures being included in the Redland Bay Council ‘Approval Conditions’. Among other ‘Approval Conditions’, the organisers of Island Vibe Festival were required to ensure:<sup>33</sup>

- (a) suitable qualified staff, in adequate numbers, were employed to ensure the safety of the public including to supervise the types of activity carried out during the event;
- (b) appropriate communication equipment and systems were in place to manage an emergency situation (eg loss of power supply, etc.);
- (c) patrons had a continuous and adequate supply of potable water at all times to all bathrooms, food stalls, toilets and drinking water facilities and any other facility that formed part of the entertainment event operation;
- (d) adequate access to and from the entertainment event for emergency service vehicles at all times;
- (e) gates for emergency vehicles are kept free from obstruction and staffed at all times; and
- (f) all first aid points are positioned in appropriate locations enabling any serious injuries to be immediately be dispatched by ambulance to the nearest hospital.

Coachella festival has some of the most effective emergency response procedures of any festival around the world. The way Coachella officials respond to emergency incidents is determined by a federal protocol for private and public sector agencies. This was implemented by President George W. Bush when he issued a Homeland Security Presidential Directive to establish a National Incident Management System, which led to the creation of a State Emergency Management System, known collectively NIMS SEMS.<sup>34</sup>

<sup>31</sup> [https://www.securityworldmarket.com/na/News/Business-News/indigovision-keeps-party-goers-safe-at-miami-music-festival#.XKPMc35S\\_dc](https://www.securityworldmarket.com/na/News/Business-News/indigovision-keeps-party-goers-safe-at-miami-music-festival#.XKPMc35S_dc)

<sup>32</sup> <https://catchcam.com.au/electronic-security-at-splendour-in-the-grass-byron-bay-parklands/>

<sup>33</sup> Redland City Council, ‘Certificate of Approval’ of Island Vibe Festival, 25 October 2017; Redland City Council, ‘Certificate of Approval’ of Island Vibe Festival, 24 October 2018.

<sup>34</sup> <https://www.usatoday.com/story/life/music/2018/04/13/coachella-drones-security-plans/513940002/>



This protocol ensures that police can talk to fire personnel, fire personnel can talk to the ambulance operators, and the ambulances can talk to the police.<sup>35</sup> However, the organisers of Coachella take this communication protocol to another level, enabling the first responders to an emergency situation to communicate with their private security personnel at the festival.

Currently in NSW emergency management protocols are governed by the NSW Health Plan (**Health Plan**). The Health Plan was developed pursuant to the *State Emergency and Rescue Management Act 1989* (NSW). The NSW Government's 'Guidelines for Music Festival Organisers: Festival Harm Reduction' (**Harm Reduction Guidelines**) sets out the current emergency escalation protocols. The Harm Reduction Guidelines list three separate emergency situations:

- (g) A **health incident** is a localised event, either accidental or deliberate, which may result in death or injury, which requires a normal response from an agency, or agencies from one or more of the components of NSW Health.
- (h) A **major incident** is an incident involving, or having the potential to involve, a large number of casualties which can be adequately managed by the available resources but which requires a significant and coordinated response involving those resources.
- (i) A **health emergency** is as an emergency, due to actual or imminent occurrence, which endangers or threatens to endanger the safety and health of persons in the state of NSW, and requires a significant and coordinated whole-of-health response.<sup>36</sup>

If a health incident occurs, the NSW Ambulance Forward Commander has scope to escalate the situation initially to the NSW Ambulance Commander or via the NSW Ambulance Control Centre.

If a major incident or health emergency occurs or is evolving, the NSW Ambulance Forward Commander will escalate to the NSW Ambulance Commander, who may contact the State Health Services Functional Area Coordinator (**HSFAC**). The State HSFAC is responsible for the management of health emergencies, as described in the NSW Health Plan.

In the case of a major incident or health emergency, the NSW Ambulance Forward Commander will assume onsite command of the medical response under the delegation of the State HSFAC. This is to support coordination of resources and effective management of the emergency.<sup>37</sup>

These emergency procedures make no mention of the ability of multiple first responders, such as ambulance, fire and police to communicate between them, as is the case at Coachella. Therefore, the Coroner may consider the possibility of all emergency services being able to effectively and efficiently talk amongst each other, as well as with the private security personnel of the particular festival, in order to respond to emergency situations such as drug related incidents.

## 9 Approval process for music festivals

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It seems that at present music festival approvals are handled at a local government level, which leads to inconsistency of approaches and the risk that "best practice" from past experience is not universally applied.

<sup>35</sup> Bruce Fessier, 'Coachella using drone, security plans enacted after 9/11 to prevent Las Vegas-type incident' *The Desert Sun* (Online) April 13 2018 < <https://www.usatoday.com/story/life/music/2018/04/13/coachella-drones-security-plans/513940002/>>.

<sup>36</sup> <https://www.health.nsw.gov.au/aod/Publications/music-festival-guidelines.PDF>.

<sup>37</sup> <https://www.health.nsw.gov.au/aod/Publications/music-festival-guidelines.PDF>.



We submit that a centralised authority for music festivals ought to be established, presumably within State Government.

All additional costs associated with the harm minimisation measures ought to be funded by the festival organiser. While those costs may ultimately be passed through to attendees in the event price, market forces will be at play.

## 10 Prevention mechanisms

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### 10.1 Limiting access to illicit substances

An App is the modern way of communicating and in some cases purchasing illicit substances. Identification and subsequent shut down of phone apps such as Wicker, etc. which appear to support the purchase of drugs anonymously and via GPS, is a prevention mechanism which can easily be adopted.<sup>38</sup>

### 10.2 Decriminalisation of 'personal use'?

The decriminalisation of 'personal use' illicit substances takes the emphasis off the patron and shifts the focus to dealers. It has the added benefit that the music festival event does not have to advertise as drug free, or that a patron if found with drugs on them or under the influence of drugs will lose the cost of their entry ticket (e.g. in some cases a \$400 entry ticket).

In turn, patrons are more likely to present to medical tents without fear of reprimand in anyway.

Empirically, we understand that decriminalisation has been shown by evidence not to increase but minimise harm due to removing the taboo of discussion around drug use and greatly increasing users accessing health assistance when they feel unwell.<sup>39</sup>

## 11 Conclusion

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We appeal the Coroner addresses the key safety problems and broader public policy issues which have contributed to drug related injury and deaths at music festivals in New South Wales. A finding which requires State and local councils to impose mandatory festival conditions will limit several small, but significant factors, each which contribute to drug related injury and death.

From a broader public policy perspective, a Coronial finding which encourages legislative reform in this sector is a progressive step towards education and changing the conversation regarding how we as a civilised society do whatever is reasonably within our power to protect our young people from harming themselves through poor decisions they make during a certain period of their lives.

**John Tam**

**Julie Tam**

*Loving parents of Joshua Tam*

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<sup>38</sup> <https://www.brisbanetimes.com.au/national/queensland/queensland-drug-dealers-using-messaging-app-wickr-20150811-givn5o.html>.

<sup>39</sup> Dr Caitlin Hughes.