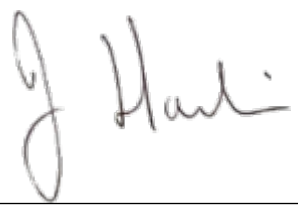
Regulation 28: REPORT TO PREVENT FUTURE DEATHS

NOTE: This form is to be used **after** an inquest.

	REGULATION 28 REPORT TO PREVENT DEATHS **THIS REPORT IS BEING SENT TO:** **1 Chief Coroners Office** **2 East Midlands Ambulance Service (Chief Executive)** **3 Kettering General Hospital (Chief Executive)**
1	**CORONER** I am Jean HARKIN, Assistant Coroner for the coroner area of Northamptonshire
2	**CORONER'S LEGAL POWERS** I make this report under paragraph 7, Schedule 5, of the Coroners and Justice Act 2009 and regulations 28 and 29 of the Coroners (Investigations) Regulations 2013.
3	**INVESTIGATION and INQUEST** On 9th December 2021 I commenced an investigation into the death of Alfie stone aged 12 years. The inquest concluded on 10th December 2021. the medical cause of death was: 1.a Hypoxic/ischaemic brain injury and multiple organ failure 1.b Epilepsy My narrative conclusion was that Alfie died from hypoxia and multiple organ failure following status epilepticus and inadequate oxygenation prior to hospital admission.
4	**CIRCUMSTANCES OF THE DEATH** Alfie Stone had a history of epilepsy, He had not had a seizure for over three years and he had stopped taking anti-epileptic medication in September 2019. At 21:50 hours on the 3rd of December 2019 he had a short seizure which lasted a few minutes Followed by a second prolonged seizure at 22:10 hours. He was attended to by paramedics from East Midlands Ambulance Service and he was admitted to Kettering General Hospital NHS Trust emergency department at 22:50 hours. In the emergency department he was treated for status epilepticus but continued to have seizures and was oxygenated, sedated, intubated, and ventilated. He did not respond to advanced paediatric life support treatment and subsequently developed multi organ failure. By 14:30 hours on the 4th of December 2019 a CT scan showed extensive cerebral oedema with brain stem coning and the decision was made to withdraw intensive care therapy, he passed away at 21:50 hours on the 4th of December 2019.
5	**CORONER'S CONCERNS** Evidence was heard at the inquest that paramedics were unable to deliver oxygen to Alfie for more than 15 minutes due to their concern that continuous fitting movements made it difficult for them to do so. In addition, the paramedics were not trained in the use of buccal midazolam, an anti-epileptic drug that can be given into the skin between teeth and cheek (side of mouth), onto the gums. Evidence was heard from a consultant that this method should be used by paramedics when it is difficult to administer rectal or IV medication due to continuous fitting movements and that this medication could be more effective in the early stages of fitting as it is a more effective medication than diazepam.

	The pathologist gave evidence stating that interruption of oxygen supply for more than five minutes was sufficient to cause a global hypoxia. He also found evidence at post-mortem examination of aspiration ("evidence of food contents in the lung"). A Paramedic confirmed that had he known this then he would have performed suction to prevent aspiration. **BRIEF SUMMARY OF MATTERS OF CONCERN** (1) Apparent lack of training of paramedics in the use of Buccal Midazolam (2) No other form of oxygenation attempted such as bagging or the child being taken earlier to the ambulance to secure and deliver oxygen (3) No suction attempted and the question was not asked of the parents as to whether the child had vomited. (4) No evidence of training to the paramedics who attended and gave evidence following an independent Serious Incident Report and its **agreed** recommendations (5) East Midlands Ambulance Service not accepting the recommendation 3 within the report to carry and administer Buccal Midazolam when necessary.
6	**ACTION SHOULD BE TAKEN** In my opinion action should be taken to prevent future deaths and I believe you (and/or your organisation) have the power to take such action.
7	**YOUR RESPONSE** You are under a duty to respond to this report within 56 days of the date of this report, namely by February 24, 2022. I, the coroner, may extend the period. Your response must contain details of action taken or proposed to be taken, setting out the timetable for action. Otherwise, you must explain why no action is proposed.
8	**COPIES and PUBLICATION** I have sent a copy of my report to the Chief Coroner and to the following Interested Persons: EAST MIDLANDS AMBULANCE SERVICE and the LOCAL SAFEGUARDING BOARD (The deceased was under 18 Years of Age). I have also sent it to Kettering General Hospital who may find it useful or of interest. I am also under a duty to send a copy of your response to the Chief Coroner and all interested persons who in my opinion should receive it. I may also send a copy of your response to any person who I believe may find it useful or of interest. The Chief Coroner may publish either or both in a complete or redacted or summary form. He may send a copy of this report to any person who he believes may find it useful or of interest. You may make representations to me, the coroner, at the time of your response about the release or the publication of your response by the Chief Coroner.
9	**Dated: 14/01/2022** 

	Jean HARKIN **Assistant Coroner for** **Northamptonshire**