CANADA
Province of Alberta

Report to the Minister of Justice and Attorney General Public Fatality Inquiry

Fatality Inquiries Act

WHEREAS a Public Inquiry was held at the Provincial Court Alberta, Calgary Courts Centre

in the Calgary (City, Town or Village) of _____ (Name of City, Town, Village), In the Province of Alberta,

on the 13-15th day of June, 2011 (year), (and by adjournment

on the 24-26th day of August, 2011 (Year),

before The Honourable H.A. Lamoureux, a Provincial Court Judge,

into the death of Gordon Bowe (Name in Full) 30 (Age)

of Calgary, Alberta (Residence) and the following findings were made:

Date and Time of Death: November 2, 2008 1700 hours

Place: Peter Lougheed Centre, Calgary, Alberta

Medical Cause of Death:
("cause of death" means the medical cause of death according to the International Statistical Classification of Diseases, Injuries and Causes of Death as last revised by the International Conference assembled for that purpose and published by the World Health Organization – The Fatality Inquiries Act, Section 1(d)).

Excited Delirium Syndrome as a consequence of cocaine toxicity.

Manner of Death:
("manner of death" means the mode or method of death whether natural, homicidal, suicidal, accidental, unclassifiable or undeterminable – The Fatality Inquiries Act, Section 1(h)).

Accidental

Circumstances under which Death occurred:

On November 1st 2008 City Police were called to a suspicious person complaint specifically a possible break and enter and an unknown male who was acting strangely. There was a complaint of a broken window glass on the residence and a concern that a break and enter had occurred. Officer M. Johnston, arrived at the scene of the complaint and observed a male inside the house with the broken window who was engaged in a struggle with other police officers who were endeavouring to restrain him. The male later identified as Mr. Bowe was observed on his back with a fist clenched making grunting and gurgling sounds. Officer Johnston endeavoured to assist in the restraint and observed that kicks to the side of Mr. Bowe's body did not elicit any reaction. At one point Officer Johnston had his hand around Mr. Bowe's torso while Mr. Bowe was on his stomach struggling to break free from the police officers involved with him. It was Officer Johnston who first observed that Mr. Bowe's movements to oppose police attempts to restrain him were "becoming less." Officer Graw, another officer on scene who arrived before Officer Johnson observed Mr. Bowe inside the residence. When Officer Graw shone a flashlight in Mr. Bowe's face, he began to scream like he was in pain. The officer ordered Mr. Bowe to get down on his stomach which was accomplished for a matter of seconds. The deceased then got up and darted out of the room.

Officer Graw worked with other officers as they endeavoured to get control of the deceased and he delivered a knee strike to the left side of Mr. Bowe with no apparent reaction. Mr. Bowe was at this point on his knees and Officer Graw attempted to kick his right leg out from under him in order to get him to lie down on his stomach. There was no reaction and no control was gained. Mr. Bowe did not obey verbal commands issued by police. Officer Graw then delivered a series of quick stuns to the right side of Mr. Bowe. The police officers were initially unable to place cuffs on Mr. Bowe while he was on his stomach.

Officer Stewart was also involved in the attempt to secure custody of the deceased. He was on duty on November 1st 2008 and responded to the complaint of a suspicious person who might be under the influence of drugs who had just broken into a private residence. When Officer Stewart responded he heard yelling and screaming inside the residence and observed glass on the grass outside the residence in big shards. Officer Stewart looked through the bedroom window of the residence and discovered Mr. Bowe jumping from one room to the other with eight-foot jumps, banging his head on the closet bar and sweating. Mr. Bowe was yelling unintelligible words. Police decided that they had to enter the residence as they were not able to determine who might be in the residence other than Mr. Bowe. Officer Van Tassel went in first followed by Officer Stewart. It was pitch black inside. Officer Stewart landed on Mr. Bowe's legs and observed Officer Van Tassel hit the wall inside the residence. He then felt Mr. Bowe's arms around his knee and he punched Mr. Bowe on the left side of his face. Officer Stewart got hold of one wrist of Mr. Bowe and observed that Mr. Bowe was "incredibly strong." Officer Stewart observed unsuccessful deployment of the Taser by officer Van Tassel. Mr. Bowe was finally handcuffed, after an extended physical struggle with police. This officer along with others then cleared the house which took two or three minutes. They then indicated that it was safe for EMS to enter to attend to Mr. Bowe who at this point was "very still and did not look like he was doing well." Officer Barrett who was also called to the scene of the residence observed that the deceased did not respond to verbal commands of the police officers. She observed that the Taser had been deployed but that it "did not work." Officer Barrett recognized that the deceased was exhibiting signs of Excited Delirium.

The evidence of Cst. Van Tassel who was partnered with Officer Stewart corresponds with observations made by other officers. Officer Van Tassel testified that Mr. Bowe on his observation was irrational, aggressive, with arms flailing about. Mr. Bowe did not acknowledge police commands, he was shouting and running. Officer Van Tassel observed Mr. Bowe dived into the west wall of the residence. Officer Van Tassel deployed his Taser, he heard the crackling

and determined that deployment of the Taser had not worked properly. It took four police officers administering various police actions and commands to bring Mr. Bowe into position of control. In fact, the body weight of four persons were on Mr. Bowe at the point of cuffing. At this time, that is the time of cuffing, Mr. Bowe was grunting, snorting and breathing heavily. While Mr. Bowe was on his stomach during the cuffing process, officers immediately put him on his side when his hands were cuffed behind his back. Within minutes, Mr. Bowe became unresponsive and EMS was called in. Calgary Health Region Hospital records indicate that it took approximately two minutes before CPR was started. At the point of time of arrival of EMS, Mr. Bowe was in asystolic cardiac arrest. After the administration of the standard ACLS Protocol, Mr. Bowe was transported by emergency services to Peter Lougheed. At arrival, he was hypotensive with a blood pressure of 76/45 and tachycardic with heart rate of 112. He had no brain stem reflexes. The patient was transported from emergency to intensive care. However, CT scan of the head showed loss of gray/white differentiation and intracranial edema related to hypoxia. In the afternoon of November 2nd 2008 after brain profusion it was concluded that Mr. Bowe was brain dead. Life support was discontinued with the decision of Mr. Bowe's wife at 0416 on November 3rd 2008 and the patient was pronounced dead at 0435. However, the official time of death was noted at 1700 on November 2nd 2008 after the result of the brain profusion scan.

Court heard evidence from Dr.Andrews, the assistant Chief Medical Examiner who performed the autopsy on Gordon Bowe. Dr. Andrews explained the cellular processes in play in the body during the condition known as Excited Delirium Syndrome due to cocaine toxicity. Metabollic acidosis is common in this syndrome. The level of activity which rises during the process of struggling against arrest can lead to an acidotic process which in turn can lead to tachycardia. The tachycardia experienced in this case by Mr. Bowe was not, in the opinion of Dr. Andrews, caused by deployment of the Taser.

The etiology of Excited Delirium in Dr. Andrews' opinion relates to a defect in the regulation of dopamine transmitters. As a consequence of insufficient reuptake of dopamine, which is responsible for thermal regulation in the body, there is a corresponding elevation of the protein responsible for a heat shock. Individuals with this syndrome cannot be left as they will not "calm down on their own." In the opinion of Dr. Andrews, chemical sedation is the preferred way of dealing with the chemical processes associated with Excited Delirium. The death of Mr. Bowe, in the opinion of Dr. Andrews, bore no relation to the deployment of the Taser as no contact was made over the cardiac axis of the deceased. In fact, in the opinion of Dr. Andrews even if Taser deployment had been successful, it would have had no effect on the outcome for Mr. Bowe. The toxicology report reviewed by Dr. Andrews disclosed a breakdown product of cocaine in the body of Mr. Bowe thus leading to the opinion of Dr. Andrews that cocaine in the body likely triggered the Excited Delirium process. Finally, Dr. Andrews informed the court that although in the past Excited Delirum Syndrome has been associated with police restraint methods, physical force methods, and pepper spray method, each has been discounted as a causal factor in connection with Excited Delirium. Similarly, in the opinion of Dr. Andrews the Taser should be discounted as a relevant factor in the death of Mr. Bowe.

The Court heard detailed testimony from the founder of Taser International, Patrick Smith. Mr. Smith explained the mechanical operation of the Taser device to the court. He testified that 100 countries utilize the Taser device as a non-lethal method of control of subject behaviour. Taser International recommends a daily spark test of the Taser to confirm appropriate electric output at 19 electrical impulses per second. It is the pattern of impulses emitted by the Taser that is relevant to the creation of muscular incapacity in the subject. Mr. Smith testified that Taser has been a party to litigation in America on 170 occasions. Of those cases, 130 were resolved before trial, one case resulted in a jury verdict in which in was determined that the Taser played a 15% role in the causation of injury. There are 30 litigation cases currently pending in the United States.

It was the view of Mr. Smith that notwithstanding the studies of Dr. John Webster of the

University of Wisconsin on the effects of Taser on the heart of an animal - a pig; there is no evidence that the Taser causes cardiac arrhythmia in human subjects. The Taser in Mr. Smith's view is at the lower end of the continuum of police force.

Mr. Smith also testified that the clicking sound heard by various police witnesses in the case of Mr. Bowe meant that there was not a good electrical connection to the subject from the Taser in this case. If there is a good electrical connection no sound emits from the Taser. If the connection is not effective a clicking sound is heard as the electrical circuit jumps. Mr. Smith finally testified that it is possible to equip a video camera to a Taser device which would essentially record all actions of the Taser on deployment. Australia and New Zealand police forces mandate that a camera be attached to Taser devices. The cost of a Taser camera is approximately $400. For a police force of 1800, the cost would be approximately $720,000 to $1 Million. Each Taser camera has a life span of three to five years.

A key witness to appear in this Fatality Inquiry was Dr. Christine A. Hall from the Department of Emergency Medicine, Vancouver Island Health Authority. Dr. Hall is qualified in many different areas including that of principal investigator in the RESTRAINT Study.

Dr. Hall provided very relevant and material evidence in connection with police restraint protocol, the operation of the Taser on the human body, and in-custody deaths associated with Excited Delirium. Dr. Hall was qualified to give opinion evidence in the field of emergency medicine, and in connection with the physiologic effects of the Taser upon the human body, and finally in connection with the medical condition known as Excited Delirium. Dr. Hall began her testimony by confirming that she had reviewed the patient care record for Gordon Bowe. Dr. Hall confirmed that Mr. Bowe arrived at emergency in full cardiac arrest, meaning there was no electric activity in the heart whatsoever. Dr. Hall's opinion was that this is the worst cardiac event that can befall on a human being. The medical name for this is asystole. Dr. Hall was asked whether Taser application could create asystole. It is her opinion that the administration of the electricity through the Taser usually introduces a condition known as ventricular fibrillation in which the ventricles are beating irregularly. In Dr. Hall's review of the medical literature no studies have been undertaken to date that demonstrate the application of the Taser can cause asystole. A review of the emergency records of Mr. Bowe by Dr. Hall was noted in connection with what she called a "devastating" blood gas reading, a ph level of 6.4. There was also a low bicarbonate level in the blood at 3.3. [normal is 16-24]. This finding is indicative of profound metabollic acidosis which can cause asystolic arrest.

Dr. Hall was also asked about the effect of cocaine consumption on the cardiac function. It was the opinion of Dr. Hall that cocaine is capable of inducing a cardiac event "heart attack" even when taken in recreational amounts. Dr. Hall was also asked whether the physical struggle with the police exacerbated the progress of Mr. Bowe's medical condition - Excited Delirium. Dr. Hall indicated that researchers do not know exactly what the tipping point is in the physical struggle with the police in terms of the progress of Excited Delirium. However, she did inform the court that the nature of the breathing is a key sign to watch for in terms of medical emergency. The nature of Mr. Bowe's breathing in this case towards the end of his struggle with the police seemed to indicate that he was in difficulty. It was Dr. Hall's observation that more time must be taken to teach police that individuals who "give up" suddenly during a physical interaction with police may in fact be in need of urgent emergency care. However, the Taser deployment in this case in Dr. Hall's opinion did not appear to have any effect whatsoever on the progression of Mr. Bowe's symptoms and breathing difficulties arising from the Excited Delirium. The Taser deployment did not in Dr. Hall's opinion impact cardiac functions in a negative way. Dr. Hall was also asked the question as to whether there is any association between the deployment of a Taser and increase in the ph levels in the blood. In her opinion the Taser application did not result in ph elevation in the blood of Mr. Bowe. Dr. Hall is engaged in active research in police methods of restraint. It was her view that the Canadian Association of Police Chiefs could assist

in furthering medical knowledge in this area through a national endorsement of the study known as RESTRAINT. Dr. Hall agreed that there is insufficient data at this time to determine whether all cases of Excited Delirium proceed inevitably to fatality. Dr. Hall did agree that the risk of death can increase with physiologic stress such as physical encounter with police and she did agree that attempts are required to minimize the physical stress experienced by these patients who are in the course of being taken into police custody while they are experiencing the metabolic changes brought about by Excited Delirium. Dr. Hall wishes to create a data base documenting all Excited Delirium cases in Canada in order to study the condition further particularly in the context of police environment.

Recommendations for the prevention of similar deaths:

At the conclusion of evidence in this case, the Court asked all counsel and the Calgary Police Service, the family of Mr. Bowe, Alberta Health Services, and Alberta Justice to collaborate to arrive at proposed recommendations for the Court's consideration.

The Court is very impressed with the quality of thought going into the various recommendations proposed by counsel. Given the statutory limitations of recommendations that may be made pursuant to s. 53[2] of the Fatality Inquiries Act, the Court accepts in their entirety the recommendations proposed by the Chief of Police and the Calgary Police Service. The Court also accepts recommendations 8 and 4 of the family's submission, the latter recommendation 4 as amended by counsel for Emergency Medical Services.

The Court thereby incorporates into this Fatality Inquiry Report the following recommendations:

(1) That all Call Takers and Dispatchers providing services to police agencies in Alberta receive updated training on the identification and management of potential Excited Delirium incidents. That this training be mandatory for all existing and newly hired staff.

Rationale: The early identification of potential ExD subject is critical. In many events, the call taker is provided information from the caller(s) which often clearly point to the fact that the subject may be in a state of ExD. By identifying this possibility at the call-intake stage, the Call Taker can ask further probing questions as required to further enhance the risk management and the quick deployment of the appropriate resources. If they are not trained, and not knowledgeable about which questions to ask, a person in a state of ExD might not be identified at this stage resulting in a delayed deployment of police and/or EMS resources, or a lack of proper preparedness on the first responders part upon arrival at the scene.

(2) That all police agencies in Alberta would train their officers annually in the identification and management of ExD incidents. Training should involve real case studies and/or scenario-based training where possible. (Note: CPS is already meeting this standard but it is not being done consistently throughout Alberta).

Rationale: Not all police agencies are training officers in the most current knowledge about the identification and management of ExD. This training should be delivered annually because the research and understanding of ExD is changing and thus police officers need to be kept abreast of the most up-to-date information in managing these events in such a manner as to maximize the survivability of the afflicted person. Real case studies from Alberta incidents heighten the training experience and experiential training

such as scenario-based training has been shown to result in the maximum retained skill and competency.

(3) That all police agencies in Alberta would collect identical data, with common terminology, for reported use of force and ExD incidents.

Rationale: The collection of identical use of force and ExD data is essential. Data which lacks common terminology and is not consistent cannot be used for research purposes. In order for Police Chiefs and researchers to examine the relationship between police/public interactions and use of force as well as the incidence of ExD, the collection of identical data with common terminology is essential.

(4) That all police agencies in Alberta and Alberta Health Service's EMS create a common terminology and inter-disciplinary training relating to the management of ExD incidents.

Rationale: In order to enhance the survivability of persons afflicted with ExD, a close cooperative relationship between frontline police officers and EMS responders is important.

(5) That frontline police officers are able to communicate directly with responding EMS members on a common radio channel. Further that police officers and EMS responders use the term 'Excited Delirium' over the radio when they communicate with one another.

Rationale: The timely transmission of critical information is essential during a medical emergency. The ability of police officers at the scene to communicate directly with the responding EMS personnel eliminates the need for core information to be transmitted from police at the scene, to police dispatch; from police dispatch to EMS dispatch; from EMS dispatch to EMS responders in the ambulance. The direct transmission of information between police and EMS will result in information being relayed much more timely and without risk of the detail being contaminated.

(6) Nationally consistent and enforced reporting on police use of force and possible incidents of ExD. That such reporting includes consistent data and terminology.

Rationale: For the same rationale as a Provincial system is required, similar reporting on a National scale would provide an enormous amount of data upon which the Canadian Police Chiefs could conduct research.

(7) National requirement for the reporting of CEW probe impact locations on the body in ALL cases of CEW deployment.

Rationale: Probe impact location is the single most important factor in discerning whether a potential cardiac risk from CEW deployment does or does not exist. Probe locations must be reported for all CEW deployments, not only those in which a fatality follows CEW use. Further probe impact locations must be reported in a consistent manner using an identical 'body matrix' so that all reported probe locations can be compared across all the agencies.

(8) The Court recommends that the association of Police Chiefs of Canada work in a collaborative way to create a national database to record and share information relating to death associated with Excited Delirium.

(9) The Court recommends that Emergency Medical Services of Alberta Health Services and its medical advisers review protocol with a view to determining whether EMS practices and protocol can be improved by identifying particular pieces of equipment that, where possible, should be taken at first instance to a call for a known or suspected Excited Delirium patients.

DATED November 30, 2011 ,

At Calgary , Alberta.

The Honourable Judge H.A. Lamoureux

A Judge of the Provincial Court of Alberta