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

Fatality Inquiries Act

WHEREAS a Public Inquiry was held at the Edmonton Law Courts

in the City (City, Town or Village) of Edmonton (Name of City, Town, Village), in the Province of Alberta,

on the 22nd day of September, 2021 (year), (and by adjournment

on the ____ day of ____, ____ (year)),

before Jody J. Moher, a Provincial Court Judge,

into the death of R.L. (Name in Full) 2 (Age)

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

Date and Time of Death: November 20, 2015 at 9:03 AM

Place: Royal Alexandra Hospital at Edmonton, 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 – *Fatality Inquiries Act*, Section 1(d)).

Oxycodone Toxicity

Manner of Death:

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

Accident

Introduction

A Public Fatality Inquiry (*Fatality Inquiry or Inquiry*) was ordered by the Fatality Review Board in the aftermath of the death of R.L. pursuant to section 33(2) of the *Fatality Inquiries Act*, RSA 2000, c F-9 (*Fatality Inquiries Act* or *Act*).

Classification: Public

A Fatality Inquiry was held on September 22, 2021. Ms. Jennifer Stengel and Mr. Peter Buijs acted as Inquiry counsel, appointed pursuant to section 35.1 of the *Act*. At the first of two Pre-Inquiry Conferences, it was contemplated that Alberta Children's Services would apply for interested party status pursuant to section 49(2) (d) of the *Act*. Children's Services was represented by Mr. Scott Matheson. The application was ultimately abandoned, both Inquiry counsel and counsel for Children's Services maintaining that given Children's Services had ceased to be involved in R's life some 19 months before his death, the Ministry's involvement was too remote.

Exhaustive and ultimately unsuccessful efforts were made to contact R's parents. maternal grandmother, W.L., was contacted as R's next of kin under the *Act,* and declined the opportunity to participate in the Inquiry. None of R's family members participated in the Inquiry.

The Inquiry heard from 3 witnesses over the course of the Inquiry:

1. Detective Steven Hunt, the Edmonton Police Service officer who was assigned to investigate R.L.'s death;
2. Dr. Craig Chatterton, Chief Toxicologist in the Alberta Office of the Medical Examiner; and,
3. Dr. Michael Rieder, a physician with training in pediatrics, pediatric emergency medicine and clinical pharmacology, working in London, Ontario.

Both Dr. Chatterton and Dr. Rieder were qualified as experts in their respective fields.

The Inquiry also reviewed 2 Exhibit Binders comprised of more than 900 pages of documents. The documents included, but are not limited to, the file from the Office of the Chief Medical Examiner, Alberta Health Services records for various persons, the Edmonton Police Service investigation file, and Children's Services records.

Circumstances under which Death occurred

Background

R.L. was born on DOB and died of unintentional oxycodone poisoning before he reached his 3rd birthday. R was much loved by his parents, grandparents and extended family, especially the "brothers and sister" who lived with R and his grandparents at the time of his death.

In order to understand the circumstances that led to R's tragic death, a brief summary of his short life will provide some context.

At the time of R's birth, his mother, F.L., was 15 years old and struggled with addictions, housing instability and poverty. She was diagnosed with FASD and significant cognitive deficits. R's mother was the subject of a Permanent Guardianship Order ("PGO"). R's father, J.S., was 17 years old at the time of R's birth and had significant Children's Services' involvement as well. Neither of R's parents were able to care for him.

Accordingly, Children's Services made arrangements for R to live with his maternal grandmother and grandfather, W.L. , and her common-law spouse, C.L. . W and C had five children of their own living in their home at the time, ages 6 to 14. Children's Services had assessed several of those children as having "higher needs". C.L. was often away working or looking for work.

At the time of R's death, the couple had been separated for about a month. Mr. L was looking for work out of town and living with his mother in Barrhead. W.L. had her own struggles, including mental health issues, chronic pain, housing instability, and poverty. W also struggled with addictions and at the material time there were concerns about misuse of prescription medication.

From the time he was two days old until his death, R lived with his maternal grandmother and grandfather and their five children, who were very much his "brothers and sisters". There was a single exception of a 7-month period from May 30, 2013 to December 30, 2013 when R was placed in foster care. W.L. experienced a relapse and, as her addictions worsened, she struggled with housing instability, and R was removed from the home.

R was returned to his grandparents' care at the end of 2013 and on March 10, 2014 a Provincial Court Judge granted W.L. interim guardianship. On April 1, 2014 Children's Services closed R's file given the Private Guardianship Order. On August 25, 2014 a Provincial Court Judge granted an Interim Guardianship Order, granting W.L. private guardianship "until further order of the court". This Order was in place at the time of R's death.

The Last 24 Hours of R'L.'s *Life*

R was a happy child, quick to smile. He loved to wrestle with the other boys in the house. On the day before his death, he had the start of cold, a slight cough and his nose was a bit congested.

On the morning of November 19, 2015, the other children residing in the home went to school. Sometime mid-morning W and R went to visit their next-door neighbour and lifelong best friend, L.A. . W and R returned home by about 12:30 PM as the children started to come home from school.

Later, W prepared supper for the children and they all watched movies in the living room. R went to bed late, perhaps close to 11:30 PM. He slept in a bedroom with his grandmother and another boy. W.L. was the only adult in the residence.

In the early morning hours of Friday November 20, 2015, W went to check on R as he was coughing. W later recounted that R "was fine" when she went to check on him at 2:00 or 2:30 AM. She resettled him.

W sat up for the rest of the night. The other children were up before 7:00 AM to get ready for school. W asked one of the older children to get R up. They observed R seated in his stroller in the bedroom. R was unresponsive and they shouted for W's assistance.

W carried R into the main living area. She called 911 and she called for a family member, V.C. , to attend at the residence. Edmonton Fire and Rescue ("EFR") as well as Emergency Medical Services ("EMS") were dispatched to the residence.

R was in cardiac arrest and was asystole upon initial assessment by first responders and remained asystole throughout notwithstanding medical intervention. R was transported by ambulance to the Royal Alexandra Hospital ("RAH"). Notwithstanding extensive resuscitative efforts, R could not be revived and he was pronounced dead by RAH medical staff at 9:03 AM on November 20, 2015.

The Aftermath of R's *Death*

An autopsy was performed by Dr. Elizabeth Brooks-Lim, a forensic pathologist with the Office of the Chief Medical Examiner ("OCME") of Alberta on November 23, 2015. Dr. Brooks-Lim's post-mortem examination revealed no external or internal evidence of injury. Histological examination indicated a mild upper respiratory tract infection, which was determined to be a clinically insignificant infection.

Subsequent toxicology results revealed "a potentially toxic level of oxycodone". Dr. Brooks-Lim concluded the cause of R's death was "oxycodone toxicity".

Dr. Brooks-Lim was unable to provide an exact time R's death. R went to bed at approximately 11:30 PM on November 19, 2015. W.L. checked on R at 2:00 or 2: 30 AM on November 20, 2015 and reported he was fine. At 7:00 AM R was found unconscious and unresponsive. His lips were blue and he was experiencing trismus (locked jaw). Two ambulances and 8 emergency personnel were dispatched. When assessed by EMS and EFR, R was in cardiac arrest with no detectable heartbeat. Extensive resuscitative efforts were undertaken including the administration of Narcan, all without any effect.

R was pronounced dead by medical staff at the Royal Alexandra Hospital at 9:03 AM on November 20, 2015. The exact time of R's death cannot be determined with scientific precision, but would be significant in terms of determining timing and mode of ingestion of the oxycodone. This information, if reliable, would shed light on the circumstances that led to R's death.

Dr. Elizabeth Brooks-Lim, the forensic pathologist then with the OCME for Alberta, provided a written opinion dated April 29, 2021 regarding the time of R's death. Dr. Brooks-Lim stated she "was not able to provide an estimated time of death".

Dr. Craig Chatterton provided a report dated April 27, 2021 and testified virtually at the Inquiry. Dr. Chatterton has been a forensic toxicologist with the OCME in Edmonton for a decade. Dr. Chatterton has been the Chief Toxicologist since December of 2017.

Dr. Chatterton explained R's toxicology results in detail. The initial toxicology report indicated that the concentration of oxycodone in R's cardiac blood was 0.04mg/L and 0.45mg/L in his iliac blood. The toxicology results also evidenced the presence of fluoxetine and a metabolic derivative thereof. Fluoxetine, an antidepressant prescription medication, is commercially available and sold in tablets with the trade name 'Prozac'.

Dr. Chatterton concluded that the toxicology findings proved unequivocally that R ingested oxycodone some time prior to his death.

According to Dr. Chatterton peak concentrations of oxycodone are typically seen with 1 hour of ingestion and the half-life, or the time after which the concentration of oxycodone is reduced by one-half, is 3-6 hours. The effect of ingestion of oxycodone is analgesia or pain relief, mood changes including euphoria, drowsiness, sedation, and diminished pupil size. At high levels the effects include respiratory depression, coma, and death.

Dr. Chatterton was not able to determine the exact amount of oxycodone R ingested with scientific certainty. Dr. Chatterton stated that in his opinion, "based on R's weight and considering the way in which oxycodone distributes within the human body, it is possible that the ingestion of a small amount (a few milligrams) of this drug could account for the [toxicology] results." Dr. Chatterton also advised that it is not possible to state, with certainty, what a fatal dose of oxycodone in a 2-year-old child would be.

During his *viva voce* evidence at the Inquiry, Dr. Chatterton testified that given it is not possible to determine the exact time of R's death, he cannot predict with scientific accuracy the time of R's ingestion of the oxycodone or the fluoxetine. Dr. Chatterton stated that the time of R's ingestion of the oxycodone was likely within a few hours of his death. In terms of the amount of oxycodone ingested, he stated it was likely R ingested one 5 mg oxycodone tablet or a portion thereof. In Dr. Chatterton's opinion the fluoxetine R ingested was a separate pill, i.e., separate and distinct from the oxycodone pill(s) ingested, and did not contribute to his death.

Dr. Michael Rieder prepared a report dated July 14, 2021 and testified virtually at the Inquiry. He is a pediatrician and clinical pharmacologist; he worked in pediatric emergency for 28 years. Dr. Rieder has served as an Investigating Coroner for the Ontario Ministry of the Solicitor General for the past 15 years. He has conducted more than 60 death investigations with respect to opiate-related deaths in the last 4 years.

Dr. Rieder wholly agreed with Dr. Brooks-Lim's conclusion regarding the cause of R's death being oxycodone toxicity.

Dr. Rieder described oxycodone as a semi-synthetic opioid analgesic which in larger doses can be fatal. In Canada only tablets are sold as a prescription and most of the tablets distributed legally are slow/sustained release. Although oxycodone is available in Canada only by prescription, he acknowledged that is also available illegally; opining that over prescription, misuse and diversion have all contributed to the opioid crisis in Canada and elsewhere.

Dr. Rieder described the difficulties associated with trying to assess with scientific precision the amount of oxycodone ingested by R from the toxicology results obtained after R's death. However, Dr. Rieder opined that a fatal dose of oxycodone in a child of R's age, height and weight would be between one to eight 5 mg slow release tablets.

Dr. Rieder explained that peak blood concentrations are achieved approximately 2 hours after ingestion, although a range of 30-180 minutes is reported in medical literature. He also described the phenomenon of "dose dumping". The slow release 5 mg tablet of oxycodone is meant to be swallowed. If a slow release oxycodone tablet is chewed or crushed, peak blood concentration will be attained much more rapidly.

During his *viva voce* evidence Dr. Rieder concluded that R.L. ingested "substantial dose of oxycodone". He indicated that R's post – mortem level of oxycodone is consistent with a single 5 mg tablet of oxycodone. He also stated that without a precise time of death for R, it is not possible to provide a time of ingestion with precision, however he concluded that a 2-3-hour time frame from ingestion to death is likely.

As soon as the toxicology results were released by the OCME to the Edmonton Police Service ("EPS"), EPS Detective Steven Hunt, then a member of EPS Child Protection Unit, was assigned to investigate R's death. Detective Hunt explored several investigative avenues. Detective Hunt was unable to ascertain whether R ingested oxycodone pill(s) while unsupervised or inadequately supervised or whether R was given the oxycodone in an effort to pacify or medicate. He was unable to determine the source of the oxycodone, although there were a variety of potential sources all of which involved misuse or diversion. Criminal charges were never laid.

As expressly set out in section 53(3) of the *Fatality Inquiries Act*, the role of a Provincial Court Judge presiding over a Public Fatality Inquiry is not to assign blame or to assess responsibility. Rather my role is to, insofar as possible, determine the circumstances that lead to R.L.'s death.

None of the experts were able to determine the exact time of R's death or the number of oxycodone pills R ingested. The EPS was not able to reliably determine the source of oxycodone pills or how R came to ingest a toxic dose of oxycodone.

In terms of circumstances leading to the death of R.L., the only possible conclusion is that 2-year-old R.L. was unintentionally poisoned by oxycodone pill(s) leading to his death. Sometime between 11:30 PM on November 19, 2015 and 7:00 AM on November 20, 2015, R.L., a 2-year-old boy, ingested one or more 5 mg tablets of oxycodone, leading to his death within a matter of hours. Timely medical intervention would likely have saved his life.

Recommendations for the prevention of similar deaths

R.L.'s death was profoundly tragic. The death of any child of an unintentional poisoning by prescription or street drugs is made more tragic by the undeniable fact that by their very nature such deaths are preventable.

The Office of the Child and Youth Advocate for Alberta undertook 2 Investigative Reviews into youth opioid use in Alberta in the past 3 years. The first in June of 2018 culminated in a report entitled "Into Focus: Calling Attention to Youth Opioid Use in Alberta". This report chronicled the death of 12 young people who received child intervention services within 2 years of their death and who died between October of 2015 and September of 2017. The Report acknowledged that "Alberta is responding to an increase in opioid related deaths in the province. The number of opioid poisonings of young people under 24 years old is alarming." This first report made 5 recommendations addressing prevention, treatment and harm reduction.

The second report from the Office of the Child and Youth Advocate for Alberta entitled "Renewed Focus: A Follow-up Report on Youth Opioid Use in Alberta" was released in June of 2021. The second report acknowledged some progress had been made regarding the 5 earlier recommendations, but emphasized more work must be done given the worsening opioid crisis. Following extensive stakeholder consultation one new recommendation was made.

In terms of the magnitude of the opioid crisis, Alberta Health has made publicly available statistics regarding the total number of deaths in the province from opioid poisoning from 2016 to 2020. Alberta Health Substance Use Surveillance Data, specifically Acute Substance Related Deaths by Age and Sex, found at www.alberta.ca/substance-use-surveillance-data.aspx#jumplinks-O enumerates the total number of deaths related to opioid poisoning in the 0-24 age group as follows:

2016 - 64 children
2017 - 84 children
2018 - 71 children
2019 - 62 children
2020 - 95 children and young people

The statistics for all age groups in Alberta reveal that the number of deaths from opioid poisoning has more than doubled from 553 persons in 2016 to 1144 persons in 2020.

As evidenced by the foregoing statistics, part of the worsening opioid crisis is the accidental or unintentional poisoning of children by opioids. This is due *inter alia* to improper storage, failure to dispose of surplus medication, overprescribing by healthcare professionals, and the diversion of prescription medication.

Facets of the opioid crisis in Alberta and indeed nationally include readily accessible street opiates which may be adulterated and potentially more lethal. As well, misuse and diversion of prescription opioids is a very significant problem. The Alberta College of Physicians and Surgeons has acknowledged the role of physicians in the opioid crisis and has responded with a Standard of Practice for Prescribing Opioids and other Drugs with the Potential for Misuse or Diversion effective April of 2017.

R.L. died of oxycodone poisoning before his 3rd birthday. In many respects he is also a victim of the worsening opioid crisis. The death of one child is too many. As a society we all share responsibility for implementing measures to prevent similar deaths.

As contemplated by section 53(2) of the *Fatality Inquiries Act*, two recommendations are appropriate in terms of possibly preventing similar deaths.

First, education. Physicians, pharmacists, public health nurses, social workers, and parents should be aware of the possible fatal risk opiate medications pose for young children. The importance of secure storage and prompt disposal of unused portions of these potentially lethal medications cannot be over emphasized. Healthcare providers and others who interface with parents and caregivers of young children should specifically inquire about prescription and nonprescription opiate use in the home and provide anticipatory guidance and awareness regarding storage, disposal and diversion of opiate medication.

The US Centres for Disease Control and Prevention has long had a parental education program, "Up and Away", intended to provide information to parents and caregivers of young children with respect to safe storage of prescription medication. CDC Program information is readily accessible online at www.cdc.gov/featuresmedicationsafety. Neither Dr. Chatterton nor Dr. Rieder were aware of an equivalent program or initiative developed provincially or nationally. It is time.

In response to the prevalence of opioid use and the effects thereof on families, in January of 2021 Children's Services mandated opiate and substance use training for all child intervention practitioners. The five-hour training program is mandatory for all child intervention practitioners and is encouraged for all other ministry staff. Children's Services recognized and acknowledged the pervasiveness of opioid drugs and the use and abuse of opiates in our population and the Ministry's role in protecting children. Children's Services is to be commended for this important initiative.

It is recommended that the Government of Alberta increase public education regarding the storage, disposal and diversion or misuse of prescription medication. This should include health care professionals providing anticipatory guidance to parents and caregivers of children, especially young children, regarding safe storage and disposal of prescription medications.

Second, naloxone kits. Dr. Craig Chatterton and Dr. Michael Rieder both agreed that the timely administration of naloxone and appropriate medical intervention could have saved R's life.

Naloxone is an opioid antagonist which reverses the effects of opiates. Dr. Chatterton advised that naloxone kits have been available in Alberta without a prescription since June of 2016. An Alberta Health website indicates that naloxone kits are currently available in 2000 sites across Alberta, primarily pharmacies. The kits can be obtained anonymously and training is available from the site providing the kit.

Alberta Health should explore ways of improving or increasing access to naloxone kits and public awareness of naloxone as a medication which can be readily administered to save lives. Intramuscular naloxone injection kits are currently available free of charge however nasal spray kits are available at a cost of approximately $145. Studies indicate the nasal spray can be administered more quickly and is easier to use in a community setting (see; W. Eggleston et al., "Naloxone Administration by Untrained Community Members"; *Pharmacotherapy*; January 2020; 84-88). Both kits should be available free of charge without a prescription.

An initiative similar to the 'Alberta Block Parent' program should be implemented. This program should include training of members of the public and placement of naloxone kits in businesses and residences with decals or signs prominently displayed ("Naloxone on Site").

Pharmacists should have an expanded role. Pharmacists are responsible for dispensing prescription drugs including opioids. Pharmacists interact with many high-risk patients (triplicate prescriptions) and should provide naloxone kits free of charge when dispensing opiates (see: Dr. R. So et al, "The Status of Naloxone in Community Pharmacies Across Canada"; *Canadian Pharmacists Journal*; 2020, Volume 153; 352-356). The Alberta College of Pharmacy should explore similar initiatives, perhaps as part of continuing professional education, given the role of their members in distributing prescription opiate medication.

Distribution of naloxone kits by emergency departments to all persons admitted for opioid overdose has met with success in the US and the UK. There is a consensus recommendation from the American College of Emergency Physicians and the Centres for Disease Control and Prevention that "take-home" naloxone kits should be provided to all presenting in emergency with opioid overdoses. A similar program should be implemented in Alberta emergency departments. If a person is admitted to an Alberta hospital following an accidental poisoning by opiates, a naloxone kit should be provided at time of discharge.

It is recommended that Alberta Health explore initiatives to improve accessibility and use of naloxone kits in Alberta. Alberta should look to other jurisdictions to adopt and implement initiatives which have successfully improved accessibility and use of naloxone to reduce opioid deaths.

All of which is respectfully submitted.

DATED October 1, 2021,

at Edmonton. Alberta.

Original Signed

A Judge of the Provincial Court of Alberta