



STATE OF DELAWARE
DEPARTMENT OF SAFETY AND HOMELAND SECURITY
DIVISION OF FORENSIC SCIENCE
200 South Adams Street
Wilmington, DE 19801

June 16, 2021

Special Investigator Timothy Argoe
Division of Civil Rights & Public Trust
Department of Justice – OAG
102 West Water Street, 3rd Floor
Dover, Delaware 19904

Dear Mr. Argoe

Re: Lymond Moses Homicide (ME case Number 2021-0130)

Pursuant to your written request dated May 28, 2021 with questions concerning the toxicology report for testing performed on Mr. Moses, my answers to your question are listed below.

Question 1. How would Fentanyl levels this high affect the human body?

Answer: The Fentanyl levels detected in Mr. Moses in the absence of other findings to explain the cause death would be lethal levels. Fentanyl and active fentanyl analogues typically cause death by inducing respiratory depression, sedation and analgesia (decrease in pain perception).

Question 2. How do Moses's levels compare to others you have seen in other Toxicology reports?

Answer: The Fentanyl level is much higher than fentanyl levels that I usually see in other deaths due to drug intoxication.

Question 3. Based on your extensive experience and medical training, do you have an opinion on what it would take to get levels this high and how they compare to overdoses (including overdose deaths)? If so, what is that opinion?

Answer: To attain such a high level of fentanyl, the drug would either be injected intravenously or possibly ingested (orally) or inhaled in large quantities over a short period of time. In addition, the person consuming (absorbing) the drug, which in this case is Mr. Moses would most likely have developed tolerance to the drug from regular, and most likely chronic use of the drug.

Question 4. Understanding that every person is different, do you have an opinion as to a level that you have seen which would normally cause a person to overdose? If so, what is that opinion?

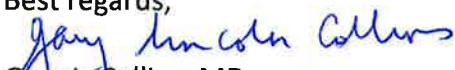
Answer: In the vast majority of cases, any Fentanyl concentration >3 ng/ml in an individual with **no other** anatomic, (physical / traumatic), natural disease (including endocrine disease) or infectious etiology to cause death the death will be attributed to the Fentanyl (and other drugs) detected. A lower level of fentanyl may cause death if other drugs that cause respiratory suppression or sedation is present, such as alcohol, other opiates (heroin, morphine, oxycodone) or benzodiazepines (Xanax, valium).

Question 5: Can you explain in general terms the process of Norfentanyl? What does it mean for Moses?

Answer: Norfentanyl is an inactive metabolite. This means that Norfentanyl does not have any pharmacological effects on the body. Since that the concentration of Norfentanyl is much lower than the fentanyl, it suggests that the parent drug (fentanyl) was recently absorbed (consumed) and the Norfentanyl detected is most likely a byproduct of the metabolism of the fentanyl.

My opinion expressed in the responses above are to a reasonable degree of medical and scientific certainty. Please feel free to contact me should you require additional information.

Best regards,


Gary L. Collins, MD

Chief Medical Examiner

Department of Safety and Homeland Security

Division of Forensic Science

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