

A HEADACHE TO DIE FOR: A CASE STUDY IN FORENSIC SCIENCE*

by

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Part I—Some Headache . . .

“Hurry up in there, your sister has to use the bathroom too,” said Sue Frost to her oldest child, eight-year-old Jonathan. Sue was rushing around the house as she did most other mornings trying to get herself ready for work as well as get the children ready for her husband to take to day care. Sue was the manager of a bank in a suburb of Seattle called Springville.

“Mommy,” said five-year-old Allison, “Jon is taking too long in the bathroom.” Sue had awakened with a slight headache and now her head was beginning to pound. “Jonathan, get out of the bathroom this instant,” yelled Sue, “your sister needs to get ready to go to Humpty-Dumpty Day Care.”

Sue went to the medicine cabinet in her bathroom to get something for her headache. She finished getting dressed, made sure the kids were ready to go, and went back to her bathroom to put on her makeup in preparation for leaving. She was found by her husband Henry a little while later collapsed on the floor. Henry dialed 911 and the dispatcher immediately sent an ambulance to their residence. When the paramedics arrived, they found Mrs. Frost gasping for breath and barely conscious.

“Mrs. Frost, can you hear me,” said Joe, one of the paramedics on the scene. Joe spoke to his partner, “Bill, she doesn’t appear to be responsive to sounds or light; any ideas?”

Bill called the physician on duty in the ER via his radio. The physician indicated that the symptoms suggested she might have experienced a ruptured aneurysm or a drug overdose from cocaine. However, the drug overdose explanation seemed improbable since Joe and Bill found no evidence of drugs at the scene. Later, tests at the hospital indicated that there had been no internal bleeding. Family and friends who were questioned subsequently about the incident confirmed the view of the paramedics on the scene. They told investigators that Mrs. Frost was not the kind of woman likely to use drugs.

Sue Frost got progressively less responsive in the ambulance and died a short time after arriving at the hospital.

Because of the uncertainty surrounding her death, an autopsy was performed by the county coroner, William Delaforte. During the autopsy, Steven Sheath, an assistant to the M.E. asked Dr. Delaforte, “Do you detect the faint odor of bitter almonds coming from the body?” Dr. Delaforte’s positive response led both men to the conclusion that Sue Frost had been poisoned. Samples sent to the lab confirmed that she had been poisoned, by cyanide. Henry, as well as Sue’s parents who lived in the area, insisted that she would never have committed suicide by poisoning herself. “She had everything to live for,” they all said. Thus, no one had a reasonable explanation of what happened to Sue Frost.

* This case is adapted from the story “Stella Nickell” in the book by Colin Evans entitled *The Casebook of Forensic Detection*, New York: Wiley, 1996. The story on which this case is based is true but the names of the characters involved were changed as well as the details of many of the events. Place names were also changed in many cases and some of the events were expanded or collapsed to make it a more readable story.

“How had she ingested the cyanide?” This was the question asked by the M.E. to his staff and the members of Sue’s family. Numerous possibilities were considered, from accidental ingestion of rat poison all the way to eating peach pits thinking they were almonds. After numerous failures to come up with a plausible solution it was decided that any over-the-counter medications that Mrs. Frost might have taken should be examined. Bingo! It turned out that the Extra-Strength Excedrin® pain reliever capsules she had taken for her headache earlier that morning were the source of the cyanide. A follow-up test confirmed that some of the capsules remaining in the bottle found in her medicine chest contained cyanide.

About four days later, Bristol-Myers, the manufacturer of Excedrin, contacted retail stores across the country and asked them to remove all bottles of Extra-Strength Excedrin from their shelves. In the interim, the local police had discovered two other bottles of cyanide-laced Excedrin, one in Springville and one in an adjoining suburb called Auburn Hills.

The case was quickly turned over to the FBI, which has jurisdiction over all cases involving product tampering. FBI investigators began their investigation assuming that the killer might be a political terrorist or perhaps a recently fired employee of Bristol-Myers. These suspicions faded when no one called to either take responsibility or issue demands from the company.

A break in the case occurred when the FBI received a call from the Seattle police about a woman who identified herself as Mrs. Stella Penny. Mrs. Penny had told the police the following story. “I heard about the Sue Frost cyanide poisoning on the local news and began to wonder if perhaps that is what happened to my husband Bart. He died suddenly 10 days before Mrs. Frost died and he too had taken Extra-Strength Excedrin capsules on the morning of his death. He regularly took pain relievers to help alleviate his persistent arthritis pain. Initially, I didn’t think anything about it because he had respiratory problems so I assumed that he died from some complication resulting from his respiratory ailment. Later I began to wonder, could there be a connection between the two cases?”

Questions

Questions 1–5 will require some research on your part to answer. Questions 6–8 should be answered based upon your knowledge of crime scene investigation and autopsy procedures.

1. Why does the FBI have jurisdiction over the Sue Frost poisoning case?
2. When did product tampering become a crime handled by the FBI?
3. Which previous case led to product tampering becoming a crime that falls under FBI jurisdiction?
4. Where did this case (referred to in Question 3) of product tampering occur?
5. Who was ultimately convicted of the crime referred to in Question 3?
6. What should be the next step(s) in the investigation of the case called “A Headache to Die For?”
7. Why would the death certificate for Stella Penny’s husband, Bart, not have shown cyanide poisoning as the cause of death?
8. Why was it important for the FBI agents to determine if there was a possible connection between Sue Frost, a banker, and Bart Penny, a construction worker?

Part II—A Suspect

A chemist in the FBI lab examined all of the tainted capsules that had been recovered so far and found something unusual; all of them contained particles of an algicide used in home fish tanks. The brand name of the algicide was even determined—Algae Destroyer™.

The FDA examined more than 740,000 capsules of the Extra-Strength Excedrin that had been sold in the Pacific Northwest and Alaska, and found only five bottles to be contaminated. Two of these five bottles had been recovered from Stella Penny's home. When asked about the bottles of Excedrin, Stella indicated that she had purchased them on different days from different stores.

The FBI's investigation included the questioning of neighbors and fellow employees of Stella Penny. All reported her to be a good neighbor and employee and indicated that she and her husband seemed to be happy. She was a grandmother with two daughters and was reported to have been devastated by her husband's death; she was described as inconsolable by some of her friends. However, the FBI soon began to consider Stella as a suspect in the case, not a victim of an unfortunate accident. As part of their investigation they also discovered a fish tank in Stella Penny's home.

Questions

1. Why was it considered unusual or peculiar to find that all capsules containing cyanide also contained an algicide?
2. How could the algicide (which is sold in a pellet form) and the cyanide wind up in the same capsule?
3. Why did the FBI think it was odd for Stella to have two contaminated bottles of Excedrin in her home?
4. Which factors led the FBI to begin considering Stella more as a suspect than a grieving widow?

Part III—The Case Begins to Unfold

FBI agents canvassed the local pet stores and found one that had a store clerk who remembered Mrs. Penny coming in to purchase some of the Algae Destroyer algicide from him. The store clerk unhesitatingly identified a picture of Mrs. Penny when shown a collection of photos of middle-aged women. He said he distinctly remembered her because she had a small bell attached to her purse that jingled as she walked around the store. He reported to investigators thinking at the time, “What a ding-a-ling, to walk around with a jingling bell attached to your purse.”

The suspicions of possible involvement of Stella Penny in the death of her husband grew as the FBI did more background checks on her. It was discovered that Mrs. Penny had been convicted of check fraud, forgery, and child abuse while living in California in the late 60’s and early 70’s. She was no longer in trouble with the law but it was discovered that she and her husband had been in significant debt and that the bank was moving to foreclose on their home at the time of Bart’s death. Being broke or living close to bankruptcy seemed to be the normal mode of existence for the Pennys.

However, investigators found that Stella had somehow managed to find the money to increase the insurance coverage on Bart’s life. As a state employee, Bart had a \$31,000 life insurance policy with an additional \$105,000 of coverage should death result from an accident. Stella had increased the value of the policy with an additional \$40,000 of accidental death coverage. Thus she stood to receive \$176,000 if Bart should die accidentally.

The FBI also learned that Stella had called the doctor who had signed the death certificate to ask if he was positive that her husband had died from emphysema, the cause listed, or if he could have been mistaken in his findings.

Questions

1. Why did the FBI do a background check on Mrs. Penny?
2. Was any of the evidence gathered by the FBI sufficient to arrest Mrs. Penny for murder? Why or why not?
3. Why would Stella call the doctor who signed her husband’s death certificate asking if he was sure he made the right call?
4. What would you suggest as the next step(s) in the investigation?

Part IV—Daughter Talks

Stella was brought in for questioning some five months after the start of the investigation of Sue Frost's death. Mrs. Penny agreed to take a lie detector test during questioning to prove her innocence. When she took the test several days later and was asked, "Did you lace the capsules with cyanide," she responded emphatically, "No!" The polygraph indicated that she lied. She stopped answering questions at that point and requested a lawyer.

The real break in the case came when Stella's own daughter, Regina Hicks, told the FBI agents that her mother had often talked about killing Bart, even the possibility of hiring a hit man to do the killing. She also mentioned to her daughter the possible use of cyanide to murder her husband. Regina informed the agents that her mother had researched the effects of cyanide on humans at various libraries.

Questions

1. What should the agents do to get additional evidence to indict Mrs. Penny? (Hint: think about what the daughter told the FBI agents that her mother told her she had done.)
2. Speculate on why her daughter did not say anything to the police initially but later contacted them and informed them of her mother's desire to see her husband dead.

Part V—Library Visit

When the FBI canvassed all of the local libraries they found one record showing that Mrs. Penny had checked out and never returned a book entitled *Human Poisoning*. Upon additional investigation it was found that Stella also had checked out a book on toxic plants called *Deadly Harvest* on two different occasions prior to Bart's death.

The book, *Deadly Harvest*, was sent to the FBI lab and checked for fingerprints. Eighty-four of Mrs. Penny's prints were lifted from the pages of the book, most from the section that dealt with cyanide and its effects on animals.

Stella Penny was indicted on December 9, 1987 and was tried the following April. She was convicted on May 9, 1988 and sentenced to 90 years of imprisonment.

Questions

1. Why was physical evidence needed to build a substantial case against Mrs. Penny?
2. What are latent fingerprints?
3. How do you lift latent fingerprints from a book?
4. Could Mrs. Penny have avoided being caught and convicted for her husband's murder? How?
5. Would you describe this as potentially a perfect murder "gone bad" due to frustration and greed on the part of Stella Penny? Explain.
6. This case occurred before the passage of the Patriot Act. Even so, libraries are not in the habit of making the records of their patrons readily available to law enforcement agencies. How do you think the FBI obtained the information regarding Stella Penny's library activities?
7. How has the passage of the Patriot Act affected collection of such information by the FBI and other federal agencies?