Below The Reinsch test is used to

## Aunt Thallie's Deadly Cup of Tea

Where:
When:
When:
Culprit:
Calprits:
Cause of death:
Forensic technique: toxicology



detect the presence of one or more heavy metals in a biological sample.

The appearance of a silvery coating on the copper may indicate Mercury.

A dark coating indicates the presence of another metal, such as thallium.



such as thallium

presence of one

indicative of the

A.dark coating

Copper strip inserted into a hydrochloric acid solution and dissolved suspect body fluid or tissue

Thomas died soon afterward, there seemed no cause for concern, as she too was in her 80s. However, the following year a younger relative, 60-year-old

John Lundberg fell seriously ill. His hair fell out, he became progressively

weaker, and he was dead within weeks. By now the members of the

Mickelson family were becoming seriously worried, and when Mary Ann Mickelson also fell ill and died with similar symptoms to Lundberg, their

fears intensified.

On the face of it, the death of 87-year-old Christina Mickelson in Sydney,

Australia in 1947 was hardly suspicious at all. When her friend Angeline

body fluid or tissue

## The Evidence

At last the situation reached a crisis point. John Lundberg's widow Eveline, and their daughter Christine Downey, began to suffer from symptoms similar to those of their recently deceased relatives—extreme fatigue, difficulty in speaking and moving, loss of hair, and progressive blindness. One family member was worried enough to contact the police. The symptoms suggested a case of thallium poisoning, so a cup of tea, made for one of the victims, was analyzed using the Reinsch test, a method used to detect the presence of certain heavy metals. The test sample is added to a solution of hydrochloric acid, and a copper strip is then added to the mixture. The presence of heavy metal contaminants is revealed by deposits of the metal in question on the strip, and further tests can then reveal whether this is arsenic, antimony, or thallium, all of which are poisonous.

died. Caroline Grills was 63 years old and had married Christina Mickelson's

Police looked for a common factor to link these deaths. They found one in a

family member who had helped nurse all the family members before they

tea for her invalid charges. Though reluctant to cast suspicion on their "Aunt

Carrie," the family could not help noticing that whenever she failed to visit,

he sickness would recede, only to reappear when she was back on duty.

nomes, bringing homemade cakes and cookies, and making endless cups of

daughter. Now a grandmother and valued member of the extended family,

stepson, Richard Grills, 40 years earlier, and they had four sons and a

her dumpy figure and thick-framed spectacles appeared regularly in their

The results were clear. The tea was indeed laced with rhallium, and even though Caroline Grills was arrested so that the imminent danger to the victims was removed, Eveline Lundberg was to lose her eyesight because of

1.5

>97

the poison. Police also took out an exhumation order to test the bodies of two of her earlier suspected victims, and both turned out to contain large enough quantities of thallium to confirm they too had been poisoned. In fact, the case took place in the context of a minor epidemic of thallium poisoning; five other women in Sydney had also been charged with poisoning members of their families. Thallium was a popular poison, as it was the basis of a rat poison released on the market to combat a rat infestation in the city. It was colorless, odorless, and tasteless, making it difficult for victims to realize there was anything sinister in what they were eating or drinking.

## The Outcome

Caroline Grills was arrested and charged with the attempted murders of Eveline Lundberg and Christine Downey on May 11, 1953. These were the cases where the evidence was strongest since these were the victims for whom Grills had made the tea that had tested positive for thallium. She claimed her relatives had given evidence against her because of police pressure, but she was found guilty and sentenced to death on October 15, 1953. Six months later her appeal was turned down and her sentence was commuted to life imprisonment, but she only served six and a half years before she contracted peritonitis and died in hospital on October 6, 1960. Her motives for killing members of her family remained a mystery to the end. During her time in prison she proved extremely popular with other inmates, who renamed her "Aunt Thally."

## QUESTIONS:

- What are some symptoms exhibited in persons dying of heavy metal poisoning?
- How do you test a substance, like a cup of tea, or a person, for heavy metal toxicity?
- Where did the murderess get her poison?
- . What did Caroline Grills have in common with Ted Bundy and Dr. Harold Shipman?