



(4) Phosphorus

2. Symptoms Preceding Death

- a. Convulsions: strychnine, nicotine;
- b. Delirium: atropine, hyoscyamine;
- c. Extreme drowsiness: opiates, hypnotics;
- d. Extreme rapidity of death: cyanide, strychnine, nicotine;
- e. Long delayed death: metals;
- f. Abdominal pains: metals, food poisoning;
- g. Diarrhea: metals, food poisoning;
- h. Vomiting: metals, food poisoning;
- i. Burning of mouth: corrosives, mercury, arsenic.

3. Intentional Poisoning May Be Suspected If:

- a. Nearby persons attempt to hurry embalming, hurry funeral, cremate, body, falsify death certificate;
- b. Sudden death of healthy individual;
- c. Death apparently due to unknown causes.

B. Guide for Investigating a Poisoning

1. Questioning and Investigating Witnesses

Witnesses should be questioned to develop information regarding the poisoning and should be investigated to determine if they participated in the poisoning. Witnesses may include:

- a. Persons who witnessed the act of poisoning;
- b. Persons who have knowledge of a suspect's utterances or actions that would tend to establish a motive for the crime;
- c. Persons who have knowledge of the victim's consumption of food or drink within the period of time he/she probably received the poison;
- d. Persons who sold the victim or suspects drugs or medicines;
- e. Persons who have knowledge of the victim's movements prior to the time he/she was stricken;
- f. Persons familiar with the victim's habits, particularly his/her eating and drinking habits, use of drugs and medicines, self-medication attempts;

- g. Persons familiar with the victim's financial status, family background, and social life.

2. Essential Information

The investigator should try to obtain answers to the following from witnesses:

- a. Where was the victim when the symptoms first appeared?
- b. What were the symptoms?
- c. Did someone intentionally give the victim poison?
- d. Did the victim administer the poison himself/herself? If so, was the poisoning accidental or intentional? What was his/her reason? Had the victim ever contemplated suicide or attempted it?
- e. Who summoned assistance? When? By what means?
- f. Prior to the appearance of the symptoms, what did the victim do? With whom did he associate?
- g. What and where did the victim eat or drink prior to the appearance of the symptoms? Did the victim request food and beverages, or was it offered/urged upon him/her? Who prepared and served it?
- h. Did the victim notice anything peculiar about the food/beverages? Was he/she in the habit of eating the food/beverage in question?
- i. Did the victim eat/drink anything after the symptoms first appeared?
- j. Was the victim in the habit of drinking any form of alcohol not intended for drinking purposes?
- k. Did the victim take any medicines prior to the appearance of the symptoms? Was the medicine prescribed by a doctor? Was it given to him/her by other than a physician or pharmacist? Where is the medicine container? Did the victim habitually take any medicine? Was he/she addicted to any drug?
- l. Was the victim unhappy/depressed recently? Was he/she angry or jealous of anyone?
- m. Did the victim have money on his/her person prior to the symptoms? Does the victim still have that money in his/her possession? What was the condition of the victim's estate? Did he/she owe large sums of money?
- n. Who would inherit the victim's estate? Has that person lost money recently? Does the victim handle money in his/her occupation?

- o. Did the victim have any recent difficulties with regard to his/her occupation/employment? Did anyone ever accuse him/her of misconduct or criminal actions?
- p. Was anyone jealous of the victim because of his/her position? Will anyone benefit from the victim's death through promotion?
- q. Did the victim recently receive any threatening letters or communications? How were they disposed of? Who sent them? If they were anonymous, who had a motive for sending them or possessed the information on which they were based?
- r. Did the victim write any letters recently? To whom? What was the subject matter of the letters?

3. The Autopsy May Disclose

- a. The time of death;
- b. The affected organ that was the direct cause of death;
- c. The specific poison that caused the death (the identification and analysis of the poison may be performed by a toxicologist after the autopsy);
- d. The approximate time the poison was taken;
- e. The food or beverage that contained the poison (this may not be possible if death is several days after taking the poison);
- f. The approximate time of death if the victim died before medical/public authorities could reach him/her;
- g. A disease or accident that may have caused death;
- h. Suicide victims may be surprised by the slowness of death (by poison) and kill themselves by other means.

4. Investigation of the Activities of the Victim

An investigation should be made of the activities of the victim during the period prior to the poisoning.

5. Ascertaining the Source of the Poison

Determining the source of the poison may furnish valuable investigative leads. Some possible sources that should not be overlooked are:

- a. Hospitals, dispensaries, laboratories, and pharmacies;
- b. Offices, homes, and grocery stores (these may contain poisonous cleaning substances, rodent or insect poisons, and medicines that may be toxic if improperly used).
- c. Depots, warehouses, storage areas, farms, and similar areas where rodent/insect poisons may be kept;

- d. Filling stations, garages, and other places where fuels with alcohol bases may be found;
- e. Establishments where cleaning/solvent compound poisons are kept or used;
- f. Illicit narcotic channels;
- g. Dealers in bad liquor.

6. Collection of Physical Evidence

There are usually few witnesses to a poisoning; therefore, physical evidence is of vital importance. It is absolutely necessary that physical evidence be taken into custody in a legal manner, properly marked for identification, and safeguarded by a complete chain of custody covering every person who has such evidence in his/her possession from the time of the seizure until it is presented in court. In addition to the usual forms of physical evidence, the investigator or crime scene technician should obtain when possible:

- a. Remains of food or drink last taken;
- b. Drugs, medicines, narcotics, or chemicals in the home of the victim;
- c. Glasses, bottles, spoons, et cetera from which the victim may have ingested a substance;
- d. Vomit, urine, feces, et cetera.

7. Cooperation Between Police and Medical Investigators

It is especially important that police and medical investigators work closely together starting from the examination at the scene of the crime of the deceased. The usual notes/sketches/photographs should be made. The pathologist will usually remove and seal in clean glass jars without the addition of any preservative:

- a. The stomach and its contents;
- b. All or a good sample of liver;
- c. Blood (at least 25 – 50 ml);
- d. Both kidneys;
- e. All or part of the brain;
- f. Contents of intestines.