## NEVADA COUNTY SHERIFF'S OFFICE



## **CORONER'S DIRECTIVE**

13 Effective Date <del>05/30/99</del> 2/6/18

SUBJECT DEATH BY CONFLAGRATION

**POLICY** It is the policy of the Nevada County Sheriff's Office to investigate

all deaths resulting from fire or from the byproducts of fire.

**PURPOSE**To assist the deputy sheriff with a standard protocol in the handling

of all deaths by conflagration

**CODE REFERENCE** 

**CASE LAW** 

**DEFINITIONS** 

## **PROCEDURE**

- A. When the investigator is called to the scene of a death that is the direct result or apparent result of a fire, certain factors and information should be ascertained. Cooperation with the fire department at the scene is essential; and the investigator should work closely with the arson investigator.
- B. Certain information should be contained in the investigative report. Some of those points are:
  - 1. Position of the bodies at the scene?
  - 2. What type of a structure? Which room, closet, porch, yard, et cetera?
  - 3. Degree of burn on the body; percentage of burns on the body.
  - 4. Origin of the fire.
  - 5. Arson? Suicide? Homicide? Accident?
  - 6. Structural damage.

- 7. Witnesses and their statements.
- 8. Deceased's activity prior to the fire: Party, senility, mental state, et cetera.
- 9. Were fire alarms in the structure? Were they working?
- C. Prior to removal of the deceased from the scene, the decedent will be properly tagged with name, if known, and the location of the body at the fire scene.
- D. Pictures of the scene and body locations will be taken by the investigator prior to the removal of the deceased. Careful attention should be made, when the body or bodies are moved, for personal property or indications of clothing that may be under the remains. Document all jewelry found on the deceased. No jewelry should be removed by the investigator at the scene; this will be done by the pathologist at the autopsy.
- E. In order to help determine if there are any gunshot wounds, especially in unwitnessed cases, charred burn victims are to be x-rayed at the morgue prior to autopsy.
- F. Fire Investigation Fatal Fires
  - 1. The fire cause and the cause of death cannot be separated in the investigation of the fatal fire. The deceased is as much a fire cause indicator as is the fire area or area of origin. The investigation of the cause of the fire MUST also include the postmortem examination of the deceased. Until the cause of death is established at the postmortem examination, the cause of the fire cannot be absolutely established. This may change in large fires with many deaths in areas away from the area of origin.
  - 2. The investigation needs to be centered around both the area of origin, and the area of the deceased. The location of the deceased in relation to the area of origin needs to be precisely established and must make sense. The victim may not be at the area of origin. The elapsed time of the fire will often dictate movement away from the area of the fire into an area which might have afforded some protection. When the victim is found at a distance from the fire, it is extremely critical to note the position of the victim and the reason for the victim to be in that position.
  - 3. In most cases, the cause of death in the fire death will be inhalation of the byproducts of combustion. This is due to the affinity of the red blood cells for absorbing carbon monoxide approximately 200 times more than oxygen. The establishment of the level of carbon monoxide in the victim is done at the time of the postmortem examination in which blood is collected and examined in the laboratory for the level of carbon monoxide in the red blood cells. This is expressed in the laboratory analysis as the percentage of carboxyhemaglobin.
  - 4. If the victim was breathing super-heated air or flame, the throat may have spasmed, shutting off the air supply to the lungs. This process may provide a relatively low carbon monoxide level in the bloodstream. In this case, the investigator who understands the fire and the victim's location in relation to the

fire needs to have knowledge of the amount of searing in the breathing passages of the victim. If searing is severe in the breathing passages, the victim may have died of suffocation, and carboxyhemaglobin may be lower than anticipated.

5. The deputy coroner with his/her knowledge of the fire should be available for questions at the postmortem examination regarding heat and fire damage to the deceased. These questions not only would include the exterior surfaces of the deceased, but the breathing passages. The investigator can also be of assistance in determining the exterior burn damage of the victim as it relates to the spread of the fire.