

Name _____

CALCULATING TIME OF DEATH USING RIGOR MORTIS

Directions: In this activity, you will estimate the approximate time of death by analyzing the degree of rigor mortis of the deceased body.

Objective: Estimate the time of death using rigor mortis evidence

Procedure

Working with a partner, answer the following questions about the determination of the time of death from rigor mortis evidence. Refer to the Rigor Mortis Table for assistance.

Part A

Estimate the approximate time of death for the following situations. Explain each of your answers:

1. A body was found with no evidence of rigor.
2. A body was found exhibiting rigor throughout the entire body.
3. A body was found exhibiting rigor in the chest, arms, face, and neck.
4. A body was discovered with rigor present in the legs, but no rigor in the upper torso.
5. A body was discovered with most muscles relaxed, except for the face.
6. A body was discovered in the weight room of a gym. A man had been doing “arm curls” with heavy weights. The only place rigor was present was in his arms.

Part B

Estimate the time of death based on the following information:

7. A frail, elderly woman's body was found in her apartment on a hot summer's evening. Her body exhibited advanced rigor everywhere except her face and neck.
8. A body was discovered in the woods. The man had been missing for two days. The average temperature the past 48 hours was 50 degrees Fahrenheit. When the body was discovered, it was at peak rigor.
9. An obese man was discovered in his air-conditioned hotel room sitting in a chair in front of the television. The air conditioner was set for 65 degrees Fahrenheit. When the coroner arrived, the man's body exhibited rigor in his upper body only.
10. After a run, a young woman was attacked and killed. The perpetrator hid the body in the trunk of a car and fled. When the woman's body was discovered, rigor was noticed in her thighs only.
11. The victim's body is not rigid. How long has she been dead? Explain your answer.
12. The body is completely stiff. How long has he been dead? Explain your answer.
13. The victim was found in a snow bank alongside a road. His body is rigid. How long has he been dead? Explain your answer, remembering the cold temperature.
14. The body of the runner was found in the park one early, hot summer morning. Her body shows rigor in her face, neck, arms, and torso. How long has she been dead? Explain your answer.