


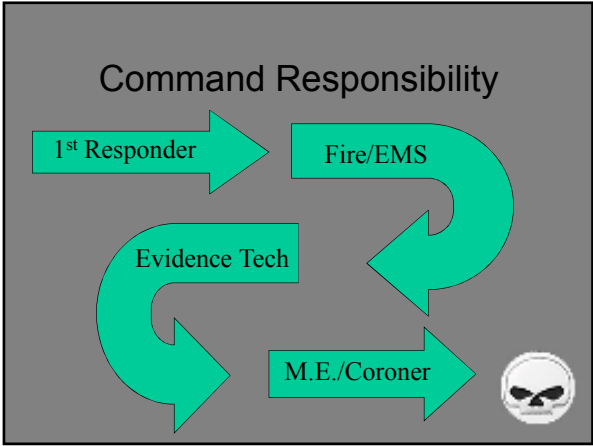
Death Investigation



First Responder Responsibilities

- Scene Responsibilities
 - Life
 - Evidence
- Be Suspicious
- No Second Chances
- Request Appropriate Support





Coroners and Medical Examiners

- Coroner: Elected
- Medical Examiner: Appointed
- In what cases do we call?
 - Un-witnessed Deaths



Remember -
Our primary
responsibility is to
protect life!



Obvious Signs of Death

- Decapitation/Dismemberment
- “Charred Remains”
- Mummification
- Insect Infestation
- Decomposition



Subtle Signs of Death

- Exsanguination
- Body Temperature
- Livor Mortis
- Rigor Mortis
- Skin Slippage



Exsanguination

- Exsanguination is a cause of human death where injuries which rupture any major blood vessel lead to rapid blood loss which cannot be rapidly treated. For example, it is a common cause of battlefield deaths.



Body Temperature

- The process of *Algor Mortis*, the cooling of a body after death, begins immediately and is greatly affected by ambient conditions. After the onset of putrefaction (about two days after death) the body temperature will increase again, due to the metabolic activity of the bacteria and other decomposing organisms.

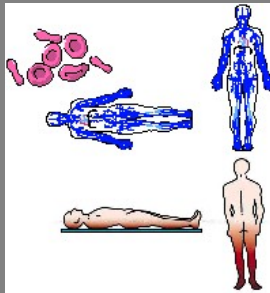


Livor Mortis

- *Livor Mortis* is the settling of blood. When the heart stops, the blood stops circulating and gravity makes it settle. This makes the areas where the blood has settled turn dark blue or purple. This starts happening immediately and is visible with a couple of hours. The lividity doesn't show where the body is in contact with something.



Livor Mortis



Rigor Mortis

- Bodies become stiff after about three hours and remain that way for around 36 hours. After death the body's muscle cells continue to function anaerobically, causing a build-up of lactic acid. *Rigor mortis* ceases as the body cells die, enzymes are released and the cells decompose.



Skin Slippage

- Within hours after death changes occur in the epidermal-dermal junction resulting in what usually is termed *skin slippage*. The layers of skin detach from themselves, and the space fills with fluid, resulting in what appear to be large blisters.



Cause Specific Clues Ligature



Cause Specific Clues Petechial Hemorrhaging

- Hemorrhages that occur in minute points beneath the skin, appearing as pinpoint, non-raised, perfectly round, purplish red spots, caused by bursting blood vessels.



Cause Specific Clues Cyanosis



Cause Specific Clues Suicide

- Overdose
- Hanging
- Gunshot
- Slit Wrists
- Carbon Monoxide
- Jumping



Themes

- Protect life, then evidence
- Be suspicious, be polite
- Once a decision to call a death “by natural causes” is made, reopening the case is possible but difficult
- When in doubt slow down and check with someone
- Get the right expert for the job