

# Forensic Archaeology and Time Since Death

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- Traditional Methods to determine TSD
  - Livor mortis
  - Rigor mortis
  - Algor mortis
  - K in vitreous humor
- But what about TSD when decomposition is involved?
  - The process of decomposition
    - Autolysis
    - Putrefaction
    - Chemistry (painless)
  - The “traditional” view
  - Factors affecting this traditional view
    - Temperature
    - Water
    - pH
    - Partial pressure of oxygen
    - Other issues?
      - Hanging
      - Scavenging
      - Embalming
- Traditional Stages of Decomposition
  - Fresh
  - Early
  - Advanced
  - Skeletonization
  - Extreme Decomposition
  - Decomposition in water
- Material decomposition and what it can tell us
- Adipocere
- Volatile fatty acids and TSD
- Inorganic chemicals and TSD
- Arpad Vass’s “Rule of Thumb” for simple TSD calculation
- Clandestine Graves
  - Detection
  - “Gold Standard” – cadaver dogs – and their problems
  - Vapor samples and impact on identification
- Dealing with Decomp