

Trust Your Gut, Trust Your Process

“Trust your gut. Your gut feelings are usually accurate and correct. If you truly feel there’s something, chances are there is.”

- Unknown



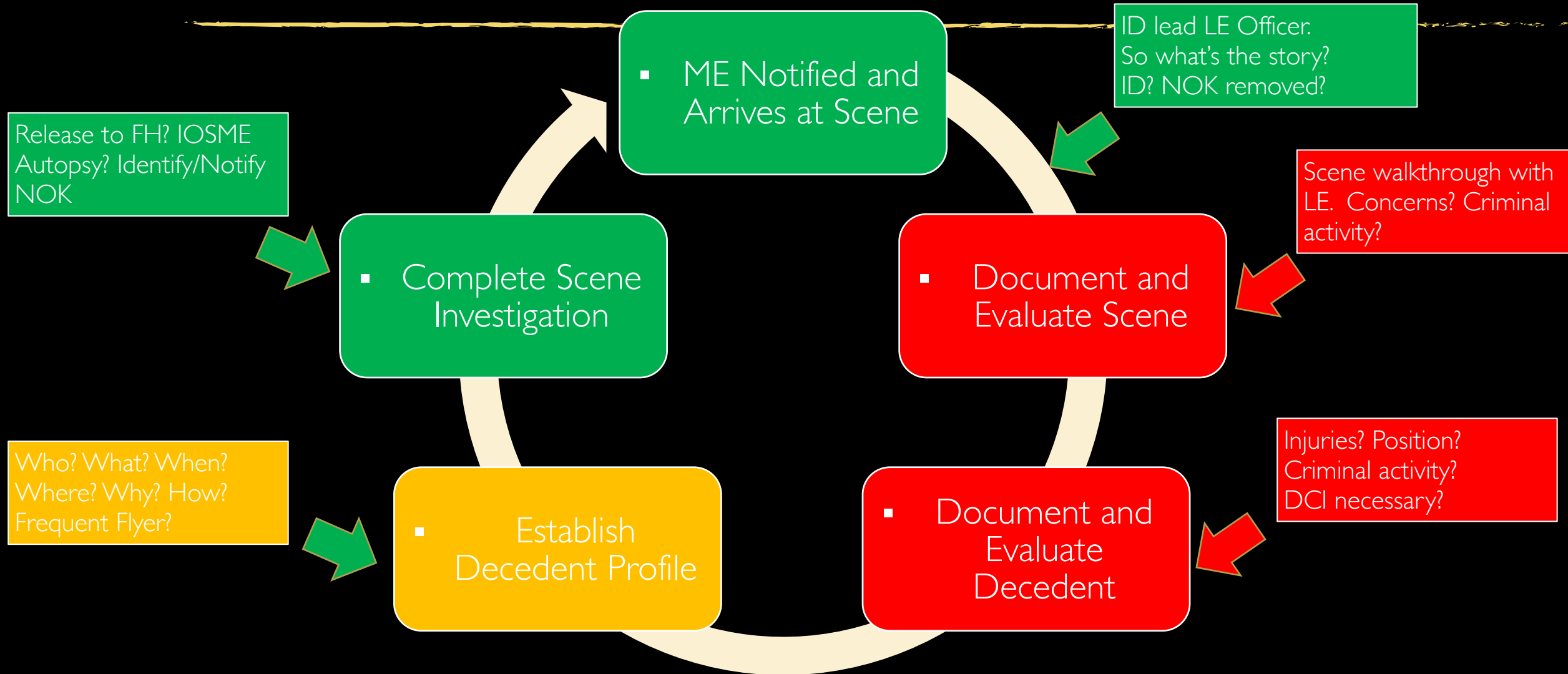
Case Study #1



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Scene Investigation Process



APPARENT SIGSW



- 50 y/o, male
- In process of divorce, separated from wife
- Member of local law enforcement
- Lives alone
- Same day birthday
- Medical/Social History currently pending

Initial Notification & Response



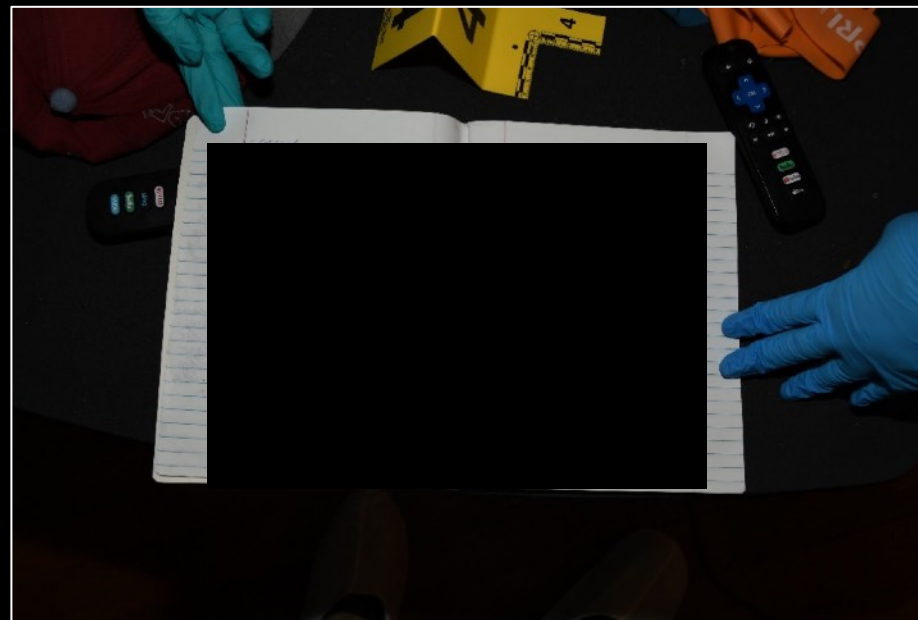
- LSA: 4 hours earlier, leaving work
- Found: by friend, welfare check
- Failed show at BBQ with friends
- Unsecured residence
- Wife (currently separated) in vehicle at scene on street

Initial Notification & Response



- Service weapon in residence, multiple others
- No notes

Decedent Profile (Who, What, Where, When, Why?)



Scene Evaluation and Documentation



- Vertical droplets, multiple locations

Scene Evaluation and Documentation





Spent Casing A



Spent Casing B



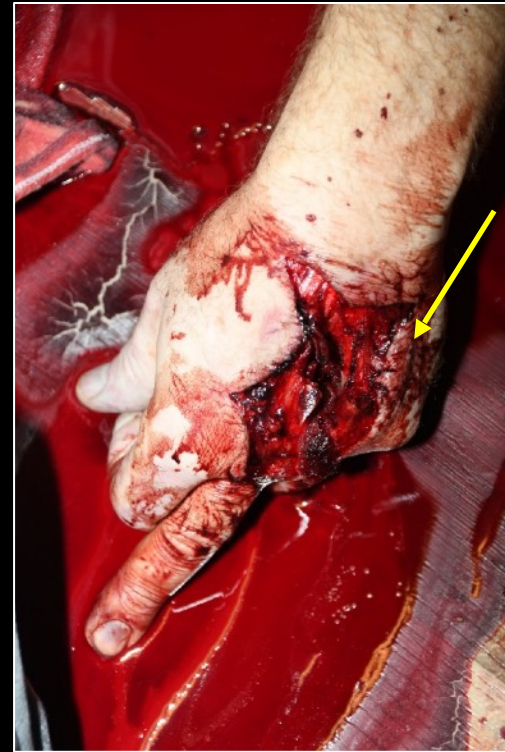
Projectile A



Projectile B



Wound A



Wound B



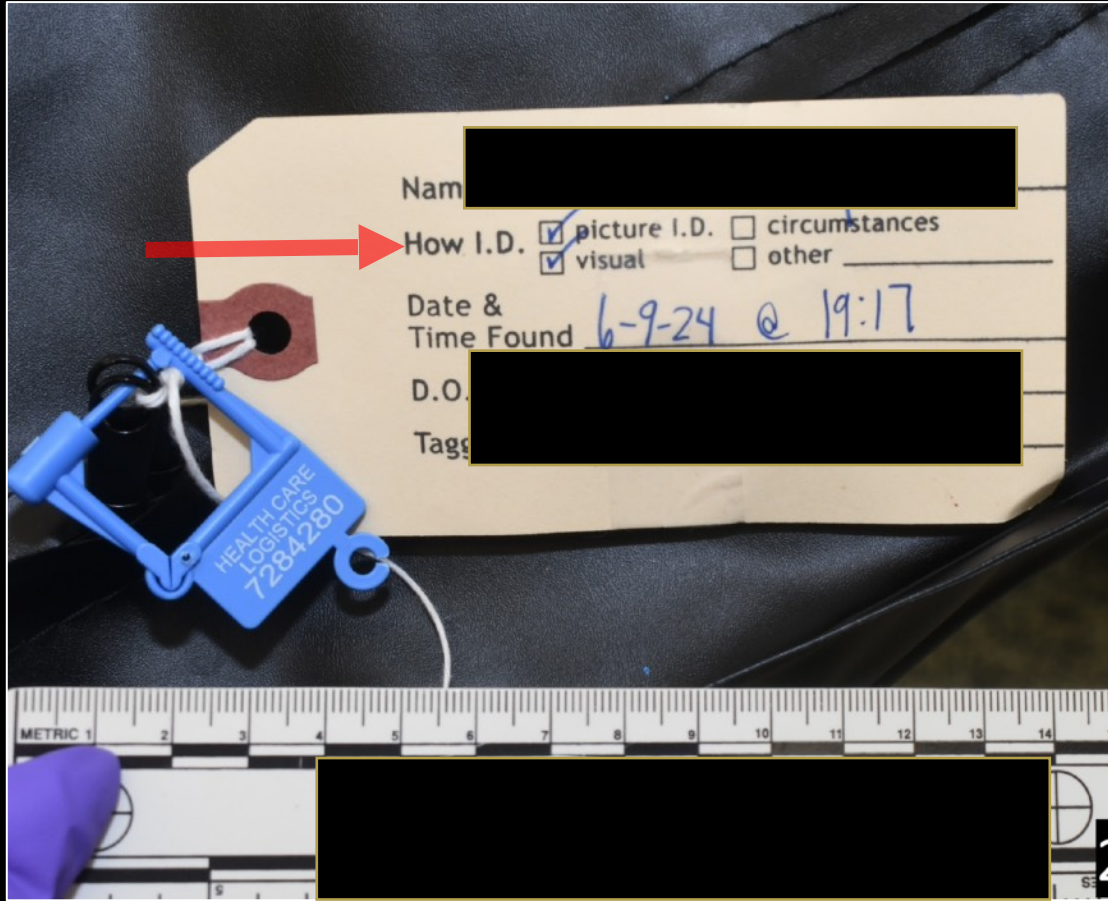
Blood Spatter



- ▶ Gunshot wound of head.
 - ▶ Entrance right scalp with surrounding soot and recoil rod mark.
 - ▶ Perforation of skull and brain.
 - ▶ Exit wound on left scalp
 - ▶ Trajectory: R to L, slightly Downward and F to B.

- ▶ Gunshot wound of left hand.
 - ▶ Entrance on left palm
 - ▶ Perforation of metacarpals and muscles
 - ▶ Exit on posterior left hand.
 - ▶ Trajectory: F to B, slightly Upward

Cause: Gunshot Wound of Head













Absence of soot or stippling,
stippling possible up to 30
inches

Other Autopsy Findings

- Toxicology: Negative
- Other conditions: Severe CAD and mild cardiomegaly

Autopsy features relevant for ~~discrimination of suicide v homicide~~

- 14 out 35 (40%) of Contact GSW had muzzle imprint mark
 - R Pircher et al 2014 j.forsciint
- Sample size 284 Suicides and 293 Homicides
 - Contact Wounds: 89% Suicides, 7.5% Homicides
 - Sites in Suicide: 36% temple, 20% mouth, 20% forehead, 11% forehead, 15% chest
 - Trajectories in Suicide with right temple entrance: 6% downwards, 4% B to F
 - More than 1 GSW in 5.6% of Suicides

Circumstances relevant to discrimination of suicide v homicide

- 40% of GSW of head suicide +ETOH
- Trajectory 51% upward, 24% horizontal
- 92% indoors (found in kitchen)
- Precipitating factors may include domestic quarrels (wife served divorce papers 4 wks prior), loss of employment, financial difficulties, substance abuse, chronic disease, or mental illness (depression, but no prior suicidal ideation)

IOSME 2023

- 229 Firearm cases: 170 (74%) Handguns
- 160 Suicides by Firearm: 123 (76%) with handguns, 37 (23%) with Rifles or Shotguns
- 106 (66%) involved single Gunshot Wound to Head, 1 more than 1 GSW to head

- 62 Homicides involving Handgun, rifle or NOS
 - 2 (3%) Homicides involved single Gunshot Wound to Head
- 69 (43%) Firearm Suicides were in the residence
- 13 (20%) Firearm Homicides were in the residence

TAKE HOME on SUICIDES

- Scene photography
- Investigate: Scene investigation, LE conclusions, Family, History
- Document stressors (Financial, Behavioral health, Bullied...)
- Autopsy