

MEDICAL EVIDENCE ANALYSIS SHEET

Subject: Brehana Fadden

Incident Date: March 14, 2025

Prepared For: Legal and Investigative Review

Purpose: To document and interpret physiological findings recorded by law enforcement and emergency personnel at the scene of the collision, and to clarify that these findings are consistent with traumatic stress response—not intoxication, impairment, or drug influence.

I. HEART RATE ASSESSMENT

Recorded Vital Signs:

- 100 bpm
- 96 bpm
- 102 bpm

Legal/Medical Interpretation:

1. Normal Resting Range for Adult Females: 60–100 bpm is medically recognized as normal sinus rhythm.
2. Heart Rate After a Motor Vehicle Collision: It is physiologically expected for heart rate to increase following sudden impact, pain response, emotional shock, adrenaline surge, fear or confusion, visible property damage, or concern for personal safety. Heart rates between 95–120 bpm are extremely common in post-accident patients who are alert, sober, and experiencing normal stress reactions.
3. Conclusion: A heart rate fluctuating around 96–102 bpm is well within normal parameters for someone who has just been struck by another vehicle. These readings do not support suspicion of intoxication and cannot be used as evidence of impairment.

II. PUPILLARY FINDINGS

Reported by Officer/EMT:

- 7.0 mm diameter in ambient street lighting
- 6.0 mm diameter in direct light
- Reaction to light: Slow

Legal/Medical Interpretation:

1. Normal Pupil Size Ranges: In low or moderate light, 4–8 mm; in bright/direct light, 2–4 mm. Size varies depending on lighting, emotional stress, pain, adrenaline.

2. Expected Post-Accident Physiology: Trauma and acute stress naturally increase sympathetic nervous system activity ("fight or flight"), causing temporary dilation and slowed constriction, even in sober individuals.

3. Critical Point: The change from 7 mm → 6 mm is constriction, demonstrating normal neurological function. Drug impairment produces specific, predictable patterns not matching these findings.

4. Conclusion: Mild dilation with slow reaction is fully consistent with stress response, adrenaline, and pain, including head impact, whiplash, shock, and anxiety. These findings do not constitute medical evidence of intoxication and are not supported by toxicology testing, which returned negative for all substances.

III. OVERALL MEDICAL CONCLUSION

Based solely on the physiological data recorded at the scene:

- Heart rate measurements are normal for a post-collision trauma response.
- Pupil size and reactivity fall within known physiological parameters for stress, fear, and lighting changes.
- None of the recorded findings support any claim of drug intoxication, impairment, or stimulant influence.
- All findings are consistent with a sober individual experiencing the direct effects of a sudden, unexpected motor vehicle accident.

This evidence supports that the initial arrest and suspicion of drug impairment were medically unfounded and contradicted by subsequent hospital toxicology, which was negative for all substances.

Prepared By:

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