

Documenting Danger



Ohio
Domestic
Violence
Network



The Center on
Partner-Inflicted
Brain Injury

What Police Reports Reveal About Brain Injury in Domestic Violence Cases

Sophia Sobota, J.D. Candidate; Rachel Ramirez, LISW-S, RASS; Julianna Nemeth, PhD



Introduction

Brain injury resulting from domestic violence (DV) is a global public health crisis. Partner-inflicted brain injury refers to brain injuries caused by an intimate partner through often repeated blows to the head, neck, and face, strangulation, or other assaults that disrupt normal brain function. These injuries often occur alongside ongoing psychological trauma, coercive control, and a history of past abuse that can worsen and compound the harm.¹ Victims often face daily challenges requiring coordinated support from justice, medical, legal, advocacy, and other systems. Partner-inflicted brain injury remains one of the most unrecognized and understudied consequences of DV.² Government agencies have requested prevalence data to allocate funding and influence policy, legislation, training, and systems response.³

Along with domestic violence shelters and programs, DV response efforts often begin within the justice system, where police play a pivotal role in initiating processes and documenting evidence that can shape case outcomes and victim experiences. Evidence collected by law enforcement and other first responders—both immediately after the assault and during follow-up interviews and investigation—can be particularly important. As is common in domestic violence criminal cases, many victims do not fully participate in the criminal process, which often results in charges being reduced or dismissed. This is especially true in cases where victims who have already suffered severe violence reasonably fear retaliation against themselves or their children and are unwilling or unable to testify. Another unexplored reason could be that the ongoing effects of trauma and unidentified and unaddressed brain injury make it difficult for victims to participate effectively in prosecution. While the federal government has significantly invested in improving justice system and police training and response, this study underscores the need for continued prioritization of training and practices to strengthen law enforcement's ability to address the complex realities of DV, including the frequently overlooked impact of brain injury.

Brain Injury Definitions, Causes and Exposures, Signs and Symptoms

Brain injuries are caused by multiple events, including sports, vehicle crashes, military service, overdoses and substance use, and accidents such as slips and falls. Violence is an underrecognized cause of brain injury.

Traumatic Brain Injury/Concussion (TBI)

A bump, blow, or jolt to the head or body that disrupts normal brain function. A concussion is another term for brain injury.

Examples of TBI exposures in domestic violence include assaults to the head, neck, or face, blunt force trauma, and forceful movement of the head, such as being shaken, thrown, or stopped abruptly.

Hypoxic-Anoxic Brain Injuries (HAI)

When breathing or blood flow to the brain is restricted or stopped, even briefly.

Common causes of HAI exposures in domestic violence cases include strangulation, suffocation, and other forms of airway and chest compression.

Brain Injury Signs and Symptoms

These can overlap with other conditions, most commonly mental health or substance use. Lack of awareness of brain injury as a significant consequence of domestic violence contributes to this reality.⁴

Signs of acute brain injury that others can observe include:

- Loss of consciousness after injury
- Any loss of memory of events immediately before or after the incident
- Change in mental status (incorrect responses to orienting questions—place, time, space)
- Neurological signs (visual disturbances, problems with motor coordination, seizure, etc)

Symptoms are experienced by victims and observers might not notice them unless a victim shares them. Symptoms fit into three broad categories. Examples include:

- **Physical:** Headache, nausea, dizziness, fatigue, light/noise sensitivity, blurred vision
- **Cognitive:** Poorer concentration, memory, speech/language difficulties, processing speed, problems with comprehension. People might also experience a subjective change in mental status (dazed, confused, or in a fog). Victims might describe it as “my brain isn’t working” or “I can’t think.”
- **Emotional:** Strong or uncontrollable feelings, irritability or easily angered, anxiety or nervousness⁵

Identifying and documenting signs and symptoms as evidence is critical because brain injuries are often invisible. While some victims might have bruising, swelling, or lacerations, many don’t. In addition, standard imaging such as MRI or CT scans appear normal, with studies showing 80-90% of concussions have no clinically significant findings.⁶ Current studies of CTA exams in strangulation cases show clinically significant findings in between 2-4% of cases.⁷

Study Summary

Injuries to the head, face, and neck are among the most common and serious physical injuries associated with intimate partner violence (also often referred to as domestic violence).⁸ Strangulation has repeatedly been shown to be a significant risk factor for severe, life-threatening assaults and homicide, increasing risk by over 7.5 times with repeated strangulation and violence significantly increasing risk.⁹ In recognition of this, Ohio passed felony strangulation legislation, the last state in the nation to do so. Effective April 4, 2023, Ohio Revised Code (ORC) §2903.18 defines strangulation as a felony offense, prohibiting knowingly causing or creating a substantial risk of physical harm by impeding breathing or circulation (manual or ligature) or covering the nose/mouth. Charges range from 5th to 2nd-degree felonies, with enhanced penalties for domestic violence or pregnancy.

The purpose of our study was to examine a snapshot of police reports to understand how often potential causes of brain injury occur and what is documented. Because this type of analysis had never been done before, we aimed to establish baseline measures and gain insight into the characteristics of the physical assaults police respond to in domestic violence cases. Our study quantitatively and qualitatively assessed public police reports obtained from the Columbus City Prosecutor’s Office in Franklin County, Ohio, comparing reports before (104 reports, 107 victims) and after (59 reports, 59 victims) strangulation felony legislation. We evaluated injuries to the head, neck, and face—common DV targets—to estimate exposure to traumatic brain injury (TBI)/concussion, and hypoxic-anoxic injury (HAI), resulting from oxygen deprivation to the brain. Additional variables collected included relationship status, prior DV exposure, medical evaluation, injury documentation, and advocacy referrals. We also studied possible changes in response and documentation following strangulation-specific training.

As is common with new laws, meaningful changes in field practice often take time to emerge as policies are implemented, training is delivered, and awareness increases. We did not observe substantial differences between pre- and post-legislation strangulation reports, likely because data collection occurred only months after the law's passage. For clarity and practical application, we therefore combined results across both years. Importantly, we identified emerging promising practices—most notably specialized training on brain injury and strangulation, described later in this report. These early indicators suggest that, with additional time and continued implementation, the impacts of the legislation and related policy changes are likely to become more evident. We developed five recommendations including multi-system response models like collaborative law enforcement-medical-advocacy approaches.

Project Aims

- 1 Estimate the prevalence and co-occurrence of possible TBI and HAI in DV-related assaults by analyzing police reports.
- 2 Evaluate the impact of strangulation-specific police training and the non-fatal strangulation felony law on documentation and response.
- 3 Identify gaps in law enforcement response to DV-related head, neck, and facial trauma and provide recommendations to improve future training, documentation, and system effectiveness.

Key Takeaways

In **163** reports, **77.1%** had **at least one** head or facial injury, strangulation, or both.

Brain injury is a defining feature of the majority of criminal domestic violence cases involving physical violence. This has direct consequences for police response, victim safety, and justice system outcomes.

Police Report Findings

163 reports, 166 victims

Police reports filed August 2022 to August 2023

Victim & Suspect Gender

79.5% female victims (8 pregnant)
19.9% male victims

77.7% male suspects
19.9% female suspects

Relationship & Living Status

64.5% dating partner, father of child,
or mother of child
4.8% ex-dating partner
22.3% family/household member
7.2% non-family/household
member
53.6% living together

77.1%
of 166 victims
experienced at
least one TBI, HAI,
or co-occurring TBI &
HAI exposure

Head Injury & Strangulation; TBI & HAI Exposure

62.7% experienced TBI exposure
22.9% experienced HAI exposure

38 reports (22.9%) documented
physical assault elsewhere on body;
10 of 38 did not specify where
on the body

Prior Exposure & History of Violence

6 reports noted prior TBI exposure
4 reports noted prior HAI exposure

16.3% noted suspect's history of
violence, DV, or prior conviction

Response & Injury Documentation

Only 27.7% of victims connected with medical professionals following incident.

In 10 out of 14 strangulation incidents, DV-STOP officers were called & responded.

1.8% documented TBI signs; 7.2% documented TBI symptoms
2.4% documented HAI signs; 16.3% documented HAI symptoms
32.5% described visible injuries from TBI exposure
7.8% described visible injuries from HAI exposure
45.8% noted officers took photos of injuries
13.3% stated "no visible injuries"
54.8% victims provided written statement
19.9% officers connected victims with advocacy services; 25.4% tried; 54.2% did not
42.2% officers conducted lethality assessments



Policy Response and Injury Documentation

As far as the discrepancy between documented violence that could cause brain injuries and documentation of signs and symptoms, we imagine that could be because we lack awareness as a country that brain injury is a defining feature of domestic violence cases. Because of this, police have had no training on brain injury and are unaware they are responding to potential concussions and how this impacts their work. They of course haven't routinely documented signs and symptoms or taken into consideration strategies for effective interviewing of victims who are experiencing acute brain injuries. Yet this data shows a need for a greater focus—to make sure the police response is effective, victims can get the medical treatment and advocacy services they need, and to assist prosecutors with collecting strong evidence for the case, including detailed documentation. More research and analysis needs to be done in this area to properly understand the role and impact of documentation in these cases of severe violence.

Victim Perspective

Statements included in police reports

Traumatic Brain Injury (TBI), Hypoxic-Anoxic Brain Injury (HAI), and Co-Occurring TBI & HAI Exposures

“ The suspect caught up with her, grabbed her by the hair, and drug her back to the truck. The suspect again told her to get in the truck to which she refused. The victim said the suspect then grabbed her hair again, and slammed her head against the side view mirror. ”

“ The suspect grabbed the victim by the back of her hair and hit her head against the wall. The victim stated the suspect hit her head against the wall and floor multiples times. ”

“ She stated he struck her around 40+ times in the head, neck, shoulder, arms, and back area. She stated he grabbed her around her neck and strangled her, banging her head against the wall. She stated she never lost consciousness during the attacks. She stated the attacks occurred over an approximate 4-hour period. ”

“ The suspect began to choke her, and she felt that she was beginning to lose consciousness. The victim stated that the suspect released pressure off of her neck just in time for her to not lose consciousness. ”

Traumatic Brain Injury Signs & Symptoms

“ Officer asked if she went unconscious during the incident, she stated that she did for a short amount of time. ”

“ Observed bruising underneath the victim's left eye and another bruise to the right side of the face that appeared to have been a day or so old. ”

“ She had blood in her mouth, a swollen left eye socket and a large lump on her forehead. ”

“ She felt lightheaded, and that she recently found out she was pregnant and was concerned for the well being of herself and the baby after being shoved twice hitting her head. ”

“ The victim was trying to recall the details but was unable to say if the suspect used a closed fist or open hand or where on her body she was struck. ”

“ She complained of pain to the back of her head. ”

HAI Signs & Symptoms

“ ...causing throat pain, blurry vision, and being unable to breathe. Also, she stated that she has had difficulty speaking since the last incident.”

“ The victim didn’t lose consciousness, but stated everything went black and she believed that she was about to.”

“ She stated she was unable to breathe for what felt like approximately a minute.”

“ She had difficulty breathing. She stated she did not lose consciousness or urinate/defecate.”

“ She stated her throat was sore and it was difficult to swallow.”

“ The victim had petechiae to both eyes.”

Prior Exposure & History of Violence

“ The victim was unable to complete a witness statement because her finger was currently broken out of a previous incident. The suspect was directly indicted on a murder charge that was dismissed.”

“ The victim stated this is not the first time this has happened.”

“ She filed DV warrants against her husband and has been hiding from him since he was never arrested.”

“ The victim stated she quickly became pregnant but had a miscarriage due the suspect putting his hands on her.”

Conclusions & Recommendations

Brain injury is a defining feature of the majority of criminal domestic violence cases involving physical violence. This has direct consequences for police response, victim safety, and justice system outcomes.

When responding to a DV incident, officers are likely encountering victims that experienced recent head injury and/or strangulation, concussion and/or oxygen deprivation to the brain. In this study assessing DV-physical assault police reports, **77.1% of 166 victims experienced a TBI, HAI, or co-occurring TBI and HAI exposure.** This data confirms that the risk of partner-inflicted brain injury is extremely common. This data also raises several key questions for improving system response to, and documentation of, these prevalent injuries.

Recognizing Harm

- Both police officers and victims are often unaware that assaults could cause brain injury.
- Police officers are likely to be responding to victims who experienced traumatic assaults as well as acute concussions and other types of brain injuries. These injuries—often multiple and repetitive—can significantly affect communication, behavior, and participation in the justice process.
- Officers may be encountering both recent, new brain injuries and the accumulated effects of prior assaults.
- Signs and symptoms vary and may not show up right away.
- Brain injury and trauma may look different in each case but must be taken seriously, especially when additional lethality factors are present.
- DV victims often face ongoing and repeated, escalating, severe assaults, and potentially lethal violence.

Multi-System Response

- Domestic violence assaults require a criminal, medical, and advocacy response.
 - What is the law enforcement role in connecting victims to care?
 - If a victim refuses on-scene help (medical or advocacy), is there a follow-up plan for care?
 - Could a co-response with medical professionals, police, and advocates improve outcomes?
- Medical evaluation, as well as emergency and/or follow-up medical care is necessary.
- Advocates can provide necessary accommodations so the victim can effectively participate in the investigation (especially when providing oral or written victim statements), as well as in ongoing judicial processes.

Shift in Understanding and Attitude

- How might awareness of brain injury in the context of significant psychological trauma shape how officers (and later attorneys, judges, jurors) interpret victim behavior? How would it shift their approach to how they do their job?
- What if what looks like defiance, noncompliance, substance use, or mental health is actually evidence of harm and possible brain injury, like common victim experiences of slurred speech, balance issues, disorientation, emotional overwhelm, or confusion?
- How might protocols look different to take into consideration acute concussion, coercive control, and the impact of psychological trauma? (e.g., documentation of violence as well as signs and symptoms, calm and patient police interactions, significant role of follow-up interviewing and investigation for delayed signs of impact, acknowledgement of acute medical concerns).

Documentation is Evidence (police report, victim statement, follow-up interviewing)

- Police reports drive charging decisions, court outcomes, and victim connection to services.
- Officer's role is to gather evidence to document and prove crime.
 - What details need to be documented for proof and severity of injury?
 - If an officer documented head injury and strangulation exposures as well as signs, symptoms and victim behavior on-scene, would it assist the prosecution process, victim participation in the process, case outcomes, follow-up medical care and advocacy response, and supportive resources offered to a victim?
- Many assaults might not have visible injuries. Absence of visible or "typical" signs of head injury or strangulation DOES NOT mean absence of injury or assault.
 - What does the reality of "no visible injury" mean for evidence in the justice system?

Foundational and Ongoing Training

- You can't document and address what you don't know to look for. Partner-inflicted brain injury is a frequent consequence of domestic violence, and all involved in systems response need education and training specifically on this topic.
- Training improves police response, documentation, and survivor experiences/outcomes, resulting in better system outcomes.

Promising Practice: Columbus Police Department's Strangulation Team Operations for Prosecution (STOP) Training

Recognizing the prevalence of traumatic brain injury and strangulation in domestic violence assaults, some law enforcement agencies are beginning to provide more extensive training on these issues. STOP is made up of dedicated patrol officers who receive more than 80 hours of specialized training. It focuses on skills to investigate domestic violence cases involving strangulation, suffocation, and traumatic brain injury.

Such training can be vital in increasing victim safety and increased connection to both medical care and domestic violence advocacy support. It also improves documentation of injuries, which can provide crucial evidence for prosecutors seeking convictions under Ohio's felony strangulation law, which took effect in 2023. STOP officers handled most strangulation cases in 2023, reflecting a speedy adoption of this new approach. Their reports were detailed with signs and symptoms and other documentation that served as strong evidence for felony charges, showcasing effectiveness of this program and signaling the need for further training for all officers on both concussion and strangulation.

Recommended Citation

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Please contact Rachel Ramirez at rachelr@odvn.org for any additional questions or comments.