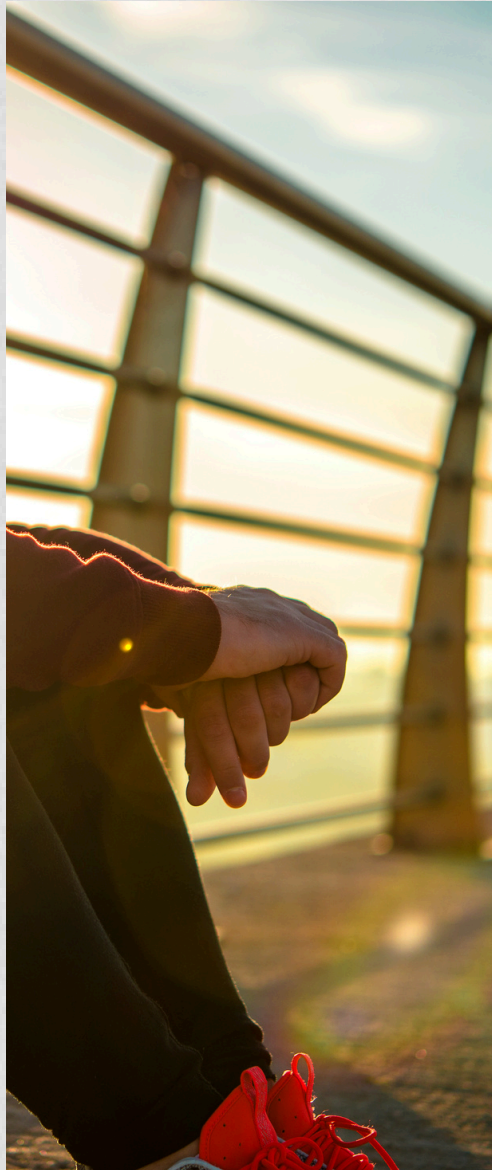
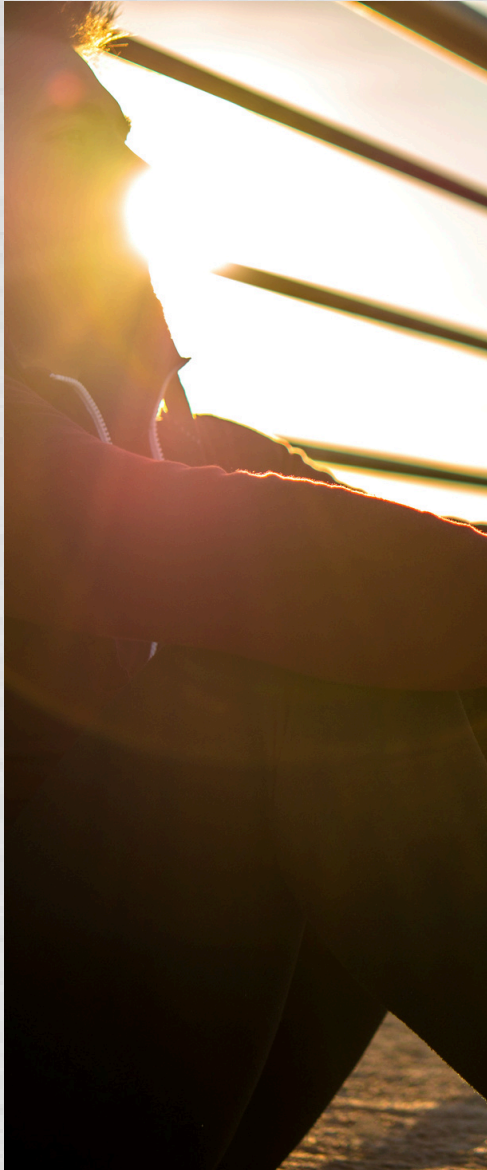


# Brain Injury After Overdose A Toolkit



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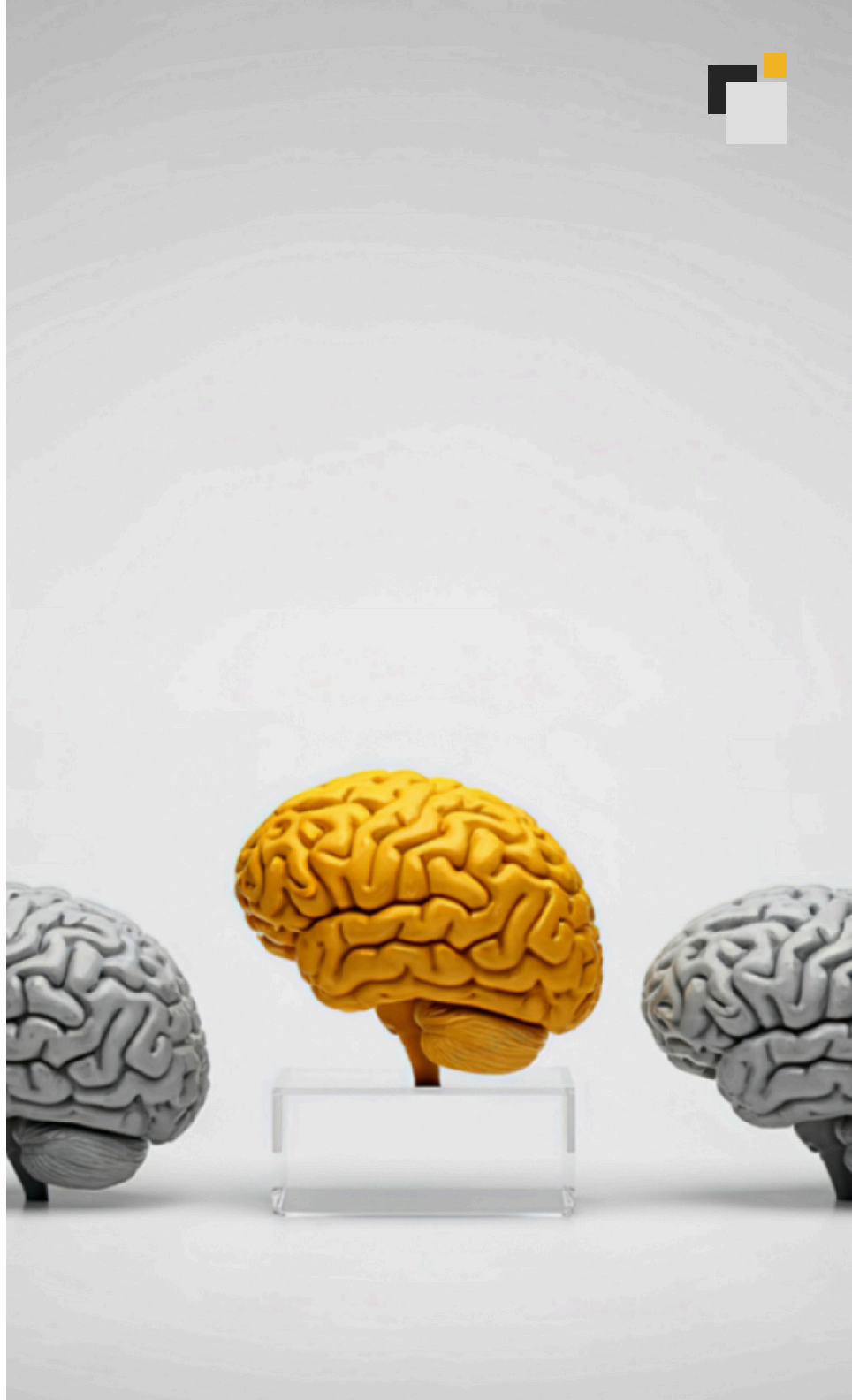


# SECTION 1

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## TOOLKIT INTRODUCTION

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*Created for deflection teams, first responders, and post-overdose partners, this toolkit highlights how brain injury can shape interactions after overdose. It offers practical guidance for safe and supportive interactions*

# INTRODUCTION

---

## WHO IS THIS GUIDE FOR?

This toolkit is intended for deflection teams, first responders, and partners involved in post-overdose response. It provides practical guidance for identifying potential brain injury after overdose and adjusting outreach, communication, and expectations to reduce harm and support engagement.

People may experience brain injury during an overdose even when there are no obvious signs at the scene. These injuries can affect awareness, behavior, and decision making in ways that shape how individuals interact with services and systems on scene and over time. This guide is designed to help practitioners recognize those patterns and respond in ways that are practical, trauma-informed, and grounded in real-world deflection and first responder work.

## WHAT THIS TOOLKIT PROVIDES

This toolkit offers guidance on recognizing and responding to possible brain injury after overdose, building on key concepts introduced in the **Brain Injury After Overdose** rack card series (Appendix B–D). It provides additional context, examples, and practical considerations that extend beyond the initial encounter.

The toolkit is designed to support day-to-day decision making, communication, and coordination across roles and settings involved in post-overdose response.

## WHAT THIS TOOLKIT IS NOT

This toolkit is not a diagnostic tool and does not replace emergency care, medical evaluation, or clinical assessment. Instead, it is meant to support awareness, observation, and supportive response when brain injury may be a factor in post-overdose engagement.





## SECTION 2

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### RECOGNIZING BRAIN INJURY AFTER OVERDOSE: WHY IT MATTERS

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*Brain injury after overdose may immediately affect awareness, behavior, and decision making at the scene and continue to affect a person in the days and weeks that follow, even if they appear medically stable.*

# RECOGNIZING BRAIN INJURY AFTER OVERDOSE: WHY IT MATTERS

Brain injury can occur during overdose even when there are no visible signs of trauma (Winstanley et al., 2022). Reduced oxygen to the brain, seizures, or falls during overdose can all cause injury that may not be immediately obvious.

Because these effects are not always visible or consistent, they can be overlooked once the immediate crisis has passed.

## INCREASED RISK OF REPEAT OVERDOSE AND DEATH

A person with brain injury faces greater risk of repeat overdose and death (Hammond et al., 2020).

This is because:

- Memory, awareness, and judgement may be impaired, making it harder to track recent use or recognize warning signs
- Substances have a stronger, more dangerous effect on an injured brain

Repeated overdoses compound damage and reduce the brain's ability to heal between events

## ENGAGEMENT AND SAFETY



Emotional and behavioral changes related to brain injury are often misunderstood. Confusion, irritability, withdrawal, or inconsistency may be interpreted as noncompliance or lack of interest, when they may instead reflect how the brain is functioning after overdose.

When helpers remain attentive to the possibility of brain injury, they are better positioned to recognize early warning signs and respond in ways that reduce harm. Adjusting pace, simplifying communication, and offering small accommodations can make it easier for people to engage.

# TYPES OF BRAIN INJURY SEEN AFTER OVERDOSE

## **Hypoxic/Anoxic Brain Injury:**

Occurs when the brain receives reduced oxygen (hypoxic) or no oxygen (anoxic). This type of injury can occur during overdose, even when no physical injury is visible (Brain Injury Association of America).

Examples include:

- Prolonged unconsciousness
- Slowed breathing or respiratory arrest
- Delayed response after naloxone

## **Traumatic Brain Injury (TBI)/Concussion:**

Occurs when the brain is injured due to external force, such as falls, seizures, hitting the head during overdose (Lemsky, 2021).

Examples include:

- Hitting the head on furniture, stairs, or other objects during collapse
- Head injury during seizure activity associated with overdose
- Falling to the ground or onto a hard surface while overdosing

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## **Considerations**

- Traumatic brain injury may also result from violence, strangulation, and accidents in addition to overdose related events
- Many people who use substances have also experienced violence, including domestic violence or strangulation, which can contribute to brain injury before or alongside overdose-related injury
- Individuals who use substances are at greater risk of injury from violence, strangulation, and accidents
- More than one type of brain injury may be present at the same time

## HOW BRAIN INJURY MAY APPEAR

After an overdose, a person may be experiencing changes in how their brain functions, even if they appear medically stable.

### **What the Person Might Experience:**

Examples include:

- Memory Challenges
- Slower Processing speed
- Executive functioning challenges
- Difficulty regulating emotions
- Sensory overload



### **How it Might Show Up:**

Examples include:

- Missed or forgotten appointments; repeating questions
- Long pauses; difficulty understanding options or next steps
- Feeling overwhelmed by referrals, paperwork, or planning
- Mood swings, overwhelm, emotional shutdown, or impulsivity
- Avoiding meetings, becoming overwhelmed by noise, light, or busy environments

These patterns may reflect the effects of a brain injury following overdose, even when the person appears physically well. Recognizing how brain injury can show up helps to avoid misinterpreting behavior as noncompliance and supports more effective, compassionate engagement (Stahl, 2025).



## SECTION 3

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### FIRST RESPONDERS: ON-SCENE RECOGNITION AND HANDOFF

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*First responders play a critical role in recognizing possible brain injury after overdose and ensuring important observations are carried forward. Even when naloxone is effective and the person regains consciousness, the brain may still be injured.*

# WHAT TO WATCH FOR ON SCENE

Possible brain injury may be suggested by a combination of environmental, physical, and behavioral indicators.

## Environmental clues

- Found on concrete, stairs, or in tight or confined spaces
- Evidence of a fall, seizure, or prolonged unconsciousness
- Chaotic or overstimulating surroundings

## Physical signs

- Bumps, bruises, or swelling to the head or neck
- Vomiting, headache, dizziness, or balance problems
- Unequal pupils or abnormal eye movements
- Loss of bladder or bowel control

## Witness reports

- Length of time the person was unconscious
- Reports of a fall, seizure, or head strike
- Changes in behavior or awareness compared to baseline
- Atypical responses persisting after naloxone
- Confusion or disorientation that does not improve
- Slow, slurred, or delayed responses
- Repeating questions or difficulty following instructions
- Increasing agitation after initial improvement





## WHAT TO ASK OR DOCUMENT

Observations may be critical for medical evaluation and follow-up. When possible, document and relay:

- Approximate duration of unconsciousness
- Whether the person fell, seized, or hit their head
- History of prior overdoses and how recently they occurred
- Any observations that suggest something abnormal, even if difficult to quantify

## WHAT ACCOMODATIONS TO MAKE

Small adjustments can reduce harm and support safety on scene:

- Reduce stimulation when possible (noise, lights, crowding)
- Use calm, clear communication and short, one-step directions
- Allow extra time for responses
- Recognize that behaviors such as confusion, agitation, or incontinence can have multiple causes
- Screen for brain injury when indicated, alongside assessment for intoxication, withdrawal, or other medical and neurological conditions
- Encourage medical evaluation and transport when appropriate



## WHAT TO RELAY DURING HANDOFF

Information gathered at the scene helps protect continuity of care. During handoff:

- Relay observations related to possible brain injury to Emergency Department staff
- Flag concerns for community partners, such as the local quick response team, to follow up on when making referrals
- Document findings clearly to help ensure that potential brain injury is recognized, monitored, and addressed beyond the scene

# SECTION 4

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## DEFLECTION TEAMS: POST-OVERDOSE ENGAGEMENT AND SUPPORT

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*Deflection teams often engage people after the immediate medical crisis, when the effects of overdose and possible brain injury may be less visible but still significantly impact engagement, decision making, and follow-through.*



## WHAT YOU MIGHT OBSERVE DURING FOLLOW-UP

During outreach or follow-up, a person may appear medically stable but continue to experience cognitive, emotional, or sensory challenges (Brain Injury Association of America).

Common observations may include:

- Cognitive fatigue, becoming tired or overwhelmed quickly
- Memory gaps, forgetting appointments, conversations, or next steps
- Emotional shifts, such as irritability, tearfulness, withdrawal, or impulsivity
- Overwhelm or shutdown, particularly when faced with paperwork, choices, or multiple referrals

These patterns may fluctuate from day to day and can affect engagement even when motivation is present.

## SCREENING

Deflection teams are well positioned to notice patterns over time. Changes in memory, processing, emotional regulation, or engagement may become more apparent during follow-up visits, outreach, or repeated contacts after an overdose.

The **CHATS tool** is a brief, non-diagnostic brain injury identification tool developed by the Ohio Domestic Violence Network (ODVN) in 2019. It is designed to support gentle, structured conversations about experiences that may affect how the brain is functioning.

CHATS does not diagnose brain injury and should not be used to determine eligibility, capacity, or compliance. Its purpose is to support awareness, guide conversation, and inform more responsive engagement.

### **When CHATS May Be Useful**

CHATS may be useful when engagement feels more difficult than expected, or when a person describes feeling “different” since an overdose. It can help organize observations when cognitive, emotional, or behavioral changes persist beyond the immediate crisis or fluctuate in ways that interfere with communication, follow-through, or decision making.

In deflection work, CHATS can support understanding without requiring teams to identify a specific cause. The focus is on recognizing patterns and identifying what might make engagement and support more effective right now.

## INTRODUCING SCREENING

CHATS should be framed as a supportive conversation, not an assessment or test. A brief, transparent introduction helps reduce concern and reinforces that the goal is to reduce barriers, not label or evaluate.

Helpful approaches include:

- Normalizing changes after overdose or other health events
- Asking permission before beginning
- Emphasizing that the purpose is to understand what support may be helpful

Example:

“We use a short tool to help us understand what might be making things harder right now, especially after something like an overdose.

## USING THE INFORMATION

Information gathered through CHATS can be used to guide support and advocacy.

This may include:

- Documenting observations and reported challenges
- Sharing relevant information during warm handoffs to treatment providers, courts, or other partners
- Advocating for pacing, communication, or environmental accommodations
- In ongoing relationships, screening can be revisited to reflect changes in symptoms, capacity, or support needs.

When used thoughtfully, CHATS helps deflection teams connect observations to action while maintaining a non-diagnostic, trauma-informed approach.

# SECTION 5

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## ACCOMMODATIONS AND ADVOCACY

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*Warm handoffs and thoughtful advocacy help ensure that possible brain injury is recognized and that people are supported in ways that improve safety, engagement, and recovery. When observations are shared forward, systems and partners are better equipped to respond, and people are less likely to fall through the cracks.*

# ACCOMMODATIONS THAT IMPROVE ENGAGEMENT

Small, practical adjustments can significantly reduce barriers and improve follow-through. These accommodations support engagement and safety.

## **Outreach and field visits**

- Meet in quieter, low-stimulation environments when possible
- Keep visits shorter or allow for breaks
- Focus on one or two priorities per visit

## **Intake and follow-up meetings**

- Break information into simple, concrete steps
- Review paperwork together rather than assigning it independently
- Use visual aids, calendars, or written summaries
- Offer reminders or brief check-ins between appointments

## **Court or probation interactions**

- Advocate for clear instructions and realistic timelines
- Suggest accommodations such as written summaries or reminders
- Help the individual prepare questions or talking points in advance



# ADVOCACY AND WARM HANDOFF

Deflection teams play a critical role in carrying observations forward and helping systems respond appropriately. When possible brain injury is present, how information is shared can shape safety, engagement, and outcomes. This role is not about diagnosis. It is about noticing patterns, reducing barriers, and advocating for supports that makes engagement more accessible and effective.

## SHARING CONCERNS WITHOUT DIAGNOSING

When communicating with providers or partners, concerns should be framed as observations and impacts, rather than conclusions about cause. This helps ensure information is received as supportive context rather than a clinical determination.

When sharing concerns, it is most helpful to describe what has been observed, how those observations are affecting understanding, participation, or follow-through, and what types of supports or adjustments may be helpful. Framing information this way keeps the focus on access and engagement, rather than labeling or assigning cause.

Avoid diagnostic language or speculation. Offer clear, practical context that helps the next provider or system respond more effectively.

*Example:*

“We’ve noticed some challenges with memory and processing since a recent overdose, which may affect engagement without added supports.”

## SAMPLE LANGUAGE FOR PROVIDERS AND PARTNERS

### **For medical or treatment providers**

- “Following a recent overdose, the client has had difficulty with memory and processing. Shorter sessions and visual supports may improve engagement.”
- “There are signs that suggest possible cognitive impacts after overdose. We wanted to flag this for awareness and accommodation.”
- “The client appears motivated but overwhelmed. Adjustments in pacing may be helpful.”

### **For courts, probation, or supervision**

- “The individual may benefit from clear written instructions and reminders due to possible cognitive impacts following overdose.”
- “Shorter appointments and step-by-step guidance may support compliance and safety.”
- “We are not requesting reduced expectations, but accommodations that support understanding and follow-through.”

## ADVOCATING FOR ACCOMMODATIONS

Advocacy for accommodations focuses on removing unnecessary barriers. Possible accommodations to suggest:

- Slower pace or shorter sessions
- Clear, written summaries of next steps
- Visual aids or checklists
- Reminder calls, texts, or brief check-ins
- Reduced sensory stimulation when possible

Intentional accommodations for service delivery can set people with brain injury up for success while supporting recovery (Lemsky, 2021).

## SUPPORTING FAMILY OR LOVED ONES

When it is safe, appropriate, and consented to, family members or trusted support people can play a helpful role in reinforcing understanding and follow-through after overdose and possible brain injury. Many people benefit from talking with someone they trust as they make sense of changes they are experiencing.

Deflection teams can support this process by sharing general information about how overdose can affect the brain, including changes in memory, focus, or emotional regulation. Encouraging patience, repetition, and calm communication can help support people respond in ways that are reassuring rather than escalating. Teams may also suggest practical ways support people can help, such as assisting with reminders, writing down next steps, or helping track appointments.

Example:

“Sometimes overdose can affect memory or focus for a while. Repeating information or writing things down can really help.”

**Involving others should always be guided by privacy, consent, and safety considerations, and should never place additional burden or risk on the individual.**

## WHY ADVOCACY MATTERS

Warm handoffs and thoughtful advocacy help ensure that possible brain injury is recognized, not overlooked, and that people are supported in ways that improve safety, engagement, and recovery.

When deflection teams carry observations forward, systems are better equipped to respond, and people are less likely to fall through the cracks.



## SECTION 6

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### HARM REDUCTION AND ONGOING SUPPORT

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*Harm reduction is especially important after overdose because possible brain injury can increase overdose risk and make substance effects less predictable. Ongoing support is also critical, as changes in memory, attention, and understanding can affect safety, decision-making, and follow-through.*

# BRAIN INJURY AND HARM REDUCTION

After a brain injury, people may be more vulnerable to overdose because changes in memory, awareness, and judgment can make it harder to track when or how much they last used. Substances can also have a stronger and less predictable effect on an injured brain, even when use patterns have not changed. When overdoses occur close together, the brain has limited time to recover, and repeated injury can compound damage and increase overdose risk (Hammond, et. al. 2020).

## KEY HARM REDUCTION MESSAGES

- Emphasize spacing use and allowing time for the brain to rest and heal
  - “Giving your body and brain more time between uses can reduce risk.”
  - “After an overdose, the brain needs rest just like the body does.”
- Support awareness of dosing and unpredictability
  - “Your tolerance can change after an overdose, even if your use hasn’t.”
  - “It can be harder to track how much you’ve used when the brain is healing.”
- Reinforce naloxone access and safer use practices
  - “Having naloxone nearby, testing your drug, and starting with less can help reduce risk.”
  - “If you can, don’t use alone, make sure someone can check on you or use the [Never Use Alone Hotline](#) (800-484-3731).”
- Share information in a nonjudgmental, supportive way, focused on safety rather than fear
  - “A lot of people don’t realize overdose can affect the brain. We want you to have that information.”
  - “You deserve support and information that helps you stay safe.”
- Normalize the conversation
  - “We share this with everyone after an overdose.”
  - “A lot of people notice things feel different for a while. You’re not alone.”

*Harm reduction conversations work best when they are calm, respectful, and grounded in safety. Clear information, shared without judgment, helps people make safer choices while their brain and body heal.*

# ONGOING SUPPORT

After an overdose, possible brain injury can make it harder to process information, remember details, and follow through on next steps. You can help by slowing down, simplifying information, and adjusting how you communicate so it matches the brain's current capacity. Small changes in how information is shared can significantly improve safety, engagement, and follow-through (ODVN).

## **Reduce Cognitive Load**

Cognitive load refers to how much information the brain is being asked to process at once. After brain injury, even routine decisions or tasks can feel overwhelming. When cognitive load is reduced, people are more likely to understand, retain, and act on information.

Ways to reduce cognitive load include:

- Limiting the amount of information shared in one interaction
- Prioritizing what is most important right now
- Breaking tasks into smaller, manageable steps
- Avoiding unnecessary details or multiple options at once

## **Keep it Simple**

Processing speed may be slower after brain injury. Sharing too much at once can lead to confusion, shutdown, or disengagement.

Helpful practices include:

- Focusing on one key message per interaction
- Allowing extra time for processing before moving on
- Repeating important information across visits rather than all at once

## **Make it Easier to Remember**

Written and visual supports can reduce the burden on memory and processing and allow people to revisit information later, when they have more capacity. The client facing Brain Injury After Overdose rack card (Appendix D) can be used as a brief, supportive reference or leave-behind for this purpose.

Examples include:

- Brief written summaries of next steps
- Simple checklists or reminders
- Appointment cards, calendars, or follow-up texts
- Visual aids when explaining processes or expectations

# FINAL THOUGHT: A BRAIN-INFORMED LENS FOR DEFLECTION WORK

Brain injury can affect memory, attention, and executive functioning even when a person appears motivated and engaged. When information or expectations exceed cognitive capacity, follow-through becomes harder, not because of unwillingness, but because of how the brain is functioning.

The choices outlined in this toolkit such as making on scene observations, communicating findings at hand off, slowing down, simplifying information, reducing cognitive load, and using supportive accommodations can all help prevent frustration, improve safety, and support continuity of care. They also reduce the risk of misinterpreting brain-injury-related behaviors as resistance or noncompliance.

Taken together, these practices offer a brain-informed lens for deflection work. Paying attention to patterns over time, adjusting responses as capacity changes, and carrying observations forward helps ensure that people recovering from overdose are met with clarity, patience, and support, strengthening outcomes not only for individuals, but across systems.



# REFERENCES

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Brain Injury Association of America. (2024.). *Hypoxic/anoxic brain injury*. Brain Injury Association of America. <https://biausa.org/brain-injury/about-brain-injury/nbiic/hypoxic-anoxic-brain-injury>

Hammond, F. M., Ketchum, J., Dams-O'Connor, K., Corrigan, J. D., Miller, C., Haarbauer-Krupa, J., Faul, M., Trexler, L. E., & Harrison-Felix, C. (2020). *Mortality secondary to unintentional poisoning after inpatient rehabilitation among individuals with moderate to severe traumatic brain injury*. *Journal of Neurotrauma*, 37(23), 2507–2516. <https://doi.org/10.1089/neu.2020.7038>

Lemsky, C. (2021). *Traumatic Brain Injury and Substance Use Disorders: Making the Connections*. Substance Use and Mental Health Services Administration (SAMHSA). [TBI++SUD+Toolkit+FINAL+11.05.2021.pdf](https://www.samhsa.gov/sites/default/files/2021/05/TBI++SUD+Toolkit+FINAL+11.05.2021.pdf)

Ohio Domestic Violence Network. (2024). *CHATS: Head Injury Identification and Accommodation Tool*. [https://www.odvn.org/wp-content/uploads/2024/07/CHATS\\_May2024b.pdf](https://www.odvn.org/wp-content/uploads/2024/07/CHATS_May2024b.pdf)

Stahl, C. (2025). *Brain Injury from Overdose* [Powerpoint Slides]. [Deflection ECHO \(Deflection ECHO\)\\_iECHO](#)

Stahl, C. (2025). *Domestic Violence and Overdose: Navigating the Complexities of Brain Injury* [Powerpoint Slides]. [Knowledge Hub | Substance-use Deflection Initiative | NEOMED](#)

Winstanley, E. L., Mahoney, J. J., Castillo, F., & Comer, A. (2021). *Neurocognitive impairments and brain abnormalities resulting from opioid-related overdoses: A systematic review (ASPE Research Report)*. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation (ASPE). <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8889511/>

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## **Collaborators**

This project was developed through a collaboration between Northeast Ohio Medical University Criminal Justice Coordinating Center of Excellence's Substance Use Deflection Initiative and the Ohio Domestic Violence Network.

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- OneOhio Recovery Foundation
- Ohio Injury Prevention Partnership Overdose Prevention Network

Disclaimer: The views expressed in this toolkit do not necessarily reflect the official policies or positions of the funding entities.

# APPENDIX A: BRAIN INJURY RESOURCES

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## **Ohio Domestic Violence Network**

Website: [Home - Ohio Domestic Violence Network](#)

A statewide organization providing training, tools, and resources related to brain injury, trauma, and survivor-centered response, including the CHATS brain injury identification tool.

## **Substance Use Deflection Initiative**

Website: [Knowledge Hub](#) | [Substance-use Deflection Initiative](#) | [NEOMED](#)

A statewide initiative supporting Ohio's deflection teams through training, technical assistance, and shared resources. The SUDI Knowledge Hub includes a dedicated brain injury section with role-specific materials for first responders, deflection teams, and clients, including rack cards, toolkits, and recorded learning sessions.

## **Deflection ECHO (Ohio)**

Website: [Deflection ECHO by Northeast Ohio Medical University](#) | [iECHO](#)

Statewide virtual learning network offering ongoing training, peer learning, and case-based discussion for deflection teams. Topics include brain injury and overdose, privacy and data sharing, harm reduction and emerging drug trends, mental health response, workforce wellness, sustainability, and evaluation.

## **Brain Injury Association of Ohio (BIAOH)**

Website: [Brain Injury Association of Ohio \(BIAOH\)](#)

A statewide organization providing education, advocacy, and resources related to brain injury, including information for individuals, families, and professionals.

## **National Association of State Head Injury Administrators (NASHIA)**

Website: [NASHIA](#) | [National Association of State Head Injury Administrators](#)

A national organization that supports state systems addressing brain injury through policy guidance, coordination, and resource development.

## **Traumatic Brain Injury and Substance Use Disorders Toolkit**

Website: [Traumatic Brain Injury and Substance Use Disorders Toolkit](#)

A provider-focused toolkit that explores the intersection of traumatic brain injury and substance use disorders, offering practical guidance for screening, communication, and support.

# APPENDIX B: FIRST RESPONDER RACK CARD

## BRAIN INJURY AFTER OVERDOSE

A Quick Guide for First Responders: Recognize hidden injuries, reduce harm, and support safe next steps.



### WHY IT MATTERS

Brain injury can occur during overdose even without visible trauma, due to lack of oxygen, seizures, or falls. These injuries may affect awareness, behavior, and decision making at the scene and can have lasting effects in the days that follow.

People with brain injury face a higher risk of repeat overdose and death:

- Substances can have stronger, more dangerous effects on an injured brain.
- Repeat overdoses compound damage and reduce the brain's ability to heal.

Many people who use substances have also experienced domestic or other forms of violence, which can contribute to brain injury.

### RESPONDER ROLE

Your response doesn't end when the person wakes up. Even when naloxone works, the brain may still be injured. Your awareness can prevent further harm and save lives.

FIND MORE RESOURCES: NALOXONE, LOCAL REFERRALS, AND TOOLS



## ON-SCENE CHECKLIST

### SIGNS OF BRAIN INJURY

- Bumps, bruises, swelling around head/neck
- Unintentional urination/defecation
- Bleeding/fluid from ears or nose
- Unequal pupils or abnormal eye movements
- Repeated vomiting or difficulty staying awake
- Seizure activity or intensifying headache

### WARNING SIGNS AFTER NALOXONE

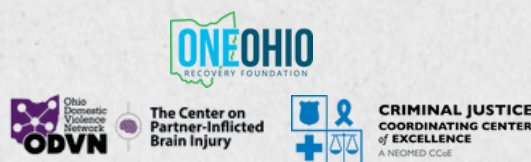
- Disorientation that does not improve
- Slow, slurred, or delayed responses
- Memory gaps or repeating questions
- Problems with balance, coordination, vision
- Blank stare or difficulty tracking conversation

### RESPONSE ACTIONS

- Avoid loud or fast speech
- Give short, one-step directions; repeat as needed
- Reduce noise, lights, and crowding when/if safe
- Document/relay findings during patient transfer
- Encourage transport and if transport is declined, educate patient and loved ones of warning signs

### HARM REDUCTION

- Recognize fear/distress; respond with reassurance
- Always offer or encourage naloxone
- Use calm, nonjudgmental communication
- Provide local resources and referral or warm handoff to needed services



# APPENDIX C: DEFLECTION TEAM RACK CARD

## BRAIN INJURY AFTER OVERDOSE

A Quick Guide for Deflection Teams: Recognize hidden injuries, reduce harm, and support safe next steps.



### WHY IT MATTERS

Brain injury can occur during overdose even without visible trauma, due to lack of oxygen, seizures, or falls. These injuries may affect awareness, behavior, and decision making and can have lasting effects in the days that follow.

People with brain injury face a higher risk of repeat overdose and death:

- Substances can have stronger, more dangerous effects on an injured brain.
- Repeat overdoses compound damage and reduce the brain's ability to heal.

Many people who use substances have also experienced domestic or other forms of violence, which can contribute to brain injury.

### REMEMBER

Deflection teams play a vital role after crisis. Recognizing when someone is struggling - and offering steady presence, pacing, and partnership - can make a real difference. Healing takes time, especially after experiences that affect the brain, and small adjustments in communication and support can meaningfully aid recovery.

FIND MORE RESOURCES: NALOXONE, LOCAL REFERRALS, AND TOOLS



### WHAT YOU MIGHT OBSERVE

- Trouble with memory or concentration
- Slow processing or difficulty understanding
- Shifts in mood or emotional expression
- Repeats questions or forgets plans
- Becomes tired or overwhelmed quickly

### HOW YOU CAN SUPPORT

- Meet in quiet, calm places
- Go slow; break down next steps and paperwork
- Offer reminders and brief check ins
- Pair written information with visuals
- Ask permission before offering information
- Use CHATS Screening Tool\*\*

**(Scan to access CHATS tool)**

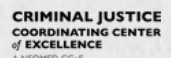
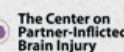


### HOW YOU CAN ADVOCATE

- Help the individual communicate needs or attend appointments
- Suggest helpful adjustments to providers (extra time, simple instructions, visual cues)
- Connect individual with brain injury resources for recovery support
- When safe and appropriate, help family or support persons understand brain injury impacts

### HOW YOU CAN REDUCE HARM

- Offer naloxone and encourage safer use (test drugs, go slow, never use alone)
- Reinforce time and rest between uses to support healing
- Emphasize that an injured brain is more vulnerable to overdose



# APPENDIX D: BRAIN INJURY AFTER OVERDOSE CLIENT RACK CARD

## Brain Injury After Overdose

After an overdose or a head, neck, or facial injury, your brain may be stressed or briefly deprived of oxygen. This can lead to temporary or longer-lasting changes in how you think, feel, or act. This card can help you and your loved ones notice those changes and know when to reach out for support.

### YOU MAY NOTICE CHANGES IN:

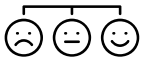
*\*CHECK ALL THAT APPLY*

#### THINKING



- Trouble remembering things
- Feeling foggy or confused
- Taking longer to think or respond
- Losing your train of thought
- Hard time concentrating

#### FEELINGS



- Feeling overwhelmed or stressed
- Feeling more emotional than usual
- Feeling flat or disconnected
- Feeling anxious, numb or sad
- Feeling mentally fatigued

#### BEHAVIOR



- Forgetting appointments
- Starting tasks and not finishing
- Having trouble keeping organized
- Avoiding people or withdrawing
- Saying or doing things impulsively

#### BODY



- Migraine like headaches
- Dizziness or balance problems
- Trouble sleeping
- Sensitivity to noise or light
- Feeling very tired or worn out

SCAN HERE FOR MORE RESOURCES  
AND INFORMATION



## ADDITIONAL NOTES

Use this section to write down additional observations or symptoms not listed on the front. Paying attention to changes can help you make sense of what's happening and talk with someone you trust, like family, friends, or a healthcare provider.

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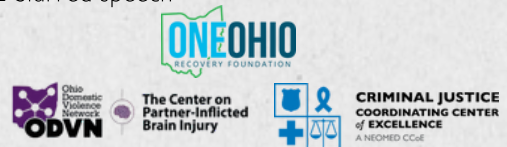
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### SEEK MEDICAL CARE RIGHT AWAY IF:

- Severe or worsening headache
- Repeated vomiting
- Seizures
- Trouble walking or staying awake
- Slurred speech



# APPENDIX E: CHATS: HEAD INJURY IDENTIFICATION AND ACCOMMODATION TOOL



The Center on  
Partner-Inflicted  
Brain Injury

## HAS YOUR HEAD BEEN HURT?

When your head, neck, or face gets hurt, the injuries might not be visible or show up right away but can impact your brain and your life in many ways. Please complete this CHATS form and work with your advocate to get support after a head injury.

**C** Has anyone ever put their hands around your neck, put something over your mouth, or done anything else that made you feel **choked**, strangled, suffocated, or like you couldn't breathe? **YES NO**

Have you ever passed out or lost **consciousness** from an overdose or drug use, a medical issue, or something else? **YES NO**

**H** Have you ever been **hit or hurt** in the **head, neck, or face**? **YES NO**

Have you ever **hurt your head, neck, or face** in any other way? Like hitting your head on something, in a fall or accident, while using alcohol or drugs, severe shaking, or a car crash? **YES NO**

**A** **After** you were hurt, did you ever feel dazed, confused, dizzy or in a fog, see stars, spots, or have trouble seeing clearly, couldn't remember what happened, or blacked out? (Doctors call this *altered consciousness*.) **YES NO**

Has any of the above happened recently? If yes, how long ago? \_\_\_\_\_ **YES NO**

Has any of the above happened more than once? **YES NO**

Are you currently having **trouble** with anything below? Circle all that apply:

<b>T</b>	PHYSICAL	EMOTIONS	THINKING	ACCESS TO
	Headaches	Worries and fears	Remembering things	Food
	Sleeping problems	Panic attacks	Multi-tasking	Health Care/Insurance
	Sensitive to light or noise	Flashbacks	Paying attention or focusing	Employment
	Vision problems	Sadness	Problem solving	Housing
	Dizziness	Depression	Getting things started	Utilities
	Balance problems	Hopelessness	Figuring out what to do next	Transportation
	Fatigue	Anger or rage	Organizing things	Childcare
Seizures	Irritable	Controlling emotions or reactions	Phone	

Are you having thoughts of suicide? **YES NO**

Are you struggling with alcohol or drugs? **YES NO**

Are you having any other health issues you want to share with us? **YES NO**

**S** Even if you did not go, have you or anyone else (like a friend or family member) ever thought you should **see a doctor or a counselor**, go to the emergency room, or get help for anything above? **YES NO**

Do you want to **see** anyone for or need help with anything above? **YES NO**

# APPENDIX E: CHATS: HEAD INJURY IDENTIFICATION AND ACCOMMODATION TOOL



CONNECT  
ACKNOWLEDGE  
RESPOND  
EVALUATE

## WE CAN HELP!

### RESOURCES FOR HEALING



An advocate can give you a copy of **JUST BREATHE** and **INVISIBLE INJURIES**.

**JUST BREATHE** has self-care ideas for better sleep, calming your body, managing anger, and more!

**INVISIBLE INJURIES** has more information about what happens when your head has been hurt and coping with common physical, emotional, and thinking challenges.

### DAILY LIFE

We want to make our services work for you. Here are some ways we might be able to help. We can also come up with other ideas.

PHYSICAL	EMOTIONS	THINKING
Provide ear plugs and/or sleep masks to help with sleep	Create a CARE plan with an advocate and use other resources in <b>JUST BREATHE</b>	Creating checklists or calendars
Use sunglasses or adjust light as needed for light sensitivity	Extra check-ins	Shorter and more frequent meetings with staff; written summaries shared if helpful
For balance and dizziness challenges, assignment to a ground floor room if possible and help decluttering	Identifying and limiting triggers	Creating a routine
	Help identify supports and coping strategies	Making appointments for time of day that you are most alert and clear

### HEAD TRAUMA INFORMATION

Referral to: \_\_\_\_\_

<b>RECENT</b>	On _____ (date), I:	<b>HISTORY</b>
	<input type="checkbox"/> Was choked or strangled <input type="checkbox"/> Was hit on the head <input type="checkbox"/> Experienced altered consciousness What I noticed immediately after: _____	
	I have a prior history of: <input type="checkbox"/> Being choked or strangled <input type="checkbox"/> Being hit on the head <input type="checkbox"/> Experiencing altered consciousness Approximate Number of Times: _____ Most Recent Time (date): _____	

I am most concerned about: \_\_\_\_\_

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