

# 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

