

# TRAUMA AND THE BRAIN

## EMDR THERAPY CAN HELP

Our brains have a natural way to recover from distress. Many times traumatic experiences can be managed and resolved spontaneously. Other times, our fight, flight, or freeze response prevents distress from being processed without help.



### AMYGDALA ACTIVITY INCREASES

The amygdala acts as an alarm signal for stressful events and helps protect us from danger. Trauma can cause the amygdala to stay overactive, which can lead to feelings of anxiety or being in danger.



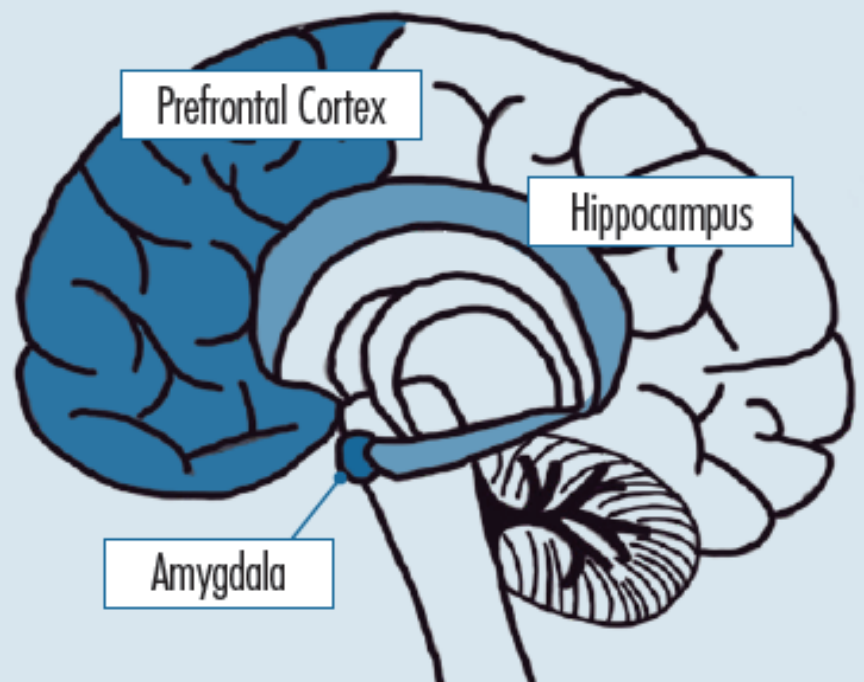
### HIPPOCAMPUS SHRINKS

The hippocampus assists with learning and memory storage, including how to remember safety and danger. It helps calm the amygdala. Trauma can cause the hippocampus to shrink. Cues to calm the amygdala are weakened, which may cause flashbacks or confusion around the trauma memory.



### PREFRONTAL CORTEX SHRINKS

The prefrontal cortex manages thoughts, behavior, and helps us control our emotional response to events. Normally, this area helps us decide that a situation is okay. Trauma can weaken the signals from this area, allowing negative emotions from the trauma memory to take over the prefrontal cortex's reasoning ability.



EMDR therapy helps the brain process traumatic memories, allowing normal healing communication to resume. After successful EMDR therapy, the fight, flight, or freeze response from the traumatic event is resolved.