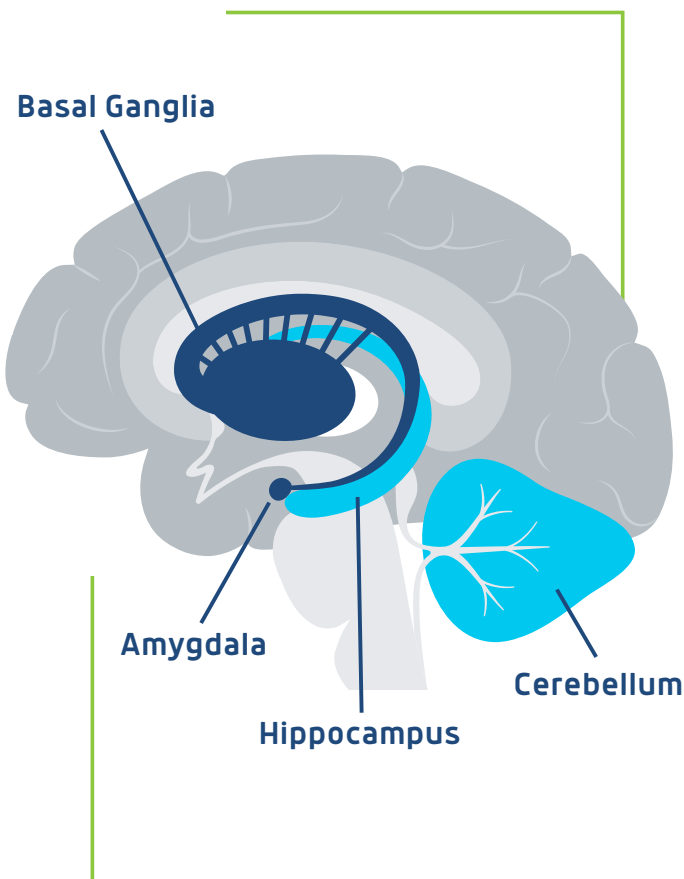




# CANNABIS AND THE BRAIN

The brain doesn't fully develop until you're in your mid-20s. Using cannabis before that can lead to:

- problems with memory, learning, thinking clearly, and problem-solving
- poor school performance, lower grades, and risk for school dropout
- impaired coordination and reaction time
- increased risk of mental health problems like depression, anxiety, and psychosis



When THC, the active chemical in weed, enters the brain, it binds to receptors in the endocannabinoid system (the brain's natural system that regulates and creates a balance of body and brain functions). This prevents the brain from regulating things like memory, coordination/alertness, coping with stress, and managing anxiety.

**THC is known to attach to the following:**

- **Basal ganglia:** the part of the brain central to motivation. THC can reduce the production of dopamine (the chemical in the body responsible for allowing you to feel pleasure, satisfaction, and motivation).<sup>1,2,3,4</sup>
- **Hippocampus:** the part of the brain responsible for creating memories. THC affects the brain's ability to form memories.<sup>5</sup>
- **Cerebellum:** the part of the brain responsible for motor function. THC may affect its development.<sup>5</sup>
- **Amygdala:** the part of the brain responsible for emotional regulation. THC could make anxiety and stress harder to manage.<sup>6</sup>

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