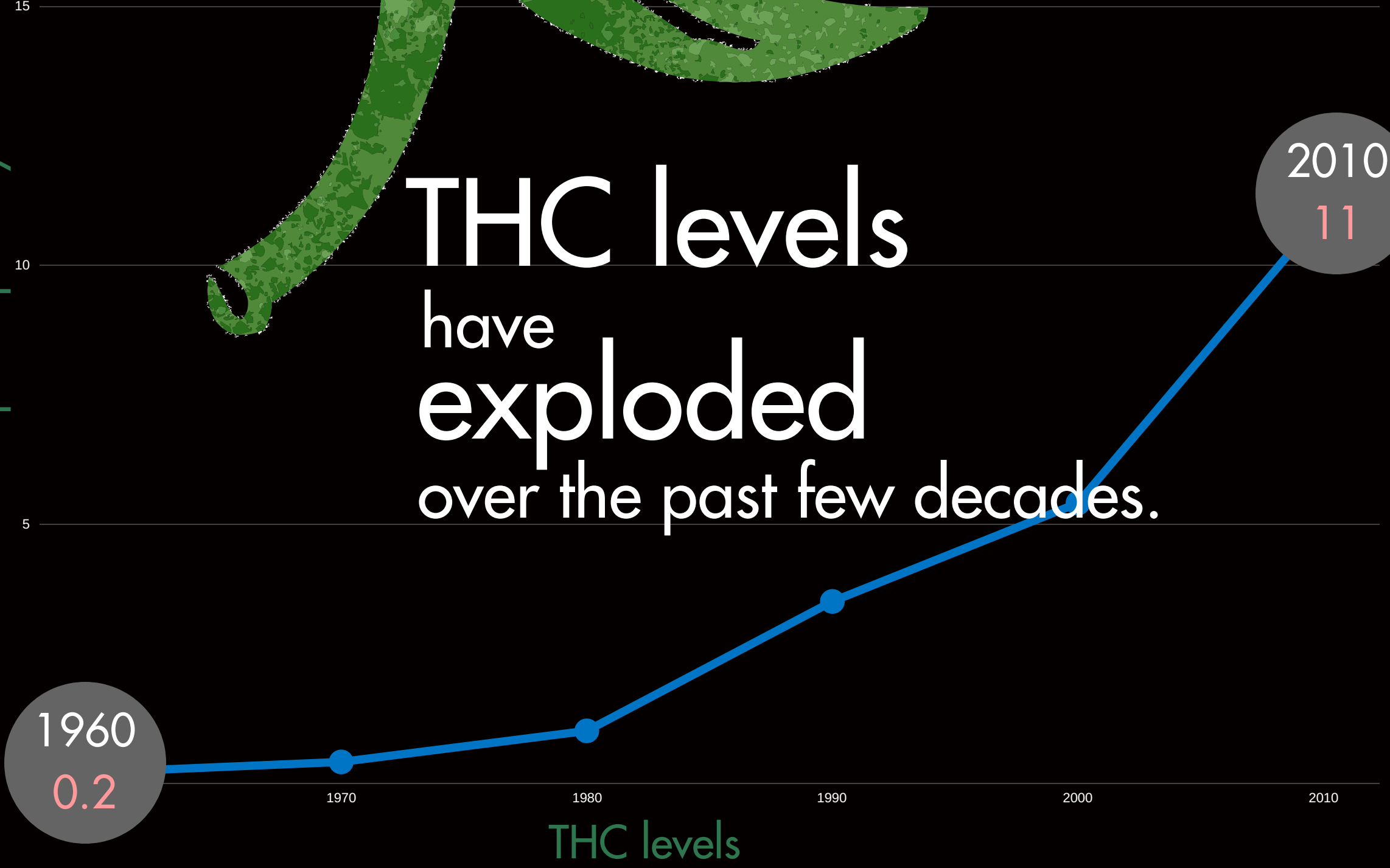


MARIJUANA and the TEEN BRAIN

*Sources: Mehmedic et al, 2010; Jennifer Golick, PhD, LMFT; D Arnone, TR Barrick, S Chengappa et al., NeuroImage 2008

Marijuana potency



by the numbers#

9% of people who try marijuana become addicted.

17% of youth who begin to use before age 18 become addicted (1 in 6), and 25-50% of daily users.

86% of state-funded treatment admissions for youth 12-17 involved marijuana.

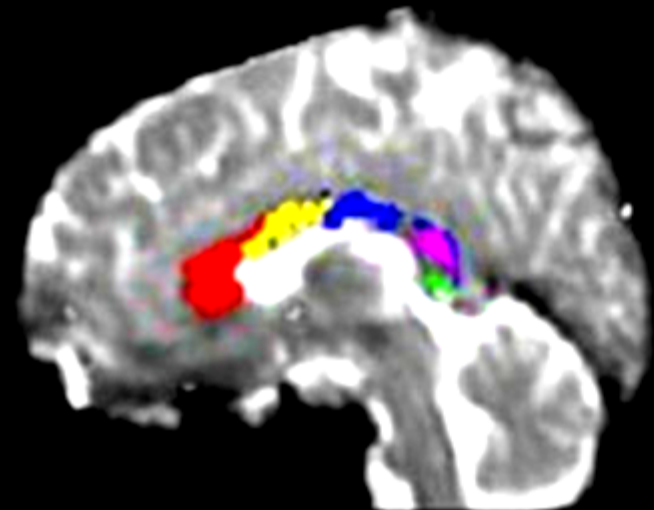
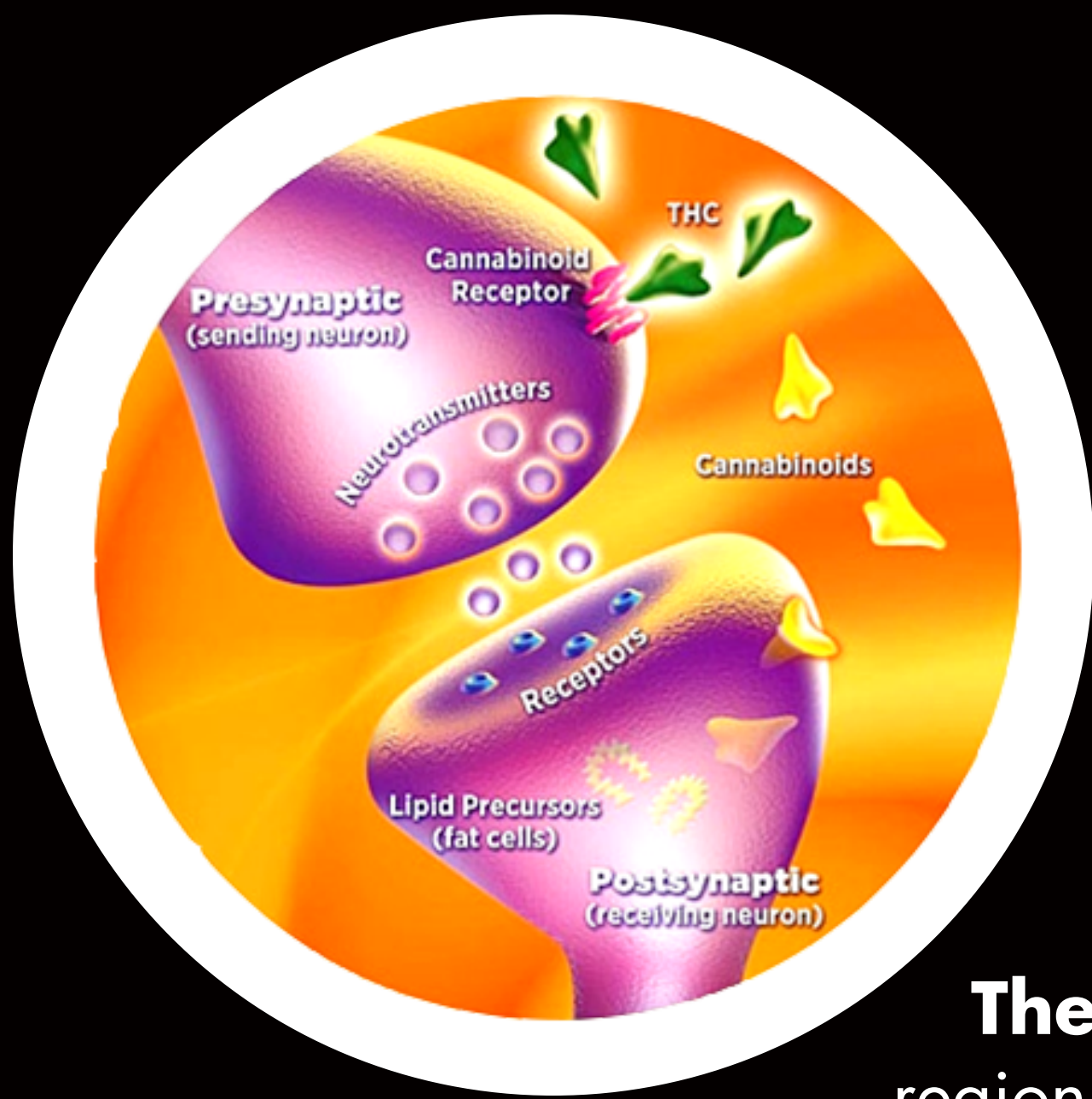
72% of youths receiving treatment here in Placer County listed marijuana as their drug of choice (compared to alcohol or heroin at 9.7%).

The science...

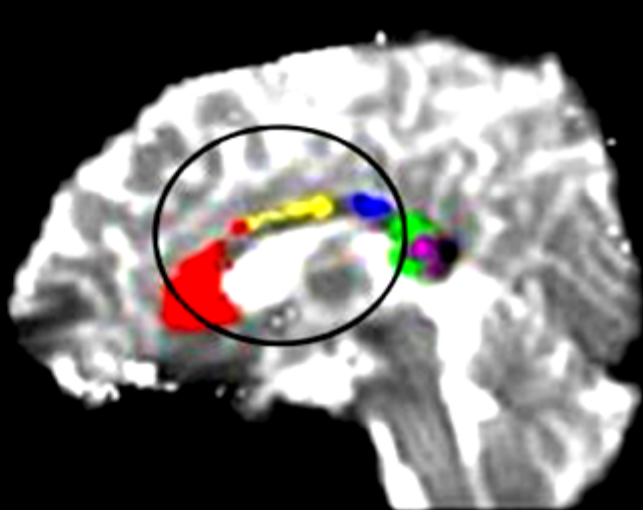
Cannabinoid receptors are broadly distributed through the brain, but selectively activated during adolescence for healthy brain structure development.

Their function is disrupted when flooded by external cannabinoid exposure.

The result? Altered structure and function of brain regions controlling emotion, thought, memory and social interaction — changes that can persist into adulthood.



Non-user



Daily user

White matter matters.

MRI scans of young males who smoked marijuana daily (starting at an average age of 15) showing white matter structure. The impairment is similar to that of a brain affected by schizophrenia.

The risks...

Addiction

Cannabis Use Disorder or Dependence.

Mental health

Psychosis, including schizophrenia.

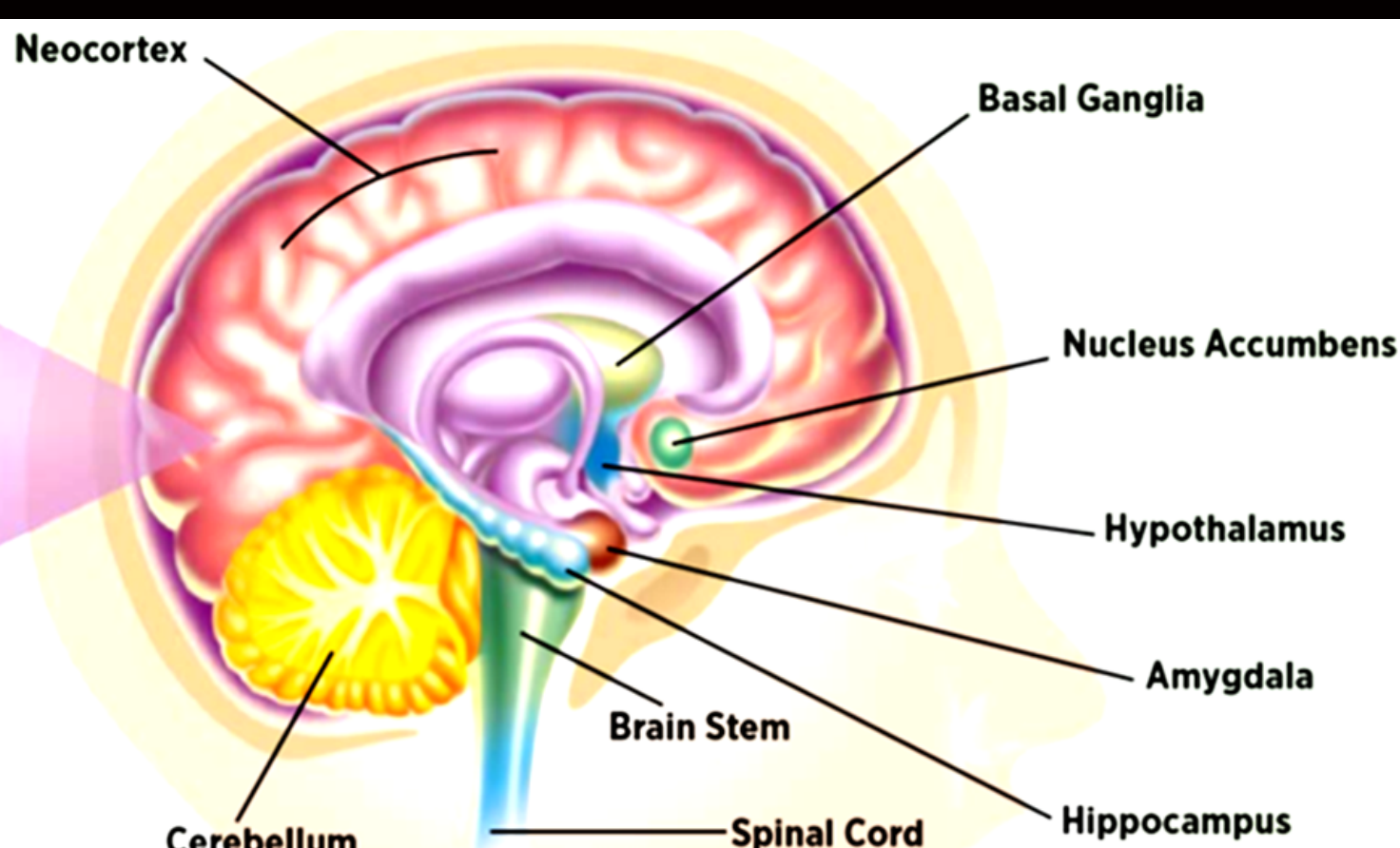
Cognitive impairment

Memory and executive functioning (difficulty thinking problem solving, distorted perception)

Drugged driving

Accidents and fatalities.

Loss of motor coordination



THC

affects these different areas of the brain, leading to panic/paranoia slowed reaction time impaired coordination impaired memory increased appetite altered judgment euphoria altered pain sensitivity & more.

Symptoms of Cannabis Use

DISORDER/DEPENDENCE

- change in friends
- academic decline
- change in personality
- increased family conflict
- school discipline
- abandoning moral compass
- health/legal consequences

WITHDRAWAL

- flu-like symptoms
- agitation
- anxiety
- nausea
- sweating
- body aches
- more reported cases of butane hash oil-induced psychosis

Self-medication

Mood & anxiety disorders among respondents with marijuana dependence vs. the general population.

