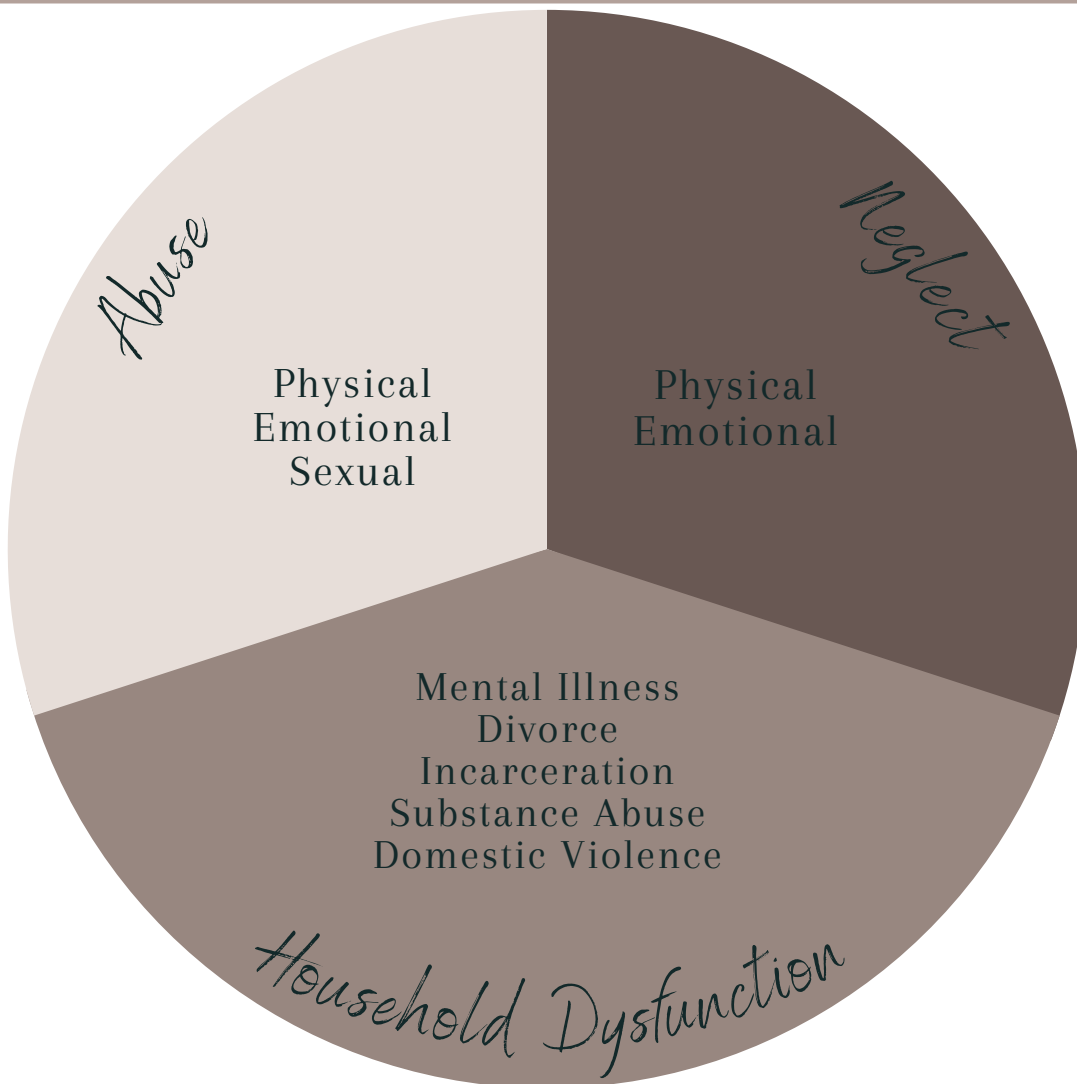


# Adverse Childhood Experiences

Adverse Childhood Experiences (ACEs) are traumatic or stressful events that children may experience during their formative years. These experiences have potentially long-term impacts on a person's physical and mental health.

ACEs can vary in severity and can include:



The concept of ACEs was first introduced through a groundbreaking study conducted by the Centers for Disease Control and Prevention (CDC) and Kaiser Permanente in the 1990s. The higher number of these adversities experienced during childhood, the more likely a person is to have negative health outcomes later in life.

# ACEs + Your Brain

The impact of ACEs on the brain is an area of active research, and it's increasingly understood that exposure to these adverse experiences can have profound and lasting effects on brain development and function, especially the Pre-Frontal Cortex, Amygdala, and Hippocampus.

## Pre-Frontal Cortex

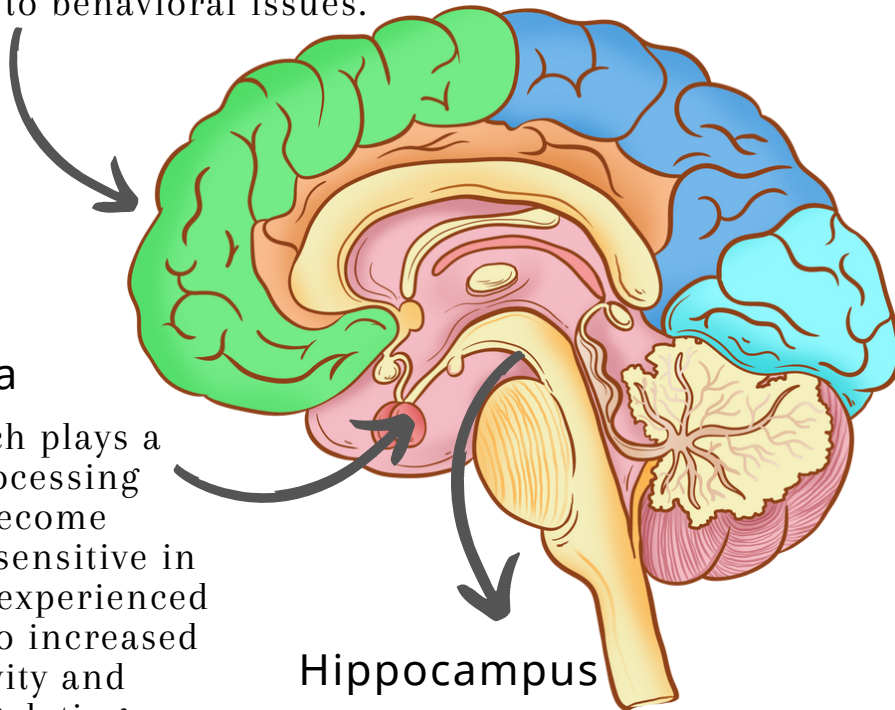
The prefrontal cortex, responsible for executive functions like decision-making and impulse control, can also be impacted, potentially leading to behavioral issues.

## Amygdala

The amygdala, which plays a central role in processing emotions, can become hyperactive and oversensitive in individuals who have experienced ACEs. This can lead to increased emotional reactivity and difficulties in regulating emotions.

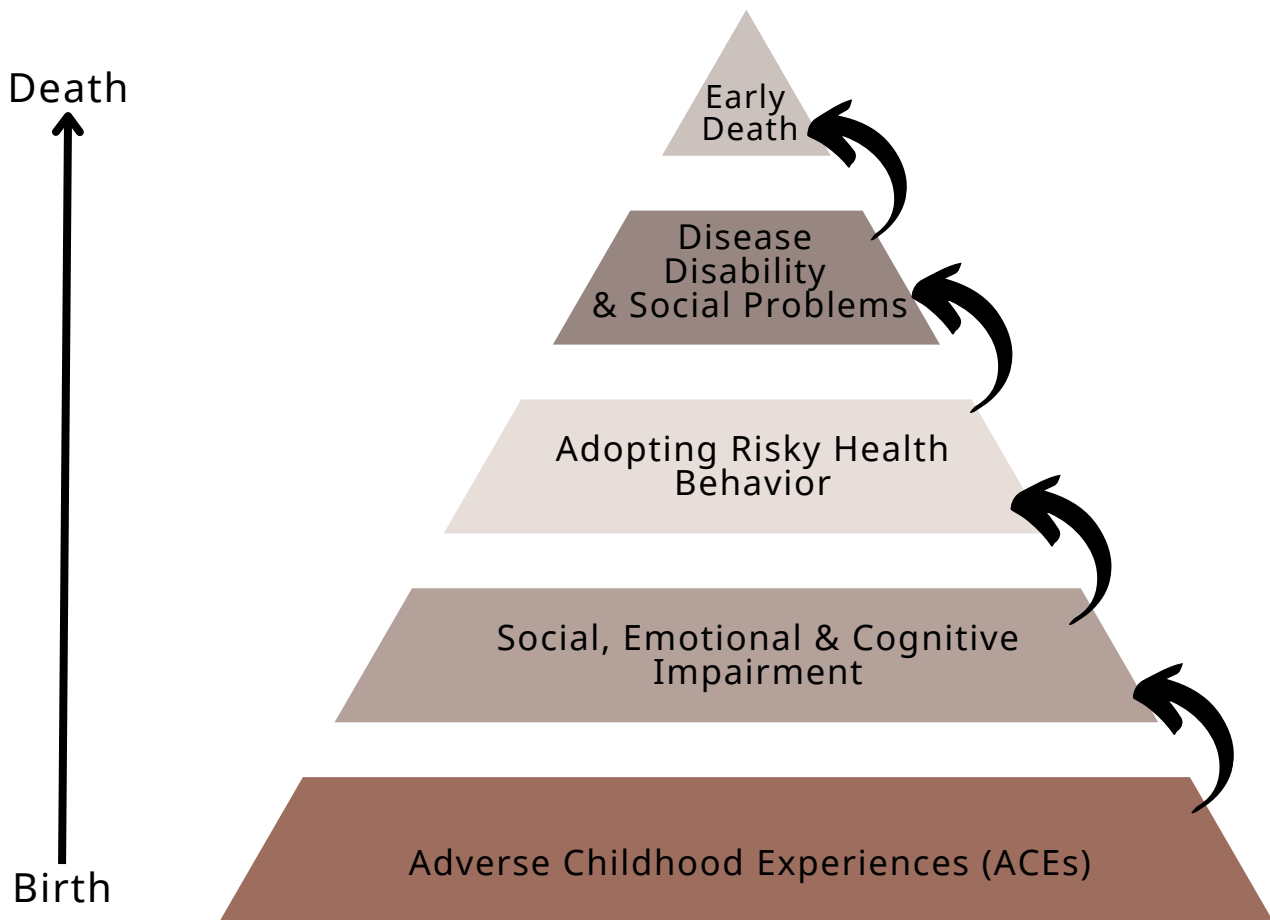
## Hippocampus

The Hippocampus plays a role in memory, differentiating past from present. It tries to make sense of trauma and can actually shrink with long-term exposure to ACEs.



# The ACE Pyramid

The ACE Pyramid typically consists of several tiers or levels, with each level representing a different aspect of childhood adversity. These levels are often organized from the base of the pyramid (the onset of adverse and traumatic experiences) through the middle (impairments & risk taking), to the top (premature death).



Research from the ACE Study has shown that individuals who experience a higher number of ACEs are at increased risk for a wide range of health problems later in life, including chronic physical conditions (e.g., heart disease, diabetes), mental health issues (e.g., depression, anxiety), substance abuse, and even early mortality.