

## THE EFFECTS OF ALCOHOL ON THE BRAIN

### 1. HIPPOCAMPUS

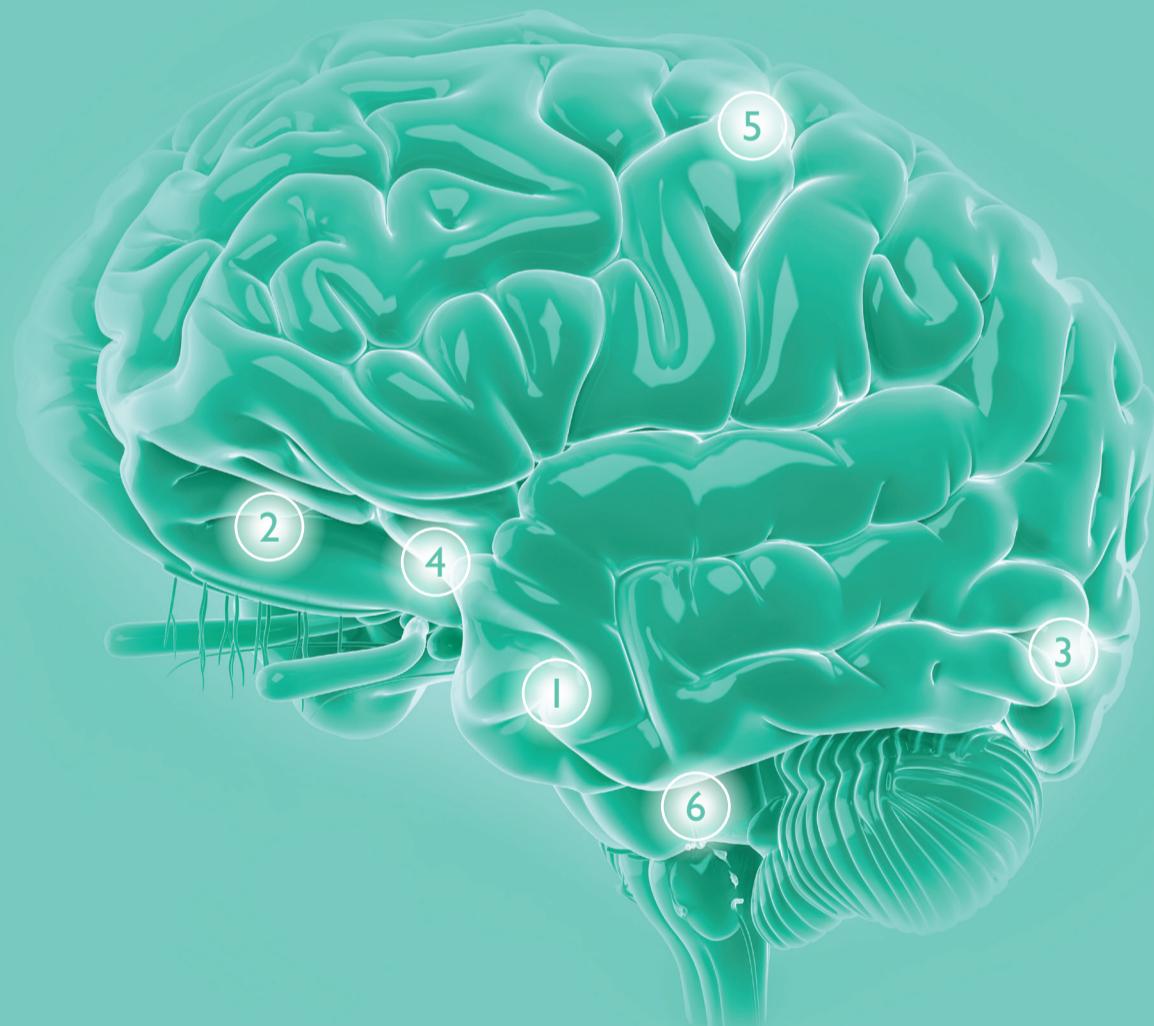
The Hippocampus part of the brain plays a vital role in the limbic system; linked to regulating emotions. Alcohol essentially affects this part of the brain by impacting memory and has been linked to the cause of individuals blacking out, becoming loud and in some occasions aggressive.

### 2. NUCLEUS ACCUMBENS

The nucleus accumbens plays a vital role in brain function and operates to release two very essential neurotransmitters; dopamine and serotonin. Alcohol affects the brain by elevating dopamine which increases the reward drive, to consume more alcohol. It also affects the serotonin levels which effect satiety and inhibition.

### 3. CEREBELLUM

The cerebellum is the part of the human brain which is linked primarily to the sensory system. Essentially this part of the brain controls motor movements from the spinal cord to other parts of the brain. Alcohol affects the cerebellum by decreasing co-ordination and balance along with slowing down an individual's reflexes.



### 4. HYPOTHALAMUS

This part of the brain is important as it's linked to the central nervous system. Alcohol affects the brain as it depresses the nervous system and produces an increase in feelings, thirst and hunger.

### 5. CEREBRAL CORTEX

The cerebral cortex plays a key role in; memory, attention, perception, awareness, thought, language, and consciousness in individuals. It is known to be the largest part of the mammalian brain. Alcohol affects the brains function by effecting thoughts that could lead to poor judgement, it also reduces inhibition therefore increases confidence. It releases an increase in emotions such as sadness and anger and has been linked to increase an individual's pain inception by causing numbing senses.

### 6. MEDULLA

The Medulla is a part of the brain that controls respiration and circulation. Alcohol affects the medulla causing distress on heart rates, temperatures, breathing movement and can in some cases lead to tiredness, unconsciousness or death.