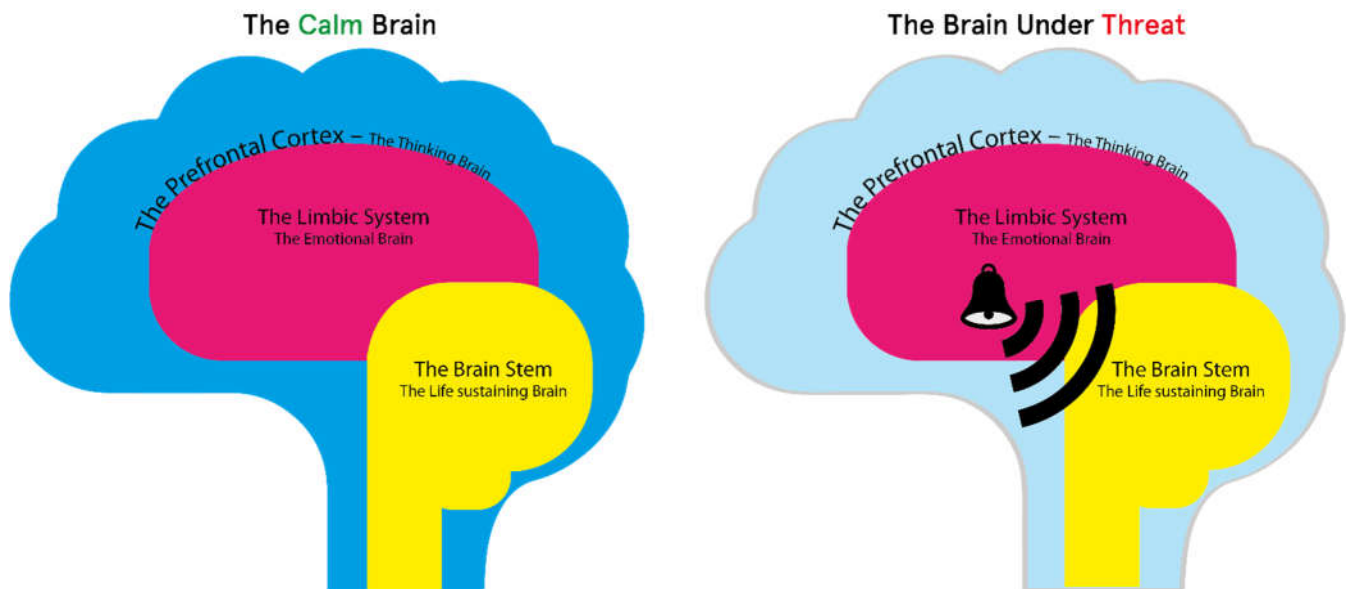


## The Brain's Response to Threat

When we detect threat the thinking areas of the brain partially shut down and activity in the emotional is heightened. The life sustaining areas react almost instantaneously in line with the emotional brain, and send signals to the body to trigger survival responses.



### The Smoke Alarm

The emotional limbic system - the emotional brain - contains a group of brain cells (within the amygdala) that are specialized in determining whether a imagine, sound or bodily sensations is a threat to us. We depend on this system to alert us to imminent danger and to ready our bodies to respond quickly.

### When Under Threat The Emotional Brain can 'Hijack' the System

The thinking brain has the capacity to dampen the response of the emotional brain. However, the more intense the activation in the emotional brain the less capacity our thinking brain has to rationalize. As the thinking brain closes down, we may respond more impulsively and find it harder to weigh-up decisions and have difficulties taking in other people's perspectives and respond to our experiences based on habit or fear.

### Past Trauma and Adversity Shape Our Brain - But Not Irreversibly

This pattern of brain activity is also observed when we remember traumatic memories - when there is no current threat but we are frightened by memories of the past. Traumatic experiences and adversity (e.g., bullying) shapes the functioning and development of the limbic system throughout life. These experiences have a particular impact on the amygdala, heightening it's sensitivity to treat. Trauma turns up the sensitivity of the smoke detector, sometimes to the extent that the amygdala falsely sounds the alarm.

