



# NeuRA

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## SCHIZOPHRENIA Factsheet

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### What is the amygdala?

The amygdala is located deep in the medial temporal lobe, and has reciprocal connections with many regions of the cortex, such as prefrontal and cingulate cortex, as well as sub-cortical regions such as the brainstem and hippocampus. The amygdala is implicated in the processing and memory of emotional responses, particularly emotional learning, as well as mediating the autonomic expression of emotion.

### What is the evidence for changes in the amygdala in people with schizophrenia?

#### Structural changes

Moderate quality evidence suggests reduced amygdala and hippocampus-amygdala grey matter in people with schizophrenia, including child-onset patients compared to people without schizophrenia. Moderate to low quality evidence suggests reduced white matter integrity in the amygdala.

Moderate quality evidence suggests that first-degree relatives of people with schizophrenia and other people at high risk of schizophrenia have reduced amygdala grey matter.

#### Functional changes

Moderate quality evidence suggests people with schizophrenia show functional hyperactivity in the amygdala during executive function tasks. Moderate to low quality evidence suggests decreased activation in the amygdala during emotion processing tasks.

For more information see the technical table



### NeuRA

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*NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.*

*Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.*

*Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.*

*While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.*

## HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone **1300 888 019** or make a secure donation at [neura.edu.au/donate/schizophrenia](http://neura.edu.au/donate/schizophrenia).