



# NeuRA

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## BIPOLAR DISORDERS Factsheet

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### What is prepulse inhibition?

The startle response involves reflex behaviour intended to prepare an organism to attend to potentially relevant stimuli. The startle response can be reduced by previous presentation of a weak stimulus, and this is known as prepulse inhibition. When prepulse inhibition is high, the corresponding one-time startle response is reduced. When prepulse inhibition is low, an inability to filter out unnecessary information may occur.

Prepulse inhibition is regulated by the limbic-cortical-striatal-pallidal-thalamic neural circuit, the dopaminergic system, and by cognitive processes such as attention and emotion. Some of these processes may be dysfunctional in people with bipolar disorder.

### What is the evidence for prepulse inhibition in people with bipolar disorder?

Moderate to high quality evidence suggests a small effect of reduced prepulse inhibition in people with bipolar disorder during euthymia compared to controls.

For more information see the technical table



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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 bipolar disorder 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](http://neura.edu.au).

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