



# NeuRA

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## SCHIZOPHRENIA Factsheet

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### How is drug and alcohol use related to schizophrenia?

Drug and alcohol misuse, abuse or dependence are concerns for people with schizophrenia due to the association with poorer clinical and social outcomes, including high rates of suicide, HIV, homelessness, aggression and incarceration. Moreover, comorbid substance use places additional burden on patients, families, psychiatric services, and government resources due to high rates of treatment non-adherence and relapse.

### What is the evidence for drug and alcohol use in people with schizophrenia?

High quality evidence shows a small increase in positive symptoms, but a medium-sized reduction in negative symptoms in people with schizophrenia and any current substance use disorder compared to people with schizophrenia without a current substance use disorder. Moderate to high quality evidence finds patients with any current substance use are also more likely to have depressive symptoms.

Moderate to low quality evidence finds an increased risk of treatment non-adherence, relapse and re-hospitalisation in people with first-episode psychosis and cocaine, opiates, or ecstasy use. Patients with a mixed psychoactive substance use disorder or a cocaine use disorder also show increased extrapyramidal (movement) symptoms, particularly akathisia and tardive dyskinesia compared to patients without a substance use disorder.

For cannabis use, there was a small increase in hospital stay duration in those who continued using cannabis after the onset of psychosis compared to non-users. There was also higher rates of relapse in people who continued cannabis use compared to people who discontinued cannabis use after the first onset of psychosis. Cannabis use was also associated with more suspiciousness and unusual thought content in people at risk of psychosis.

For overall functioning, moderate to high quality evidence finds a small decrease in global functioning in people with psychosis and a current substance use disorder compared to people with psychosis and a former substance use disorder, and decreased functioning in people with a former substance use disorder compared to people with no former substance use disorder.

For cognition, high quality evidence shows a small effect of lower current IQ, and a medium-sized effect of lower premorbid IQ in people with psychosis and current cannabis use compared to people with psychosis without current cannabis use. Moderate quality evidence also finds poorer verbal working memory in those currently using cannabis. For people with schizophrenia specifically, moderate to high quality evidence finds a medium-sized effect of *better* global cognition, processing speed, planning, and visual and working memory in those with any history of cannabis use, but not in those with current cannabis use. Similarly, high quality evidence shows a small to medium-sized increase in global cognition, processing speed, planning, visual and working memory, attention, and psychomotor skills in people with psychosis and a polysubstance or cannabis use disorder compared to people with psychosis with no substance use disorder. For people with psychosis and an alcohol use disorder, moderate quality evidence finds more impaired working memory compared to people with psychosis and no substance use disorder.

For more information see the technical table

### 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).



### 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.*