The background of the cover is a dark field filled with numerous vertical, slightly blurred streaks of light. The colors range from deep blue to bright cyan, with some streaks having a purple or magenta tint. The streaks vary in thickness and intensity, creating a sense of motion and depth. The overall effect is reminiscent of fiber optic cables or data streams.

# **DOUBLE TROUBLE**

**Drugs and Mental Health**

**Revised**

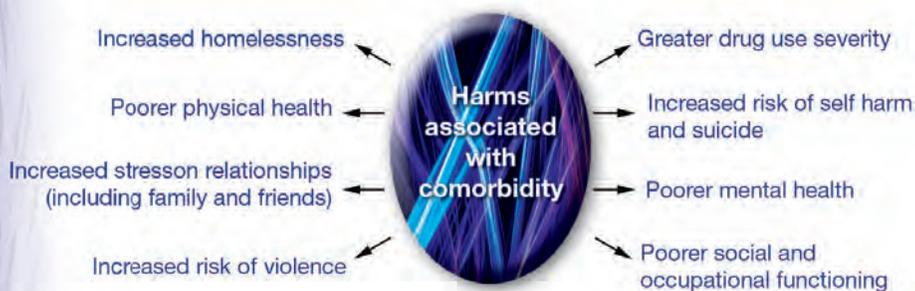
## Drug Use and Mental Health

The link between drug use and mental health problems is common. Compared to the general population, people who have problems with their drug use also have an increased risk of mental health problems. Likewise, people in the community with mental health problems have a higher rate of drug use problems. The term 'comorbidity' is used to describe this situation where two types of medical problems occur together. There are a number of theories as to why comorbidity of mental health and drug and alcohol problems occur:

- **Using drugs may increase the risk of developing a mental disorder.** For example, alcohol use and withdrawal can induce symptoms of depression or anxiety.
- **Having a mental illness may lead a person to use drugs.** For example, alcohol and/or other drugs are often used to relieve the distress of mental illnesses such as anxiety and depression. Although this form of self-medication may appear to ease the problem in the short term, it may lead to a long term problem with drug use in future.
- **Drug use and mental health problems may have the same cause or causes.** Biological factors, family and social issues, social disadvantage, lack of social support, as well as stress, may have an important role in causing someone to develop both drug and alcohol problems and mental health problems. For example, the genetic vulnerability to one drug or mental disorder may increase the risk of the other.

The most commonly reported mental illnesses linked to drug use are anxiety and depression. These comorbidities cause a high burden to society and to the individual. However the less common but more severe mental illnesses such as bipolar disorder and schizophrenia also have high associations with drug and alcohol and can have devastating outcomes for individuals and their families.

As illustrated below, having both a mental illness and a comorbid drug and alcohol disorder causes significantly more problems than having either problem alone:



**Harms associated with comorbidity**

# Mental illness

One in five Australians will experience a mental illness. Some people experience such an illness only once and are able to make a full recovery, but for others, the illness recurs throughout their lives.

## What Causes Mental Illness?

Many mental illnesses are caused by a physical problem in the brain but researchers are still not completely sure why some people develop a mental illness and others do not. Stress factors such as the death of a loved one, a relationship breakdown, child abuse, unemployment or an accident or life-threatening illness, may trigger some mental illnesses.

Another factor that can trigger a mental illness is the use of alcohol and other drugs.

## Types of Mental Illness

### Anxiety

Anxiety is a normal human feeling. Everyone feels anxious when they have to face a situation they find threatening or difficult. Normally anxiety, like fear, can be helpful and protective by leading people to avoid potentially dangerous situations. It also makes people more alert and gives them the motivation to deal with problems.

If the feeling of anxiety becomes too strong or goes on for too long, it can keep a person from doing the things they want to do and generally makes their life miserable. It is estimated that some 13% to 26% of the population experience an anxiety disorder in their lifetime. Anxiety is often accompanied by feelings of depression.

#### Anxiety disorders include:

- *generalised anxiety*, where the person worries too much about almost everything
- *social anxiety*, where the person fears being humiliated or embarrassed in front of other people
- *specific phobia*, which is an unreasonable fear of certain places or situations
- *panic disorder*, where a person experiences panic attacks, which are unexpected surges of anxiety that can be very frightening

- *post traumatic stress disorder (PTSD)*, which is an anxiety disorder resulting from experiencing a stressful event or events, such as combat situations, natural disasters, frightening accidents and sexual assault. People with this disorder can experience flashbacks where they relive the horror of an event. They also expend a lot of energy avoiding suspected stressful situations or feelings. They suffer from hyperarousal, leading to jitteriness, poor concentration and sleep problems.

**Some of the more common symptoms of anxiety disorders are:**

- feeling worried all the time
- getting tired easily
- unable to concentrate
- feeling irritable
- irregular heartbeats or palpitations
- dizziness
- muscle tensions and pains

These symptoms can cause the person experiencing anxiety to believe they are suffering from a physical illness. This causes them to worry and can make the symptoms worse.

Both nature and nurture play a role in the development of anxiety disorders. For example, panic attacks appear to run in families so that panic disorder seems to be inherited. However an environmental trigger is usually required to bring about the anxious response. On the other hand, experiencing a traumatic event (an environmental factor) is likely to be the main influence on whether a person suffers from PTSD.

## **Depression**

Everyone can feel sad, particularly when faced with loss or grief. Depression, however, is more than a low mood or feeling sad about losing something or someone. It is a serious medical illness. It is the result of chemical imbalances in the brain. The sufferer feels extremely sad, dejected and unmotivated. One in four women and one in six men suffer from depression at some time in their life. But only a small proportion of people are correctly diagnosed, since many of the symptoms of depression can seem like a physical illness (such as chronic pain, insomnia or chronic fatigue).

### **Symptoms of depression include:**

- feeling sad or depressed
- a loss of interest and pleasure in normal activities
- loss of appetite or weight
- inability to get to sleep or waking up early
- feeling tired all the time
- having trouble concentrating
- feeling restless, agitated, worthless or guilty
- feeling that life isn't worth living

In some cases people with severe depression may experience symptoms of psychosis (see next section). People with major and recurrent depression may need to be hospitalised to help them recover.

Depression results from a combination of physical and psychological factors which cause chemical imbalances in the brain. Careful analysis is necessary for an accurate diagnosis since the cause can be different for each person.

### **Some common factors associated with depression are:**

- family history/genetic factors
- chronic illness such as stroke, spinal damage, cancer, coronary disease
- treatments for chronic illness such as chemotherapy
- hormonal factors and childbirth (more common in women)
- having another mental illness, such as schizophrenia or anxiety
- age (depression is more common in young people)
- being bisexual or homosexual
- use of alcohol and other drugs

# Psychotic Illnesses

The more disabling but less common illnesses that can bring about an episode of psychosis include schizophrenia and bipolar disorder as well as more severe forms of depression. People with these conditions can have episodes of psychosis which cause them to experience the world in a profoundly confused and often disturbing and frightening way. During a psychotic episode they often hear and see things that are not really there (hallucinations). Similarly they can have delusions, which are false beliefs about what is happening in their world e.g. they may think that some stranger is reading their thoughts. They believe that these feelings and experiences are real – just as people without psychosis believe their feelings and experiences are real.

A minority of people with psychosis can become aggressive, but they are no more likely than other people to become aggressive and threaten others. If they do become aggressive, they are more likely to aim their aggression at themselves and close family or friends, rather than at strangers.

When a person has an acute psychotic episode, they often need to be hospitalised until they are stabilised on medication. This is done not only to protect them from harm but also to protect their reputation.

There is still much stigma associated with such illnesses. However, once stabilised and, given appropriate treatment including psychological and social support, most people can return to their normal lives in the community.

These illnesses usually begin in the late teens or early twenties but can start later in life as well.

No one fully understands the cause of the more severe mental illnesses. However, as with anxiety and depression, they are likely to be a combination of inherited vulnerability and life stressors.

Susceptible people may have their first psychotic episode triggered if they become very stressed at some point in their lives, or begin to use drugs such as cannabis or methamphetamines (e.g., speed or ice).

**Schizophrenia** is a complex brain disorder affecting approximately 7 people in 1000 at some time in their lives. About 20 to 30 per cent of people with schizophrenia experience only a few brief episodes, for others it may become a chronic condition.

There are many myths about schizophrenia, but sufferers do not have ‘split personalities’, and they are not intellectually disabled. With appropriate medical care they can lead fulfilled lives. Medication can keep psychotic episodes to a minimum or remove them totally. Some people retain symptoms of the illness such as thought disorder, social withdrawal, lack of motivation, blunted emotions and inappropriate responses, even when not acutely psychotic.

Although people diagnosed with schizophrenia are rarely considered 'cured', many are considered to be 'recovered'. They still need medication, and sometimes extra psychosocial support, to remain well. The illness is more treatable today than ever before, and the earlier a person with schizophrenia sees a doctor or health professional, the better the outcome is likely to be (early intervention).

It has been estimated that between 1% and 4% of Australians experience **bipolar disorder** in their lives. A person with bipolar disorder suffers from episodes of mania or hypomania and depression which occur at different times. The symptoms of depression have been described above. When a person is manic they become over-excited and reckless. They can have racing thoughts and rapid speech and can also be irritable. They are at risk of spending all their money or giving it away, and are also more vulnerable due to increased sex drive. Hypomania is a milder version of mania.

When a person is suffering either manic or depressive episodes they may also become psychotic. For this reason bipolar disorder is often confused with schizophrenia. It also has symptoms in common with anxiety and depression, and can be difficult to diagnose, especially in young people.

# Commonly used drugs and their impact on mental health

## Alcohol and Mental Health

More people suffer from a combination of alcohol dependence and other mental illnesses than would be expected by chance in the population. For example, nearly half of all Australian women with alcohol dependence also have anxiety or depression, as do a quarter of males in the 18-34 year old age group.

Some people who have mental health problems use alcohol to help them cope. For example, they drink because they think it can help them manage their depression by making them forget their feelings of sadness. Other people drink alcohol because they think it helps them relax when they are in social situations, such as parties, where they feel nervous and awkward.

Unfortunately, even though alcohol might make a person feel better in the beginning, if they keep drinking in these situations it actually makes their problems worse. This is because alcohol itself can cause mental health problems to become worse. For example, if a person is depressed and drinks they can become even more depressed. A person is more likely to attempt suicide if they have been drinking alcohol.

Drinking can also cause feelings of anxiety, so that while a person believes it is helping them relax, it may actually be increasing their level of anxiety and cause symptoms such as heart palpitations, sweatiness, light-headedness and fear of objects or social situations.

Compared with the rest of the population people with schizophrenia or bipolar disorder are 4 to 5 times more likely to have an alcohol use disorder. Having an alcohol disorder means more and longer hospitalizations and more medical problems than having schizophrenia or bipolar disorder alone. For people with severe mental illnesses, having alcohol problems has a significant negative impact on their lives.

Not only does alcohol make mental health problems worse, but drinking to relieve a problem can become a problem in itself. If a person keeps drinking to manage their anxiety or depression they might also start to become dependent on the alcohol. If this happens it becomes difficult for them to decide whether they are drinking because they feel anxious or depressed, or because they have developed a dependence on alcohol and need to drink more to get the same effect. Problems that may seem to be caused by feelings of depression or anxiety, such as family, work, or legal problems, might really be due to dependence on alcohol.

# Cannabis and Mental Health

Cannabis is an illegal drug derived from the plant *cannabis sativa*. It is by far the most widely used illicit drug in Australia. The main ingredient in cannabis which causes the 'high' is delta-9 tetra hydro-cannabinol, commonly known as THC.

Some people experience very unpleasant psychological effects when they use cannabis, like severe anxiety or panic reactions. At high doses, confusion, delusions and hallucinations may also occur. These symptoms are more likely to be felt by people who are not used to the effects of cannabis or who have smoked more than they usually do. These experiences do not usually last after the effects of the cannabis wear off, but can be very frightening, and may be enough to put some people off using the drug.

There is some evidence which shows that cannabis use may rekindle psychotic symptoms in people who have a mental disorder but were no longer having symptoms. It may also be a trigger in people with a predisposition for schizophrenia for their first psychotic experience or 'episode'. In fact, reports show that people with schizophrenia who continue to use cannabis experience more psychotic symptoms (like hallucinations and delusions) and more frequent hospitalisations than those who do not use cannabis.

Having a family history of mental illness should cause a person to think twice before using cannabis. However, even where there are no known mental illnesses in a family, cannabis can still trigger psychosis. If a person chooses to use cannabis they should use it so that it is less concentrated, and keep their use to a minimum instead of making it a daily habit.

It is very important for people who are living with psychotic illnesses to know that using cannabis can cause symptoms to return more seriously and more often. Further, using cannabis can interfere with any treatment for their illness as it can override any good effects anti psychotic medication may be having.

In comparison to psychosis, there has been far less attention given to the link between cannabis use and depression. Research has found that although depression does not lead to cannabis use, cannabis use does lead to later depression. Given the high rate of suicide in young Australian males and the common use of cannabis in this group, the issue of suicide risk and cannabis use is important. Although there has only been a small amount of research examining this issue, the research indicates that there is reason to believe that heavy cannabis use may pose a small additional risk of suicide.

Like depression and schizophrenia, anxiety disorders occur at higher rates in frequent users of cannabis, however, it is unclear whether this association is due to factors such as other drug use, childhood and family factors and peer group affiliations, rather than simply the use of cannabis. Sufficient research has not been carried out on cannabis use with personality or bipolar disorders to be able to draw conclusions about their association.

## Methamphetamine and Mental Health

Methamphetamine is a stronger version of amphetamine and over the past 15 years has replaced amphetamines in the illicit drug scene. It is also known as ice, crystal meth, speed, base, shabu. Amphetamines belong to a group of drugs called stimulants, which increase activity in the brain and central nervous system, and cause similar effects to one of the body's own naturally occurring hormones, adrenaline. Methamphetamine is now the second most commonly used illicit drug in Australia after cannabis.

Many people who use methamphetamine experience depression, anxiety and general psychological distress when they 'come down' from the drug or stop using it. Methamphetamine users who have experienced mental health problems like depression before they began using the drug, often find that their mental illness becomes worse when they use methamphetamine. It can also cause people living with schizophrenia to experience an 'acute' or sudden attack of psychosis, with symptoms they may not have had for a while or have had under control. These symptoms may also be more severe than usual.

### Speed Psychosis

One of the most common effects of methamphetamine, or 'speed' overdose is 'speed psychosis'. This is usually a temporary condition brought on by taking too much speed and developing toxic blood levels of the drug. While symptoms of 'speed psychosis' closely resemble those of a sudden attack of paranoid schizophrenia, it is clearly a separate disorder since the symptoms will begin to go away once the drug has left the body - usually within a few days. Occasionally, however, some people with speed psychosis will experience symptoms for up to three months after the incident. It is unclear as to why this happens but it may be due to an underlying psychotic illness the person has.

The risk of experiencing speed psychosis increases when large amounts of methamphetamine are taken, or when the drug is used heavily over an extended period of time or in a binge-like pattern. 'Ice' or 'crystal' is a very pure form of methamphetamine, so use of ice is associated with an increased risk of psychosis. If ice is injected or smoked the risk is further increased.

The main symptom of speed psychosis is paranoia along with 'ideas of reference' - the user begins to think they are being followed or that someone is plotting against them, and that other people are thinking or talking about them. Speed psychosis most likely begins with a heightened awareness of the environment and a feeling of anxiety and tenseness. This is soon followed by a vague sense of suspicion and the feeling of being watched. There is also an overreaction to slight movements they may see out of their side vision which may lead to illusions.

Another common symptom that occurs during speed psychosis is called ‘stereotyped behaviour’ and is usually characterised by compulsive activity where the user will keep doing the same thing over and over again. For example they might get involved in taking a pen apart and putting it back together or they start cleaning everything. Occasionally the behaviour becomes bizarre and people do strange things that make no sense and they later cannot explain.

Whatever the activity, no matter how unpleasant or weird it may seem to someone else, most amphetamine users describe the process as pleasurable, funny, and relaxing. Anxiety is not felt. They sense that it is a meaningless activity in which they “get stuck” and cannot give up. The person gets so focussed on the activity that they lose the sense of time, and only very urgent matters will stop them or interfere with the activity. If they are forced to stop, a strong feeling of irritation, anger, anxiety and the compulsion to continue ensues.

The interesting thing about speed psychosis is that it develops while the person is in a clear state of insight and consciousness, in other words they still know who and where they are and what they are doing, whereas in other forms of psychoses people are unsure or forget where they are or what they are doing. However, in speed psychosis, this clear insight can suddenly be lost and many users develop well-formed delusions of persecution. If the psychosis becomes severe it can lead to a confused, panic state where acts of violence may occur.

#### **Other symptoms can include:**

- visual and auditory hallucinations—seeing and hearing things that are not really there
- smelling things that are not there
- thinking or feeling like something is crawling on them or in their skin which leads them to picking at their skin until wounds develop
- distortions of body image
- changes in libido
- flattening of mood
- thought disorder

Fortunately, these symptoms usually disappear when the drug leaves the body.

## Ecstasy and Mental Health

After cannabis, ecstasy is the most frequently used illicit drug in Australia. Its use has increased over time, especially amongst teenagers and young adults. The active ingredient in ecstasy is 3,4-methylenedioxymethamphetamine (MDMA). Ecstasy, like speed, is a stimulant and mainly acts by causing the release of large amounts of the “mood altering” neurotransmitter called serotonin into the brain.

While ecstasy use is associated with a number of short-term effects including euphoria, feelings of wellbeing, closeness with others, as well as a sense of increased confidence and heightened senses, for some people, it has also been associated with a “hangover effect” that can last for days after using it. These symptoms include: loss of appetite, insomnia, depression, muscle aches and difficulty concentrating. However, ecstasy use is often associated with a lifestyle of short-term high-energy output (like club dancing) which can lead to missing meals and sleep deprivation. It can sometimes be difficult to figure out how much of the bad effects people experience are caused by the MDMA and how much by the person’s lifestyle. The majority of studies show that ecstasy may not be as harmless as users believe and is directly responsible for a range of short and long-term psychological problems. These include depression, anxiety, paranoia, psychotic problems, panic attacks and bulimia.

Other points to consider when trying to understand the relationship between ecstasy and mental health are that even though ecstasy pills are supposed to contain MDMA alone, some have been found to contain a combination of MDMA and other drugs (such as methamphetamine, MDA and ketamine), or they may not contain MDMA at all. Also, the purity of pills that do contain MDMA varies from pill to pill.

It has been shown that ecstasy use occurs in situations where people are taking more than one drug at the same time. This is known as polydrug use. Users may take a mix of drugs like cannabis, alcohol, nicotine, or methamphetamine while they are using ecstasy. It can be risky to mix drugs, as one drug can mask the effects of another and you can end up taking more than you planned. For example the stimulating effects of ecstasy may mask the depressant effects of alcohol and you may drink too much. Similarly, taking two stimulants such as ecstasy and speed can markedly increase the risks to mental health that either drug poses.

## Heroin and Mental Health

Studies have shown that people who seek treatment for heroin and other drug problems have a high rate of psychiatric comorbidity, which means they often have two or more mental illnesses at once. Anxiety and depression are amongst the most common mental illnesses to be found together.

Heroin users are 14 times more likely than their peers to die from suicide and they are also more likely than the rest of the community to attempt suicide. It is not surprising to find out that the more different types of drugs a person takes the greater their psychological distress tends to be.

A frequently asked question is: “which comes first, the anxiety and depression or the drug use”? One possibility is that heroin users are self-medicating psychological distress they may have had for a long time. And, people with more severe anxiety, depressive and/or personality disorders tend to use a broad range of drugs to relieve their distress.

While anxiety and depression may have been problems for many people before they developed heroin dependency, the anxiety and depression they feel may just be a part of their heroin withdrawal symptoms. These symptoms occur whenever a heroin dependent person tries to go without heroin. In addition, the heroin using lifestyle itself is a very stressful one, which adds to the person’s overall stress levels.

Maintaining an illegal and expensive habit often results in legal problems, with approximately 40% of heroin users having been in prison at some stage. The ‘lifestyle’ commonly involves unemployment, housing problems, poor nutrition, exposure to life-threatening or violent situations and the risk of losing custody of children. At the very least, these problems are likely to worsen symptoms of anxiety and depression which may have been present before heroin withdrawal.

Regardless of the relationship between psychological distress and heroin use, health services that treat heroin dependent individuals need to screen their clients for mental illnesses, and where necessary refer clients to specialist services.

## Summary

Many people have mental illnesses and although some of these people will experience these illnesses only once and never again, for others these problems will recur throughout their lives. Although we don't yet know exactly what triggers a mental illness, we do know that people who use alcohol and other drugs are more likely to have these mental problems than people who don't use these substances.

Among people who drink **alcohol** heavily, there is a high rate of depression and anxiety. Although we don't know what comes first, the alcohol or the mental illness, we do know that some people start drinking to help them cope with problems like anxiety and depression and that the alcohol use then also becomes a problem in itself.

**Cannabis** is widely used and some people, mostly those who haven't used it before or those who use more than they are used to, will experience unpleasant effects like severe anxiety and panic. Cannabis can also trigger the onset of a mental illness in certain vulnerable people – especially if they have a history of mental disorders in their family. Cannabis complicates treatment in those whose illness is already present.

When people use **amphetamines**, they are at a higher risk of having a 'speed psychosis' where they have symptoms of paranoia, for example, they may think that people are following them or talking about them. This paranoid condition is usually temporary and the symptoms will disappear when the drug leaves the body; although these symptoms may persist in some people.

After the initial euphoria associated with **ecstasy** has worn off, some people experience a "hangover effect" where the person has symptoms like insomnia and depression. Recent research has shown that ecstasy is not a harmless drug and is associated with longer term mental problems like depression, anxiety, psychotic problems and panic.

Many **heroin** users also suffer depression, anxiety and personality disorders. Although we don't know whether depression and anxiety came before or after the heroin use started we do know that these problems are very severe and lead to a very high rate of suicide among heroin users.

This booklet was jointly produced by the National Drug and Alcohol Research Centre (NDARC) and the Mental Health Services Conference Inc. of Australia and New Zealand (TheMHS)

This booklet was written in 2007 by Bridget Barker, Lucy Burns, Louisa Degenhardt, Tia Demou, Paul Dillon, Rebecca McKetin, Joanne Ross, and Maree Teesson.

Updated by Heather Proudfoot and edited by Kati Haworth in 2009.

Copies of this booklet can be purchased from:  
National Drug and Alcohol Research Centre Education Trust,  
University of New South Wales, Sydney NSW 2052  
Ph (02) 9385 0333; Fax (02) 9385 0222  
Resources: <http://ndarc.med.unsw.edu.au/>

Booklet designed by Ian Jopson. [ianjopson@hotmail.com](mailto:ianjopson@hotmail.com)

ISBN 1 877027 83 9

Disclaimer: All information contained in this booklet was correct at the time of publication ©2007, NDARC, UNSW. Revised 2009

