

# Psychosis

## Introduction

Psychosis is a medical word used to describe mental health problems that stop the person from thinking clearly, telling the difference between reality and their imagination, and acting in a normal way.

The two main symptoms of psychosis are:

hallucinations – where a person hears, sees (and in some cases smells) things that are not really there; a common hallucination is when people hear voices in their head

delusions – where a person believes things that, when examined rationally, are obviously untrue; such as believing that your next door neighbour is secretly planning to kill you

The combination of hallucinations and delusional thinking can cause an often severe disruption to perception, thinking, emotion and behaviour.

Experiencing symptoms of psychosis is often referred to as having a psychotic episode.

## Causes

Psychosis is not a condition in itself – it is triggered by other conditions.

Sometimes it is possible to identify the cause of psychosis as a specific mental health condition such as:

schizophrenia – a condition where people may have repeated episodes of psychosis

bipolar disorder – a condition where people have periods of depression at times and at other times have periods of feeling energetic, impulsive and happy (manic)

Psychosis can also be triggered by physical conditions, such as Parkinson's disease, a brain tumour, or a result of drug or alcohol misuse.

The length of time that someone will experience a psychotic episode, will depend on underlying causes. Drug- or alcohol-induced psychosis may only last a few days.

However, psychosis that results from schizophrenia or bipolar disorder may last indefinitely unless treated.

## Treatment

Treatment for psychosis involves using a combination of:

antipsychotic medicines, which can help relieve symptoms of psychosis

psychological therapies, which can help address the underlying cause of the psychosis – for example the talking therapy cognitive behavioural therapy has proved successful in helping people with schizophrenia

social support – help to support the person with psychosis with social needs, such as education, employment or accommodation

Some people may only need to take antipsychotic medicines on a short-term basis. Other people may need them for months or, in some cases, years to prevent symptoms reoccurring.

In severe cases a person may need to be admitted to hospital or a secure psychiatric unit.

## Getting help for others

People with psychosis often have what is known as a lack of insight, meaning they are unaware they are thinking and acting strangely.

Due to their lack of insight, it is often down to friends, relatives or carers of people affected by psychosis to seek help for them.

If you are concerned that someone you know may be affected by psychosis you could contact their social worker or community mental health nurse if they have previously been diagnosed with a mental health condition.

If you think the person's symptoms are placing them at possible risk of harm then you can:

take the person to the nearest accident and emergency department, if they agree

## Complications

People with a history of psychosis are much more likely to have drug and/or alcohol misuse problems. This may be because the use of these substances can provide short-term relief from symptoms (though they usually make symptoms worse in the long-term).

People with psychosis also have a higher risk of suicide than the population at large. It is estimated that one in five people with psychosis will attempt suicide at some point in their life and one in 25 people with psychosis will kill themselves.

Also, side effects can occur if taking antipsychotics on a long-term basis. A common side effect is weight gain, and in rare cases, type 2 diabetes.

Read more about the complications of psychosis.

## Who is affected

Another study estimated that around one in 100 people have at least one episode of psychosis at some point during their life.

Most cases of psychosis first develop during the older teenage years (15 or above) or during adulthood. Cases affecting children under the age of 15 are rare, accounting for only one in every 500 cases.

## Symptoms of psychosis

There are four main symptoms associated with a psychotic episode:

hallucinations

delusions

confused and disturbed thoughts

a lack of insight and self-awareness

These are outlined in more detail below.

## Hallucinations

A hallucination is when you perceive something that does not exist in reality. Hallucinations can occur in all five of your senses:

sight – someone with psychosis may see colours and shapes, or imaginary people or animals

sounds – someone with psychosis may hear voices that are angry, unpleasant or sarcastic

touch – a common psychotic hallucination is that insects are crawling on the skin

smell – usually a strange or unpleasant smell

taste – some people with psychosis have complained of having a constant unpleasant taste in their mouth

## Delusion

A delusion is where you have an unshakeable belief in something implausible, bizarre or obviously untrue. Two examples of psychotic delusions are:

paranoid delusion

delusions of grandeur

These are described below.

### Paranoid delusion

A person with psychosis will often believe an individual or organisation is making plans to hurt or kill them. This can lead to unusual behaviour. For example, a person with psychosis may refuse to be in the same room as a mobile phone because they believe they are mind-control devices.

### Delusions of grandeur

A person with psychosis may have delusions of grandeur where they believe they have some imaginary power or authority. For example, they may think they are president of a country, or have the power to bring people back from the dead.

## Confusion of thought

People with psychosis often have disturbed, confused and disrupted patterns of thought. Signs of this include that:

their speech may be rapid and constant

the content of their speech may appear random; for example, they may switch from one topic to another mid-sentence

their train of thought may suddenly stop, resulting in an abrupt pause in conversation or activity

## Lack of insight

People experiencing a psychotic episode are often totally unaware their behaviour is in any way strange, or their delusions or hallucinations could be imaginary.

They may be capable of recognising delusional or bizarre behaviour in others, but lack the self-awareness to recognise it in themselves. For example, a person with psychosis who is being treated in a psychiatric ward may complain that all of their fellow patients are mentally unwell while they are perfectly normal.

## Postnatal psychosis

Postnatal psychosis, also called puerperal psychosis, is a severe form of postnatal depression (a type of depression some women experience after they have had a baby).

It is estimated that postnatal psychosis affects one or two women in every 1,000 who give birth, and most commonly occurs during the first few weeks after having a baby. Postnatal psychosis is more likely in women who already have a mental health condition, such as bipolar disorder or schizophrenia.

As well as symptoms of psychosis (see above), symptoms of postnatal psychosis can include:

a high mood (mania) – for example, talking and thinking too much or too quickly

a low mood – for example, depression, lack of energy, loss of appetite and trouble sleeping

Postnatal psychosis is regarded as an emergency. If you are concerned someone you know may have developed postnatal psychosis contact your DOCTOR immediately.

## Causes of psychosis

The causes of psychosis have three main classifications:

psychosis caused by psychological (mental) conditions

psychosis caused by general medical conditions

psychosis caused by substances, such as alcohol or drugs

These three classifications are described in more detail below.

## Psychological causes

The following conditions have been known to trigger psychotic episodes in some people:

schizophrenia – a chronic (long-term) mental health condition that causes hallucinations and delusions

bipolar disorder – previously called manic depression, bipolar disorder affects your moods, which can swing from one extreme to another

severe stress or anxiety

severe depression – feelings of extreme sadness that last a long time (including postnatal depression, which some women experience after having a baby)

lack of sleep

The underlying psychological cause will often influence the type of psychotic episode someone experiences. For example, a person with bipolar disorder is more likely to have delusions of grandeur, whereas someone with depression or schizophrenia is more likely to develop paranoid delusions (read more about the symptoms of psychosis).

## General medical conditions

The following medical conditions have been known to trigger psychotic episodes in some people:

HIV and AIDS – a virus that attacks the body's immune system (the body's natural defence against illness and infection)

malaria – a tropical disease spread by infected mosquitoes

syphilis – a bacterial infection usually passed through sexual contact

Alzheimer's disease – the most common form of dementia that causes a decline of mental abilities, such as memory and reasoning

Parkinson's disease – a chronic condition that affects the way the brain coordinates body movements, including walking, talking and writing

hypoglycaemia – an abnormally low level of sugar (glucose) in the blood

lupus – a condition where your immune system attacks healthy tissue

Lyme disease – a bacterial infection spread to humans by infected ticks

multiple sclerosis – a condition of the central nervous system (the brain and spinal cord)

brain tumour – a growth of cells in the brain that multiply in an abnormal and uncontrollable way

Substances

Alcohol and drug misuse can trigger a psychotic episode. A psychotic episode can also be triggered if you suddenly stop taking a drug or drinking alcohol after using for a long time. This is known as withdrawal.

You can also experience psychosis after drinking large amounts of alcohol or if you are high on drugs.

Drugs known to trigger psychotic episodes include:

cocaine

amphetamine (speed)

methamphetamine (crystal meth)

mephedrone (MCAT or miaow)

MDMA (ecstasy)

cannabis

LSD (acid)

psilocybins (magic mushrooms)

ketamine

In rare situations, psychosis can also occur as a side effect of some types of medication, or as a result of an overdose of that medication.

One example is levodopa, a medication used to treat Parkinson's disease, but any medicine that acts on the brain can cause psychosis with an overdose.

Never stop taking a prescribed medication unless advised to do so by your DOCTOR or another qualified healthcare professional responsible for your care. See your DOCTOR if you are experiencing psychotic side effects because of taking a medication.

The brain

There has been a great deal of research looking at how psychosis affects the brain and conversely how changes in the brain can trigger symptoms of psychosis.

A summary of the research is provided below.

Grey matter

Research has revealed that during a psychotic episode several physical and biological changes occur in the brain.

The results of magnetic resonance imaging (MRI) scans have shown some people with a history of psychosis may have less grey matter than the average member of the general public. Grey matter is the part of the brain responsible for processing thoughts. MRI scans use a strong magnetic field and radio waves to take images of the inside of the body.

This research has led to scientists suggesting repeated episodes of psychosis may actually cause physical damage to the brain. However, further research is required to confirm this.

Alternatively, both the reduction of grey matter and a history of psychosis could both be symptoms of an underlying condition not yet identified.



## Dopamine

Researchers also believe that dopamine plays an important role in psychosis.

Dopamine is a neurotransmitter, one of many chemicals the brain uses to transmit information from one brain cell to another. Dopamine is associated with how we feel something is significant, important or interesting.

In people with psychosis, it is thought levels of dopamine in their brain rise too high. The excess dopamine interrupts specific pathways of the brain responsible for some of its most important functions, such as:

memory

emotion

social behaviour

self-awareness

Disruption to these important brain functions may explain the symptoms of psychosis.

Evidence for the role of dopamine in psychosis comes from several sources, including brain scans, and the fact that medications known to reduce the effects of dopamine in the brain also reduce symptoms of psychosis. However, illegal drugs known to increase levels of dopamine in the brain, such as cannabis, cocaine and amphetamines, can trigger psychosis.

### Diagnosing psychosis

Visit your DOCTOR if you are experiencing psychotic episodes. It is important to speak to your DOCTOR as soon as possible because early treatment of psychosis usually has better long-term outcomes.

Visit your DOCTOR

There is no test to positively diagnose psychosis. However, your DOCTOR will look at your symptoms and rule out short-term causes, such as drug misuse.

Your DOCTOR may ask questions to determine the cause of your psychosis. For example, you may be asked:

whether you are taking any medication

whether you have been taking illegal substances

how your moods have been – for example, whether you have been depressed

how you have been functioning day-to-day – for example, whether you are still working

whether you have a family history of mental health conditions, such as schizophrenia

about the details of your hallucinations, such as whether you have heard voices

about the details of your delusions, such as whether you feel people are controlling you

whether you have other symptoms

## Referral

The evidence supporting the early treatment of psychosis means you are likely to be referred to a specialist urgently. This will either be during or after your first episode of psychosis. Who you are referred to will depend on services available in your local primary care trust (PCT). However, you may be referred to:

a community mental health team – a team of different mental health professionals who provide support to people with complex mental health conditions

a crisis resolution team – a team of different mental health professionals who treat people currently experiencing a psychotic episode, who would otherwise require hospitalisation

an early intervention team – a team of mental health professionals who work with people who have experienced their first episode of psychosis

These teams are likely to include some or all of the following healthcare professionals:

a psychologist – a healthcare professional who specialises in the assessment and treatment of mental health conditions

a psychiatrist – a qualified medical doctor who has received further training in treating mental health conditions

a community mental health nurse – a nurse with specialist training in mental health conditions

Your psychiatrist will carry out a full assessment to diagnose any underlying mental health condition that could be causing your symptoms. This will help when planning your treatment.

### Helping others

The lack of self-awareness associated with psychosis means people experiencing psychosis will not be able to recognise they are behaving strangely. They may be reluctant to visit their DOCTOR if they believe there is nothing wrong with them, and you may need to get help for them.

Someone who has had psychotic episodes in the past may have been assigned a social worker (someone who works in social services), so try to contact them to express your concerns.

If someone is having a psychotic episode for the first time, it may be necessary for a friend, relative or someone else close to them to persuade them to visit their DOCTOR. If someone is having a rapidly worsening psychotic episode, contact the duty psychiatrist at their nearest A&E department.

If a person having a psychotic episode refuses to seek help, and is believed to present a risk to themselves or others, their nearest relative can request a psychological assessment is carried out.

### Treating psychosis

Treatment for psychosis involves a combination of antipsychotic medicines, psychological therapies and social support.

### Your care team

Your treatment is likely to be co-ordinated by a team of mental health professionals working together. If this is your first psychotic episode, you may be referred to an early intervention team.

### Early intervention teams

An early intervention team is a team of healthcare professionals set up specifically to work with people who have experienced their first episode of psychosis.

Some early intervention teams only focus on a certain age range, such as people who are 14 to 35 years old. Depending on what is necessary for your care, early intervention teams aim to provide:

a full assessment of your symptoms

prescriptions for medications

psychological services

social, occupational and educational interventions

Treatment for psychosis will vary depending on the underlying cause – for example, your treatment may be slightly different if you have been diagnosed with an underlying mental health condition as well.

For example:

bipolar disorder is treated using a variety of medications, which could include antipsychotics to treat symptoms of mania; lithium and anticonvulsants to help stabilise mood on a long-term basis; and psychological therapy such as cognitive behavioural therapy (CBT)

schizophrenia is usually treated using a combination of antipsychotic medication and social support, CBT or another form of psychotherapy called family therapy are often used

Psychosis related to drug or alcohol intoxication or withdrawal may only require a short course of antipsychotics or tranquilisers (which have a calming effect). Referral to an addiction counsellor may then be recommended.

Antipsychotics

Antipsychotic medicines, also known as neuroleptics, are usually recommended as the first treatment for psychosis. Antipsychotics work by blocking the effect of dopamine (a chemical that transmits messages in the brain). However, they are not suitable or effective for everyone as side effects can affect people differently.

In particular, antipsychotics will be monitored closely in people who also have:  
epilepsy – a condition that causes seizures or fits

cardiovascular disease – conditions that affect the heart, blood vessels or circulation, such as heart disease

Antipsychotics can usually reduce feelings of anxiety or aggression within a few hours of use, but they may take several days or weeks to reduce other psychotic symptoms, such as hallucinations or delusional thoughts.

Antipsychotics can be taken orally (by mouth) or given as an injection. There are several 'slow release' antipsychotics, where you only need one injection every two to six weeks.

Depending on the underlying cause of your psychosis, you may only need to take antipsychotics until your psychosis subsides. However, if you have a condition such as schizophrenia or bipolar disorder, you may need to take antipsychotics on a long-term basis to prevent further episodes of psychosis.

Side effects

Both typical and atypical antipsychotics have side effects, although not everyone will experience them and their severity will differ from person to person.

Side effects of typical antipsychotics can include:

drowsiness – which may affect your ability to drive

shaking

trembling

restlessness

muscle twitches

spasms – where your muscles shorten tightly and painfully

Side effects of both typical and atypical antipsychotics can include:

blurred vision

dizziness

constipation – an inability to empty your bowels

lack of sex drive

dry mouth

See the patient information leaflet that comes with your medicine for a full list of possible side effects.

In addition long-term use of antipsychotics can lead to complications such as weight gain and diabetes. Read more about these types of complications.

You should inform your DOCTOR if your side effects are becoming particularly troublesome because there may be an alternative antipsychotic medicine you can take.

You should never stop taking medication prescribed for you unless advised to do so by a qualified healthcare professional responsible for your care. Suddenly stopping prescription medication could trigger a return (relapse) of your symptoms. When it is time for you to stop taking your medication it will be done gradually and under close observation.

Psychological treatment

Psychological treatment, such as counselling (a talking therapy), can help reduce the intensity and anxiety caused by psychosis. Some possible psychological treatments are discussed below.

Cognitive behavioural therapy

Cognitive behavioural therapy (CBT) for psychosis is based on an understanding of how people make sense of their experiences and why some people become distressed by them.

The aim of CBT is to identify unhelpful thinking patterns and emotions that may be causing your unwanted feelings and behaviours. It is then possible to learn to replace this thinking with more realistic and balanced thoughts.

A CBT therapist may encourage you to consider different ways of understanding what is happening to you. The aim is to help you achieve goals that are meaningful and important to you, such as reducing your distress, returning to work or university, or regaining a sense of control.

Family therapy

As family therapy is known to be an effective treatment for people with schizophrenia, it is also sometimes used to treat people who have experienced an episode of psychosis.

Family therapy is a way of helping both you and your family to cope better with your condition. After experiencing an episode of psychosis, you may rely on your family members for care and support. While most family members are happy to help, the stress of caring for somebody can place a strain on any family.

Family therapy involves a series of informal meetings that take place over a period of six months. Meetings may include:

- discussing information about your condition, such as what treatments are available, and how your condition might progress

- exploring ways of supporting someone with psychosis

- deciding how to solve practical problems caused by psychosis – for example, planning how to manage a future psychotic episode

Self-help groups

If you are experiencing episodes of psychosis, a self-help group can be an additional source of support. You may benefit from being around others who have been through similar experiences.

## Dealing with violence and aggression

Acts of violence and aggression are actually uncommon in people with psychosis. They are more likely to be victims of violence than perpetrators.

However, there may be time when your behaviour places yourself or others at risk of harm.

Mental health staff have received special training in dealing with aggressive behaviour.

If you fail to respond to requests to calm down, it may be necessary to hold you down without hurting you. This is known as a physical intervention. You may then be moved to a secluded room to calm down.

In some cases it may be necessary to give you a medication that will cause you to become very relaxed in a short space of time. This is known as rapid tranquillisation.

You will be asked to take the medication voluntarily but if you refuse you can be treated against your consent. This may involve giving you an injection of a tranquiliser.

It should be stressed that the methods described above are only ever used in extreme circumstances and are in no way a routine part of treating psychosis.

### Advance decisions

If there is a risk of future psychotic episodes occurring, and there are certain treatments you do not want to have, it is possible to pre-arrange a legally binding advance decision (previously known as an advance directive).

An advanced decision is a series of written instructions about what you would like your family or friends to do in the event you experience another psychotic episode. You may also want to include the contact details of your care team and social worker.

To create an advance decision, make your wishes clear in writing and have it signed by a witness. Include specific details about which treatments you do not want, and specific circumstances in which they may apply.

### Complications of psychosis

#### Self-harm

Self-harming behaviour is a relatively common complication in people with psychosis. One study found that 1 in 10 people with psychosis also had a history of self-harm.

The risk of self-harm is thought to be highest in people experiencing their first episode of psychosis that is currently going untreated.

If you suspect that a friend or relative is self-harming, look out for any of the following signs:



unexplained cuts, bruises or cigarette burns, usually on their wrists, arms, thighs and chest

keeping themselves fully covered at all times, even in hot weather

Read more about spotting the signs of self-harm in others.

The person who is self-harming may feel deep shame and guilt, or may feel confused and worried by their own behaviour. It's important to approach them with care and understanding.

They may not wish to discuss their self-harm with you, but you could suggest that they speak to an anonymous helpline or see their DOCTOR.

## Suicide

Another serious complication of psychosis is that people with the condition have an increased risk of suicide.

It is estimated that 1 in 5 people with psychosis will attempt suicide at some point in their life and 1 in 25 people with psychosis will kill themselves.

If you are feeling suicidal, you can:

  speak to a friend, family member or someone you trust

  make an urgent appointment to see your DOCTOR

If you are worried that someone you know may be considering suicide, recommend that they contact one or more of the organisations above and encourage them, in a non-judgemental way, to talk about how they are feeling.

If the person has previously been diagnosed with a mental health condition, such as depression, you can speak to a member of their care team for help and advice.

## Complications of antipsychotics

Using antipsychotics on a medium to long term basis can cause a number of complications. Some of the more common ones are discussed below.

### Weight gain

Weight gain can be a common complication of many commonly used antipsychotics.

It is thought there are two main reasons weight gain can occur:

antipsychotics can lead to an increase in appetite

antipsychotics can slow down your metabolism meaning that you burn off fat at a reduced rate

To combat the reduction in your metabolism you will probably be recommended to take more exercise as this can help burn off the excess fat.

Read more about getting started with exercise and how to lose weight safely.

Metabolic syndrome

Metabolic syndrome is a term used to describe a number of related conditions that are linked with weight gain, such as:

high blood sugar levels

high cholesterol levels

high blood pressure

becoming obese

In turn these conditions can increase your risk of developing type 2 diabetes, heart disease, and most seriously, a heart attack or a stroke.

Because of the risk of metabolic syndrome it is usually recommended that you receive regular blood tests and blood pressure tests while taking an antipsychotic.

If tests show that you do have an increased risk of developing a condition such as heart disease then there are a number of preventative treatments available such as statins which can help lower cholesterol levels.

Tardive dyskinesia

Another common complication of long-term antipsychotic use is tardive dyskinesia (TD).

TD is a movement disorder when a person experiences involuntary movements such as twitching, tics, grimaces, tremors and spasms.

TD usually starts in the face and mouth before spreading to the rest of the body.

The mental health charity Mind estimated that 1 in 5 people who have been taking an antipsychotic for four years or more will develop TD.

In some cases stopping taking an antipsychotic will lead to relief of symptoms of TD (though this may not always be safe to do and has to be balanced against the risk of a relapse) though it can take several years for this to occur.

In some cases TD can be a permanent condition.

There are a number of treatments that can sometimes lead to an improvement in symptoms of TD, such as:

clonazepam – a medication used in the treatment of epilepsy

vitamin E supplements – check with the doctor in charge of your care before taking vitamin supplements as they are not safe or suitable for everyone

Preventing psychosis

It is not always possible to prevent psychosis. For example, schizophrenia is caused by a combination of biological, psychological and environmental factors you may not be able to avoid.

However, you can prevent psychosis caused by substances by not taking illegal drugs.

Cannabis

Research has shown regular cannabis users are 40% more likely to develop a psychotic illness, such as schizophrenia, than people who do not use the drug.

Cannabis is known to increase levels of dopamine (a chemical that helps transmit messages) in your brain. Therefore, long-term cannabis use may cause permanent changes in your brain's chemistry that could lead to psychosis.

People who regularly use 'skunk' (the herbal type of cannabis specifically grown for its increased strength) are thought most at risk.

You should also avoid other recreational drugs, such as cocaine and ecstasy, because they also increase your risk of developing psychosis.

Read more information about drug misuse.

## Stress and depression

Experiencing prolonged bouts of stress can sometimes trigger an episode of depression. Both stress and depression are major risk factors for psychosis.

The advice listed below may help reduce your stress levels, helping prevent depression and subsequent psychotic episodes.

Use a problem-solving approach to deal with stress and worries

Try to identify negative thoughts and change them to positive thoughts

Assess your symptoms regularly and consult your DOCTOR or counsellor if problems arise

Take regular exercise. Exercise triggers the release of a mood-boosting brain chemical called serotonin

Learn how to relax using relaxation exercises and tapes

Practise yoga and meditation, or have a massage to help relieve tension and anxiety

Join a self-help group to discuss your feelings and concerns. This can help you feel less isolated

Avoid smoking, taking illegal drugs and drinking alcohol. These may make you feel better in the short-term, but will usually make you feel worse in the long-term

Read about depression and stress for more information about these conditions.