SCHIZOPHRENIA
What is schizophrenia?
Schizophrenia is a serious and lifelong neurodevelopmental disorder that affects how a person thinks, feels, and behaves.

People with schizophrenia may experience delusions, hallucinations, disorganized speech or behavior, and impaired cognitive ability. They may hear voices or see things that aren’t there. They may believe other people are reading their minds, controlling their thoughts, or plotting to harm them. These behaviors can be scary and upsetting to people with the illness and make them withdrawn or extremely agitated. It can also be scary and upsetting to the people around them.

People with schizophrenia may sometimes talk about strange or unusual ideas, which can make it difficult to carry on a conversation. They may sit for hours without moving or talking. Sometimes people with schizophrenia seem perfectly fine until they talk about what they are thinking.

**Schizophrenia is not dissociative identity disorder (formerly called multiple personality disorder or split personality).** While some of the signs may seem similar on the surface, people with dissociative identity disorder have two or more distinct identities that are present and alternately take control of them.

People with schizophrenia may cope with symptoms throughout their lives, but treatment helps many to recover sufficiently and pursue their life goals. Researchers are using new research tools to understand the causes of schizophrenia and develop more effective treatments.

What are the signs of schizophrenia?
It’s important to know the signs and symptoms of schizophrenia and seek help early. The signs usually appear between ages 16 and 30. In rare cases, children can have schizophrenia too. Schizophrenia symptoms fall into three categories: positive, negative, and cognitive.

**POSITIVE SYMPTOMS**

“Positive” symptoms are referred to as positive because the symptoms are additional behaviors not generally seen in healthy people. For some people, these symptoms come and go. For others, the symptoms become stable over time. These symptoms can be severe—but at other times—unnoticeable. Positive symptoms include:

- **Hallucinations:** When a person sees, hears, smells, tastes, or feels things that are not real. Hearing voices is common for people with schizophrenia. People who hear voices may hear them for a long time before family or friends notice a problem.

- **Delusions:** When a person believes things that are not true. For example, a person may believe that people on the radio and television are talking directly to him or her. Sometimes people who have delusions may believe that they are in danger or that others are trying to hurt them.

- **Thought disorders:** When a person has ways of thinking that are odd or illogical. People with thought disorders may have trouble organizing their thoughts. Sometimes a person will stop talking in the middle of a thought or make up words that have no meaning.

- **Movement disorders:** When a person exhibits abnormal body movements. A person may repeat certain motions over and over—this is called stereotypies. At the other extreme, a person may stop moving or talking for a while, which is a rare condition called catatonia.
NEGATIVE SYMPTOMS

“Negative” symptoms refer to social withdrawal, difficulty showing emotions, or difficulty functioning normally. People with negative symptoms may need help with everyday tasks. Negative symptoms include:

- Talking in a dull voice
- Showing no facial expression, such as a smile or frown
- Having trouble experiencing happiness
- Having trouble planning and sticking with an activity, such as grocery shopping
- Talking very little to other people, even when it is important

These symptoms are harder to recognize as part of schizophrenia and can be mistaken for depression or other conditions.

COGNITIVE SYMPTOMS

Cognitive symptoms are not easy to see, but they can make it hard for people to have a job or take care of themselves. The level of cognitive function is one of the best predictors of a person’s ability to improve how they function overall. Often, these symptoms are detected only when specific tests are performed. Cognitive symptoms include:

- Difficulty processing information to make decisions
- Problems using information immediately after learning it
- Trouble paying attention

RISK OF VIOLENCE

Most people with schizophrenia are not violent. If a person has symptoms of schizophrenia, it is important to help him or her get treatment as quickly as possible. The risk of violence is greatest when schizophrenia is untreated since the illness may get worse over time. People with schizophrenia are much more likely than those without the illness, to be harmed by others as well as harm themselves.

DRUGS AND ALCOHOL

It is common for people with schizophrenia to have problems with illicit drugs and alcohol. A treatment program that includes treatment for both illnesses is critical for recovery because misuse of drugs and alcohol can interfere with treatment for schizophrenia.

Drug abuse can increase the risk of suicide, trauma, and homelessness in people with schizophrenia as well as increase the risk of developing other mental illnesses. To learn more about substance use and mental health, visit www.nimh.nih.gov (search: substance use).

What causes schizophrenia?

Many factors may cause schizophrenia, including:

- Genetics. Schizophrenia sometimes runs in families. However, it is important to know that just because someone in a family has schizophrenia, it does not mean that other members of the family will have it as well.

- Environment. Many environmental factors may be involved, such as living in poverty, stressful surroundings, and exposure to viruses or nutritional problems before birth.

- Disruptions in brain structures, brain function, and brain chemistry. These disruptions could be the result of genetic or environmental factors and, in turn, may cause schizophrenia.

Researchers have learned a lot about schizophrenia, but more research is needed to help explain its causes.
How is schizophrenia treated?

Two main types of treatment can help with symptoms: antipsychotic medications and psychosocial treatments.

**ANTIPSYCHOTIC MEDICATIONS**

Antipsychotic medications help patients with the psychotic symptoms of schizophrenia. Some people have side effects when they start taking medications, but most side effects go away after a few days. People respond to antipsychotic medications differently, so it is important to report any of these side effects to a doctor. Sometimes a person needs to try several medications before finding the right one.

**A patient should not stop taking a medication without first talking to a doctor. Suddenly stopping medication can be dangerous, and it can make schizophrenia symptoms worse.**

Choosing the right medication, medication dose, and treatment plan should be done under an expert’s care and based on an individual’s needs and medical situation. Only an expert clinician can help a patient decide whether the medication’s ability to help is worth the risk of a side effect.

**PSYCHOSOCIAL TREATMENTS**

Psychosocial treatments help patients deal with everyday challenges of schizophrenia. These treatments are often most helpful after patients find a medication that works. Examples of treatment include:

- **Family education**: Teaches the whole family how to cope with the illness and help their loved one.
- **Illness management skills**: Helps the patient learn about schizophrenia and manage it from day to day.
- **Cognitive behavioral therapy (CBT)**: Helps the patient identify current problems and how to solve them. A CBT therapist focuses on changing unhelpful patterns of thinking and behavior.
- **Rehabilitation**: Helps with getting and keeping a job or going to school and everyday living skills.
- **Peer counseling**: Encourages individuals to receive help from other people who are further along in their recovery from schizophrenia.
- **Self-help groups**: Provides support from other people with the illness and their families.
- **Treatment for drug and alcohol misuse**: Is often combined with other treatments for schizophrenia.

**COORDINATED SPECIALTY CARE (CSC)**

This treatment model integrates medication, psychosocial therapies, case management, family involvement, and supported education and employment services, all aimed at reducing symptoms and improving quality of life.

The National Institute of Mental Health (NIMH) **Recovery After an Initial Schizophrenia Episode** (RAISE) research project examined different aspects of CSC. The goal of RAISE was to help reduce the likelihood of long-term disability that people with schizophrenia often experience and help them lead productive, independent lives. Findings from RAISE show that CSC is more effective than usual treatment approaches. CSC is most effective when the patient receives coordinated specialty care treatment in the earliest stages of the disorder.

**CLINICAL TRIALS**

Clinical trials are research studies that look at new ways to prevent, detect, or treat diseases and conditions, including schizophrenia. During clinical trials, treatments might be new drugs...
or new combinations of drugs, new surgical procedures or devices, or new ways to use existing treatments.

Decisions about participating in a clinical trial should be made in collaboration with a licensed health professional.

The goal of clinical trials is to determine if a new test or treatment works and is safe. Individual participants may benefit from being part of a clinical trial. However, participants should be aware that the primary purpose of a clinical trial is to gain new scientific knowledge so that there can be better ways to prevent and treat patients in the future.

Find National Institutes of Health-funded studies currently recruiting participants with schizophrenia by using ClinicalTrials.gov (search: schizophrenia) or visit www.nimh.nih.gov/joinastudy. For more information about clinical trials conducted at NIMH, call 301-496-5645 or nimhcore@mail.nih.gov.

How can family and friends support their loved one with schizophrenia?

SUPPORT SYSTEM

Supporting a loved one with schizophrenia can be hard. It can be difficult to know how to respond to someone who makes strange or clearly false statements. It is important to understand that schizophrenia is a biological illness.

- Help them with treatment and encourage them to stay in treatment.
- Remember that the beliefs or hallucinations seem very real to them.
- Be respectful, gently supportive, empathetic, and kind without tolerating dangerous or inappropriate behavior.
- Check to see if there are any support groups in the area.

Finding Help

MENTAL HEALTH TREATMENT LOCATOR

The Substance Abuse and Mental Health Services Administration (SAMHSA) provides this online resource for locating mental health treatment facilities and programs. The Mental Health Treatment Locator section of the Behavioral Health Treatment Services Locator lists facilities providing mental health services to persons with mental illness. Find a facility in your state at www.findtreatment.samhsa.gov/. For additional resources, visit www.nimh.nih.gov/findhelp.

INFORMATION SHARING

Asking questions and providing information to your doctor or health care provider can improve your care. Talking with your doctor builds trust and leads to better results, quality, safety, and satisfaction. Visit the Agency for Healthcare Research and Quality website for tips at www.ahrq.gov/patients-consumers.

Reprints

This publication is in the public domain and may be reproduced or copied without permission from NIMH. Citation of NIMH as a source is appreciated. We encourage you to reproduce it and use it in your efforts to improve public health. However, using government materials inappropriately can raise legal or ethical concerns, so we ask you to use these guidelines:
• NIMH does not endorse or recommend any commercial products, processes, or services, and our publications may not be used for advertising or endorsement purposes.
• NIMH does not provide specific medical advice or treatment recommendations or referrals; our materials may not be used in a manner that has the appearance of providing such information.
• NIMH requests that non-Federal organizations not alter our publications in ways that will jeopardize the integrity and "brand" when using the publication.
• The addition of non-Federal Government logos and website links may not have the appearance of NIMH endorsement of any specific commercial products or services, or medical treatments or services.
• Images used in publications are of models and are used for illustrative purposes only. Use of some images is restricted.

If you have questions regarding these guidelines and use of NIMH publications, please contact the NIMH Information Resource Center at 1-866-615-6464 or e-mail nimhinfo@nih.gov.

For More Information
The National Institute of Mental Health (NIMH) is part of the National Institutes of Health and the lead federal agency for research on mental disorders. Through research, NIMH aims to understand mental disorders and develop better ways to treat and prevent them. For more information on mental health disorders and current research, visit the NIMH website (www.nimh.nih.gov).

For additional resources on schizophrenia, visit: Medline Plus (National Library of Medicine) https://medlineplus.gov/schizophrenia.html (En Español: https://medlineplus.gov/spanish/schizophrenia.html)

For information on clinical trials, visit: ClinicalTrials.gov: https://clinicaltrials.gov (En Español: https://salud.nih.gov/investigacion-clinica/)

National Institute of Mental Health
Office of Science Policy, Planning, and Communications
Science Writing, Press, and Dissemination Branch
6001 Executive Boulevard
Room 6200, MSC 9663
Bethesda, MD 20892-9663
Phone: 301-443-4513 or 1-866-615-NIMH (6464) toll-free
TTY: 301-443-8431 or 1-866-415-8051 toll-free
Fax: 301-443-4279
E-mail: nimhinfo@nih.gov
Website: www.nimh.nih.gov