**About the First Episodes of Psychosis**

Early identification and evaluation of the onset of psychosis is an important health concern. Early detection and intervention improve outcomes. Psychosis may be transient, intermittent, short-term or part of a longer-term psychiatric condition. It is important to understand the range of possibilities, both in terms of possible diagnosis associated with psychosis and the prospects for recovery. This NAMI website is a resource guide for your increased understanding of assessing, treating and living with new onset psychosis, including strategies to help the return to school, work and daily life.

**What Is Psychosis?**
Psychosis (psyche = mind, osis = illness) is defined as the experience of loss of contact with reality, and is not part of the person’s cultural group belief system or experience. Psychosis typically involves one of two major experiences:

A. **Hallucinations** can take the form of auditory experiences (such as hearing voices); less commonly, visual experiences; or, more rarely, smelling things that others cannot perceive. The experience of hearing voices has been matched to increased activity in the auditory cortex of the brain through neuroimaging studies. While the experience of hearing voices is very real to the person experiencing it, it may be very confusing for a loved one to witness. The voices can often be critical (i.e. “you are fat and stupid”) or even threatening. Voices also may be neutral (i.e. “the radio is on”) and may involve people that are known or unknown to the person hearing the voices. The cultural context is also important. For example, in some Native American cultures, hearing the voice of a deceased relative is part of a healthy grieving process.

B. **Delusions** are fixed false beliefs. Delusions could take the shape of paranoia (“I am being chased by the FBI”) or of mistaken identity (a young woman may say to her mother, “You are an imposter—not my mother”). What makes these beliefs delusional is that these beliefs do not change or modify when the person is presented with new ideas or facts. Thus, the beliefs remain fixed even when presented with contradicting information (the young woman continues to believe her mother is an imposter, even when presented with her mother’s birth certificate and pictures of her mother holding her as a baby). Delusions often are associated with other cognitive issues such as problems with concentration, confused thinking and a sense that one’s thoughts are blocked. These experiences can be short lived (e.g. after surgery or after sleep deprivation) or periodic (as when associated with a psychiatric condition or persistent like bipolar disorder or major depression).

**Some typical and early warning signs of psychosis include**

- Worrisome drop in grades or job performance;
- New trouble thinking clearly or concentrating;
- Suspiciousness/uneasiness with others;
- Decline in self-care or personal hygiene;
- Spending a lot more time alone than usual;
- Increased sensitivity to sights or sounds;
- Mistaking noises for voices;
- Unusual or overly intense new ideas; and
- Strange new feelings or having no feelings at all.

These signs are particularly important when they are new or have worsened in the last year and if the individual has a close relative that has experienced psychosis. Learn more about psychosis risks by visiting the Center for Early Detection, Assessment and Response to Risk.

Behavior and thought processes are often impacted by delusions or hallucinatory experiences. People experiencing new onset psychosis may report trouble organizing their thoughts, feeling as if they are dreaming while awake or wondering if their minds are playing tricks on them. Hallucinations can distract a person’s attention and executive functioning (the ability to prioritize tasks and make decisions) may also be impacted. Agitation or withdrawal often accompanies these experiences, which can be experienced in a variety of ways but are often anxiety-provoking or terrifying. At times, people experience these altered perceptions of reality with indifference or resignation, or they simply “fall into” the psychosis and lose interest in external reality. Shame and humiliation of being different often complicate the experience and make getting help more difficult.

**Is Psychosis a Diagnosis?**
No. Psychosis is like fever - a very important symptom. When a person has a fever, it could be from a virus in the respiratory system or a bacterial infection of the urinary tract. These are two very different causes of fever and each cause requires different treatments. The reduction of fever is one way to know the condition has been addressed properly.

While we understand less about the three-pound “universe” that is the human brain than we do about infectious disease, the same broad principles apply. The goal of a comprehensive evaluation is to determine if there is an underlying, reversible medical cause of the condition and - if there is none - to determine the psychiatric diagnosis. After the symptoms, the associated history and relevant workup have been put into a diagnostic framework, the next step is to develop a collaborative and comprehensive plan with the person to address the symptoms in the context of this diagnosis. A comprehensive plan attends to the person interests and strengths and looks to school, work and relationships as the person’s goals dictate.

**What Is a First Episode of Psychosis?**
A first episode of psychosis is the first time a person experiences a psychotic episode. The first such episode often is very frightening, confusing and distressing, particularly because it is an unfamiliar experience. Unfortunately, there are also many negative stereotypes and misconceptions associated with psychosis that can further add to this distress. You are not alone if you are having this experience (estimates place the risk of psychosis at about three in 100). Help is out there both for the individual and the family, and this help comes in many forms. By exploring this web resource, you are already looking at the issue and seeing how your resilience and coping strategies can be employed to best deal with psychosis.

Psychosis is treatable. Many people recover from a first episode of psychosis and never experience another psychotic episode. Finding support and resources is essential to managing the experience, whether it is short-lived or lasts a good deal longer. NAMI has more than
1,000 locations across the country, made up of individuals and their families who help each other successfully live with serious psychiatric illnesses. We are here to help you and the people who love you.

Early Onset of Psychosis
When young children report hallucinations in the context of poor school performance social withdrawal or exhibit other odd behaviors then a diagnostic evaluation is required. The caregiver will assess the child, perform laboratory tests and may request developmental or psychological testing to help make a diagnosis. This could include neurologic problems, bipolar disorder, or childhood schizophrenia, which is a rare, but real, presentation.

Schizophrenia typically occurs in a window of the mid- to late-teens to the early 30s (this age range is a few year later for females, often the presentation is early- to mid-20s as opposed to the teen years). Symptoms of schizophrenia in school-age children are rare, and this is unexpected and traumatic for the family while they are seeking help and assessment. As this is an uncommon condition, local caregivers may struggle to put together a comprehensive plan. A teaching hospital with a department of child and adolescent psychiatry would be a good place to begin.

The National Institute of Mental Health (NIMH) has a research and clinical service center in Bethesda, Md., to better understand childhood schizophrenia, while providing state-of-the-art care to children in care. This program offers diagnostic and treatment options to children who have had the onset of psychosis prior to the age of 13. Children aged 6-18 are eligible to enroll.

Young Adults and New Onset Psychosis
Young adults are the most common age group to be at risk for their first episode of psychosis. The experience of psychosis impacts young adults at a developmentally vulnerable time. This is a stage of life that usually challenges young people to develop more independence, establish an identity, create intimate relationships and move away from the nest of the family home. Typically, young adulthood focuses on the external world and friends, while parents often serve a valuable—but less central—day-to-day role. Yet, if a young adult is having problems organizing his or her thinking or is distracted by hearing voices, functioning at a high level of independence will be problematic in many cases. The culture in a college setting is not typically geared towards seeking help. Having a psychotic process separates the individual from peers and can impair social connections. The loss, or threat of loss, of social contacts adds stress to the person experiencing these symptoms. It is often scary and activates feeling of shame when one is having these experiences that are so difficult to discuss. This leads to isolation and may reinforce the power of the inner experience as withdrawal from external contacts occurs.

With a young adult away at college, parents may think they are supposed to keep some distance in order to support independence in a college-age child, and may not have adequate information in order to appreciate the onset of psychosis. Psychosis requires intervention as soon as the person or the family realizes the seriousness of the situation. University counseling centers are increasingly aware of the need to get support and assessment to students experiencing this challenge.

Young adults and families can be encouraged by the development of resources intended to help meet their unique needs. NAMI offers some resources, including NAMI on Campus, NAMI groups on some college campuses, and StrengthofUs.org, a social networking site specifically for young adults living with mental health conditions. These both offer young adults access to information and peer support from other young adults with a shared experience.

Later-in-life New Onset Psychosis
When the first presentation of psychosis is over age 40, this presentation raises the need for intensive medical evaluation. The probability that there is a detectable medical cause of psychosis increases with age, with increased use of medications, medical illness and surgical procedures. Delirium, which can present with psychosis (coupled with change in level of consciousness), is common in individuals who have other risks (i.e., post-surgery, on multiple medications) or neurologic vulnerabilities (e.g. dementia, Parkinson’s disease, cognitive decline).

Multiple neurologic and medical conditions can present with psychosis later in life, and many of these are reversible.

Short-term Psychosis
A brief psychotic disorder that lasts between one day and one month and is typically associated with severe stress or the post-partum phase is considered short-term. The return to a nonpsychotic state is common in the condition.

Trauma and Its Relationship to Psychosis
Traumatic events impact body, spirit and brain. Research has demonstrated biological as well as psychological effects of traumatic events. The type of trauma as well as the developmental stage of the person and their brain also makes a difference in terms of how a traumatic event may manifest in the person’s experience. The field of mental health has moved towards a more sophisticated understanding of how traumatic events can influence a person’s experience, and a movement towards trauma informed care has been a focus of SAMSHA for years. This is an important departure as NAMI was founded in part by mothers who were falsely blamed for the neglect and reason their children had developed schizophrenia. The “schizophrenogenic mother” theory posited that cold and neglectful parenting caused schizophrenia. This “one size fits all” conceptualization blamed mothers and did not rely on empiric evidence. The relationship of traumatic event—of all kinds—and the development of psychiatric illnesses is emerging and reveals a significantly more complex story. We now know that the brain is plastic—it responds to its environment and that the way that environmental experiences manifests in a given person with their genetic makeup remains an important area of inquiry.

The Adverse Childhood Experience (ACE) study demonstrated a relationship between self reported adverse childhood experiences and multiple adult health problems, spanning both physical and mental health concerns. The researches noted higher rates of many health problems that correlate with the number of adverse childhood experiences in a large HMO population, including heart disease, lung disease, hypertension and mental health concerns including suicide. ACE were not limited to a few of the subjects followed—more than one fourth of individuals were exposed to substance abuse in the home and over two thirds of the sample reported at least one adverse experience. One individual in 10 had more than five adverse experiences and this population had more health concerns of all kinds later in life. Traumas impacted both health outcomes and also adult life choices—including substance abuse, domestic violence and sexually transmitted diseases. This is a powerful and provocative study and promotes more research in this area.
There is no simple if A then B in this compelling area of inquiry. Neurodevelopmental conditions like psychosis have many possible influences than span genetic, stress and environmental aspects. It does appear that adverse experiences are more common in people with psychotic disorders, yet a trauma history is not present in many individuals with psychotic disorders. In a review of two large data sets researchers found a relationship between multiple adverse experiencing and the later development of psychosis. "Experiencing two or more traumas significantly predicted psychosis and there appeared to be a dose response relationship."

For more on this research review, visit “Cumulative Traumas and Psychosis: An Analysis of the National Co morbidity Survey and the British Psychiatric Morbidity Survey” Shevlin et al., Schizophrenia Bulletin2008 34 (1).

The experience of psychosis can also be experienced as traumatic. The experiences can have many manifestations but terror and fear are key elements of traumatic experiences and these are common responses to the onset of psychosis. As the field goes forward, integrating awareness of the interaction of experience on brain and body development will improve approaches to individuals experiencing psychosis.

**Causes of Psychosis**

**Risk Factors**

When it comes to psychosis, the interplay between genetics and the environment is not yet fully understood. Researchers are continuing to explore the underlying genetic risks associated with psychosis. Research suggests that a wide range of environmental factors (such as birth injury, severe stress, sleep deprivation, maternal infection in the second trimester, head trauma and substance use) may trigger an underlying genetic risk and lead to an episode of psychosis. There is no one gene or stress that causes psychosis. Like asthma and diabetes, vulnerability to psychosis likely is the interplay of genetic risk and environmental factors. Much more needs to be understood about this interplay. The mapping of the human genome in 2003 begins what promises to be a long and challenging process to better understand the relationship between genetics, the environment and mental illness.

Of the many conditions that have psychosis as a symptom, schizophrenia is the best-studied in terms of the interplay between genes and environment. For example, using careful population records in Europe, researchers have shown the relative correlations of how the condition travels in families. Having first-degree relatives (parents, siblings) with schizophrenia increases your risk of having schizophrenia. For example, if you have an identical twin that was diagnosed with schizophrenia, your overall risk would be in the range of 50 percent. If you have a parent with the condition, you would have about a 10 percent chance of developing the disorder. These are probabilities only, as there have been no developments in determining any one person’s risk with scientific precision.

There exists no single gene test for illnesses associated with psychosis, such as schizophrenia. There is evidence that vulnerability to psychosis may be increased in individuals who have a gene variant and who also smoke marijuana. It is best to avoid this substance, especially if you have any risk factors for development of psychosis.

**Early Warning Signs**

For some psychiatric conditions that later develop psychosis symptoms, there is often a prodromal (early) phase. In this phase, the following may be noted:

- Isolation and withdrawal
- Loss of interest in peers
- Declining self-care/hygiene
- Change in thought pattern including disorganized thinking
- Preoccupations/paranoid thinking
- Lack of motivation

Getting a comprehensive assessment of these symptoms is important to understand the possible explanations for the change in the person’s behavior.

**Substance Use**

For many individuals, the use of substances increases the risk of developing psychosis. In general, the younger the person and their developing brain are, the greater the risk posed by the use of substances.

Substances known to have links to possible psychosis include:

- Marijuana/hash/THC
- Methamphetamine (including crystal meth)
- PCP/Psilocybin/Peyote /Mescaline
- LSD
- Ketamine

Prescribed medicines may also produce psychosis:

- Steroids
- Amphetamines/stimulants