

Fast Facts

1. Mental disorders in adolescence are common: An estimated one in five adolescents has a diagnosable disorder.¹
2. Adolescence is the time when many mental disorders first arise. More than half of all mental disorders and problems with substance abuse (such as binge drinking and illegal drug use) begin by age 14.²
3. The most prevalent mental disorder experienced among adolescents is depression,⁴ with more than one in four high school students found to have at least mild symptoms of this condition.⁵
4. Adolescents with mental disorders are at increased risk of getting caught up in harmful behaviors, such as substance abuse and unprotected sexual activity.^{1,6,7}
5. Many effective treatments exist for mental disorders, most involving some combination of psychotherapy and medication.⁹
6. The majority of adolescents with mental disorders do not seek out or receive treatment, a consequence of various barriers to care, including the fear of being stigmatized by peers and others.⁴

Mental Health Disorders

By David Murphey, Ph.D., Megan Barry, B.A., and Brigitte Vaughn, M.S.

Mental disorders are diagnosable conditions characterized by changes in thinking, mood, or behavior (or some combination of these) that can cause a person to feel stressed out and impair his or her ability to function. These disorders are common in adolescence. This *Adolescent Health Highlight* presents the warning signs of mental disorders; describes the types of mental disorders and their prevalence and trends; discusses the consequences and risk of mental disorders; presents treatment options and barriers to accessing mental health care; and provides mental health resources.

The definition and complexities of mental disorders

Medical science increasingly recognizes the vital link between a person's physical health and his or her mental/emotional health. Mind and body are connected as one, each affected by the other, and both are influenced by a person's genetic inheritance, environment, and experience. Just as the absence of disease does not adequately define physical health, mental health consists of more than the absence of mental disorders. Mental health is best seen as falling along a continuum, which fluctuates over time, and across individuals, as well as within a single individual.³

As defined in this *Highlight*, mental disorders are diagnosable conditions characterized by changes in thinking, mood, or behavior (or some combination of these) that are associated with distress or impaired functioning.⁴ As with symptoms of physical illness, symptoms of mental disorders occur on a spectrum from mild to severe. People with mental disorders, however, often have to bear the special burden of the societal stigma associated with their condition. This burden sometimes prevents people from acknowledging their illness and from seeking support and effective treatment for it. Just as with physical health, failure to address symptoms early on can have serious negative consequences.

What are the warning signs of mental disorders?

It is important to make a clear distinction between the normal ups and downs of mood and outlook, and diagnosable mental disorders. Everyone, especially many adolescents, experiences mood swings—from feeling blue, to expressing giddy excitement, to being anxious or irritable. Adolescents are biologically prone to have more of these mood swings because of the hormonal changes associated with this period in life, coupled with the fact that their brains are still developing.^{6,8} Many adolescents can worry that they're "losing it," when, in reality, these mood swings may be normal occurrences.^{6,10}

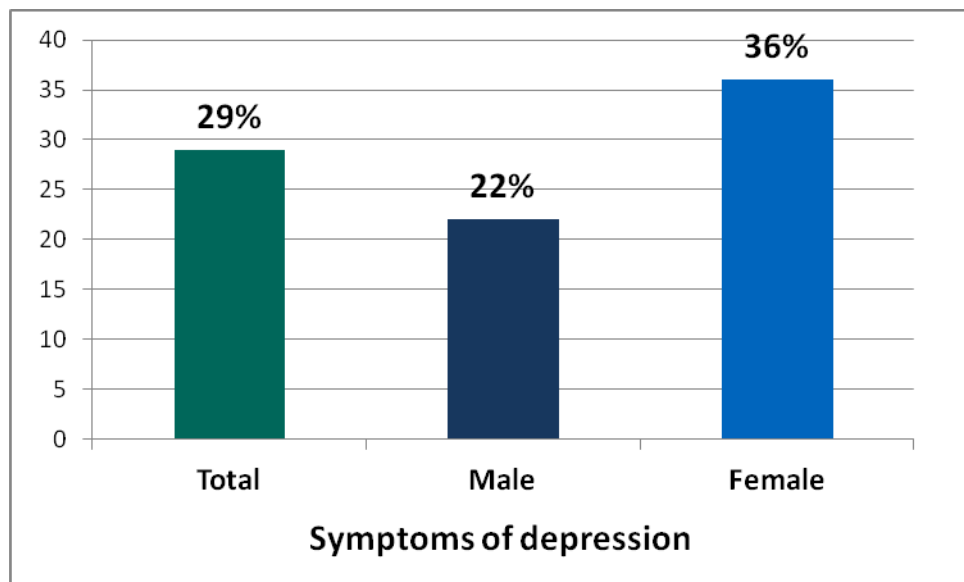
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However, when psychological symptoms cause major emotional distress, or interfere substantially with daily life and social interactions over a period of time, professional evaluation is warranted, just as it is with any serious illness. Not all mental disorders among adolescents have obvious, reliable symptoms, but parents, teachers, and others should be alert to some warning signs that an adolescent may be in trouble. These signs include persistent irritability, anger, or social withdrawal, as well as major changes in appetite or sleep.^{11,12}

What are the types of mental disorders, and which are the most common among adolescents?

Mental health professionals use various classifications to identify the diverse range of mental disorders. Many adolescent mental disorders fall under the broad categories of mood disorders (e.g., depression and bipolar disorder); behavioral disorders (e.g., various acting-out behaviors, including aggression, destruction of property, and some problems of attention and hyperactivity); and anxiety disorders (including social anxiety disorder, obsessive-compulsive disorder (OCD), post-traumatic stress disorder, and phobias).^{4,13} Many adolescents with mental disorders have symptoms indicative of more than one disorder.³

FIGURE 1: Percentage of students in grades 9-12 who reported symptoms of depression*, by gender, 2011



* Symptoms of depression in this survey are an affirmative response to the statement “reported feeling sad or hopeless almost every day for two weeks or longer during the past year.”

Source: Centers for Disease Control and Prevention. (2012). Youth Risk Behavior Surveillance Survey- United States, 2011. Surveillance summaries: MMWR 2012; 61 (No SS-4) .

Adolescence is a time when many mental disorders first arise; in fact, more than half of all mental disorders and problems with substance abuse (such as binge drinking and illegal drug use) begin by age 14, and three-quarters of these difficulties begin by age 24.² Accurate estimates of the number of adolescents who have diagnosable mental disorders are difficult to come by, for several reasons: many adolescents are reluctant to disclose these disorders; definitions of disorders vary; and most diagnoses rely on clinical judgment rather than on biological markers (such as a blood test).¹⁴ However, available data suggest that 20 percent of adolescents have a diagnosable mental disorder.¹ Depression is the single most common type reported by adolescents, though it is often

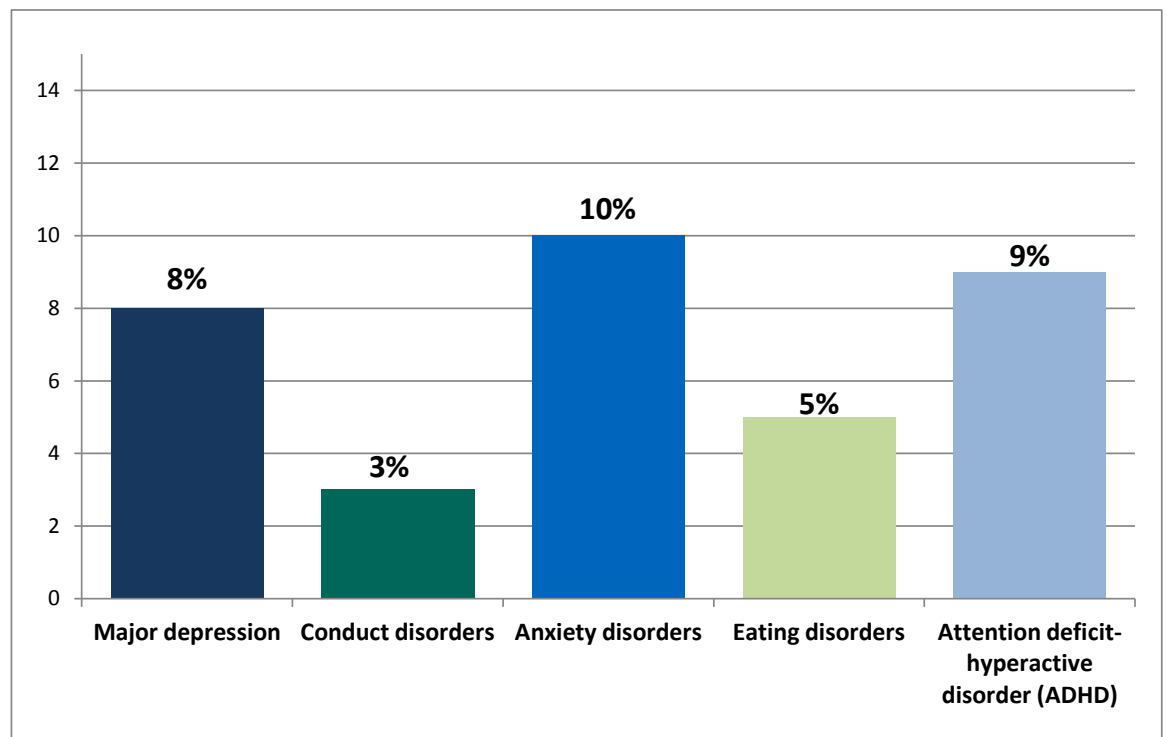
Available data suggest that 20 percent of adolescents have a diagnosable mental disorder, and depression is by far the most common.

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accompanied by other mental disorders.⁴ In 2011, more than one in four (29 percent) high school students in grades 9-12 who participated in a national school-based survey reported feeling sad or hopeless almost every day for two weeks or longer during the past year—a red flag for possible clinical depression (see Figure 1).¹⁵

Another survey that collected information from adolescents between the ages of 12 and 17 found that in 2008, about one in 12 (8 percent) reported experiencing a major depressive episode during the past year (see Figure 2).¹⁶ These estimates have not changed much over the past five to 10 years.⁵ A slightly lower percentage of adolescents (3 percent) met the criteria for conduct disorders.⁴ Adolescents with conduct disorders are extremely uncooperative, are persistent in defying societal rules and authority figures, and are often severely angry, aggressive, and destructive.¹⁷

FIGURE 2: Percentage of adolescents with selected mental disorders*



**These data are from different reporting years: major depression, 2008; anxiety disorders, 1999; conduct disorders, 1995; and eating disorders and ADHD, 2005. Estimates are based on adolescents' self-reports of symptoms, not clinical diagnoses, except for ADHD, where estimates are based parent's reporting that a professional had given that diagnosis.*

Sources: Substance Abuse and Mental Health Services Administration. (2009). Results from the 2008 National Survey on Drug Use and Health: National Findings (Office of Applied Studies, NSDUH Series H-36, HHS Publication No. SMA 09-4434). Rockville, MD. Knopf, D. et al. (2008). The mental health of adolescents: A national profile, 2008. National Adolescent Health Information Center.

An estimated 10 percent of adolescents reported symptoms of an anxiety disorder.⁴ Among the more common anxiety disorders are OCD, social anxiety disorder, post-traumatic stress disorder (PTSD), and phobias. OCD is characterized by recurrent and persistent thoughts, images, or impulses (obsessions) that are unwanted, and/or repetitive behaviors or rituals (compulsions) that cause distress.¹⁸ PTSD can develop after a person has seen or lived through a dangerous or frightening event. This disorder is characterized by flashbacks or bad dreams, emotional numbness, and/or intense guilt or worry, among other symptoms.¹⁹ Phobias are intense, irrational fears of things or

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circumstances that pose little or no actual danger. Facing, or even the thought of facing, the feared object or situation can spur panic attacks or severe anxiety.¹³ Panic disorders (a type of anxiety disorder characterized by a racing heartbeat, shortness of breath, and other pronounced physical symptoms) affect around one percent of adolescents.²⁰

About five percent of adolescents report symptoms of an eating disorder.⁴ Less common are autism spectrum disorders (a diverse category of conditions, typically marked by severe impairments in social and communication skills).²¹

Adolescents with attention deficit-hyperactivity disorder (ADHD) have difficulty paying attention, controlling impulses, and staying organized.¹² Some estimates put the prevalence of the disorder as high as nine percent among 12- to 17-year-olds.⁴ Adolescent males are more likely than are females to have ever been diagnosed with ADHD.⁴ However, biases may exist in the identification of young people with ADHD, including lower rates of diagnosis among Hispanic children²² and higher rates for those who are young for their grade.²³

What are some of the consequences of mental disorders?

Mental disorders take a toll on adolescents, their parents, and friends, and contribute significantly to health care costs. The consequences can be short- or long-term. Indeed, most mental disorders diagnosed among adults began during adolescence, although other mental disorders experienced by adolescents may diminish by early adulthood if they are treated.^{4,9}

Substance abuse disorders frequently go hand in hand with mental disorders.⁴ In addition, mental disorders are often associated with other negative emotional and behavioral patterns in adolescence—including impaired relationships, lower academic performance, a higher risk of unprotected sex and teen pregnancy, and increased involvement with the juvenile justice system. However, many adolescents who experience these issues do not have a mental disorder, and many youth with mental disorders do not have these problems.^{1,6,7} The single most disturbing potential consequence of adolescent mental disorders is suicide—the third leading cause of death among 10- to 24-year-olds in the United States. Although suicide can have multiple causes, 90 percent of adolescents who commit suicide had a diagnosable mental disorder, and up to 60 percent of them were suffering from depression at the time of their death.²⁴

How do risks of mental disorders vary across adolescents?

Adolescent males generally are more likely than are their female peers to be diagnosed with behavioral problems, including conduct disorders, ADHD, and autism spectrum disorders.^{4,25} Adolescent females are more commonly diagnosed with depression and eating disorders than are males.^{4,26} Adolescents whose parents have lower levels of education (e.g., no college degree) have more risk of having a mental disorder than do adolescents whose parents have higher levels of education. Adolescents whose parents are divorced are also more likely to have mental disorders than are adolescents whose parents are married or cohabiting.²⁷ Other groups of adolescents particularly at risk for mental disorders include those involved in bullying (either as victims or perpetrators), those who have experienced sexual or physical abuse, and those whose parents have a history of mental disorders.^{24,28} Among ethnic groups, Hispanic and black adolescent females have a higher risk of depressive symptoms than do adolescent females from other racial/ethnic groups.¹⁵

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How can mental disorders be treated?

As in other arenas of health, early intervention or prevention can be an effective way to address potential mental disorders before they reach the stage requiring treatment. Although not all mental disorders are accompanied by early warning signs, people who interact with and care about adolescents should be alert to marked changes in mood or behavior that may suggest problems. At the same time, concerned adults can help adolescents maintain positive mental health by providing caring, supportive relationships, encouraging healthy behaviors, and teaching effective strategies for coping with stress.²⁹

Most mental disorders are treatable, although what works for particular individuals may vary. Often a combination of psychosocial therapy (personal or group counseling with a psychotherapist) and medication is effective. For many types of disorders (e.g., depression and OCD), cognitive-behavioral therapies and medications have been shown to be effective in many cases.⁷ Cognitive-behavioral therapies seek to help people modify negative or irrational thoughts and to replace dysfunctional behaviors with more rational ones. For other types of disorders (such as ADHD), behavioral parent training and classroom management techniques may be effective.⁹ When psychiatric medications are prescribed, they are typically administered in combination with other treatment approaches, such as individual psychotherapy, group therapy, or family therapy. In general, experts agree that medication should not be the only treatment followed, and that any treatment plan should be supervised by a clinician with specific training in adolescent mental health.⁹

Other strategies have also been used successfully with particular mental disorders. For depression, some evidence shows that increased physical exercise may provide some benefits.³⁰ For conduct disorders, promising results have been found when the young person with the disorder is treated, together with his or her family and community, using a “systems” approach. The systems approach attempts to address multiple problem behaviors that the adolescent is exhibiting by providing multiple types of services, such as education, child protection, juvenile justice, and mental health services.⁷ In other words, systems approaches involve coordinating services from different providers and are tailored to meet the needs of the individual adolescent.

Some families may choose unconventional therapies (sometimes referred to as complementary or alternative medicine) as a way to treat physical and mental disorders. Examples of these include diet modifications, such as eliminating sugar, or foods with dyes and additives; herbal or vitamin supplements; and music or dance therapy. Although these practices have become more widespread in recent years, particularly for autism spectrum disorders, they have not met the same rigorous standards of evidence as more traditional treatments, and consumers should be skeptical of dramatic or poorly substantiated claims for effectiveness.³¹ Talking to a trained clinician is key in determining the proper treatment for any mental disorder.

How do adolescents access mental health services, and what are barriers to care?

Parents, other family members, and friends can all play roles in encouraging adolescents who are experiencing emotional distress to seek help. Mental health services for adolescents are provided by a mix of specialists (psychiatrists, psychologists, social workers, and others) in the public and private sectors. In general, this system of diverse providers is crisis-oriented and designed for treating people with diagnosed mental disorders (particularly as reflected in reimbursement policies.) The system is less structured to address prevention and health promotion, early identification of difficulties, and timely, effective treatment.^{14,32}

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School health centers are often helpful in identifying the mental health care needs of adolescents, partly because adolescents spend much of their time in school, and partly because these clinics are accessible to students in low-income and underserved racial and ethnic minority groups, who are more likely to be without health insurance.^{14,33} However, few school mental health professionals are able to provide intensive care on their own.¹⁴ Primary care providers (pediatricians and others) are often the gatekeepers for identifying mental disorders in adolescents. However, these providers may lack the time in their practices—as well as the specific expertise—to identify and manage these disorders. Moreover, efforts to coordinate care between primary care providers and mental health professionals vary considerably in their effectiveness.

Studies have found that most children and adolescents with mental disorders (between 60 and 90 percent) do not seek out or receive the services that they need.⁴ The societal stigma associated with mental disorders may help explain why many adolescents do not seek treatment. Also, parents, school officials, and medical providers often miss opportunities to address the prevention and early identification of mental disorders. Additional barriers include services that are poorly coordinated (e.g., among schools, primary health care providers, and social services agencies); a lack of health insurance (although most adolescents are insured); restrictions by insurers on coverage for certain services; and a shortage of providers with specific expertise in adolescent mental health.¹⁴

Implications for preventing risky adolescent behaviors

Young people with mental disorders, in general, are more vulnerable to involvement in risky activities that jeopardize their health and well-being than are young people in the larger adolescent population.^{1,6} Suicide attempts and self-injury are the most dire of these threats, but other troublesome behaviors warrant scrutiny as well. For example, adolescents with depression are also more likely than are their nondepressed peers to engage in substance abuse and early sexual activity;⁵ and adolescents with conduct disorders are more likely to engage in early sexual activity, early drug and alcohol use, interpersonal violence, and delinquency.¹² Thus, prevention—in addition to early diagnosis and treatment of mental disorders—is essential for reducing many other serious problem behaviors.²⁹

Strategies and approaches to reduce mental health disorders among adolescents

The National Prevention Strategy is a comprehensive plan designed the government's National Prevention Council to help improve the health of Americans at every stage of life. Its mental health recommendations include:

- Promoting early identification of mental health needs and access to quality services. Clinicians are key to identifying mental health needs, so integrating mental health care into traditional health care settings and social service, community, and school settings is important, especially for adolescents who have experienced trauma.
- Reducing the stigma associated with mental health services. Doing so will improve access to and use of the effective mental health treatment that is available.³⁴

The U.S. Preventive Services Task Force recommends that adolescents (ages 12-18) be screened for major depressive disorder (MDD) when there are appropriate services available for accurate diagnosis, psychotherapy, and follow-up.³⁵

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Resources

The Child Trends DataBank includes brief summaries of well-being indicators, including several that are related to mental disorders and mental health:

- Attention Deficit-Hyperactivity Disorder (ADHD): <http://childtrendsdatbank.org/?q=76>
- Adolescents Who Feel Sad or Hopeless: <http://childtrendsdatbank.org/?q=node/126>
- Autism Spectrum Disorders: <http://childtrendsdatbank.org/?q=node/372>
- Bullying: <http://childtrendsdatbank.org/?q=node/370>
- Disordered Eating: Symptoms of Bulimia: <http://childtrendsdatbank.org/?q=node/123>
- Suicidal Teens: <http://childtrendsdatbank.org/?q=node/128>
- Teen Homicide, Suicide, and Firearm Deaths: <http://childtrendsdatbank.org/?q=node/124>

The Childs Trends [LINKS](#) (Lifecourse Interventions to Nurture Kids Successfully) database summarizes evaluations of out-of-school time programs that work (or not) to enhance children's development. The LINKS Database is user-friendly and directed especially to policy makers, program providers, and funders.

- Programs related to anxiety disorders/symptoms, conduct/disruptive disorders, and eating disorders can be found by selecting those boxes under mental health.
- Evaluations of programs proven to work (or not) for reducing depression/depressive symptoms, suicidal thoughts or behaviors, anxiety/anxious symptoms, and post-traumatic stress disorder, in addition to other mental health behaviors, are summarized in the fact sheet [What works to prevent or reduce internalizing problems or social-emotional difficulties in adolescents: Lessons from experimental evaluations of social interventions](#).
- Evaluations of programs proven to work (or not) for reducing ADHD are summarized in a fact sheet [What works for acting-out \(externalizing\) behavior: Lessons from experimental evaluations of social interventions](#).

Other selected resources include:

- The National Institute of Mental Health (NIMH) provides a number of resources, including fact sheets on brain development and mental disorders in adolescence (<http://www.nimh.nih.gov/health/topics/child-and-adolescent-mental-health/index.shtml>).
- The Centers for Disease Control and Prevention (CDC) has information about mental health changes in early adolescence (<http://www.cdc.gov/ncbddd/child/earlyadolescence.htm>) and middle or older adolescence (<http://www.cdc.gov/ncbddd/child/middleadolescence15-17.htm>), as well as a number of resources on suicide prevention (<http://www.cdc.gov/ViolencePrevention/suicide/>).
- The Substance Abuse and Mental Health Services Administration (SAMHSA) provides the Mental Health Services Locator, an online, map-based program people can use to find facilities in their vicinity (<http://store.samhsa.gov/mhlocator>). SAMSHA also maintains an online library of free publications and resources, with more than 200 documents focused on adolescent behavioral health issues (<http://store.samhsa.gov/home>). In addition, SAMHSA supports the Suicide Prevention Resource Center (<http://www.sprc.org>), which helps organizations and individuals to develop suicide prevention programs, interventions, and policies.

The Child Trends DataBank includes brief summaries of well-being indicators, including several that are related to mental disorders and mental health.

The National Institute of Mental Health provides a number of resources, including fact sheets on brain development and mental disorders in adolescence.

- Healthcare.gov provides prevention goals and guidelines for several key indicators of adolescent mental health, including screenings for depression and decreasing the rate of suicide attempts (<http://www.healthcare.gov/center/councils/nphpphc/strategy/report.pdf>).

In addition, health professionals, educators, and others can direct adolescents and their families to a number of federal resources.

Adolescents (or anyone) in suicidal crisis or emotional distress can call the National Suicide Prevention Lifeline at 1-800-273-TALK.

- GirlsHealth.gov, from the Office on Women’s Health, offers tip sheets about adolescents and their feelings, including “How to know if your ‘blues’ are depression” (<http://girlshealth.gov/feelings/>).
- Adolescents (or anyone) in suicidal crisis or emotional distress can call the National Suicide Prevention Lifeline at 1-800-273-TALK; calls made to this 24-hour hotline are routed to the caller’s nearest crisis center.

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