



INTRODUCTION

Mental health disorders are the most common diseases of childhood.

Of the 74.5 million children in the United States, an estimated 17.1 million have or have had a psychiatric disorder¹ — more than the number of children with cancer, diabetes, and AIDS combined.² Half of all psychiatric illness occurs before the age of 14 and 75 percent by the age of 24.

In spite of the magnitude of the problem, lack of awareness and entrenched stigma keep the majority of these young people from getting help.³ Children and adolescents with psychiatric illness are at risk for academic failure, substance abuse, and a clash with the juvenile justice system — all of which come at a tremendous cost to them, their families, and the community.

This is a public health crisis that must be addressed.

The Child Mind Institute Children's Mental Health Report brings together the most up-to-date information on child and adolescent mental health, based on findings from the most reliable and comprehensive studies. The report covers:

- 1) The prevalence of childhood mental illness
- The gap between illness and care
- 3 The cost to society of ignoring children's mental health
- (4) The effectiveness of treatment

We cannot deny that childhood mental illness is real and common. For millions of children, treatment can be transformative — but not nearly enough have access to care. Our nation must make a commitment to better training, robust research initiatives, and expanded public education efforts. Only then will we honor the promises we make to our young people.

It is our hope that this report will spark conversations — from kitchen tables to the halls of Congress — so that many more children will get the help they need to live healthy lives.

Childhood Mental Illness Is Common

PREVALENCE

While statistics on the number of children and adolescents who have mental illness vary depending on what you measure, one large and well-designed study shows that:⁴

49.5%

of American youth will have had a diagnosable mental illness at some point before they are 18, based on diagnostic interviews done by professionals with a sample of young people ages 13–18.

22.2%

of American youth will have a diagnosable mental illness with "serious impairment" at some point before they are 18.

How many kids are we talking about?

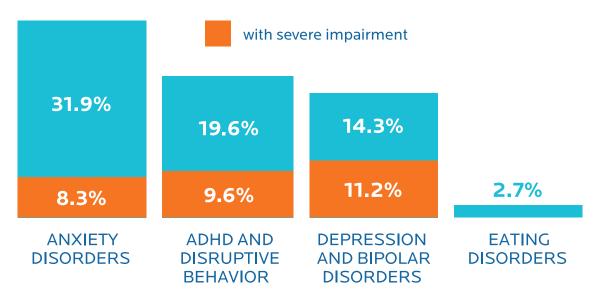
The US Census estimates that in 2015 there are 74.5 million children under 18. Of these we estimate that:

17.1 million

young people have or have had a diagnosable psychiatric disorder.5

This estimate is extrapolated from Census data and prevalence numbers reported for the NCS-A, GSMS, NHANES, and an analysis of early-childhood severe emotional disturbance by Brauner (2006).

What are the most common psychiatric disorders in childhood?



These estimates are based on diagnostic interviews done by professionals with a large, representative sample of young people ages 13–18.6

How Many Kids Have an Autism Spectrum Disorder?

1.5%

This estimate is based on retroactive chart review of almost 364,000 8-year-old children.⁷

2.6%

This estimate is based on diagnostic interviews done by professionals with a sample of 55,000 young people ages 7–12.8



4.5 times as many boys as girls have autism⁹



Age of onset of types of disorders in children



Age 6
median age
of onset
Anxiety
Disorders



Age 11
median age
of onset
ADHD and
Behavior

Disorders



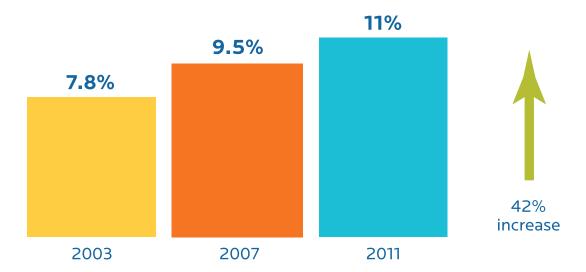
Age 13
median age
of onset
Mood
Disorders



Age 15
median age
of onset
Substance
Use

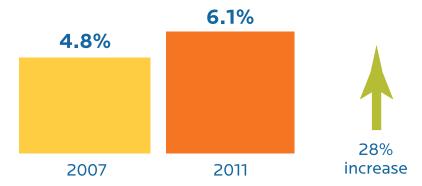
These estimates are based on diagnostic interviews done by professionals of a large, representative sample of young people ages 13–18. Anxiety disorders include generalized anxiety disorder, social anxiety disorder, specific phobias, panic disorder, PTSD, and separation anxiety disorder. Behavior disorders include ADHD, oppositional defiant disorder, and conduct disorder. Mood disorders include major depressive disorder, dysthymia, and bipolar disorder I and II.¹⁰

ADHD: How many kids are getting diagnosed?



The percentage of US children (ages 4–17) who had been diagnosed with ADHD by a health care provider, as reported by parents in phone interviews¹¹

ADHD: How many kids are getting treated with medication?

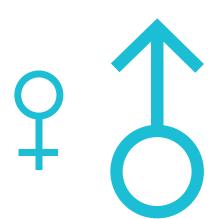


The percentage of US children (ages 4–17) taking stimulant medication for ADHD, as reported by parents in phone interviews.¹²

More than twice as many boys as girls (ages 4–17) are diagnosed with and medicated for ADHD.¹³

5.5% girls currently diagnosed with ADHD

3.7% girls currently taking ADHD medication



12.1% boys currently diagnosed with ADHD

8.4%boys currently taking ADHD medicationD

Average Age of ADHD Diagnosis

The average age of diagnosis varies depending on the severity of symptoms.



Age 8 for children with mild ADHD



Age 7
for children with
moderate ADHD



Age 5
for children with
severe ADHD

States vary dramatically in the number of ADHD diagnoses.





The geographic variation is even more dramatic in the percentage of kids who get ADHD medication.





These estimates are based on parent reports in phone interviews.¹⁴

Millions of Children Are Not Getting Help

BARRIERS TO CARE

The gap between the need and the number of kids receiving help:15

49.5%

estimated to have a diagnosable mental illness

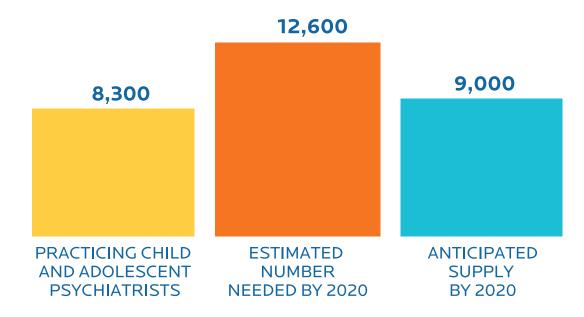
22,2%

have mental illness with severe impairment some time before they are 18

7.4%

of children in the US have any mental health visits in a year

Specialists and Training Are in Short Supply.16



28,500

Number of practicing school psychologists in the US.

9,000

Current estimated shortage of practicing school psychologists.¹⁷

1:1,482

Ratio of school psychologists to students.¹⁸

5,000

Number of clinical child psychologists.¹⁹

Who doesn't get treatment?

40% of youth with diagnosable ADHD²⁰

ADHD

60% of youth with depression²¹

Depression

80% of youth with a diagnosable anxiety disorder²²

Anxiety Disorder

In Merikangas, treatment use includes seeing a psychiatrist or being hospitalized; seeing another doctor or going to the emergency room; speaking with a counselor; attending a support group; interacting with the juvenile justice system; and receiving school-based services.

In the NSDUH, a person accessed treatment if they "saw or talked to a medical doctor or other professional or used prescription medication."

Early anxiety leads to later psychiatric disorder.

Childhood anxiety predicts later:23

Panic attacks Conduct disorder

Depression Social phobia

Separation anxiety disorder Suicidality

Untreated Mental Illness Hurts All of Us

COST TO SOCIETY

Suicide

4,600 adolescents commit suicide every year.²⁴

157,000 are hospitalized for self-injury.²⁵

90%

of young people who commit suicide have a psychiatric illness.²⁶

Lost Productivity and Law Enforcement

\$202 Billion

The cost of lost productivity and crime spending related to mental illness in Americans under 24.27

Mental Illness in Youth Involved in the Juvenile Justice System

70.4%

of youth in juvenile justice settings meet criteria for a psychiatric diagnosis.²⁸

Mental Illness in the Justice System

Young people who don't get treatment for mental illness are at higher risk for incarceration as adults—and most mental illness in this population is not identified until people are incarcerated. Our jails are serving as de facto hospitals now.

More than half of inmates in the correctional system have a mental health problem.²⁹

45%

of federal prison inmates

56%

of state prison inmates

65%

of local jail inmates



A mental health problem is defined either by having a history in the year before incarceration of being diagnosed, hospitalized or treated for a mental disorder, or by meeting DSM4 criteria for a disorder based on a diagnostic interview.³⁰

Many inmates were found to have symptoms of a mental health problem with no history of previous diagnosis or treatment.³¹



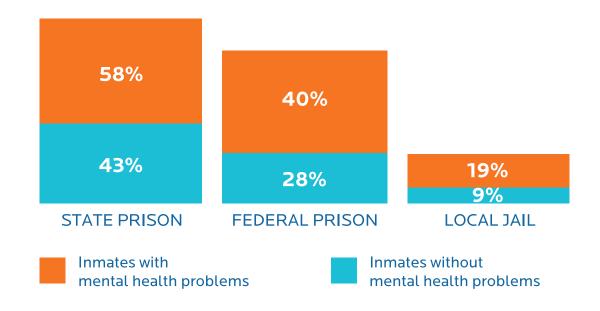
32% of state prison inmates

43% of local jail inmates



Inmates who have mental health problems are more likely than other inmates to have disciplinary problems while they are incarcerated.³²

Percent charged with violating prison rules



Early Identification and Treatment Can Turn Lives Around

EFFECTIVENESS OF TREATMENT

Large randomized, controlled studies show a high response rate for treatments for psychiatric disorders, including anxiety, depression, and ADHD.

The most effective treatments for children with anxiety

The definitive, federally funded clinical trial of treatments for kids with anxiety disorders showed that a combination of cognitive behavioral therapy (CBT) and antidepressant medication (a selective serotonin reuptake inhibitor, or SSRI, called sertraline, or Zoloft) is the most effective acute or short-term treatment.

Effectiveness after 12 Weeks



Longer Term: By 36 weeks of treatment, the response rates for the combined treatment remained the same, but response rates for treatment with medication alone and CBT alone caught up.

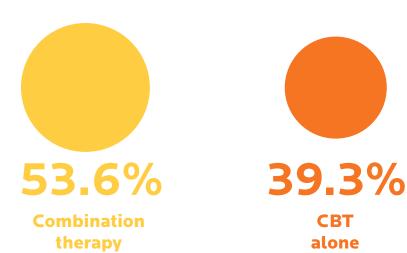
Effectiveness after 36 Weeks³³



The most effective treatments for children with OCD

The definitive, federally funded trial of treatments for children with OCD found that the combination of medication (an SSRI called sertraline, or Zoloft) and cognitive behavior therapy (CBT) has the highest response rate.





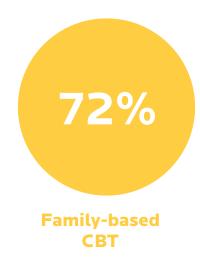


Is CBT effective for younger children with OCD?

A later study of younger children (ages 5–8) evaluated the effectiveness of family-based CBT involving exposure and response prevention, comparing it to a family-based relaxation treatment that served as a control.

alone

Response Rates at 14 Weeks³⁴



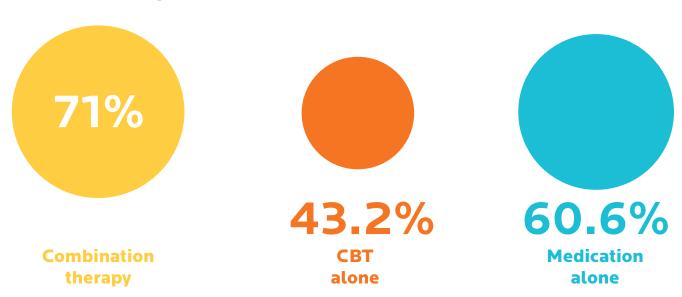


Family-based relaxation therapy

The most effective treatments for children with depression

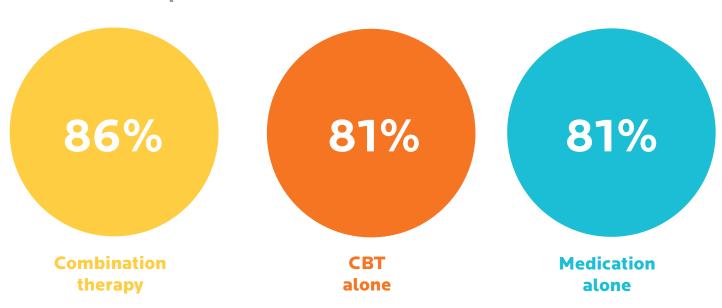
The definitive, federally funded clinical trial of treatments for adolescents with depression showed that a combination of antidepressant medication (fluoxetine, or Prozac) and cognitive behavioral therapy (CBT) is more effective than either fluoxetine or CBT alone.

Rate of Improvement After 12 Weeks



Over time the response rates of all three treatments rose, but the gap between them narrowed.

Rate of Improvement After 36 Weeks³⁵



Do antidepressant medications increase the risk of suicide?

Government studies suggest that SSRIs may increase suicidal thinking and behavior. However, there does not appear to be a link to completed suicide. For example, in a study comparing prescription rates of SSRIs in different US counties from 1996 to 1998, suicide rates were lower where prescription rates were higher.³⁶

A later study examined the suicide rate after regulators issued public health warnings in the US and the Netherlands.³⁷

- 22% decline in SSRI prescriptions for youths in both countries.
- 49% increase in youth suicide rate between 2003 and 2005 in the Netherlands.
- 14% increase in youth suicide rates between 2003 and 2004 in the US, the largest year-to-year change in suicide rates in this population since the CDC began collecting suicide data in 1979.

The most effective treatment for children with ADHD

Stimulant medication significantly reduces symptoms of ADHD for most kids.

70%

get a benefit from a single stimulant medication.³⁸

85%

get a benefit when more than one stimulant medication is tried.³⁹

- Medication is significantly more effective in reducing ADHD symptoms than behavioral treatment.
- Adding behavioral treatment to medication does not make it more effective in reducing ADHD symptoms.
- Combined medication and behavioral treatment worked better to improve related areas of functioning that are problematic for kids with ADHD oppositionality, anxiety, academic achievement, social skills, parent-child relations.
- The kids in the combined treatment group were able to take lower doses of medication to see the desired effect than the medication-alone kids.

Later evaluations of the kids who had participated in the study, after the 14-month treatment period ended, found that the differences between the groups diminished until they disappeared at 36 months. After the study, participants were in what's called "community care," which means that medications are given without the careful monitoring done during the study—and many stopped taking them. The conclusion is that if ADHD medication treatment is to be effective, there has to be an active approach to dosing and use of the meds.⁴¹

Does taking stimulant medication for ADHD increase a child's risk of later substance abuse?

- Research shows that children with ADHD are more likely than other children to develop substance use disorders.⁴²
- However, children who are treated with stimulant medication for ADHD are not at higher risk for substance use disorders than those with ADHD who have not taken medications.

Treating Autism

There are three kinds of interventions that have been shown to help children with autism: behavioral interventions to improve communication and cognitive skills, structured educational models that help with learning, and medications that help with problematic behavior.

The American Academy of Child and Adolescent Psychiatry (AACAP) recommends that patients have access to an intervention called Applied Behavioral Analysis (ABA), particularly a version called Early Intensive Behavioral Intervention.

- "ABA techniques have been repeatedly shown to have efficacy for specific problem behaviors, and ABA has also been found to be effective as applied to academic tasks, adaptive living skills, communication, social skills, and vocational skills."
- AACAP

AACAP also says children on the spectrum have benefitted from a structured educational approach with explicit teaching.

- "Efficacy has been shown for two of the structured educational models, the Early Start Denver Model (ESDM) and the Treatment and Education of Autism and related Communication handicapped Children program (TEACCH)."
- AACAP

Medication has also been show to help with behaviors like irritability, aggression, self-injury, and tantrums.

- "Combining medication with parent training is moderately more efficacious than medication alone for reducing serious behavioral disturbance and modestly more efficacious for adaptive functioning."
- AACAP

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