A Center Report . . .

Youngsters' Mental Health and Psychosocial Problems: What are the Data?

Prepared by the *Center for MH in Schools & Student/Learning Supports* – updated in 2018.
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Executive Summary

A common request to Centers such as ours is for information about the prevalence and incidence of youngsters' problems. In response, our Center has prepared *Youngsters' Mental Health and Psychosocial Problems: What are the Data?* Our focus is on highlighting recent data reports and clarifying the limitations of what has been gathered so far. Our intent is to indicate why available data must be used cautiously.

Data on youngsters mental health and psychosocial problems have the power to influence life-shaping decisions for better and for worse. In many arenas, the demand for data has outstripped the availability of *good* data and has increased the tendency to grab for whatever numbers are being circulated in the literature. As a result, when someone says: "This is the *best* data available," it is essential to remember that *best* does not always mean *good.* At this stage in the development of the field, the best available data are still rather limited. They provide snapshots, but the pictures are fuzzy and too often the data limitations call for extreme caution in formulating generalizable conclusions.

The reality is that the primary sources for widely cited data on mental health and psychosocial concerns represent a relatively small body of studies, each of which makes an important contribution; at the same time, the researchers are the first to acknowledge the limitations of the reported findings. Underlying problems are that too little investment is made in gathering and aggregating good data, and sound methodological practices are difficult and costly to implement.

To illustrate the current state of the art, we provide a sampling of statistical reports, including general surveys, special education and juvenile justice reports, and data on specific problems (i.e., attention deficit/ hyperactivity disorder, autism, depression and suicide, substance abuse) and on cultural and economic influences. We stress the following about available data reports:

- The major sources of data reflect significant limitations related to sampling and methodology that must be taken into consideration in sharing the data. Concerns include overreliance on accessible samples, problems with lengthy surveys, the nature and scope of survey items, participant recall of the past, what should be viewed as a symptom rather than a common response to life experiences, problems related to the statistical analyses, and the degree to which the interpretations of the findings are generalizable.
- It is widely acknowledged that available information on prevalence and incidence of mental health and psychosocial problems and related service provision varies markedly in both quantity and quality. For instance, some youngsters may be counted more than once when they have multiple problems. Children and adolescents frequently have multiple problems, and reporting each separately inflates overall numbers and percentages of individuals having problems and needing services.
- A related concern is that a wide variety of activity may be included in reports of what constitutes a mental health service.
- With respect to widely shared data, we note that it continues to be commonplace for reports to indicate the 20 year old data that "from 12% to 22% of all youngsters under age 18 are in need of services for mental, emotional or behavioral problems."
- Another concern is that the data amassed on youngsters' learning, behavior, and emotional problems usually are reported without reference to problem etiology. This tends to create the image that all the problems were instigated by internal (e.g.,psychological, biological) conditions. Such an interpretation tends to minimize attention to environmental factors that often are the primary instigating causes. Data delineating problems also create an image of deficits, disorders, and disabilities and this tends to minimize attention to reporting the range of assets/strengths of those being counted.

- With respect to regularly reported increases in the number of children and adolescents diagnosed with mental disorder and special education disabilities, we focus on the problem of overdiagnosis. Concerns have been raised in particular related to the diagnoses of teen depression, Specific Learning Disabilities (LD), Attention Deficit-Hyperactivity Disorder (ADHD). Factors influencing overdiagnosis noted are diagnostician biases, imprecise diagnostic criteria and differential diagnostic categorization and methodology, ambiguous and misleading assessment data, parental pressure, school and health care system factors (especially funding and reimbursement requirements), and more.
- With respect to data indicating high levels of LD and increasing rates of ADHD, a particular concern is that widespread learning, behavior, and emotional problems are being overdiagnosed using formal pathological labels. The reality is that there are a great many students who are not doing well at school and only a relatively small number have problems that warrant formal diagnoses. The evidence is that 40% of young people are in bad educational shape and therefore will fail to fulfill their promise. In many schools serving low-income populations over 50% are not doing well. For a large proportion of these youngsters, the problems are rooted in the restricted opportunities and difficult living conditions associated with poverty.

Finally, we focus on findings about the extent to which the mental health needs of youth are underserved. And we include a report on the degree to which schools play a role in providing mental health services. As with other data on mental health concerns, these reports provide useful findings but have obvious limitations that call for various caveats.

We conclude with an exploration of whether efforts to meet the mental health needs of children and adolescents have improved over the last 20 years. Our view is that available data doesn't provide a satisfactory answer. As the report indicates, a great deal more research is needed, and it must be pursued with sufficient resources to enhance and refine the methodology used. Funders must support the development of better systems for gathering quality and generalizable data. Such data systems are fundamental to improving policy and practice. A beginning has been made related to some fundamental matters. But policy is needed that focuses on building a comprehensive system for gathering a full set of indicators that can be used to understand the nature and scope of the problems experienced by children and adolescents and what is being done to address these problems. Such data are a critical facet of any report on the well-being of young people in any society.

Despite the limitations, we recognize that available findings will continue to be used by planners and decision makers. Our concern here is that such data be applied with appropriate caution and wisdom.

Preface

A common request to Centers such as ours is for information about the prevalence and incidence of youngsters' problems. Our focus is on highlighting recent data reports and clarifying the limitations of what has been gathered so far. Our intent is to indicate why available data must be used cautiously.

To illustrate the current state of the art, we provide a sampling of statistical reports, including general surveys, special education and juvenile justice reports, and data on specific problems (i.e., attention deficit/ hyperactivity disorder, autism, depression and suicide, substance abuse) and on cultural and economic influences. Then, we focus on findings about the extent to which the mental health needs of youth are underserved. And we include a report on the degree to which schools play a role in providing mental health services.

As you will see, the report underscores limitations of available data and highlights major gaps that need filling. It is clear that a great deal more research is needed, and it must be pursued with sufficient resources to enhance and refine the methodology used.

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This report reflects the contributions of past and present Center staff. We hope you find it helpful.

Howard Adelman & Linda Taylor
Center Co-directors

Youngsters' Mental Health and Psychosocial Problems: What are the Data?

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Youngsters' Mental Health and Psychosocial Problems: What are the Data?

Commonly heard is the shibboleth:

In God we trust; from all others demand data!

Increasingly, policy makers and others who make decisions are demanding;

Show me the data!

In many arenas, the demand for data has outstripped the availability of *good* data and has increased the tendency to grab for whatever numbers are being circulated in the literature. As a result, when someone says: "This is the *best* data available," it is essential to remember that *best* does not always mean *good*. This caution is particularly relevant in the mental health field where funding to support data gathering continues to be sparse and sound methodological practices are difficult and costly to implement.

It is widely acknowledged that available information on prevalence and incidence of mental health and psychosocial problems and related service provision varies markedly in both quantity and quality.[1] For instance, some youngsters may be counted more than once when they have multiple problems. And, a wide variety of activity may be included in reports of what constitutes a MH service.

The reality is that the primary sources for widely cited data on mental health and psychosocial concerns represent a relatively small body of studies, each of which makes an important contribution; at the same time, the researchers are the first to acknowledge the limitations of the reported findings. An underlying problem is that too little investment is made in gathering and aggregating good data. As a result, available data are limited by sampling and methodological constraints, and thus the appropriate generalizability of findings is significantly constricted.

[1] *Prevalence* data indicate the percentage of a population that is affected at a given time. In contrast, date on *incidence rate* indicate the rate at which new events occur in a population (i.e., the numerator is the number of new events occurring in a defined period; the denominator is the population at risk of experiencing the event during this period). Most of the data reported on the scope of problems are indices of prevalence.

Another concern to keep in mind is that the data amassed on youngsters' learning, behavior, and emotional pronlems usually are reported without reference to problem etiology. This tends to create the image of that all the problems were instigated by internal (e.g.,psychological, biological) conditions. Such an interpretation tends to minimize attention to environmental factors that often are the primary instigating causes. Data delineating problems also create an image of deficits, disorders, and disabilities, and this tends to minimize attention to reporting the range of assets/strengths of those being counted.

I. A Sampling of Statistical Reports

A. General Surveys

B. Special Education Data

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D. Specific Problems

   1. Attention Deficit/ Hyperactivity Disorder

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   3. Depression and Suicide

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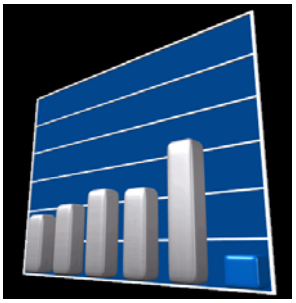
E. Cultural and Economic Influence on Prevalence and Service

I. A Sampling of Statistical Reports

A. General Surveys



Emotional and Behavioral Difficulties

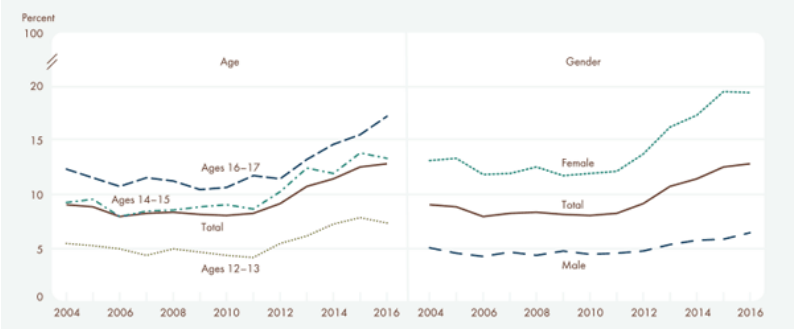
FIGURE HEALTH3: PERCENTAGE OF CHILDREN AGES 4–17 REPORTED BY A PARENT TO HAVE SERIOUS EMOTIONAL OR BEHAVIORAL DIFFICULTIES BY AGE AND GENDER, 2005–2016

NOTE: Emotional or behavioral difficulties of children were based on parental responses to the following question on the Strengths and Difficulties Questionnaire:[1] "Overall, do you think that (child) has difficulties in any of the following areas: emotions, concentration, behavior, or being able to get along with other people?" Response choices were (1) no; (2) yes, minor difficulties; (3) yes, definite difficulties; (4) yes, severe difficulties. Children with serious emotional or behavioral difficulties are defined as those whose parent responded "yes, definite" or "yes, severe." These difficulties may be similar to but do not equate with the Federal definition of serious emotional disturbance, used by the Federal government for planning purposes.

[1] Goodman, R. (1999). The extended version of the Strengths and Difficulties Questionnaire as a guide to child psychiatric caseness and consequent burden. *Journal of Child Psychology and Psychiatry, 40*, 791–799.

SOURCE: National Center for Health Statistics, National Health Interview Survey

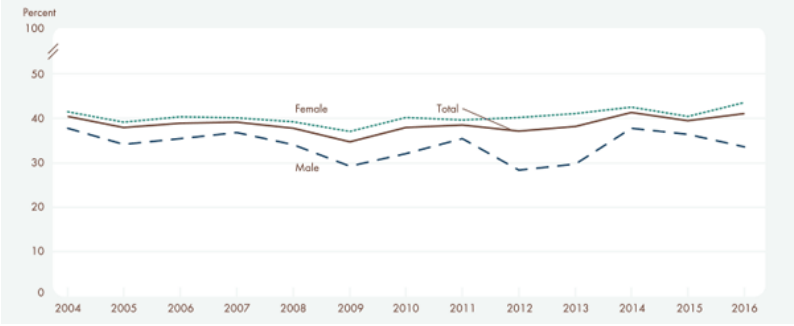
FIGURE HEALTH4.A: PERCENTAGE OF YOUTH AGES 12–17 WHO EXPERIENCED A MAJOR DEPRESSIVE EPISODE (MDE) IN THE PAST YEAR BY AGE AND GENDER, 2004–2016



NOTE: MDE is defined as a period of at least 2 weeks when a person experienced a depressed mood or loss of interest or pleasure in daily activities plus at least four additional symptoms of depression (such as problems with sleep, eating, energy, concentration, and feelings of self-worth) as described in the fourth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV).

SOURCE: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health.

FIGURE HEALTH4.B: PERCENTAGE OF RECEIVING TREATMENT FOR DEPRESSION AMONG YOUTH AGES 12–17 WITH AT LEAST ONE MDE IN THE PAST YEAR BY GENDER, 2004–2016



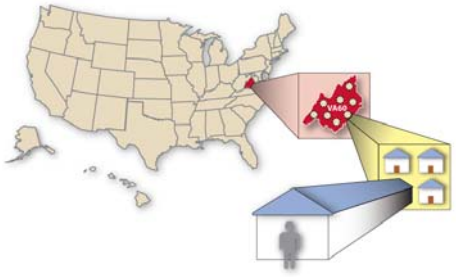
NOTE: Treatment is defined as seeing or talking to a medical doctor or other professional and/or using prescription medication in the past year for depression. Respondents with unknown treatment data were excluded.

SOURCE: Substance Abuse and Mental Health Services Administration, National Survey on Drug Use and Health.

https://www.childstats.gov/americaschildren/health_fig.asp#health3

Substance Abuse and Mental Health Services Administration
SAMHSA
www.samhsa.gov • 1-877-SAMHSA-7 (1-877-726-4727)
National Survey on Drug Use and Health
The CBHSQ Report
Short Report
May 05, 2016*
https://www.samhsa.gov/data/sites/default/files/report_1973/ShortReport-1973.html

ADOLESCENT MENTAL HEALTH SERVICE USE AND REASONS FOR USING SERVICES IN SPECIALTY, EDUCATIONAL, AND GENERAL MEDICAL SETTINGS



AUTHORS

Rachel N. Lipari, Ph.D., Sarra Hedden, Ph.D., Gary Blau, Ph.D., and Lisa Rubenstein, MHA

In Brief

- Adolescents receive mental health services in a variety of settings. Of the 24.9 million adolescents aged 12 to 17 in the United States in 2014, 3.4 million received mental health services in a specialty setting (i.e., inpatient or outpatient mental health setting), 3.2 million received services in an educational setting, and 700,000 received services in a general medical setting.
- Among adolescents, females were more likely than males to receive mental health services regardless of the mental health services sertting.
- Older adolescents (aged 16 or 17) were less likely than younger adolescents to receive mental health services in an educational setting.
- Adolescents living in rural areas were less likely than those living in urban areas to receive mental health services in a general medical setting.
- Asian adolescents were less likely than adolescents of most other races/ethnicities to receive mental health services regardless of the mental health services setting.
- Although adolescents accessed mental health services in a variety of settings, their reasons for obtaining help were similar. For example, regardless of the setting, approximately half of adolescents reported that they received mental health services because they felt depressed.

INTRODUCTION

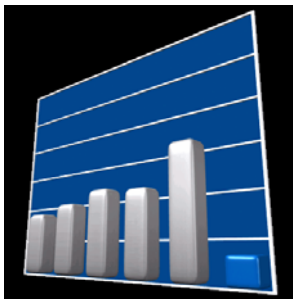
Substance use and mental health issues (i.e., behavioral health issues) affect millions of adolescents in the United States. Half of all lifetime cases of mental disorders begin by age 14,[1] and about 1 in 4 adolescents experience mental disorders that result in severe impairment.[2] Although many disorders can be treated, almost half of adolescents with mental health issues do not receive any mental health services.[3,4] Ensuring that the mental health needs of adolescents are met has long-term implications. Research indicates that older adolescents with mental health issues are less likely than their peers without mental health issues to have the foundation needed to succeed as young adults.[5] For example, adolescents who had experienced a major depressive episode (MDE) were more likely than those who had not had MDE to do poorly in school and to engage in delinquent behaviors.[5] When adolescents do receive mental health services, care may occur across a variety of settings, such as educational or primary care settings. Understanding whether and where adolescents receive mental health services is important to understand where there may be gaps in care, and may help policymakers, mental health providers, and parents expand and improve access to care.

The National Survey on Drug Use and Health (NSDUH) includes questions on adolescent mental health service utilization that ask all respondents aged 12 to 17 whether they received any treatment or counseling within the 12 months before the interview for problems with emotions or behavior. Respondents are asked whether they received these mental health services in several settings: (1) *specialty mental health settings* (inpatient or outpatient care), (2) *educational settings* (talked with a school social worker, psychologist, or counselor about an emotional or behavioral problem; participated in a program for students with emotional or behavioral problems while attending a regular school; or attended a school for students with emotional or behavioral problems), or (3) *general medical settings* (care from a pediatrician or family physician for emotional or behavioral problems). Adolescents aged 12 to 17 were also asked the reasons they received mental health care from each reported mental health service (i.e., specialty setting, educational setting, and general medical setting). Respondents could indicate multiple reasons for the last time they received mental health care; thus, the response categories are not mutually exclusive.[6] Note that NSDUH does not collect data on the presence of one or more mental disorders among adolescents. Therefore, this report focuses on the use of mental health services among all adolescents.

This issue of *The CBHSQ Report* uses 2014 NSDUH data from approximately 17,000 adolescents aged 12 to 17 to examine the prevalence of mental health service use among adolescents and the reasons these adolescents receive mental health services. Results are presented for adolescents aged 12 to 17 overall, and by age subgroups (i.e., 12 or 13, 14 or 15, and 16 or 17), gender, race/ethnicity, and rural residence status.[7,8] Only comparisons that are statistically significant at the .05 level are discussed in this report.

I. A Sampling of Statistical Reports

B. Special Education Data



Children and Youth With Disabilities

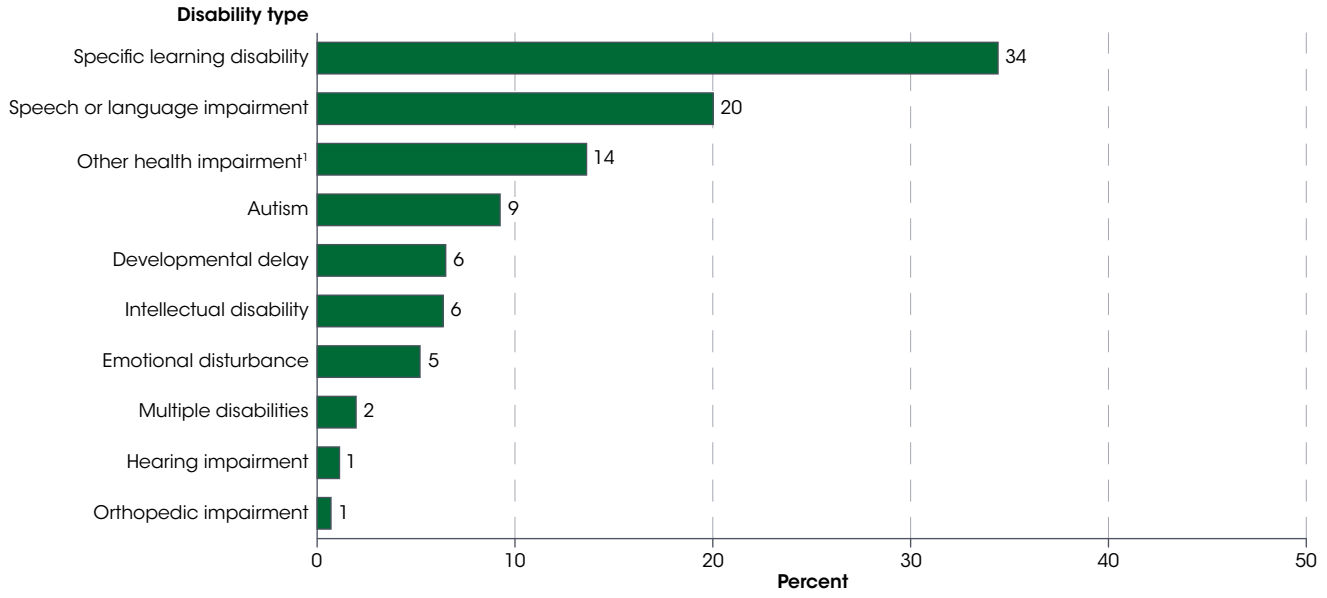
https://nces.ed.gov/pubs2018/2018144.pdf

In 2015–16, the number of students ages 3–21 receiving special education services was 6.7 million, or 13 percent of all public school students. Among students receiving special education services, 34 percent had specific learning disabilities.

Enacted in 1975, the Individuals with Disabilities Education Act (IDEA), formerly known as the Education for All Handicapped Children Act, mandates the provision of a free and appropriate public school education for eligible students ages 3–21. Eligible students are those identified by a team of professionals as having a disability that adversely affects academic performance and as being in need of special education and related services. Data collection activities to monitor compliance with IDEA began in 1976.

From school year 2000–01 through 2004–05, the number of students ages 3–21 who received special education services increased from 6.3 million, or 13 percent of total public school enrollment, to 6.7 million, or 14 percent of total public school enrollment.[1] Both the number and percentage of students served under IDEA declined from 2004–05 through 2011–12. Between 2011–12 and 2015–16, the number of students served increased from 6.4 million to 6.7 million, while the percentage served remained at 13 percent of total public school enrollment.

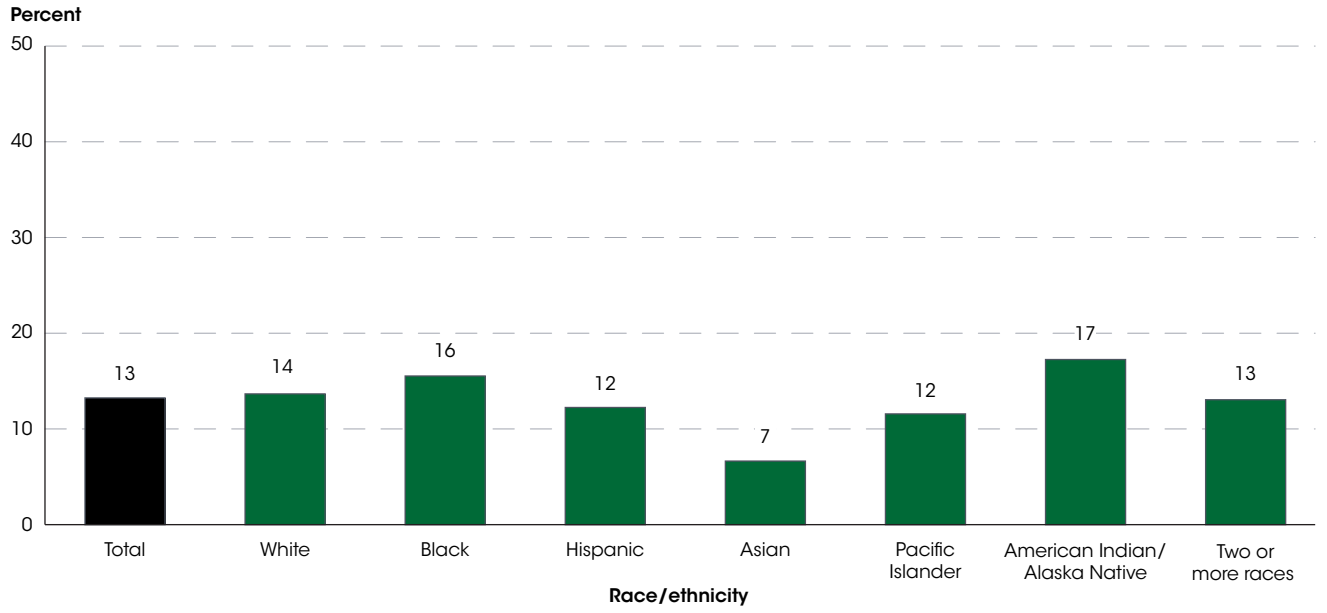
Figure 1. Percentage distribution of students ages 3–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, by disability type: School year 2015–16



[1] Other health impairments include having limited strength, vitality, or alertness due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes.
NOTE: Deaf-blindness, traumatic brain injury, and visual impairment are not shown because they each account for less than 0.5 percent of students served under IDEA. Due to categories not shown, detail does not sum to 100 percent. Although rounded numbers are displayed, the figures are based on unrounded estimates.
SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved July 10, 2017, from https://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html#bcc. See *Digest of Education Statistics 2017*, table 204.30.

In school year 2015–16, a higher percentage of students ages 3–21 received special education services under IDEA for specific learning disabilities than for any other type of disability. A specific learning disability is a disorder in one or more of the basic psychological processes involved in understanding or using language, spoken or written, that may manifest itself in an imperfect ability to listen, think, speak, read, write, spell, or do mathematical calculations. In 2015–16, some 34 percent of all students receiving special education services had specific learning disabilities, 20 percent had speech or language impairments, and 14 percent had other health impairments (including having limited strength, vitality, or alertness due to chronic or acute health problems such as a heart condition, tuberculosis, rheumatic fever, nephritis, asthma, sickle cell anemia, hemophilia, epilepsy, lead poisoning, leukemia, or diabetes). Students with autism, intellectual disabilities, developmental delays, and emotional disturbances each accounted for between 5 and 9 percent of students served under IDEA. Students with multiple disabilities, hearing impairments, orthopedic impairments, visual impairments, traumatic brain injuries, and deaf-blindness each accounted for 2 percent or less of those served under IDEA.

Figure 2. Percentage of students ages 3–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, by race/ethnicity: School year 2015–16



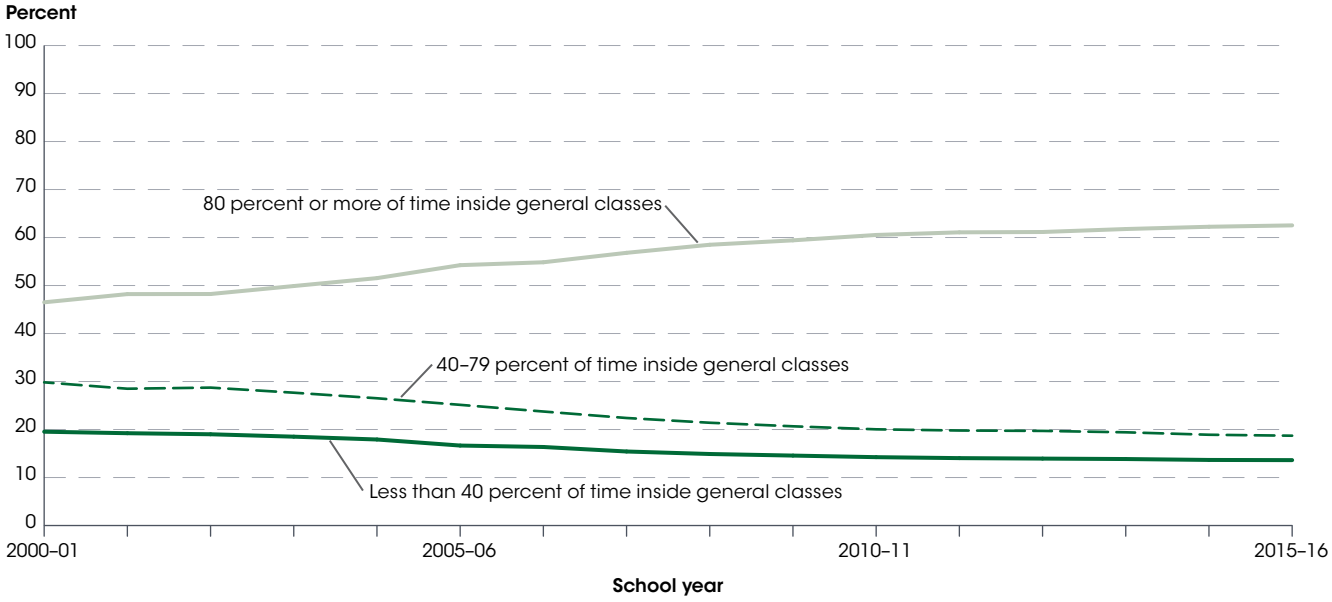
NOTE: Based on the total enrollment in public schools, prekindergarten through 12th grade. Race categories exclude persons of Hispanic ethnicity. Although rounded numbers are displayed, the figures are based on unrounded estimates.
SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved July 10, 2017, from http://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html#bcc; and National Center for Education Statistics, Common Core of Data (CCD), "State Nonfiscal Survey of Public Elementary/Secondary Education," 2015–16. See *Digest of Education Statistics 2017*, table 204.50.

In school year 2015–16, the percentage (out of total public school enrollment) of students ages 3–21 served under IDEA differed by race/ethnicity. The percentage of students served under IDEA was highest for those who were American Indian/Alaska Native (17 percent), followed by those who were Black (16 percent), White (14 percent), of Two or more races (13 percent), Hispanic and Pacific Islander (both at 12 percent), and Asian (7 percent).

In each racial/ethnic group except for Asian, the percentage of students receiving services for specific learning disabilities combined with the percentage receiving services for speech or language impairments accounted for over 50 percent of students served under IDEA. The percentage distribution of various types of special education services received by students ages 3–21 in 2015–16 differed by race/ethnicity. For example, the percentage of students with disabilities receiving services under IDEA for specific learning disabilities was lower among Asian students (21 percent), students of Two or more races (30 percent), and White students (31 percent) than among students overall (34 percent). However, the percentage of students with disabilities receiving services under IDEA for autism was higher among Asian students (21 percent), students of Two or more races (10 percent), and White students (10 percent) than among students overall (9 percent). Additionally, among students who were served under IDEA, 7 percent of Black students and 7 percent of students of Two or more races received services for emotional disturbances. In comparison, 5 percent of all students served under IDEA received services for emotional disturbances. Among students who received services under IDEA, each racial/ethnic group other than Hispanic (5 percent) had a higher percentage of students receiving services for developmental delays than the overall percentage of students receiving services for developmental delays (6 percent).

Separate data on special education services for males and females are available only for students ages 6–21, rather than ages 3–21. Among those 6- to 21-year-old students enrolled in public schools in 2015–16, a higher percentage of males (17 percent) than of females (9 percent) received special education services under IDEA. The percentage distribution of students who received various types of special education services in 2015–16 differed by sex. For example, the percentage of students served under IDEA who received services for specific learning disabilities was higher among female students (44 percent) than among male students (35 percent), while the percentage served under IDEA who received services for autism was higher among male students (12 percent) than among female students (4 percent).

Figure 3. Percentage of students ages 6–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, by amount of time spent inside general classes: Selected school years, 2000–01 through 2015–16

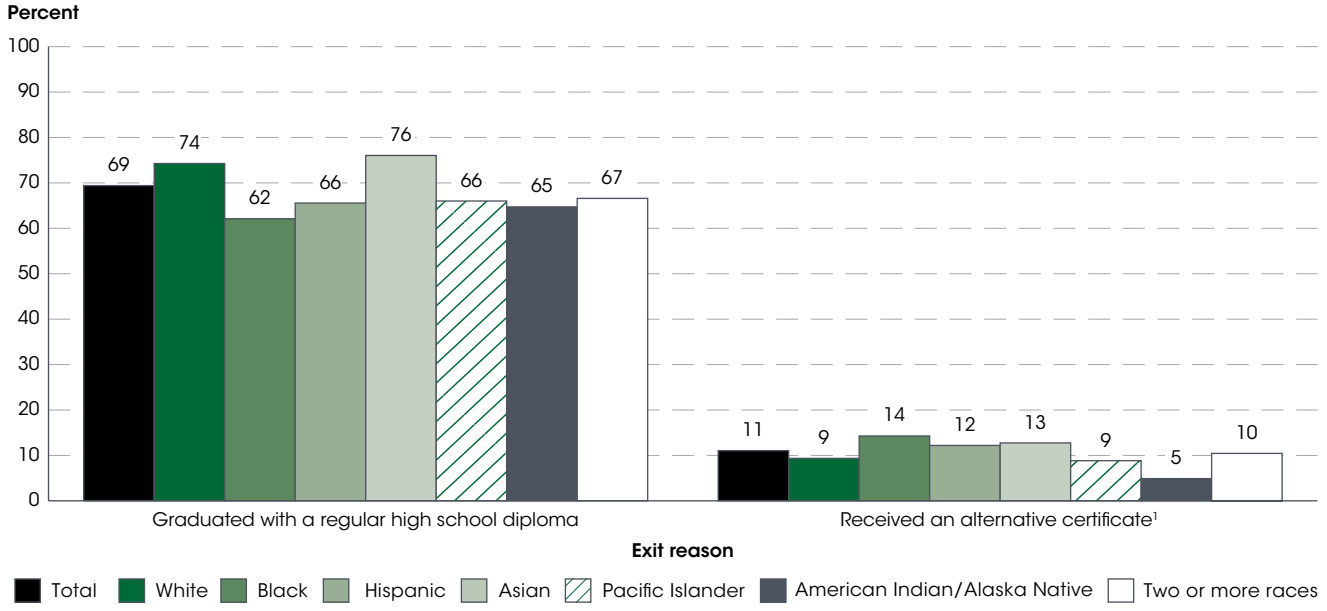


SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) database, retrieved July 15, 2017, from http://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html#bcc. See *Digest of Education Statistics 2017*, table 204.60.

Educational environment data are also available for students ages 6–21 served under IDEA. About 95 percent of students ages 6–21 served under IDEA in fall 2015 were enrolled in regular schools. Some 3 percent of students served under IDEA were enrolled in separate schools (public or private) for students with disabilities; 1 percent were placed by their parents in regular private schools; and less than 1 percent each were homebound or in hospitals, in separate residential facilities (public or private), or in correctional facilities. Among all students ages 6–21 served under IDEA, the percentage who spent most of the school day (i.e., 80 percent or more of their time) in general classes in regular schools increased from 47 percent in fall 2000 to 63 percent in fall 2015. In contrast, during the same period, the percentage of those who spent 40 to 79 percent of the school day in general classes declined from 30 to 19 percent, and the percentage of those who spent less than 40 percent of their time inside general classes also declined, from 20 to 14 percent. In fall 2015, the percentage of students served under IDEA who spent most of the school day in general classes was highest for students with speech or language impairments (87 percent). Approximately two-thirds of students with specific learning disabilities (70 percent), visual impairments (67 percent), other health impairments (65 percent), and developmental delays (64 percent) spent most of the school day in general classes. In contrast, 16 percent of students with intellectual disabilities and 13 percent of students with multiple disabilities spent most of the school day in general classes.

Data are also available for students ages 14–21 served under IDEA who exited school during school year 2014–15, including exit reason.[2] Approximately 395,000 students ages 14–21 who received special education services under IDEA exited school in 2014–15: about two-thirds (69 percent) graduated with a regular high school diploma, 18 percent dropped out, 11 percent received an alternative certificate,[3] 1 percent reached maximum age, and less than one-half of 1 percent died.

Figure 4. Percentage of students ages 14–21 served under the Individuals with Disabilities Education Act (IDEA), Part B, who exited school, by selected exit reason and race/ethnicity: School year 2014–15



[1] Received a certificate of completion, modified diploma, or some similar document, but did not meet the same standards for graduation as those for students without disabilities.
NOTE: Data in this figure are for the 50 states, the District of Columbia, the Bureau of Indian Education, American Samoa, the Federated States of Micronesia, Guam, the Northern Marianas, Puerto Rico, the Republic of Palau, the Republic of the Marshall Islands, and the U.S. Virgin Islands. Data for all other figures in this indicator are for the 50 states and the District of Columbia only. Race categories exclude persons of Hispanic ethnicity.
SOURCE: U.S. Department of Education, Office of Special Education Programs, Individuals with Disabilities Education Act (IDEA) Section 618 Data Products: State Level Data Files. Retrieved July 14, 2017, from http://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html. See *Digest of Education Statistics 2017*, table 219.90.

Of the students ages 14–21 served under IDEA who exited school in 2014–15, the percentages who graduated with a regular high school diploma, received an alternative certificate, and dropped out differed by race/ethnicity. The percentage of exiting students who graduated with a regular high school diploma was highest among Asian students (76 percent) and lowest among Black students (62 percent). The percentage of exiting students who received an alternative certificate was highest among Black students (14 percent) and lowest among American Indian/Alaska Native students (5 percent). The percentage of exiting students who dropped out in 2014–15 was highest among American Indian/Alaska Native students (29 percent) and lowest among Asian students (7 percent).

Of the students ages 14–21 served under IDEA who exited school in 2014–15, the percentages who graduated with a regular high school diploma, received an alternative certificate, and dropped out also differed by type of disability. The percentage of exiting students who graduated with a regular high school diploma was highest among students with visual impairments (82 percent) and lowest among those with intellectual disabilities (42 percent). The percentage of exiting students who received an alternative certificate was highest among students with intellectual disabilities (34 percent) and lowest among students with speech or language impairments (5 percent). The percentage of exiting students who dropped out in 2014–15 was highest among students with emotional disturbances (35 percent) and lowest among those with autism and visual impairments (both at 7 percent).

Endnotes:

[1] Data for students ages 3–21 and 6–21 served under IDEA are for the 50 states and the District of Columbia only.
[2] Data for students ages 14–21 served under IDEA who exited school are for the 50 states, the District of Columbia, the Bureau of Indian Education, American Samoa, the Federated States of Micronesia, Guam, the Northern Marianas, Puerto Rico, the Republic of Palau, the Republic of the Marshall Islands, and the U.S. Virgin Islands.
[3] Received a certificate of completion, modified diploma, or some similar document, but did not meet the same standards for graduation as those for students without disabilities.

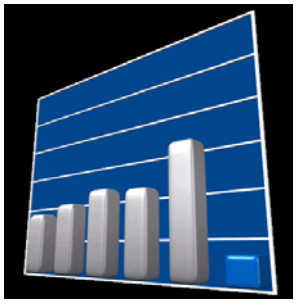
Reference tables: *Digest of Education Statistics 2017*, tables 204.30, 204.50, 204.60, and 219.90; *Digest of Education Statistics 2015*, table 204.30

Related indicators and resources: Disability Rates and Employment Status by Educational Attainment [*The Condition of Education 2017 Spotlight*]; English Language Learners in Public Schools; Students with Disabilities [*Status and Trends in the Education of Racial and Ethnic Groups*]

Glossary: Disabilities, children with; Enrollment; High school completer; High school diploma; Individuals with Disabilities Education Act (IDEA); Private school; Public school or institution; Racial/ethnic group; Regular school

I. A Sampling of Statistical Reports

C. Juvenile Justice Data



Intersection between Mental Health and the Juvenile Justice System

Mental health disorders are prevalent among youths in the juvenile justice system. A meta-analysis by Vincent and colleagues (2008) suggested that at some juvenile justice contact points, as many as 70 percent of youths have a diagnosable mental health problem. This is consistent with other studies that point to the overrepresentation of youths with mental/behavioral health disorders within the juvenile justice system (Shufelt and Cocozza 2006; Meservey and Skowyra 2015; Teplin et al. 2015). However, prevalence varies depending on the stage in the justice system at which youths are assessed. In a nationwide study, the prevalence of diagnosed disorders increased the further that youths were processed in the juvenile justice system (Wasserman et al. 2010).

While there appears to be a prevalence of youths with mental health issues in the juvenile justice system, the relationship between mental health problems and involvement in the system is complicated, and it can be hard to disentangle correlational from causal relationships between the two (Shubert and Mulvey 2014).

This literature review will focus on the scope of mental health problems of at-risk and justice-involved youths; the impact of mental health on justice involvement as well as the impact of justice involvement on mental health; disparities in mental health treatment in the juvenile justice system; and evidence-based programs that have been shown to improve outcomes for youths with mental health issues.

Defining Mental Health and Identifying Mental Health Needs

Defining Mental Health. According to the U.S. Department of Health and Human Services, mental health includes a person's psychological, emotional, and social well-being and affects how a person feels, thinks, and acts. Mental disorders relate to issues or difficulties a person may experience with his or her psychological, emotional, and social well-being. As Stein and colleagues explained, "each of the mental disorders is conceptualized as a clinically significant behavioral or psychological syndrome or pattern that occurs in an individual and that is associated with present distress (e.g., a painful symptom) or disability (i.e., impairment in one or more important areas of functioning) or with a significantly increased risk of suffering death, pain, disability, or an important loss of freedom" (2010, 1).

The *Diagnostic and Statistical Manual of Mental Disorders, 5th Edition* is a standard classification tool for mental disorders used by many mental health professionals in the United States (American Psychiatric Association 2013). It includes 20 chapters of mental health disorders, including the following:

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https://www.ojjdp.gov/mpg/litreviews/Intersection-Mental-Health-Juvenile-Justice.pdf
Prepared by Development Services Group, Inc., under cooperative agreement number 2013–JF–FX–K002. Points of view or opinions expressed in this document are those of the author and do not necessarily represent the official position or policies of OJJDP or the U.S. Department of Justice.

- Substance-related and addictive disorders
- Bipolar and related disorders
- Depressive disorders
- Anxiety disorders
- Obsessive-compulsive disorders
- Trauma- and stressor-related disorders such as posttraumatic stress disorder and adjustment disorders
- Disruptive, impulse control, and conduct disorders
- Neurodevelopmental disorders, which includes intellectual disabilities,[1] attention deficit/hyperactivity disorder, and autism spectrum disorders

A broader categorization divides mental health disorders into two categories: internalizing and externalizing. *Internalizing disorders*, which are negative behaviors focused inward, include depression, anxiety, and dissociative disorders. *Externalizing disorders* are characterized by behaviors directed toward a youth's environment and include conduct disorders, oppositional defiant disorder, and antisocial behaviors.

Tools to Identify Mental Health Needs. Juvenile justice systems use a variety of tools to identify mental health needs, although most fall into one of two categories:

- **Screening**. The purpose of screening is to identify youths who might require an immediate response to their mental health needs and to identify those with a higher likelihood of requiring special attention (Vincent 2012). It is similar to a triage process in a hospital emergency room. Although there are numerous screening instrument options, two commonly used are the Massachusetts Youth Screening Instrument—Version 2 (MAYSI-2; Grisso and Barnum 2006) and the Diagnostic Interview Schedule for Children (Wasserman, McReynolds, Fisher, and Lucas 2005). In addition to tools that screen for multiple mental health-related issues, there are also tools that screen for specific problems, such as the Children's Depression Inventory (Kovacs 1985) or the Suicidal Ideation Questionnaire (Reynolds 1988), which can help determine if a youth should be monitored for suicide attempts upon entry to detention or residential facility.
- **Assessment**. The purpose of assessment is to gather a more comprehensive and individualized profile of a youth. Assessment is performed selectively with those youths with higher needs, often identified through screening. Mental health assessments tend to involve specialized clinicians and generally take longer to administer than screening tools (Vincent 2012). There are numerous mental health assessments. One widely studied assessment is the Achenbach System of Empirically Based Assessment (Achenbach and Rescorla 2001), which includes three instruments completed by youths (Youth Self-Report), parents (Child Behavior Checklist), or teachers (Teachers Report Form)[2].

Scope of the Problem

Multiple studies confirm that a large proportion of youths in the juvenile justice system have a diagnosable mental health disorder. Studies have suggested that about two thirds of youth in detention or correctional settings have at least one diagnosable mental health problem, compared with an

[1] A separate *Model Programs Guide* literature review on intellectual/development disabilities among youths in the justice system can be accessed here: https://www.ojjdp.gov/mpg/litreviews/Intellectual-Developmental-Disabilities.pdf

[2] For more information on Risk/Needs Assessments for Youths, please see the literature review on the *Model Programs Guide*: https://www.ojjdp.gov/mpg/litreviews/RiskandNeeds.pdf

estimated 9 to 22 percent of the general youth population (Schubert and Mulvey 2014; Schubert, Mulvey, and Glasheen 2011). The 2014 National Survey on Drug Use and Health found that 11.4 percent of adolescents aged 11 to 17 had a major depressive episode in the past year, although the survey did not provide an overall measure of mental illness among adolescents (Center for Behavioral Health Statistics and Quality 2015). Similarly, a systematic review by Fazel and Langstrom (2008) found that youths in detention and correctional facilities were almost 10 times more likely to suffer from psychosis than youths in the general population.

These diagnoses commonly include behavior disorders, substance use disorders, anxiety disorder, attention deficit/hyperactivity disorder (ADHD), and mood disorders (Chassin 2008; Gordon and Moore 2005; Shufelt and Cocozza 2006; Teplin et al. 2003). The prevalence of each of these diagnoses, however, varies considerably among youths in the juvenile justice system. For example, the Pathways to Desistance study (which followed more than 1,300 youths who committed serious offenses for 7 years after their court involvement) found that the most common mental health problem was substance use disorder (76 percent), followed by high anxiety (33 percent), ADHD (14 percent), depression (12 percent), posttraumatic stress disorder (12 percent), and mania (7 percent) (Schubert, Mulvey, and Glasheen 2011; Schubert and Mulvey 2014). A multisite study by Wasserman and colleagues (2010) across three justice settings (system intake, detention, and secure post-adjudication) found that over half of all youths (51 percent) met the criteria for one or more psychiatric disorders. Specifically, one third of youths (34 percent) met the criteria for substance use disorder, 30 percent met the criteria for disruptive behavior disorders, 20 percent met the criteria for anxiety disorders, and 8 percent met the criteria for affective disorder.

Many of these youths are also diagnosed with multiple disorders. For example, the Pathways to Desistance study found that 39 percent of youths met the threshold for more than one mental health problem (Schubert, Mulvey, and Glasheen 2011). Similarly, the Northwestern Juvenile Project (a longitudinal study that followed over 1,800 youths who were arrested and detained in Cook County, Illinois) found that 46 percent of males and 57 percent of females had two or more psychiatric disorders (Teplin et al. 2013). In a study of youths in contact with the juvenile justice systems (including community-based programs, detention centers, and secure residential facilities), in Texas, Louisiana, and Washington, Shufelt and Cocozza (2006) found that 79 percent of the youths diagnosed for one mental health disorder also met the criteria for two or more diagnoses.

Impact of Mental Health Problems on Juvenile Justice Involvement

As previously mentioned, the relationship between mental health problems and involvement in the juvenile justice system is complex. As Schubert and Mulvey explained, "although these two problems often go hand in hand, it is not clear that one causes the other. Many youths who offend do not have a mental health problem, and many youths who have a mental health problem do not offend" (2014, 3). There has been research to show how mental health diagnoses and problem behaviors are associated with each other. But as is often emphasized, correlation does not mean causation. In addition, certain risk factors could increase the occurrence of both mental health and problem behaviors in youths. For example, exposure to violence can increase mental health issues, such as posttraumatic stress, in youth and increase the occurrence of delinquent behavior (Finkelhor et al. 2009). However, although the research can point to a relationship between mental health issues and juvenile justice involvement, it remains difficult to determine the exact correlation.

Research on individual risk factors often focuses on how certain mental health problems may be associated with delinquency, violence, and justice system involvement. Researchers have found that some externalizing disorders (e.g., conduct disorders, oppositional defiant disorder, and antisocial

behaviors) and substance use disorders do increase the likelihood of delinquency, violence, and contact with the justice system (Barrett et al. 2014; Hawkins et al. 2000; Huizinga et al. 2000).

For instance, in their meta-analysis of predictors of youth violence, Hawkins and colleagues (2000) found evidence that psychological factors—such as aggression, restlessness, hyperactivity, concentration problems, and risk taking—were consistently correlated with youth violence. However, they also found that internalizing disorders—such as worrying, nervousness, and anxiety—were either unrelated to later violence or reduced the likelihood of engaging in later violence. A recent meta-analysis by Wibbelink and colleagues (2017) also examined the relationship between mental disorders (including internalizing, externalizing, and comorbid disorders) and recidivism in juveniles. Similar to the findings from the Hawkins and colleagues (2000) meta-analysis, Wibbelink and colleagues (2017) found that externalizing disorders were significantly related to recidivism, while internalizing behaviors were not related to recidivism (and in some cases, internalizing behaviors had a buffering effect on recidivism).

This link between certain mental health problems and delinquency has also been studied for youths in certain subpopulations. Among maltreated youths living in out-of-home care, the presence of a mental health disorder was significantly associated with juvenile justice system involvement, and conduct disorder was the strongest predictor (Yampolskaya and Chuang 2012). A study of psychiatric-inpatient adolescents found that having a disruptive disorder, a history of aggressive behavior, and using cocaine were all predictors of juvenile justice system involvement (Cropsey, Weaver, and Dupre 2008).

Trauma or exposure to violence may also increase the likelihood of juvenile justice involvement. Multiple studies show a connection between childhood violence exposure and antisocial behavior, including delinquency, gang involvement, substance use, posttraumatic stress disorder, anxiety, depression, and aggression (Wilson, Stover, and Berkowitz 2009; Finkelhor et al. 2009). In the Northwestern Juvenile Project, 92.5 percent of detained youths reported at least one traumatic experience, and 84 percent reported more than one (Abram et al. 2013). Other studies that have looked at past traumatic exposures in juvenile justice populations have also found high rates (e.g., Romaine et al. 2011; Rosenberg et al. 2014).

Impact of Justice System Involvement on Mental Health Problems

Entry into the juvenile court system may exacerbate youths' existing mental health problems for many reasons. For instance, there is inconsistency across some of the decision points of the juvenile justice system (including in the court systems and residential facilities) in providing referrals to treatment and appropriately screening, assessing, and treating juveniles with mental health conditions. There are also the difficulties that many juveniles face when detained or incarcerated, the increased odds of recidivating once youths are involved in the justice system, and the perceived barriers to services that can prevent youths from seeking or receiving treatment (National Mental Health Association 2004).

Lack of Referrals for Treatment. Among youths involved in the juvenile justice system (including those who have been referred to court or those who have been adjudicated and placed in a residential facility), only a small percentage of those in need of services can access treatment. For example, a 2014 juvenile residential facility census found that 58 percent reported they evaluated all youths for mental health needs, 41 percent evaluated some but not all youths, and 1 percent did not evaluate any youths (Hockenberry, Wachter, and Sladky 2016). However, it is unknown how many of the evaluated youths received referrals for treatment. In a study of juvenile courts in Tennessee, Breda (2003) found that fewer than 4 percent of juveniles who had committed offenses (regardless of diagnosis) were referred for mental health services. A study of a southern California correctional facility also found that only 6 percent of youths were referred for mental health services (Rogers et al. 2001).

Even among youths who have been diagnosed, treatment is not guaranteed. The Pathways to Desistance Project found overall low rates of services provided to youths; however, this depended on both the type of facility in which youths had been placed (i.e., state-run juvenile corrections facilities, contract residential settings, detention centers, and jails/prisons) and the diagnosable mental health issue (Schubert and Mulvey 2014). Similarly, the Northwestern Juvenile Project found that only 15 percent of youths diagnosed with psychiatric disorders and functional impartment received treatment while in detention (Teplin et al. 2013). A study of mental health delivery patterns in Maryland found that only 23 percent of the youths diagnosed with a mental disorder received any treatment (Shelton 2005). A national study found that even if juvenile justice facilities reported having the capacity to provide services to youths in their care, youths with a severe mental health disorder often did not receive any emergency mental health services (Shufelt and Cocozza 2006). Finally, numerous studies have revealed disparities in regard to which youths are more likely to be referred for treatment (see Disparities in Mental Health Treatment below for more information).

Impact of Detention/Confinement. Juvenile detention and correctional facilities may impact youths with mental health issues due to overcrowding, lack of available treatment/services, and separation from support systems (such as family members and friends). In addition, for juveniles in correctional facilities, being placed in solitary confinement or restrictive housing also has the potential to worsen mental health issues (National Institute of Justice 2016).

Greater Likelihood of Recidivism. Given the aforementioned limitations of the juvenile justice system, having a mental health problem while involved in the system can increase youths' likelihood of recidivating or engaging in other problem behavior (e.g., Yampolskaya and Chuang 2012). This link has been documented most frequently for externalizing disorders (Barrett et al. 2014; Constantine et al. 2013; McReynolds, Schwalbe, and Wasserman 2010) and for substance use disorders (Baglivio et al. 2014; Hoeve et al. 2013; Schubert and Mulvey 2014).

For example, in their study of Florida youths who had completed juvenile justice residential placements, Baglivio and colleagues (2014) found that current substance use was a predictor of re-arrest. In their study of youths who were previously placed in a detention facility, Mallett and colleagues (2013) found that having a conduct disorder diagnosis and a self-reported previous suicide attempt predicted subsequent recidivism to detention placement. In their study of almost 100,000 youths whose cases had been processed by the South Carolina Department of Juvenile Justice, Barrett and colleagues (2014) found that an early diagnosis of an aggressive disorder was the strongest predictor of recidivism.

Perceived Barriers to Treatment among Youth. Abram and colleagues (2015) surveyed youths with alcohol, drug, and mental health disorders in detention and found that the most frequently cited barrier to services was that youths believed their problems would go away without getting any help. Other reported perceived barriers were that youths were unsure whom to contact or where to go for help, and believed it was too difficult to obtain help. Perceived barriers can impact whether youths pursue treatment in the first place, as well as whether they participate and remain in treatment (Abram et al. 2015).

Disparities in Mental Health Treatment in the Juvenile Justice System

Researchers have also found disparities—particularly by race/ethnicity, gender, and age—in who is referred for treatment in the juvenile justice system.

Race/Ethnicity. Racial disparities exist among mental health diagnoses and treatment in both the community and the juvenile justice system. In the community, researchers have found that youths of color are less likely to receive mental health or substance use treatment (Dembo et al. 1998; Garland et al. 2005). Researchers have also found that minority youths receive fewer services than white youths in the foster care and child welfare populations (Garland and Besinger 1997; Horwitz et al. 2012). Among youths being served by mental health systems, youths of color are more likely to be referred to the juvenile justice system than white youths (Cauffman et al. 2005; Evens and Vander Stoep 1997; Scott, Snowden, and Libby 2002; Vander Stoep, Evens, and Taub 1997).

Once in the juvenile justice system, minority youths are less likely to be treated for mental health disorders than white youths (e.g., Dalton et al. 2009; Herz 2001; Rawal et al. 2004). According to a 2016 systematic review of articles that examined racial disparities among referrals to mental health and substance abuse services from within the juvenile justice system, most of the studies published from 1995 to 2014 found that there was at least some race effect in determining which youths received services, even when including statistical controls for mental health or substance use diagnosis or need (Spinney et al. 2016).

For example, an examination of detained youths in Indiana found that both African American and Hispanic youths were less likely than white youths to receive contact with a mental health clinician within 24 hours of detention center intake and to receive a referral to mental health services upon detention center discharge—even after incorporating statistical controls for age, gender, detention center site, and whether the youth had a positive MAYSI–2 screening (Aalsma et al. 2014). Additionally, in a study of mental health delivery patterns in the Maryland juvenile justice system, Shelton (2005) found that while 42.6 percent of white youths who met diagnostic criteria received mental health services, only 11.9 percent of the African American youths who met diagnostic criteria received these services. She concluded that the data reflected a racial bias in the provision of services.

Gender-Related Factors. As the proportion of girls involved in the juvenile justice system grows (Espinosa, Sorensen, and Lopez 2013; Odgers et al. 2005), researchers are increasingly looking at how gender differences impact the receipt of mental health care within the system. They are reporting a higher rate of referrals for females than males overall (Teplin et al. 2003; Cauffman et al. 2007; Fazel and Langstrom 2008; Herz 2001). In a study on juvenile offenders in Texas, Daurio (2009) found that girls were more likely than boys to receive mental health placements than incarceration, as a disposition outcome. Gunter-Justice and Ott (1997) also found that family court judges recommended mental health placements more frequently for girls, compared with boys. Once within the system, girls are also more likely to be referred for treatment by facility staff, which, as Rogers and colleagues (2001) suggested, may have to do with the staff members themselves being female. Finally, although girls in the juvenile justice system are referred for mental health treatment more frequently than boys, they are usually not referred for further follow-up treatment upon community reentry (Aalsma, Schwartz, and Perkins 2014).

The following differences between boys and girls may explain why gender is a significant predictor of mental health placement:

1. Girls are most often detained for status offenses and technical violations.
2. Girls report mental health symptoms and are more willing to use psychiatric services than boys.

3. Girls are more likely to exhibit internalizing disorders—such as anxiety, depression, and suicidality—than externalizing disorders such as aggression, bullying, and oppositional behaviors (Huizinga et al. 2000; Espinosa et al. 2013; Teplin et al. 2006).

Odgers and colleagues (2005) also found that the rates of comorbidity of disorders increase exponentially for girls in the juvenile justice system. Regardless of their higher levels of referral as compared with boys, girls are still undertreated in the system given their high need (Espinosa et al. 2013).

Age-Related Factors. Age is often a determinant for who receives mental health services within the juvenile justice system. As various studies have indicated, younger juveniles (usually under 15 years of age) are more likely to be referred for mental health placements (Herz 2001; Daurio 2009). Rogers and colleagues (2001) found that of the youths in a Southern California juvenile correctional facility, those who had been arrested before the age of 14 were more likely to have been referred for treatment than youths arrested after the age of 14. Herz (2001) posited that this referral disparity indicates evidence of a "two-tiered system," in which older adolescents receive a more punitive than rehabilitative approach than younger adolescents.

Outcome Evidence

Some programs and treatment approaches for justice-involved youths, particularly those involving cognitive–behavioral therapy (CBT), have shown positive results. CBT is designed to help youths adjust their thinking and behaviors related to delinquency, crime, and violence (Little 2005; Beck 1999). CBT programs have also been shown to be effective in reducing recidivism rates (Jeong, Lee, and Martin 2014). Research on other program types that specifically target youths with mental health needs, such as mental health diversion initiatives, have also shown positive results (Colwell, Villarreal, and Espinosa 2012; Cuellar, McReynolds, and Wasserman 2006).

The following are examples of evidence-based programs from the *Model Programs Guide* that have demonstrated positive outcomes for youths with specific mental health needs, the first two of which specifically draw on the strategies of CBT.

Functional Family Therapy. Functional family therapy (FFT) is a family-based prevention and intervention program for high-risk youths ages 11–18. It concentrates on decreasing risk factors and increasing protective factors that directly affect adolescents who are at risk for delinquency, violence, substance use, or behavioral problems such as conduct disorder or oppositional defiant disorder. FFT is conducted over 8–12, 1-hour sessions for mild cases; it includes up to 30 sessions of direct service for families in more difficult situations. Sessions generally occur over a 3-month period and can be held in clinical settings as an outpatient therapy model or as a home-based model.

In one large-scale study on FFT, which was delivered by community-based therapists, Sexton and Turner (2010) found that when adherence to the FFT model was high, FFT resulted in a significant reduction in felony crimes and violent crimes and a nonsignificant decrease in misdemeanor crimes. In addition, a study by Celinska and colleagues (2013) found that FFT had a positive effect on youths in the areas of reducing risk behavior, increasing strengths, and improving functioning across key life domains.

Multisystemic Therapy. Multisystemic Therapy (MST) is designed to help adolescents ages 12–17 who have exhibited serious clinical problems such as drug use, violence, and severe criminal behavior. Through intense family involvement, MST aims to assess the origins of adolescent behavioral problems and change the youth's ecology to increase prosocial behavior while decreasing problem and delinquent behavior. MST typically uses a home-based model of service delivery to reduce barriers that

keep families from accessing services. The average treatment occurs over approximately 4 months, although there is no definite length of service, with multiple therapist–family contacts occurring each week.

In one evaluation of MST, Henggeler and colleagues (1992) found that, at 59 weeks post-referral, the group that received MST had just more than half the number of re-arrests than the comparison group, which received treatment as usual. Another study showed significant differences between treatment and comparison groups 4 years after the end of their probation: 71.4 percent of the individual therapy comparison group participants were arrested at least once, compared with 26.1 percent of MST participants (Borduin et al. 1995).

Jefferson County Community Partnership. The Jefferson County Community Partnership in Birmingham, Ala., offers services for youth with serious emotional disturbances, which are accessible, community-based, individualized, culturally competent, and include an individual's family in the planning and delivery of treatment. Overall, the goal of this collaborative approach is to reduce youths' contact with the juvenile justice system. This includes reducing the odds of future offending and decreasing the seriousness of offenses, if they were committed (Matthews et al. 2013). The Jefferson County Community Partnership is not a program; rather, it is a collaborative framework that operates within a system-of-care concept. An evaluation of the Jefferson County Community Partnership found a significant reduction in contact with the juvenile justice system among youths in the Birmingham system-of-care community, compared with the comparison community (Matthews et al. 2013).

Special Needs Diversionary Program. Based on the theory of therapeutic jurisprudence, the Special Needs Diversionary Program (SNDP) provides intensive supervision and treatment for juvenile probationers (ages 10–17) who display low levels of conduct and mental health disorders. The goal of the program is to rehabilitate the youths and prevent them from further involvement in the justice system. SNDP offers mental health services (including individual and group therapy), probation services (including life skills, mentoring, and anger management), and parental education and support. Specialized juvenile probation and professional mental health staff from the local mental health centers work together to coordinate intensive case-management services. The program follows procedures based on typical wraparound strategies. Services provided to juveniles include individual and family therapy, rehabilitation services, skills training, and chemical dependency.

In their study on SNDP, Cuellar and colleagues (2006) evaluated re-arrests for juveniles who participated in the program. They found that there were 63 fewer arrests per 100 youths served by the program over a 1-year period, compared with youths who had not been enrolled in the program.

For more information on these programs, click on the links below.

Functional Family Therapy

Jefferson County Community Partnership (Birmingham, Ala.)

Multisystemic Therapy

Special Needs Diversionary Program

Conclusion

The research presented shows that many youths with mental health issues in the justice system are in need of treatment. Substance use disorders are particularly prevalent. However, the intersection

between mental health and the juvenile justice system represents a challenging area for policymakers and practitioners, because the exact relationship between mental health issues and problem behaviors (such as delinquency) is not always clear (Schubert and Mulvey 2014). The research indicates there are shared risk factors for mental health issues and juvenile justice involvement; however, the research is less conclusive about whether mental health problems increase the odds of youth involvement in the justice system or whether being a part of the justice system increases youths' mental health problems.

Despite the prevalence of mental health disorders among justice-involved youths, particularly for those processed further into the system, many do not receive services to meet their needs (Teplin et al. 2013). In addition, there are discrepancies in referrals for treatment, particularly regarding race and gender (Teplin et al. 2003; Spinney et al. 2016).

However, there are several evidence-based programs that specifically target youths with mental health needs in the juvenile justice system and focus on reducing delinquency and other related problem behaviors by properly addressing both criminogenic risk factors and the mental health needs of these youths (Cuellar et al. 2006; Matthews et al. 2013).

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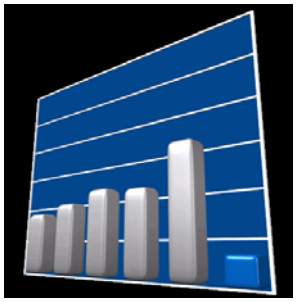
I. A Sampling of Statistical Reports

D. Specific Problems

1. Attention Deficit/ Hyperactivity Disorder



Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

Attention Deficit Hyperactivity Disorder (ADHD)*

Data are for the U.S. https://www.cdc.gov/nchs/fastats/adhd.htm

Morbidity: Children aged 5–17 years

- Percent ever diagnosed with ADHD: 10.6% (2014–2016)
- Percent of boys ever diagnosed with ADHD: 14.5% (2014–2016)
- Percent of girls ever diagnosed with ADHD: 6.5% (2014–2016)

Source: Health, United States, 2017, table 35 [PDF – 9.8 MB]

Physician office visits

- Number of visits to physician offices with attention deficit disorder as the primary diagnosis: 10.9 million

Source: National Ambulatory Medical Care Survey: 2013 Summary Tables, table 16 [PDF – 926 MB]

* The term "attention deficit disorder (ADD)" is used rather than "attention deficit hyperactivity disorder (ADHD)" in some data sources.

More data

- Tables of Summary Health Statistics from the National Health Interview Survey
- Trends in Attention deficit/hyperactivity disorder (ADHD) from Health,United States
- Physician Office Visits for Attention Deficit/Hyperactivity Disorder in Children and Adolescents Aged 4–17 Years; United States 2012-2013
- Association Between Diagnosed ADHD and Selected Characteristics Among Children Aged 4 –17 Years: United States, 2011–2013
- Diagnostic Experiences of Children With Attention-Deficit/Hyperactivity Disorder [PDF – 230 KB]
- Mental Health Surveillance Among Children – United States, 2005 — 2011
- Psychotropic Medication Use Among Adolescents: United States, 2005–2010
- Data Resource Center for Child and Adolescent Health (http://www.childhealthdata.org/)

PsychiatryAdvisor

July 28, 2015

A True ADHD Epidemic or an Epidemic of Overdiagnosis?

https://www.psychiatryadvisor.com/adhd/a-true-adhd-epidemic-or-an-epidemic-of-overdiagnosis/article/429034/

In 2011, the CDC reported that the prevalence of attention-deficit/hyperactivity disorder in children ages 4 to 17 years was 11%, with 6.4 million children diagnosed with ADHD and 4.2 million taking psychostimulants.[1]

These findings represent a dramatic increase from more than 30 years ago, when the rate of attention-deficit/hyperactivity disorder (ADHD) was estimated at between 3% and 5%.[2] What is more concerning is that the prevalence of ADHD increased by about 35% just from 2003 to 2011, and there is no indication that this increase leveling out.[1] More than 20% of high school-aged boys have been told they have ADHD![3]

What is going on here? Have 11% of our children always had ADHD and we just missed it? Has some cataclysmic genetic or epigenetic shift taken place, causing ADHD to be the most prevalent childhood disease second only to obesity? I don't think so. I believe that this dramatic increase in ADHD diagnoses is caused by two factors:

1. Overdiagnosis through inadequate evaluation and societal pressure for treatment ; and
2. A significant increase in the demands being made on our children, schools, and families.

It is important to recognize that a diagnosis of ADHD is contextual, meaning that a child with the same neurodevelopmental traits may be seen as having ADHD or not depending on his or her specific social and educational environment.

Making an accurate diagnosis of ADHD takes time. It is not a matter of just filling out a standardized form and giving a trial of medication. Physicians must rule out other conditions that may present with ADHD-like symptoms, such as learning disabilities, anxiety, and posttraumatic stress disorder (PTSD). It is important to get an understanding of the child's entire environment, including his or her school and family situation. One must take the time to speak with and observe the child before rushing to a diagnosis.

Yet how often is this possible? Practicing pediatricians and primary care providers are aware of the pressures to make a diagnosis and prescribe a stimulant. Teachers are demanding it of parents, as are parents whose resources of time and energy are strained to the limit. However, how many of our frontline providers have the time and resources to conduct an adequate evaluation?

Where I practice, near Silicon Valley, there are schools of very bright children where up to one-third or more are reported to be taking psychostimulants because of the academic pressure to succeed and be admitted to an elite university.

On the other end of the spectrum, the prevalence of ADHD in Medicaid patients is 33% higher than that seen in the general population. The reasons for this are uncertain, but may well reside in the need to provide behavioral control in situations where there are inadequate services available.

If ADHD is a true neurodevelopmental disease—which it is—then the prevalence of diagnosis and treatment should be consistent. Yet there is dramatic difference in prevalence rates not only by state, but even by county. In 2011, the prevalence of ADHD in Kentucky was 14.8%, which was 250% higher than the 5.6% prevalence reported in Colorado.[4] Although these statewide disparities exist across the United States, there is no reasonable biological explanation for these differences.

Consider this: In 2010 in a study in the *Journal of Health Economics,* 10% of kindergarteners born in August (youngest in class) were diagnosed with ADHD compared with 4.5% of those born in September (oldest in class), and those born in August were twice as likely as those born in September to be treated with psychostimulants.[5] The authors estimated that just this factor alone could have resulted in 900,000 incorrect diagnoses of ADHD. Similar results were found in a Canadian study.[6]

In Iceland, a country with a relatively high use of psychostimulants, investigators found that the entire youngest third of the class was 50% more likely to be diagnosed with ADHD and prescribed psychostimulants.[7] What these studies tell us is that we are unable to distinguish those children who have ADHD from those who are simply immature.

One could argue, and some do, that this might mean we are underdiagnosing the older children; however, I think it is much more likely that we are misdiagnosing children who are simply a little young for the demands being placed on them.

This leads me to the second major reason that I believe ADHD is overdiagnosed: the escalating demands made on children in our current educational system. When those of us who are now mature adults were in kindergarten, all that was required was to be able to eat, sleep, and play. Kindergarteners are now expected to learn to read. Of course, most of them can do so—although studies indicate there is no overall cognitive benefit to this earlier training[8]—but there are some children whose neurodevelopmental level is just not high enough for this level of challenge.

To clarify the point, what if we asked a few hundred 2-year-old children to sit still and focus on learning to read? How many would fit the diagnostic criteria for ADHD? It sounds absurd, but to a lesser but significant extent, this is what is happening in our kindergartens.

In addition, the diagnosis and treatment of ADHD in preschoolers is creating one of the most rapidly growing segments of the ADHD population. How many of us have been asked to diagnose a 3-year-old child with ADHD because they "won't sit still during circle time"? A generation or two ago, many children did not go to preschool and sitting still in a group was not one of the requirements of early childhood education.

Another aspect of this problem involves newer educational policies. In *The ADHD Explosion*, Stephen Hinshaw, PhD, demonstrated that educational accountability policies in schools have had a significant influence on ADHD rates.[9] In the 1990s, policies such as "No Child Left Behind" (signed into law in 2001) began to incentivize schools to boost test scores.

Those states in which this occurred saw the largest increases in the diagnosis of ADHD. After all, with limited educational resources, what better way to quickly increase results than to simply give more children psychostimulants?

Finally, I believe the ever-increasing stress on the average American family is contributing significantly to this problem. Imagine the single-parent or two-working-parent family taking their sons and daughters to school or sometimes early school, working all day as the children go to after-care, and then rushing home to pick them up. They then try to get a decent dinner on the table before homework and bedtime.

The stress on both parents and children is very high. This stress can result in children who may have been able to cope under different circumstances, but who appear to have ADHD in this context (and that also doesn't consider the influence of poor nutrition on these children, which is a subject for another day and another column).

In summary, I do believe that we have an "epidemic" of overdiagnosis of ADHD, the roots of which are deeply ingrained at many levels in our society. We will have to decide whether to treat more of our children with long-term psychostimulants or work together to find a different approach to this persistent problem.

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Overdiagnosis of mental disorders in children and adolescents (in developed countries)

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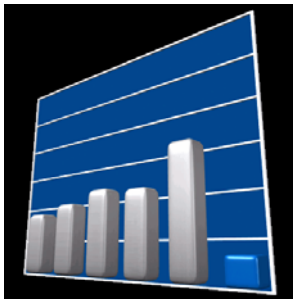
Abstract

During the past 50 years, health insurance providers and national registers of mental health regularly report significant increases in the number of mental disorder diagnoses in children and adolescents. However, epidemiological studies show mixed effects of time trends of prevalence of mental disorders. Overdiagnosis in clinical practice rather than an actual increase is assumed to be the cause for this situation. We conducted a systematic literature search on the topic of overdiagnosis of mental disorders in children and adolescents. Most reviewed studies suggest that misdiagnosis does occur; however, only one study was able to examine overdiagnosis in child and adolescent mental disorders from a methodological point-of-view. This study found significant evidence of overdiagnosis of attention-deficit/hyperactivity disorder. In the second part of this paper, we summarize findings concerning diagnostician, informant and child/adolescent characteristics, as well as factors concerning diagnostic criteria and the health care system that can lead to mistakes in the routine diagnostic process resulting in misdiagnoses. These include the use of heuristics instead of data-based decisions by diagnosticians, misleading information by caregivers, ambiguity in symptom description relating to classification systems, as well as constraints in most health systems to assign a diagnosis in order to approve and reimburse treatment. To avoid misdiagnosis, standardized procedures as well as continued education of diagnosticians working with children and adolescents suffering from a mental disorder are needed.

I. A Sampling of Statistical Reports

D. Specific Problems

2. Autism



Autism Spectrum Disorder Data & Statistics

https://www.cdc.gov/ncbddd/autism/data.html

Prevalence

- About 1 in 59 children has been identified with autism spectrum disorder (ASD) according to estimates from CDC's Autism and Developmental Disabilities Monitoring (ADDM) Network. [Read article]
- ASD is reported to occur in all racial, ethnic, and socioeconomic groups. [Read summary (http://www.ncbi.nlm.nih.gov/pubmed/20634960)] [Read article]
- ASD is about 4 times more common among boys than among girls. [Read article]
- Studies in Asia, Europe, and North America have identified individuals with ASD with an average prevalence of between 1% and 2%. [Data table]
- About 1 in 6 children in the United States had a developmental disability in 2006-2008, ranging from mild disabilities such as speech and language impairments to serious developmental disabilities, such as intellectual disabilities, cerebral palsy, and autism. [Read summary]

Identified Prevalence of Autism Spectrum Disorder

ADDM Network 2000-2014 Combining Data from All Sites

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Prevalence per 1,000 Children (Range)	This is about 1 in X children...
2000	1992	6	6.7 (4.5-9.9)	1 in 150
2002	1994	14	6.6 (3.3-10.6)	1 in 150
2004	1996	8	8.0 (4.6-9.8)	1 in 125
2006	1998	11	9.0 (4.2-12.1)	1 in 110
2008	2000	14	11.3 (4.8-21.2)	1 in 88

Surveillance Year	Birth Year	Number of ADDM Sites Reporting	Prevalence per 1,000 Children (Range)	This is about 1 in X children…
2010	2002	11	14.7 (5.7-21.9)	1 in 68
2012	2004	11	14.6 (8.2-24.6)	1 in 68
2014	2006	11	16.8 (13.1-29.3)	1 in 59

Learn more about prevalence of ASD »

Learn more about the ADDM Network »

Learn more about MADDSP »

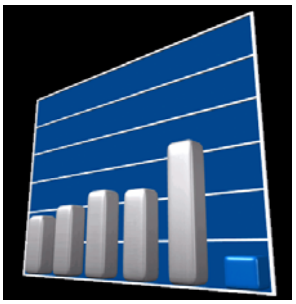
Risk Factors and Characteristics

- Studies have shown that among identical twins, if one child has ASD, then the other will be affected about 36-95% of the time. In non-identical twins, if one child has ASD, then the other is affected about 0-31% of the time. [1-4]
- Parents who have a child with ASD have a 2%–18% chance of having a second child who is also affected.[5,6]
- ASD tends to occur more often in people who have certain genetic or chromosomal conditions. About 10% of children with autism are also identified as having Down syndrome, fragile X syndrome, tuberous sclerosis (http://www.nlm.nih.gov/medlineplus/ency/article/000787.htm) , or other genetic and chromosomal disorders.[7-10]
- Almost half (44%) of children identified with ASD has average to above average intellectual ability. [Read article]
- Children born to older parents are at a higher risk for having ASD. [Read summary (http://www.ncbi.nlm.nih.gov/pubmed/18945690)]
- A small percentage of children who are born prematurely or with low birth weight are at greater risk for having ASD. [Read summary (http://www.ncbi.nlm.nih.gov/pubmed/18519485)]
- ASD commonly co-occurs with other developmental, psychiatric, neurologic, chromosomal, and genetic diagnoses. The co-occurrence of one or more non-ASD developmental diagnoses is 83%. The co-occurrence of one or more psychiatric diagnoses is 10%. [Read summary (http://www.ncbi.nlm.nih.gov/pubmed/20431403)

I. A Sampling of Statistical Reports

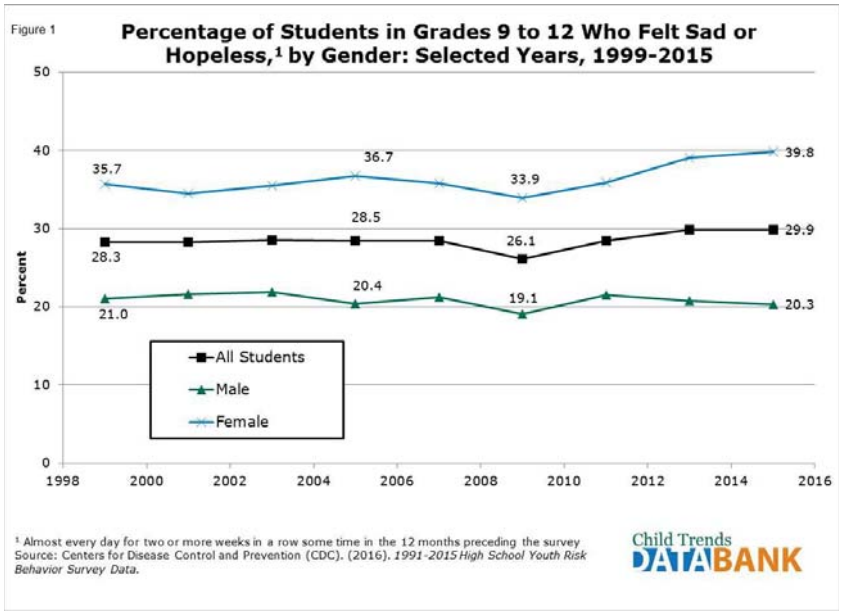
D. Specific Problems

3. Depression & Suicide



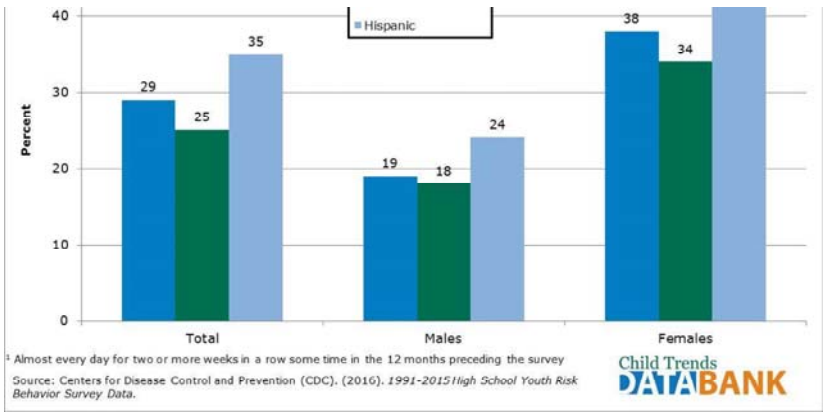
https://www.childtrends.org/indicators/adolescents-who-felt-sad-or-hopeless

The prevalence of "sad or hopeless" feelings as defined here remained steady between 1999 and 2007, staying between 28 and 29 percent. However, between 2007 and 2009, the proportion decreased, from 29 to 26 percent. Most of this decline reflected a lower prevalence of "sad or hopeless" feelings among males. Then, between 2009 and 2015, the prevalence of these feelings increased, from 26 to 30 percent. This rise was driven mainly by an increase among female teens. (Figure 1)



Differences by Gender

Girls are more likely than boys to report feeling sad or hopeless. In 2015, two-fifths of girls reported having been sad or hopeless, while only one-fifth of boys reported having felt the same way. (Figure 1) Rates were highest among Hispanic female students (47 percent). (Figure 2)



Differences by Race and Hispanic Origin*

Hispanic youth are more likely than white or black youth to report feeling sad or hopeless for extended periods of time (35, versus 29 and 25 percent, respectively, in 2015). (Figure 2)

**Hispanics may be any race. Estimates for whites and blacks in this report do not include Hispanics.*

Differences by Grade

In 2015, twelfth-grade boys were significantly more likely to report having felt sad or hopeless than ninth-grade boys (24 versus 17 percent), while ninth-grade girls were more likely to report having felt sad or hopeless than twelfth-grade girls (42 versus 36 percent). There were no significant difference by grade level overall. (Appendix 1)

State and Local Estimates

2015 estimates of feeling sad or hopeless among high school students (Grades 9-12) are available for select states and cities from the Youth Risk Behavior Survey (YRBS) (Table 24).

2015 state-level data on the prevalence of major depressive episodes among youth ages 12-17 are available from the National Survey on Drug Use and Health (Table 26).

International Estimates

International estimates (1997-1998) are available from the World Health Organization.

Data Source

Centers for Disease Control and Prevention (CDC). (2016). 1991-2015 High School Youth Risk Behavior Survey Data. Available at http://nccd.cdc.gov/youthonline/.

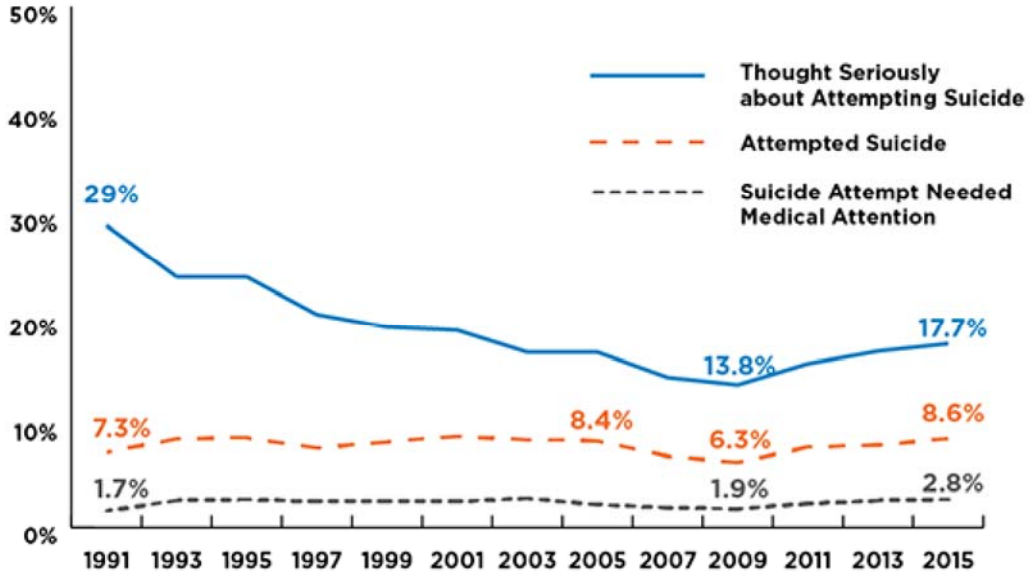
Key facts about teen suicide

- **The percentage of high school students who reported thinking seriously about attempting suicide in the past year is on the rise, after falling substantially during the 1990s and 2000s, reaching almost one-fifth of students in 2015 (18 percent).**
- **As of 2015, the proportion of female high school students who reported attempting, or thinking seriously about attempting, suicide in the past year was larger than for male students.**
- **Also in 2015, a higher percentage of Hispanic high school students reported attempting suicide in the past year than either black or white students.**

Trends

The percentage of high school students who reported thinking seriously about committing suicide in the last year declined from 29 percent in 1991 to 14 percent in 2009. However, the percentage has since increased, reaching 18 percent in 2015. The proportion of students who reported having attempted suicide remained relatively constant in the 1990s and early 2000s (between 7 and 9 percent), but declined between 2005 and 2009, from 8 to 6 percent. This trend reversed in 2011, increasing to 8 percent; by 2015, the figure had increased again to 9 percent. A much smaller proportion—2 to 3 percent of high school students—reported requiring medical attention as a result of a suicide attempt. This proportion remained constant between 1991 and 2009. However, the proportion increased significantly between 2009 and 2013, from 1.9 to 2.8 percent.

Percentage of Students in Grades 9 through 12 who report they Thought Seriously About Attempting Suicide, Attempted Suicide, and Their Attempts Required Medical Attention: 1991-2005



[1] During the past twelve months
Source: Centers for Disease Control and Prevention (CDC). (2016). 1991-2015 High School Youth Risk Behavior Survey Data. Accessed on 11/11/2016. Available at http://nccd.cdc.gov/youthonline/.

childtrends.org

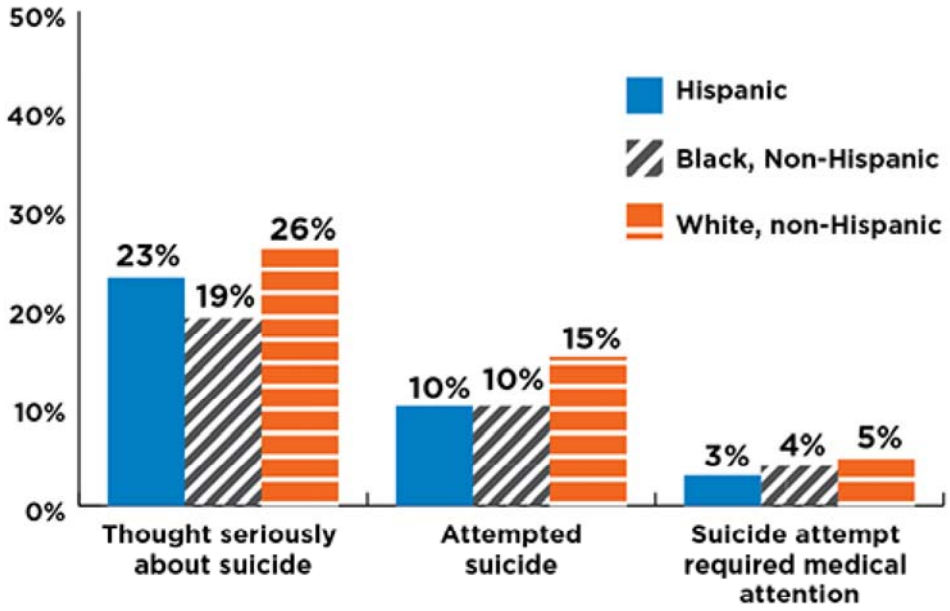
Differences by race and Hispanic origin[6]

In 2015, Hispanic females were more likely to seriously consider suicide than their white or black peers (26 percent, versus 23 and 19 percent, respectively), more likely to report attempting suicide (15 percent, versus 10 percent, each), and more likely to require medical attention for a suicide attempt (5 percent, versus 3 and 4 percent, respectively). (Figure 3) Among males, whites were less likely than blacks and Hispanics to attempt suicide (4 percent, versus 7 and 8 percent, respectively) and less likely to require medical attention for a suicide attempt (1 percent, versus 4 and 3 percent, respectively). (Appendices 2 and 3)

Differences by gender

Females are much more likely than males to report seriously considering suicide (23 and 12 percent, respectively, in 2015), attempting suicide (12 and 6 percent, respectively), and requiring medical attention (4 and 2 percent, respectively). However, males are far more likely to succeed in committing suicide.[5]

Percentage of Female Students in Grades 9 through 12 who report they Thought Seriously About Attempting Suicide, Attempted Suicide, and Their Attempts Required Medical Attention, by Race/Hispanic Origin: 2015



[1] During the twelve months preceding the survey.
[2] Estimates reported here include only respondents who selected one race category.
Source: Centers for Disease Control and Prevention (CDC). (2016). *1991-2015 High School Youth Risk Behavior Survey Data*. Accessed on 11/11/2016. Available at http://nccd.cdc.gov/youthonline/.

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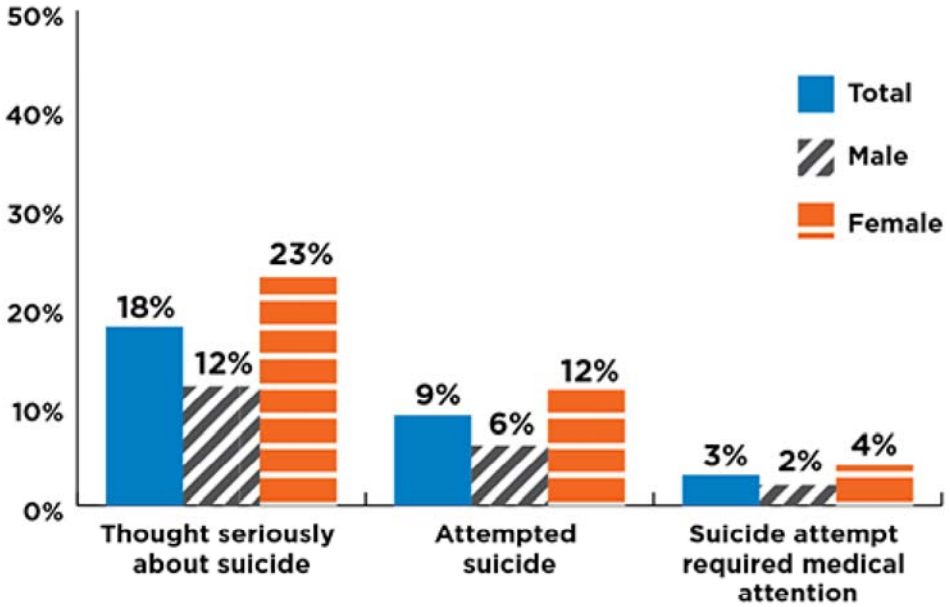
By Gender

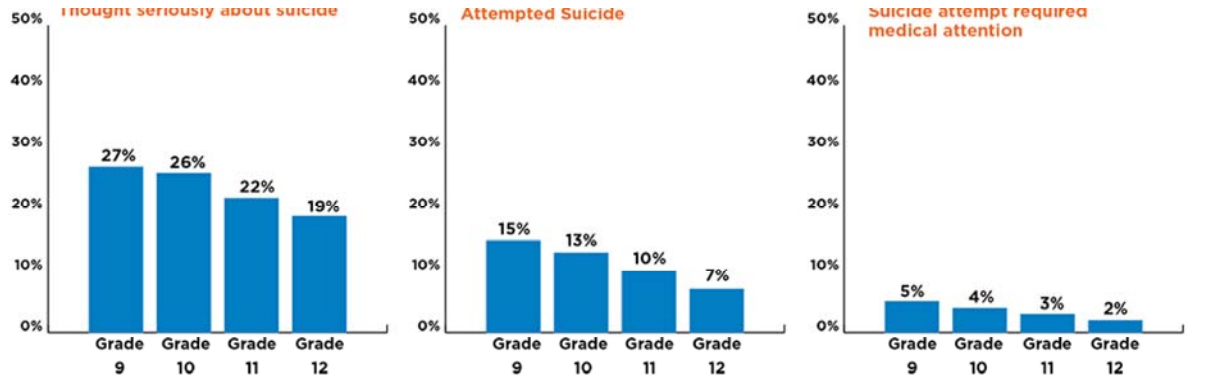


[1] During the past twelve months
Source: Centers for Disease Control and Prevention (CDC). (2016). *1991-2015 High School Youth Risk Behavior Survey Data*. Accessed on 11/11/2016. Available at http://nccd.cdc.gov/youthonline/.

childtrends.org

In 2015, twelth-grade girled were less likely than ninth-grade girls to seriously consider or attempt suicide (19 versus 27 percent). Additionally, ninth-grade girls were more than twice as likely as their twelfth-grade counterparts to attempt suicide (15 versus 7 percent) and to require medical treatment as a result of suicide attempts (5 versus 2 percent).

Percentage of Female Students in Grades 9 through 12 who report they Thought Seriously About Attempting Suicide, Attempted Suicide, and Their Attempts Required Medical Attention, by Grade: 2015



[1] During the twelve months preceding the survey.
Source: Centers for Disease Control and Prevention (CDC). (2016). *1991-2015 High School Youth Risk Behavior Survey Data*. Accessed on 11/11/2016. Available at http://nccd.cdc.gov/youthonline/.

State and local estimates

2015 estimates of suicidal thoughts and attempts among high school students (grades 9 to 12) are available for select states and cities from the Youth Risk Behavior Survey (YRBS) (Tables 26 and 28).

Trends in the Prevalence of Suicide–Related Behaviors
National YRBS: 1991—2017

The national Youth Risk Behavior Survey (YRBS) monitors health behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. The national YRBS is conducted every two years during the spring semester and provides data representative of 9th through 12th grade students in public and private schools throughout the United States.

Percentages														Trend from 1991–2017[1]	Change from 2015–2017[2]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017		
Seriously considered attempting suicide (during the 12 months before the survey)															
29.0	24.1	24.1	20.5	19.3	19.0	16.9	16.9	14.5	13.8	15.8	17.0	17.7	17.2	Decreased 1991—2017 Decreased 1991—2007 Increased 2007—2017	No change
Made a suicide plan (during the 12 months before the survey)															
18.6	19.0	17.7	15.7	14.5	14.8	16.5	13.0	11.3	10.9	12.8	13.6	14.6	13.6	Decreased 1991—2017 Decreased 1991—2009 Increased 2009—2017	No change
Attempted suicide (one or more times during the 12 months before the survey)															
7.3	8.6	8.7	7.7	8.3	8.8	8.5	8.4	6.9	6.3	7.8	8.0	8.6	7.4	Decreased 1991—2017	No change
Made a suicide attempt that had to be treated by a doctor or nurse (during the 12 months before the survey)															
1.7	2.7	2.8	2.6	2.6	2.6	2.9	2.3	2.0	1.9	2.4	2.7	2.8	2.4	No change 1991—2017	No change

[1] Based on linear and quadratic trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade, $p < 0.05$. Significant linear trends (if present) across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).

[2] Based on t-test analysis, $p < 0.05$.

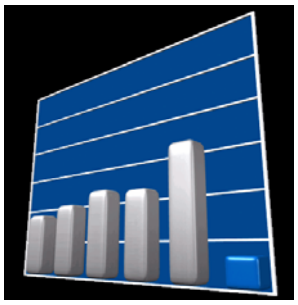
https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trends/2017_suicide_trend_yrbs.pdf

Where can I get more information? Visit www.cdc.gov/yrbss or call 800–CDC–INFO (800–232–4636).

I. A Sampling of Statistical Reports

D. Specific Problems

4. Substance Abuse



Trends in the Prevalence of Alcohol Use
National YRBS: 1991—2017

The national Youth Risk Behavior Survey (YRBS) monitors health behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. The national YRBS is conducted every two years during the spring semester and provides data representative of 9th through 12th grade students in public and private schools throughout the United States.

Percentages														Trend from 1991–2017[1]	Change from 2015–2017[2]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017		
Ever drank alcohol (at least one drink of alcohol on at least 1 day during their life)															
81.6	80.9	80.4	79.1	81.0	78.2	74.9	74.3	75.0	72.5	70.8	66.2	63.2	60.4	Decreased 1991—2017 Decreased 1991—2007 Decreased 2007—2017	No change
Drank alcohol before age 13 years (had their first drink other than a few sips)															
32.7	32.9	32.4	31.1	32.2	29.1	27.8	25.6	23.8	21.1	20.5	18.6	17.2	15.5	Decreased 1991—2017 No change 1991—1999 Decreased 1999—2017	No change
Current alcohol use (at least one drink of alcohol on at least 1 day during the 30 days before the survey)															
50.8	48.0	51.6	50.8	50.0	47.1	44.9	43.3	44.7	41.8	38.7	34.9	32.8	29.8	Decreased 1991—2017 Decreased 1991—2007 Decreased 2007—2017	No change

[1] Based on linear and quadratic trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade, $p < 0.05$. Significant linear trends (if present) across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).
[2] Based on t-test analysis, $p < 0.05$.

https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trends/2017_alcohol_trend_yrbs.pdf

Where can I get more information? Visit www.cdc.gov/yrbss or call 800–CDC–INFO (800–232–4636).

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of Adolescent and School Health

Trends in the Prevalence of Marijuana, Cocaine, and Other Illegal Drug Use National YRBS: 1991—2017

The national Youth Risk Behavior Survey (YRBS) monitors health behaviors that contribute to the leading causes of death, disability, and social problems among youth and adults in the United States. The national YRBS is conducted every two years during the spring semester and provides data representative of 9th through 12th grade students in public and private schools throughout the United States.

Percentages														Trend from 1991–2017[1]	Change from 2015–2017[2]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017		
Ever used marijuana (also called grass, pot, or weed, one or more times during their life)															
31.3	32.8	42.4	47.1	47.2	42.4	40.2	38.4	38.1	36.8	39.9	40.7	38.6	35.6	Increased 1991—1997 Decreased 1997—2017	No change
Tried marijuana before age 13 years															
7.4	6.9	7.6	9.7	11.3	10.2	9.9	8.7	8.3	7.5	8.1	8.6	7.5	6.8	Decreased 1991—2017 Increased 1991—1999 Decreased 1999—2017	No change
Current marijuana use (one or more times during the 30 days before the survey)															
14.7	17.7	25.3	26.2	26.7	23.9	22.4	20.2	19.7	20.8	23.1	23.4	21.7	19.8	Increased 1991—1995 Decreased 1995—2017	No change
Ever used cocaine (any form of cocaine, such as powder, crack, or freebase, one or more times during their life)															
5.9	4.9	7.0	8.2	9.5	9.4	8.7	7.6	7.2	6.4	6.8	5.5	5.2	4.8	Decreased 1991—2017 Increased 1991— 2001 Decreased 2001—2017	No change
Ever used hallucinogenic drugs (such as LSD, acid, PCP, angel dust, mescaline, or mushrooms, one or more times during their life)															
—[3]	—	—	—	—	13.3	10.6	8.5	7.8	8.0	8.7	7.1	6.4	6.6	Decreased 2001—2017 Decreased 2001—2005 Decreased 2005—2017	No change

https://www.cdc.gov/healthyyouth/data/yrbs/pdf/trends/2017_us_drug_trend_yrbs.pdf

Where can I get more information? Visit www.cdc.gov/yrbss or call 800–CDC–INFO (800–232–4636).

National Center for HIV/AIDS, Viral Hepatitis, STD, and TB Prevention
Division of Adolescent and School Health

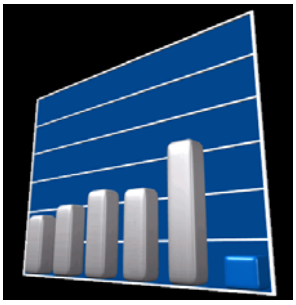
Percentages														Trend from 1991–2017[1]	Change from 2015–2017[2]
1991	1993	1995	1997	1999	2001	2003	2005	2007	2009	2011	2013	2015	2017		
Ever used inhalants (sniffed glue, breathed the contents of aerosol spray cans, or inhaled any paints or sprays to get high, one or more times during their life)															
—	—	20.3	16.0	14.6	14.7	12.1	12.4	13.3	11.7	11.4	8.9	7.0	6.2	Decreased 1995—2017 Decreased 1995—2011 Decreased 2011—2017	No change
Ever used ecstasy (also called "MDMA", one or more times during their life)															
—	—	—	—	—	11.1	11.1	6.3	5.8	6.7	8.2	6.6	5.0	4.0	Decreased 2001—2017	Decreased
Ever used heroin (also called "smack," "junk," or "China white," one or more times during their life)															
—	—	—	—	2.4	3.1	3.3	2.4	2.3	2.5	2.9	2.2	2.1	1.7	Decreased 1999—2017 No change 1999—2011 Decreased 2011—2017	No change
Ever used methamphetamines (also called "speed," "crystal," "crank," or "ice," one or more times during their life)															
—	—	—	—	9.1	9.8	7.6	6.2	4.4	4.1	3.8	3.2	3.0	2.5	Decreased 1999—2017	No change
Ever took steroids without a doctor's prescription (pills or shots, one or more times during their life)															
2.7	2.2	3.7	3.1	3.7	5.0	6.1	4.0	3.9	3.3	3.6	3.2	3.5	2.9	Increased 1991—2001 Decreased 2001—2017	No change
Ever injected any illegal drug (used a needle to inject any illegal drug into their body one or more times during their life)															
—	—	2.1	2.1	1.8	2.3	3.2	2.1	2.0	2.1	2.3	1.7	1.8	1.5	Decreased 1995—2017 No change 1995—2011 Decreased 2011—2017	No change
Offered, sold, or given an illegal drug on school property (during the 12 months before the survey)															
—	24.0	32.1	31.7	30.2	28.5	28.7	25.4	22.3	22.7	25.6	22.1	21.7	19.8	Decreased 1993—2017 Increased 1993—1997 Decreased 1997—2017	No change

[1] Based on linear and quadratic trend analyses using logistic regression models controlling for sex, race/ethnicity, and grade, $p < 0.05$. Significant linear trends (if present) across all available years are described first followed by linear changes in each segment of significant quadratic trends (if present).
[2] Based on t-test analysis, $p < 0.05$.
[3] Not available.

Where can I get more information? Visit www.cdc.gov/yrbss or call 800–CDC–INFO (800–232–4636).

I. A Sampling of Statistical Reports

E. Cultural and Economic Influence on Prevalence and Service



Mental Health Disparities: **Diverse Populations**

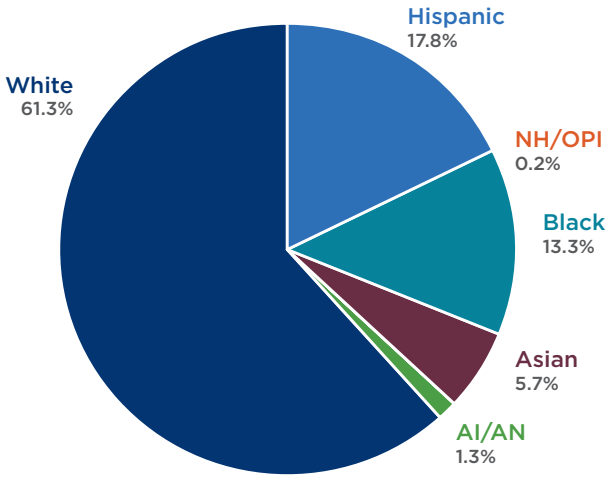
AMERICAN PSYCHIATRIC ASSOCIATION

https://www.psychiatry.org/psychiatrists/cultural-competency/mental-health-disparities

Mental Health in U.S.

- Approximately 18% of US adults have a diagnosable mental disorder in a given year, and approximately 4% of adults have a serious mental illness. [1]
- Mental and behavioral disorders are among the leading causes of disability in the U.S., accounting for 13.6% of all years of life lost to disability and premature death. [2]
- Mental disorders are among the top most costly health conditions for adults 18 to 64 in the U.S., along with cancer and trauma-related disorders. [3]
- An estimated 43% of people with any mental illness receive mental health treatment/ counseling. [4]

US Population, 2016



Source: US Census. Quick Facts: Population Estimates 2016. www.psychiatry.org/psychiatrists/practice/professional-interests/disaster-and-trauma (Notes: AI/AN – American Indian/Alaska Native, NH/OPI – Native Hawaiian/Other Pacific Islander)

Increasingly Diverse Population

The U.S. population is continuing to become more diverse. By 2044, more than half of all Americans are projected to belong to a minority group (any group other than non-Hispanic White alone). [5]

Mental Health, Diverse Populations and Disparities

Most racial/ethnic minority groups overall have similar—or in some cases, fewer—mental disorders than whites. However, the consequences of mental illness in minorities may be long lasting.

- Ethnic/racial minorities often bear a disproportionately high burden of disability resulting from mental disorders.
- Although rates of depression are lower in blacks (24.6%) and Hispanics (19.6%) than in whites (34.7%), depression in blacks and Hispanics is likely to be more persistent. [6]
- People who identify as being two or more races (24.9%) are most likely to report any mental illness within the past year than any other race/ethnic group, followed by American Indian/Alaska Natives (22.7%), white (19%), and black (16.8%).
- American Indians/Alaskan Natives report higher rates of posttraumatic stress disorder and alcohol dependence than any other ethic/ racial group.
- White Americans are more likely to die by suicide than people of other ethnic/racial groups.

- Mental health problems are common among people in the criminal justice system, which has a disproportionate representation of racial/ethnic minorities. Approximately 50% to 75% of youth in the juvenile justice system meet criteria for a mental health disorder. [7]
- Racial/ethnic minority youth with behavioral health issues are more readily referred to the juvenile justice system than to specialty primary care, compared with white youth. Minorities are also more likely to end up in the juvenile justice system due to harsh disciplinary suspension and expulsion practices in schools.[8]
- Lack of cultural understanding by health care providers may contribute to underdiagnosis and/or misdiagnosis of mental illness in people from racially/ethnically diverse populations. Factors that contribute to these kinds of misdiagnoses include language differences between patient and provider, stigma of mental illness among minority groups, and cultural presentation of symptoms.

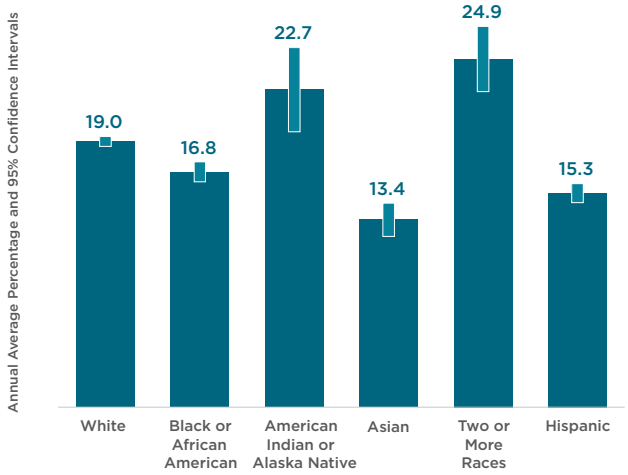
Disparities in Mental Health Service Use

People from racial/ethnic minority groups are less likely to receive mental health care. For example, in 2015, among adults with any mental illness, 48% of whites received mental health services, compared with 31% of blacks and Hispanics, and 22% of Asians.[9]

There are differences in the types of services (outpatient, prescription, inpatient) used more frequently by people of different ethnic/racial groups. Adults identifying as two or more races, whites, and American Indian/Alaska Natives were more likely to receive outpatient mental health services and more likely to use prescription psychiatric medication than other racial/ethnic groups. Inpatient mental health services were used more frequently by black adults and those reporting two or more races. Asians are less likely to use mental health services than any other race/ethnic group.[10]

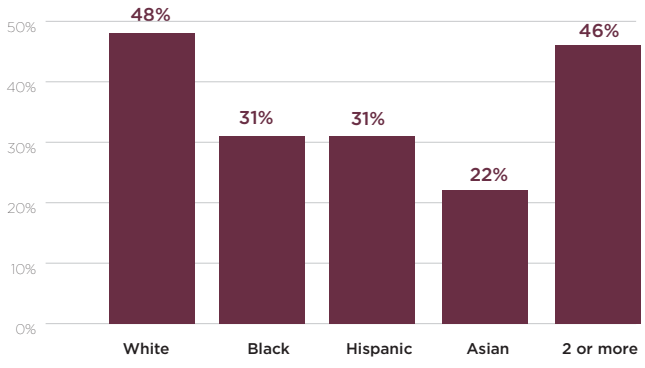
Among all racial/ethnic groups, except American Indian/Alaska Native, women are much more likely to receive mental health services than men.[10]

Any Mental Illness in the Past Year among Adults, by Race/Ethnicity, 2008-2012



Source: Substance Abuse and Mental Health Service Administratio., Racial/Ethnic Differences in Mental Health Service Use among Adults. 2015

Among People with Any Mental Illness, Percent Receiving Services, 2015



Source: Substance Abuse and Mental Health Services Administration. National Survey on Drug Use and Health. 2008-2015.

Perceived Need for Mental Health Care: The Intersection of Race, Ethnicity, Gender, and Socioeconomic Status

Alice P. Villatoro, Vickie M. Mays, Ninez A. Ponce, more...

First Published August 1, 2017 | Research Article |
https://doi.org/10.1177/2156869317718889

Abstract

Racial/ethnic minority populations underutilize mental health services, even relative to psychiatric disorder, and differences in perceived need may contribute to these disparities. Using the Collaborative Psychiatric Epidemiology Surveys, we assessed how the intersections of race/ethnicity, gender, and socioeconomic status affect perceived need. We analyzed a nationally representative sample of U.S. adults (18years or older; N= 14,906), including non-Latino whites, Asian Americans, Latinos, African Americans, and Afro-Caribbeans. Logistic regressions were estimated for the total sample, a clinical need subsample (meets lifetime diagnostic criteria for a psychiatric disorder), and a no disorder subsample. Perceived need varies by gender and nativity, but these patterns are conditional on race/ethnicity. Men are less likely than women to have a perceived need, but only among non-Latino whites and African Americans. Foreign-born immigrants have lower perceived need than U.S.-born persons, but only among Asian Americans. Intersectional approaches to understanding perceived need may help uncover social processes that lead to disparities in mental health care.

Early childhood special education in a refugee resettlement community: challenges and innovative practices

Jennifer J. Hurley, Rachel A. Warren, Rebecca D. Habalow, Lauren E. Weber & Sarah R. Tousignant

Pages 50-62 | Received 04 Dec 2012, Accepted 20 Jan 2013, Published online: 27 Feb 2013

Early Child Development and Care ›

Volume 184, 2014 - Issue 1 https://www.tandfonline.com/doi/pdf/10.1080/03004430.2013.769214

There has been a significant increase in the number of children who are culturally and linguistically diverse who qualify for early childhood special education (ECSE) services [Banerjee, R., & Guiberson, M. (2012). "Evaluating young children from culturally and linguistically diverse backgrounds for special education services." "Young Exceptional Children", The current study investigates the challenges and innovative practices in the evaluation and ECSE services for preschool aged children who are refugees. Twenty-eight early childhood educators who work in a small refugee resettlement community participated in a qualitative study using semi-structured interviews resulting in themes regarding challenges and innovative practices. Challenges include: lack of validated assessments, wait time for evaluations, different cultural perspectives and family advocacy. Innovative practices include: assessing skills not dependent on language and including caregivers in evaluations. Implications for future research and teacher preparation are discussed.

II. A Sample of Primary Sources & Some Analyses

A. How many young people are affected?

B. How are data commonly reported?

C. Increasing Rates?

D. Are they being served?

Centers for Disease Control and Prevention
CDC 24/7: Saving Lives, Protecting People™

https://www.cdc.gov/mentalhealth/data_publications/index.htm

The reports and other products in this section can serve as resources to public health officials and other health professionals who need up-to-date statistics and data sources around mental health and mental illness. However, these lists of reports and data tools are not exhaustive.

Public Health Data Systems that Provide Mental Health Information

Behavioral Risk Factor Surveillance System (BRFSS)

BRFSS collects information on health risk behaviors, preventative practices, and healthcare access. Questions include recent mentally unhealthy days, anxiety and depressive disorders, mental illness and stigma, and psychological distress.

National Health and Nutrition Examination Survey (NHANES)

NHANES assesses health and nutritional status through interviews and physical examinations. Collected data cover a number of conditions, including depression and anxiety, symptoms of conditions, concerns associated with mental health and substance abuse, and mental health service use and need.

National Health Interview Survey (NHIS)

NHIS collects data on both adult and children's mental health and mental disorders. For adults, this includes serious psychological distress and feelings of depression and anxiety. For children, this includes the presence of attention deficit/hyperactivity disorder and autism spectrum disorder. The NHIS also examines mental health service use and whether individuals have unmet mental health needs. Questions about recent anxiety or frequent stress have been included in previous years.

National Ambulatory Medical Care Survey

NAMCS collects data on visits to nonfederally employed office-based physicians who are primarily engaged in direct patient care and, starting in 2006, a separate sample of visits to community health centers. Data are collected on type of provider, medications, primary diagnoses and presence of long-lasting conditions.

National Hospital Care Survey (NHCS)

NHCS allows examination of care provided across treatment settings. Data cover physicians' diagnoses, services and procedures, types of healthcare professionals seen, hospital characteristics, discharge diagnoses, surgical and diagnostic procedures, and prescriptions for ambulatory visits.

National Study of Long-Term Care Providers (NSLTCP)

NSLTCP monitors trends in the supply, provision, and use of the major sectors of paid, regulated long-term care services. Data cover mental illness, depression, and service use.

National Survey of the Diagnosis and Treatment of ADHD and Tourette Syndrome (NS-DATA)

NS-DATA collects information about children 2 to 15 years old in 2011-2012 who had ever been diagnosed with attention-deficit/hyperactivity disorder (ADHD) and/or Tourette syndrome (TS) with the goal of better understanding diagnostic practices, level of impairment, and treatments for this group of children.

National Violent Death Reporting System (NVDRS)

NVDRS collects data from medical examiners, coroners, police, crime labs, and death certificates to understand the circumstances surrounding violent deaths, including suicide. NVDRS can also provide details on the circumstances that may have led to violent deaths, including mental illness and mental disorders.

Pregnancy Risk Assessment Monitoring System (PRAMS)

PRAMS collects data on maternal attitudes and experiences before, during, and after pregnancy. Surveillance research includes the prevalence of self-reported postpartum depression and anxiety symptoms.

School Health Policies and Programs Study (SHPPS)

SHPPS is a national survey assessing school health policies and practices at the state, district, school, and classroom levels. Collected data includes mental health and social service policies.

WISQARS™

CDC's WISQARS (Web-based Injury Statistics Query and Reporting System) is an interactive database system that provides customized reports of injury-related data, such as intentional self-harm including suicide.

Youth Risk Behavior Surveillance System (YRBSS)

The YRBSS monitors health-risk behaviors including tobacco use, substance abuse, unintentional injuries and violence, sexual behaviors that contribute to unintended pregnancy and STDs.

National Survey of Children's Health (NSCH)

NSCH examines the health of children including those with special needs with an emphasis on well-being, such as medical homes, family interactions, parental health, school and after-school experiences, and safe neighborhoods. The survey also collects information on the presence of a mental or behavioral problem.

Mental Health Reports and Publications

Selected Scientific Articles

2017

Albert M, Rui P, Ashman JJ. Physician office visits for attention-deficit/hyperactivity disorder in children and adolescents aged 4–17 years: United States, 2012–2013. NCHS data brief, no 269. Hyattsville, MD: National Center for Health Statistics. 2017.

Kegler SR, Stone DM, Holland KM. Trends in Suicide by Level of Urbanization — United States, 1999–2015 (http://dx.doi.org/10.15585/mmwr.mm6610a2) . MMWR Morb Mortal Wkly Rep 2017;66:270–273.

Ko JY, Rockhill KM, Tong VT, Morrow B, Farr SL. Trends in Postpartum Depressive Symptoms — 27 States, 2004, 2008, and 2012 (http://dx.doi.org/10.15585/mmwr.mm6606a1) . MMWR Morb Mortal Wkly Rep 2017;66:153–158.

McKnight-Eily LR, Okoro CA, Mejia R, et al. Screening for Excessive Alcohol Use and Brief Counseling of Adults — 17 States and the District of Columbia, 2014 (http://dx.doi.org/10.15585/mmwr.mm6612a1) . MMWR Morb Mortal Wkly Rep 2017; 66:313–319.

Pratt LA, Brody DJ, Gu Q. Antidepressant use among persons aged 12 and over: United States, 2011–2014. NCHS data brief, no 283. Hyattsville, MD: National Center for Health Statistics. 2017.

Robinson LR, Holbrook JR, Bitsko RH, et al. Differences in Health Care, Family, and Community Factors Associated with Mental, Behavioral, and Developmental Disorders Among Children Aged 2–8 Years in Rural and Urban Areas — United States, 2011–2012 (http://dx.doi.org/10.15585/mmwr.ss6608a1) . MMWR Surveill Summ 2017;66(No. SS-8):1 –11.

QuickStats: Suicide Rates for Teens Aged 15–19 Years, by Sex — United States, 1975–2015 (http://dx.doi.org/10.15585/mmwr.mm6630a6) . MMWR Morb Mortal Wkly Rep

2016

Bitsko RH, Holbrook JR, Robinson LR, et al. Health Care, Family, and Community Factors Associated with Mental, Behavioral, and Developmental Disorders in Early Childhood — United States, 2011–2012 (http://dx.doi.org/10.15585/mmwr.mm6509a1) . MMWR Morb Mortal Wkly Rep 2016; 65:221–226.

Curtin SC, Warner M, Hedegaard H. Increase in suicide in the United States, 1999–2014. NCHS data brief, no 241. Hyattsville, MD: National Center for Health Statistics. 2016.

David-Ferdon C, Crosby AE, Caine ED, Hindman J, Reed J, Iskander J. CDC Grand Rounds: Preventing Suicide Through a Comprehensive Public Health Approach (http://dx.doi.org/10.15585/mmwr.mm6534a2) . MMWR Morb Mortal Wkly Rep 2016;65:894–897.

A. How Many Young People are Affected?

The following documents provide the data from studies that reflect the most rigorous efforts to gather and report findings. As our earlier analyses indicated, each has its limitations (http://smhp.psych.ucla.edu/pdfdocs/2005%20analyses.pdf). For example, the major sources of data reflect significant limitations related to sampling and methodology that must be taken into consideration in sharing the data. These include widely recognized concerns about overreliance on accessible samples and those who are not represented, administration of lengthy surveys, the nature and scope of survey items, participant recall of the past, what should be viewed as a symptom rather than a common response to life experiences, problems related to statistical analyses, the degree to which the interpretations of the findings are generalizable, and more.

It is widely acknowledged that available information on prevalence and incidence of mental health and psychosocial problems and related service provision varies markedly in both quantity and quality. For instance, some youngsters may be counted more than once when they have multiple problems. Children and adolescents frequently have multiple problems, and reporting each separately inflates overall numbers and percentages of individuals having problems and needing services.

Nevertheless, as the best data available, it is not surprising that the findings from the various studies and reports are highlighted, extrapolated, and widely cited in order to shed some light on young people's problems.

Prevalence

Click to Enlarge (/img/ymh_infographic.png)

Most youth are healthy, physically and emotionally, yet one in every four to five youth in the general population meet criteria for a lifetime mental disorder that is associated with severe role impairment and/or distress (11.2 percent with mood disorders, 8.3 percent with anxiety disorders, and 9.6 percent behavior disorders).[1] A national and international literature review found that an average of 17 percent of young people experience an emotional, mental, or behavioral disorder. Substance abuse or dependence was the most commonly diagnosed group for young people, followed by anxiety disorders, depressive disorders, and attention deficit hyperactivity disorder.[2] The rate of serious mental illness was higher for 18 to 25 year olds (7.4 percent) in 2008 than for any other age group over 18.[3] In addition, the onset for 50 percent of adult mental health disorders occurs by age 14, and for 75 percent of adults by age 24.[4]

Depression and Suicide

In 2008, 8.1 percent of youth ages 12 to 17 and 8.7 percent of young adults between the ages of 18 and 25 had at least one depressive episode. In addition, six percent of 12- to 17-year-olds and 5.4 percent of 18- to 25-year-olds had at least one major depressive episode with severe impairment.[5] Suicide (https://youth.gov/youth-topics/youth-suicide-prevention) is the third leading cause of death for youth between the ages of 10 and 24, resulting in 4,513 deaths in 2008.[6] Further, in a survey of private and public high school students,

- 13.8 percent reported that they had seriously considered attempting suicide;
- 10.9 percent had made a plan for how they would attempt suicide;
- 6.3 percent reported that they had attempted suicide one or more times within the past year; and
- 1.9 percent had made a suicide attempt that resulted in an injury, poisoning, or an overdose that had to be treated by a doctor or nurse.[7]

Youth at Higher Risk for Mental Illness

Youth from low-income households are at increased risk for mental health disorders:

- Twenty-one percent of low-income children and youth ages 6 to 17 have mental health disorders.[10]
- Fifty-seven percent of these low-income children and youth come from households with incomes at or below the federal poverty level.[11]

Youth involved in the child welfare and juvenile justice (https://youth.gov/youth-topics/juvenile-justice) systems are at even higher risk for having a mental health disorder:

- Fifty percent of children and youth in the child welfare system have mental health disorders.[12]
- Sixty-seven to seventy percent of youth in the juvenile justice system have a diagnosable mental health disorder.[13]
- The risk for mental health problems, especially traumatic stress, is greatly increased for children who are living in foster care as a result of abuse and neglect. Children often suffer from traumatic stress after experiencing or witnessing the injury or death of someone else, or otherwise feeling seriously threatened.[14]

Youth of color experience disparities in prevalence and treatment for mental health issues:

- Eighty-eight percent of Latino children and youth have unmet mental health needs, compared to 77 percent for African-Americans and 76 percent for white children and youth.[15]
- Thirty-one percent of white children and youth receive mental health services compared to thirteen percent of children of color.[16]
- Twenty percent of female Latino high school students seriously considered attempting suicide and 15.4 percent made a suicide plan, compared to 16.1 percent of white female high school students who considered it and 12.3 percent who made a suicide plan.[17]

Youth who have disabilities (https://youth.gov/youth-topics/disabilities) experience mental health issues at higher rates than their peers without disabilities:

- Individuals with autism spectrum disorders (ASDs) are more likely than their nondisabled peers to experience depression and anxiety.[18]
- Youth with learning disabilities have increased risk for severe depression and suicide.[19]
- Youth with physical disabilities such as cerebral palsy and spina bifida have increased risk for severe depression.[20]

Many youth also face co-occurring substance abuse and mental health disorders. Click to learn more about co-occurring disorders (/youth-topics/youth-mental-health/co-occurring) and substance abuse (/youth-topics/substance-abuse).

Resources

Adolescent Mental Health (http://www.hhs.gov/ash/oah/adolescent-health-topics/mental-health/index.html)
The Office of Adolescent Health provides information on a range of topics including mental health. You can review national level data as well as state specific information. In addition there is information on mental health disorders, access to care, and positive mental health and resilience.

Child Health USA (http://mchb.hrsa.gov/publications/childhealthusa.html)
Child Health USA is the Health Resources and Services Administration's annual report on the health status and service needs of America's children. The book is a compilation of secondary data for many health status indicators, and provides both graphical and textual summaries of data and addresses long-term trends. The site provides information on a range of indicators, including mental health.

Healthy Youth Mental Health
(http://www.cdc.gov/healthyyouth/mentalhealth/index.htm)
This Centers for Disease Control and Prevention website provides information on mental health targeted at youth adolescent and school health. The site includes information from the Youth Risk Behavior Survey data and school policies and programs to support youth mental health.

Mental Health Statistics
(http://www.samhsa.gov/data/2k12/MHUS2010/index.aspx)
The Substance Abuse and Mental Health Services Administration released *Mental Health, United States, 2010,* the latest in a series of publications issued biannually since 1980. This report includes mental health statistics at the national and state levels from 35 different data sources.

Youth and Mental Health Issues (http://store.samhsa.gov/product/Results-from-the-2010-National-Survey-on-Drug-Use-and-Health-NSDUH-Mental-Health-Findings/SMA11-4667)
The Substance Abuse and Mental Health Services Administration's Office of Applied Studies provides national estimates on mental health problems including a section targeted specifically to youth mental health issues. The latest available data (http://store.samhsa.gov/product/Results-from-the-2010-National-Survey-on-Drug-Use-and-Health-NSDUH-Mental-Health-Findings/SMA11-4667) was released in 2010.

Youth Suicide
(http://www.cdc.gov/ViolencePrevention/suicide/youth_suicide.html)
Suicide is a serious public health problem. The Centers for Disease Control and Prevention provides information on youth suicide, risk factors, and prevalence data as a subsection of their information on suicide prevention. The information on suicide prevention includes definition, data and statistics, risk and protective factors, prevention methods, and additional resources and links to more information.

B. How are the Data Commonly Reported?

The following documents provide a few examples of how statistics on child and adolescent problems are frequently shared. Again, we emphasize that the reports offer data that is extrapolated from sources that raise significant sampling and methodological concerns.

We note, for example, that it continues to be commonplace for reports to indicate that "from 12% to 22% of all youngsters under age 18 are in need of services for mental, emotional or behavioral problems." These figures stem from the 1999 Surgeon General's report on *Mental Health* (U.S. Department of Health and Human Services, 1999). Referring to ages 9 to 17, that document states that 21% or "one in five children and adolescents experiences the signs and symptoms of a ... disorder during the course of a year" – with 11% of all children experiencing significant impairment and about 5 percent experiencing "extreme functional impairment." Of the 5 percent with extreme problems, estimates suggest that 13% have anxiety disorders, 10% have disruptive disorders, 6% have mood disorders, 2% have substance abuse disorders; some have multiple diagnoses. https://profiles.nlm.nih.gov/ps/retrieve/ResourceMetadata/NNBBHS

Also note that special education data continue to indicate high levels of Specific Learning Disabilities (LD) and increasing rates of Attention Deficit-Hyperactivity Disorder (ADHD),

A particular concern about all the statistics related to children and adolescents is that widespread learning, behavior, and emotional problems are being overdiagnosed using formal pathological labels. The reality is that there are a great many students who are not doing well at school and only a relatively small number have problems that warrant formal diagnoses. The evidence is that 40% of young people are in bad educational shape and therefore will fail to fulfill their promise. In many schools serving low-income populations over 50% are not doing well. For a large proportion of these youngsters, the problems are rooted in the restricted opportunities and difficult living conditions associated with poverty.

For an example of how the data are reported, go back to pages 8-11.

IDEA Section 618 Data Products: State Level Data Files (Excerpts)

https://www2.ed.gov/programs/osepidea/618-data/state-level-data-files/index.html

618 Data Home (/programs/osepidea/618-data/index.html)

Collection Documents (/programs/osepidea/618-data/collection-documentation/index.html)

State Level Data Files (/programs/osepidea/618-data/state-level-data-files/index.html)

Static Tables (/programs/osepidea/618-data/static-tables/index.html)

There are 12 data collections authorized under the *Individuals with Disabilities Education Act* (*IDEA*) Section 618 under:

Part B:

1. Child Count;
2. Educational Environments;
3. Personnel;
4. Exiting;
5. Discipline;
6. Assessment;
7. Dispute Resolution; and
8. Maintenance of Effort Reduction and Coordinated Early Intervening Services; and

Part C:

9. Child Count;
10. Settings;
11. Exiting; and
12. Dispute Resolution.

Part C:

- Child Count *
- Child Count and Settings *
- Dispute Resolution
- Exiting
- Settings *

* Prior to school year (SY) 2012, the Part B Child Count and Educational Environments data and the Part C Child Count and Settings data were provided to the public in separate files.

Part B:

- Assessment
- Child Count *
- Child Count and Educational Environments *
- Discipline
- Dispute Resolution
- Educational Environments *
- Exiting
- Maintenance of Effort Reduction and Coordinated Early Intervening Services
- Personnel

Part B

Part B of *IDEA* provides funds to states to assist them in providing free appropriate public education (FAPE) to children ages three through 21 with disabilities who are in need of special education and related services.

Assessment (SY (school year) 2007-08 to present)

- 2015–16 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2015-16.csv) (CSV, 52KB)
- 2014–15 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2014-15.csv) (CSV, 52KB)
- 2013–14 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2013-14.csv) (CSV, 57KB)
- 2012–13 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2012-13.csv) (CSV, 53KB)
- 2011–12 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2011-12.csv) (CSV, 58KB)
- 2010–11 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2010-11.csv) (CSV, 210KB)
- 2009–10 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2009-10.csv) (CSV, 612KB)
- 2008–09 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2008-09.csv) (CSV, 64KB)
- 2007–08 (/programs/osepidea/618-data/state-level-data-files/part-b-data/assessment/bassessment2007-08.csv) (CSV, 62KB)

Child Count * (SY (school year) 2005-06 to SY (school year) 2011-12)

- 2011 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count/bchildcount2011.csv) (CSV, 293KB)
- 2010 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count/bchildcount2010.csv) (CSV, 289KB)
- 2009 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count/bchildcount2009.csv) (CSV, 404KB)
- 2008 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count/bchildcount2008.csv) (CSV, 426KB)
- 2007 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count/bchildcount2007.csv) (CSV, 245KB)
- 2006 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count/bchildcount2006.csv) (CSV, 250KB)
- 2005 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count/bchildcount2005.csv) (CSV, 249KB)

Child Count and Educational Environments (SY (school year) 2012-13 to present)

- 2016 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count-and-educational-environments/bchildcountandedenvironments2016.csv) (CSV, 2.8MB)
- 2015 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count-and-educational-environments/bchildcountandedenvironments2015.csv) (CSV, 2.8MB)
- 2014 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count-and-educational-environments/bchildcountandedenvironments2014.csv) (CSV, 2.8MB)
- 2013 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count-and-educational-environments/bchildcountandedenvironments2013.csv) (CSV, 2.8MB)
- 2012 (/programs/osepidea/618-data/state-level-data-files/part-b-data/child-count-and-educational-environments/bchildcountandedenvironments2012.csv) (CSV, 2.2MB)

Discipline (SY (school year) 2005-06 to present)

- 2015–16 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2015-16.csv) (CSV, 139KB)
- 2014–15 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2014-15.csv) (CSV, 139KB)
- 2013–14 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2013-14.csv) (CSV, 139KB)
- 2012–13 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2012-13.csv) (CSV, 142KB)
- 2011–12 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2011-12.csv) (CSV, 140KB)
- 2010–11 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2010-11.csv) (CSV, 391KB)
- 2009–10 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2009-10.csv) (CSV, 363KB)
- 2008–09 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2008-09.csv) (CSV, 334KB)
- 2007–08 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2007-08.csv) (CSV, 277KB)
- 2006–07 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2006-07.csv) (CSV, 237KB)
- 2005–06 (/programs/osepidea/618-data/state-level-data-files/part-b-data/discipline/bdiscipline2005-06.csv) (CSV, 132KB)

Educational Environments * (SY (school year) 2005-05 to SY (school year) 2011-12)

- 2011 (/programs/osepidea/618-data/state-level-data-files/part-b-data/educational-environments/benvironment2011.csv) (CSV, 8.3MB)
- 2010 (/programs/osepidea/618-data/state-level-data-files/part-b-data/educational-environments/benvironment2010.csv) (CSV, 8.8MB)
- 2009 (/programs/osepidea/618-data/state-level-data-files/part-b-data/educational-environments/benvironment2009.csv) (CSV, 9.8MB)
- 2008 (/programs/osepidea/618-data/state-level-data-files/part-b-data/educational-environments/benvironment2008.csv) (CSV, 9.8MB)
- 2007 (/programs/osepidea/618-data/state-level-data-files/part-b-data/educational-environments/benvironment2007.csv) (CSV, 6.3MB)
- 2006 (/programs/osepidea/618-data/state-level-data-files/part-b-data/educational-environments/benvironment2006.csv) (CSV, 7.0MB)
- 2005 (/programs/osepidea/618-data/state-level-data-files/part-b-data/educational-environments/benvironment2005.csv) (CSV, 5.8MB)

Maintenance of Effort Reduction and Coordinated Early Intervening Services (SY (school year) 2009-10 to present)

States reported these data to the U.S. Department of Education's Office of Special Education Programs (OSEP (/about/offices/list/osers/osep/index.html)) for the first time on May 1, 2011.

- 2015–16 (/programs/osepidea/618-data/state-level-data-files/part-b-data/ceis-moe/bmaintenancedistrict2015-16.csv) (CSV, 2.0MB)
- 2014–15 (/programs/osepidea/618-data/state-level-data-files/part-b-data/ceis-moe/bmaintenancedistrict2014-15.csv) (CSV, 2.0MB)
- 2013–14 (/programs/osepidea/618-data/state-level-data-files/part-b-data/ceis-moe/bmaintenancedistrict2013-14.csv) (CSV, 2.2MB)
- 2012–13 (/programs/osepidea/618-data/state-level-data-files/part-b-data/ceis-moe/bmaintenancedistrict2012-13.csv) (CSV, 2.0MB)
- 2011–12 (/programs/osepidea/618-data/state-level-data-files/part-b-data/ceis-moe/bmaintenancedistrict2011-12.csv) (CSV, 1.8MB)
- 2010–11 (/programs/osepidea/618-data/state-level-data-files/part-b-data/ceis-moe/bmaintenancedistrict2010-11.csv) (CSV, 5.6MB)
- 2009–10 (/programs/osepidea/618-data/state-level-data-files/part-b-data/ceis-moe/bmaintenancedistrict2009-10.csv) (CSV, 5.2MB)

Youth Mental Health Matters

from Mental Health American http://www.mentalhealthamerica.net/conditions/infographic-youth-mental-health-emotions-matter

KIDS AND TEENS ARE DEALING WITH REAL PROBLEMS AND THE COMPLICATED EMOTIONS THAT COME WITH THEM.

According to the National Survey of Children's Health:[4]

2.2 million

children have ever lived with a parent or guardian who has died

5 million

children feel like their family often has a hard time covering "the basics" like food, or housing

7.7 million

children have lived with someone who had a drug or alcohol problem

6.1 million

children have lived with someone who had a mental illness or who was suicidal

2.9 million

children have been treated unfairly because of their race or ethnicity

5.2 million

children have seen or heard physical abuse between adults in their home

6.2 million

children have been victims of violence or witnessed it in their neighborhood

And it doesn't stop there...

36%

of children (ages 2-17) have been emotionally bullied or teased in the past year[5]

1.2 million

children (ages 8-18) are estimated to be caregivers[6]

82.9%

of LGBTQ youth (age 11-17) who take a screen at mhascreening.org score "at-risk" for a mental health disorder[7]

WITHOUT HEALTHY COPING SKILLS, THE EMOTIONS THAT COME ALONG WITH THE ISSUES KIDS ARE FACING CAN RESULT IN BEHAVIOR PROBLEMS.

4.6% of children (ages 3-17) have

Boys are

2 x

been diagnosed with either Oppositional Defiance Disorder or Conduct Disorder

more likely than girls to have these disorders[8]

11%

of those who took the Youth Screen reported having conduct problems often

By the time parents came to take the Parent Screen,

23%

reported seeing conduct problems often in their children[9]

MISBEHAVIOR IN SCHOOLS IS OFTEN ADDRESSED WITH DISCIPLINARY MEASURES LIKE SUSPENSION, EXPULSION, OR EVEN ARREST.

7 million students

received in-school or out-of-school suspensions in the 2011-2012 school year[10]

3 and 4 year olds are expelled from childcare centers at

13x the rate

of K-12 aged youth[11]

92 thousand students

were involved in school-related arrests during one year[12]

BUT DISCIPLINE LIKE THIS OFTEN LEAVES KIDS AND TEENS FEELING ISOLATED AND LABELLED, FURTHER FUELING THE FEELINGS THAT CAUSED THE MISBEHAVIOR IN THE FIRST PLACE AND LEADING TO POOR OUTCOMES DOWN THE ROAD.

48%

of 11-17 year olds who took MHA's Youth Screen said they often felt that they were "bad"[13]

Young students who are expelled or suspended are as much as

10x more likely

to drop out of high school, experience academic failure, be held back, hold negative school attitudes, and face incarceration than those who are not[14]

IT DOESN'T HAVE TO BE THIS WAY. BY PROVIDING SUPPORTIVE ENVIRONMENTS AND TEACHING KIDS AND TEENS TO RECOGNIZE

Youth Risk Behavior Surveillance — United States, 2017

Laura Kann, PhD[1]; Tim McManus, MS[1]; William A. Harris, MM[1]; Shari L. Shanklin, MPH[1]; Katherine H. Flint, MA[2]; Barbara Queen, MS[3]; Richard Lowry, MD[1]; David Chyen, MS[1]; Lisa Whittle, MPH[1]; Jemekia Thornton, MPA[1]; Connie Lim, MPA[1]; Denise Bradford, MS[1]; Yoshimi Yamakawa, MPH[1]; Michelle Leon, MPH[1]; Nancy Brener, PhD[1]; Kathleen A. Ethier, PhD[1]

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Abstract

Problem: Health-risk behaviors contribute to the leading causes of morbidity and mortality among youth and adults in the United States. In addition, significant health disparities exist among demographic subgroups of youth defined by sex, race/ethnicity, and grade in school and between sexual minority and nonsexual minority youth. Population-based data on the most important health-related behaviors at the national, state, and local levels can be used to help monitor the effectiveness of public health interventions designed to protect and promote the health of youth at the national, state, and local levels.

Reporting Period Covered: September 2016–December 2017.

Description of the System: The Youth Risk Behavior Surveillance System (YRBSS) monitors six categories of priority health-related behaviors among youth and young adults: 1) behaviors that contribute to unintentional injuries and violence; 2) tobacco use; 3) alcohol and other drug use; 4) sexual behaviors related to unintended pregnancy and sexually transmitted infections (STIs), including human immunodeficiency virus (HIV) infection; 5) unhealthy dietary behaviors; and 6) physical inactivity. In addition, YRBSS monitors the prevalence of other health-related behaviors, obesity, and asthma. YRBSS includes a national school-based Youth Risk Behavior Survey (YRBS) conducted by CDC and state and large urban school district school-based YRBSs conducted by state and local education and health agencies. Starting with the 2015 YRBSS cycle, a question to ascertain sexual identity and a question to ascertain sex of sexual contacts were added to the national YRBS questionnaire and to the standard YRBS questionnaire used by the states and large urban school districts as a starting point for their questionnaires. This report summarizes results from the 2017 national YRBS for 121 health-related behaviors and for obesity, overweight, and asthma by demographic subgroups defined by sex, race/ethnicity, and grade in school and by sexual minority status; updates the numbers of sexual minority students nationwide; and describes overall trends in health-related behaviors during 1991–2017. This reports also summarizes results from 39 state and 21 large urban school district surveys with weighted data for the 2017 YRBSS cycle by sex and sexual minority status (where available).

Results: Results from the 2017 national YRBS indicated that many high school students are engaged in health-risk behaviors associated with the leading causes of death among persons aged 10–24 years in the United States. During the 30 days before the survey, 39.2% of high school students nationwide (among the 62.8% who drove a car or other vehicle during the 30 days before the survey) had texted or e-mailed while driving, 29.8% reported current alcohol use, and 19.8% reported current marijuana use. In addition, 14.0% of students had taken prescription pain medicine without a doctor's prescription or differently than how a doctor told them to use it one or more times during their life. During the 12 months before the survey, 19.0% had been bullied on school property and 7.4% had attempted suicide. Many high school students are engaged in sexual risk behaviors that relate to unintended pregnancies and STIs, including HIV infection. Nationwide, 39.5% of students had ever had sexual intercourse and 9.7% had had sexual intercourse with four or more persons during their life. Among currently sexually active students, 53.8% reported that either they or their partner had used a condom during their last sexual intercourse. Results from the 2017 national YRBS also indicated many high school students are engaged in behaviors associated with chronic diseases, such as cardiovascular disease, cancer, and diabetes. Nationwide, 8.8% of high school students had smoked cigarettes and 13.2% had used an electronic vapor product on at least 1 day during the 30 days before the survey. Forty-three percent played video or computer games or used a computer for 3 or more hours per day on an average school day for something that was not school work and 15.4% had not been physically active for a total of at least 60 minutes on at least 1 day during the 7 days before the survey. Further, 14.8% had obesity and 15.6% were overweight. The prevalence of most health-related behaviors varies by sex, race/ethnicity, and, particularly, sexual identity and sex of sexual contacts. Specifically, the prevalence of many health-risk behaviors is significantly higher among sexual minority students compared with nonsexual minority

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students. Nonetheless, analysis of long-term temporal trends indicates that the overall prevalence of most health-risk behaviors has moved in the desired direction.

Interpretation: Most high school students cope with the transition from childhood through adolescence to adulthood successfully and become healthy and productive adults. However, this report documents that some subgroups of students defined by sex, race/ethnicity, grade in school, and especially sexual minority status have a higher prevalence of many health-risk behaviors that might place them at risk for unnecessary or premature mortality, morbidity, and social problems (e.g., academic failure, poverty, and crime).

Public Health Action: YRBSS data are used widely to compare the prevalence of health-related behaviors among subpopulations of students; assess trends in health-related behaviors over time; monitor progress toward achieving 21 national health objectives; provide comparable state and large urban school district data; and take public health actions to decrease health-risk behaviors and improve health outcomes among youth. Using this and other reports based on scientifically sound data is important for raising awareness about the prevalence of health-related behaviors among students in grades 9–12, especially sexual minority students, among decision makers, the public, and a wide variety of agencies and organizations that work with youth. These agencies and organizations, including schools and youth-friendly health care providers, can help facilitate access to critically important education, health care, and high-impact, evidence-based interventions.

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December 14, 2017
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Tables summarizing estimates for the drugs discussed below, as well as additional drugs, are here: https://goo.gl/w78A5e
The findings summarized here will be published by the end of January in a forthcoming volume.

National Adolescent Drug Trends in 2017: Findings Released

Marijuana Use Edges Upward

ANN ARBOR—***Marijuana use*** among adolescents edged upward in 2017, the first significant increase in seven years. Overall, past-year use of marijuana significantly increased by 1.3% to 24% in 2017 for 8th, 10th, and 12th graders combined. Specifically, in 8th, 10th, and 12th grades the respective increases were 0.8% (to 10.1%), 1.6% (to 25.5%) and 1.5% (to 37.1%). The increase is statistically significant when all three grades are combined.

"This increase has been expected by many" said Richard Miech, the Principal Investigator of the study. "Historically marijuana use has gone up as adolescents see less risk of harm in using it. We've found that the risk adolescents see in marijuana use has been steadily going down for years to the point that it is now at the lowest level we've seen in four decades."

The results come from the annual Monitoring the Future study, now in its 43rd year. About 45,000 students in some 380 public and private secondary schools have been surveyed each year in this U.S. national study, designed and conducted by research scientists at the University of Michigan's Institute for Social Research and funded by the National Institute on Drug Abuse. Students in grades 8, 10 and 12 are surveyed.

This increase in marijuana drove trends in ***any illicit drug use*** in the past year. In both 12th and 10th grade this measure increased (although the increase was not statistically significant), while use of ***any illicit drug use other than marijuana*** declined (although the decrease was not statistically significant). In 8th grade neither of these drug use measures significantly changed, although they both increased slightly.

First-Ever U.S. Standard Estimates for Vaping of Nicotine, Marijuana, and Flavoring

The 2017 survey also reports first-ever national, standard estimates of ***nicotine vaping, marijuana vaping, flavoring-only vaping, and any vaping***. Previously, no national study has published estimates for vaping of specific substances for the standard time periods of past 30 days, past year, and lifetime.

Levels of ***marijuana vaping*** are considerable. One in ten 12th grade students vaped marijuana in the past year, and levels were 8% and 3% for 10th and 8th grade students, respectively. These annual levels are about the same as the levels for *lifetime* prevalence[1] of vaping marijuana use, indicating that almost all marijuana vaping had occurred within one year of the survey.

Levels of ***nicotine vaping*** are also considerable, with 19% of 12th grade students vaping nicotine in the past year. The annual prevalence levels were 16% and 8% for 10th and 8th grade students, respectively. It is also possible that additional students are getting nicotine in what they vape but are not aware of it, so these are lower bound estimates.

Levels of ***overall vaping*** were similar in 2017 to their previous levels in 2016, although the measures are not directly comparable. Updated vaping questions in 2017 asked about vaping of specific substances, while in previous years vaping questions were about any vaping in general. With this caveat, the percentage of students in 2017 who reported vaping flavoring, marijuana, or nicotine was similar to those who reported that they had vaped anything in 2016, with the two respective percentages for use in the past 30 days at 17% in 2017and 13% in 2016 among 12th grade students, 13% and 11% for 10th grade students, and 7% and 6% for 8th grade students.

"These findings emphasize that vaping has progressed well beyond a cigarette alternative," said Richard Miech. "Vaping has become a new delivery device for a number of substances, and this number will likely increase in the years to come."

Cigarettes and Several Other Tobacco Products Decline in Use

Cigarette smoking by teens continued to decline in 2017. For the three grades combined, all measures (lifetime, 30-day, daily, and half-pack/day) are at historic lows since first measured in all three grades in 1991. Since the peak levels reached in the mid-1990s, lifetime prevalence has fallen by 71%, 30-day prevalence by 81%, daily prevalence by 86%, and current half-pack-a-day prevalence by 91%. The prevalence of smoking a half-pack-per-day in the 30 days before the survey now stands at just 0.2% for 8th graders, 0.7% for 10th graders, and 1.7% for 12th graders.

"The health implications of these dramatic declines in smoking are enormous for this generation of young people" says Lloyd Johnston, the previous director of the study. "Long-term increases in perceived risk and personal disapproval of smoking have accompanied these changes, as has a long-term drop in the perceived availability of cigarettes to these age groups."

Lifetime prevalence and daily prevalence both fell significantly in 2017; 30-day prevalence fell, but not significantly, and half-pack-a day prevalence held steady at low levels.

Smokeless tobacco also showed a continuing decline this year with 30-day prevalence reaching a low point for the three grades individually and combined. It has fallen for the grades combined by nearly two-thirds, from 9.7% in 1992 to 3.5% in 2017, including a non-significant drop in 2017 of 0.7%.

Snus, a form of smokeless tobacco, showed a significant decline in use this year for the three grades combined (annual prevalence fell from 3.6% to 2.6%).

Use of a ***hookah pipe*** to smoke tobacco had been increasing earlier in the decade and reached a substantial proportion of the age group, but annual prevalence has fallen by more than half since 2014, from 23% to 10% in 2017 for the three grades combined (including a significant decline this year of 2.9 percentage points). "The use of hookah appears to be fading out," conclude the investigators.

Use of both ***flavored little cigars*** and ***regular little cigars*** is down modestly since first being measured in all three grades in 2014, but did not continue to decline this year. Thirty-day prevalence is at 5.4% for flavored and 3.7% for regular little cigars.

Alcohol Use Levels, After a Long Decline

In general, alcohol use by adolescents has been in a long-term decline that actually first began in the 1980s and was interrupted for a few years during the relapse phase in the substance use epidemic in the 1990s.

In 2017, however, lifetime prevalence, annual prevalence, 30-day prevalence, and daily prevalence all showed little or no change with no significant changes for any grade or for the three grades combined. This is the first time this has happened in many years and may herald the end of the long-term decline in adolescent alcohol use. It is worth noting, however, that prior to this year lifetime prevalence and annual prevalence for the three grades combined both trended down by roughly four-tenths from the peak levels of use reached in the mid-1990s; 30-day prevalence is down by about one-half since then; and daily prevalence is now down by two-thirds. "These are dramatic declines for such a culturally ingrained behavior and good news to many parents," note the investigators. "However, we saw no further declines in 2017."

Two measures of heavy alcohol use--having ***been drunk*** in the past 30 days and ***binge drinking*** (having had five or more drinks in a row at least once in the prior two weeks)—similarly have trended down by over half from their peak rates reached in the mid-to-late-1990s. However, the decline did not continue into 2017. In 2017 binge drinking was reported by 4% of 8th graders, 10%, of 10th graders, and 17% of 12 graders. ***Extreme binge drinking***, defined as drinking 10 or more drinks, or even 15 or more drinks, in a row during a single occasion in the past two weeks was added to the study in 2005. Fortunately, both measures have seen a drop of more than half since their peak rates observed in 2006, but here also no further decline this year.

Use of Inhalants Increases among 8th graders

Use of ***inhalants*** significantly increased among 8th grade students in 2017. Inhalant use includes sniffing glue, gases, or sprays, and is an unusual type of substance use because it is more common among younger than older adolescents. In 2017 the percent of 8th grade students who had ever used inhalants in their lifetime increased 1.2% to 8.9%, a significant increase; use in the past 12 months increased 0.9% to 4.7%, also a significant increase. This upturn may mark the end of a gradual decline that started nearly a decade earlier in 2008.

For some years MTF has warned that inhalant use is primed to increase. Perceptions of risk from using inhalants among 8th graders have been steadily declining since 2010 (Table 8-1), which is often a leading indicator of future increases in prevalence.

Any illicit drug use including inhalants also significantly increased among 8th grade students in 2017. Lifetime use increased 2.7% to 23.3% and past 12 month use increased 2.3% to 15.8%, both significant increases. These increases were driven primarily by the upturn in inhalant use.

Heroin and Opioid Use Remains Low Among Adolescents

The opioid epidemic among adults has received much attention in recent months, and MTF offers the opportunity to see what is happening with opioid use among adolescents. ***Heroin*** use by adolescents has always been low, and did not significantly change in the 8th, 10th, or 12th grades in 2017, with annual use levels at 0.4% or lower in all three grades.

Misuse of ***prescription opioids*** is reported only for 12th grade students; it continued a decade-long decline in 2017, although this year's decline was not statistically significant. Use in the past 12 months decreased 0.5% to 4.2% in 2017, and is now at a level that is less than half of the 9.5% prevalence recorded in 2004. ***Vicodin***, which has had the highest level of use among the opioid analgesics, showed a significant decline in past 12 month use among

12th graders in 2017 from 2.9% to 2.0%. Its annual prevalence is now at the lowest levels in all three grades observed since it was first included in the study in 2002.

Tables summarizing estimates for the drugs discussed below, as well as additional drugs, are here: https://goo.gl/6dR3kK
The findings summarized here will be published by the end of January in a forthcoming volume.

[1] Prevalence refers to the percent of the study sample that report using a drug once or more during a given period—i.e.in their lifetime, past 12 months [annual prevalence], past 30 days, and daily in the past 30 days.

Monitoring the Future has been funded under a series of competing, investigator initiated research grants (R01 DA001411 and R01 DA016575) from the National Institute on Drug Abuse, one of the National Institutes of Health. The lead investigators are Richard Miech (principal investigator), John Schulenberg, Lloyd Johnston, Patrick O'Malley, Jerald Bachman, and Megan Patrick—all research professors at the University of Michigan's Institute for Social Research. Surveys of nationally representative samples of American high school seniors were begun in 1975, making the class of 2017 the 43rd such class surveyed. Surveys of 8th and 10th graders were added to the design in 1991, making the 2017 nationally representative samples the 27th such classes surveyed. The samples are drawn separately at each grade level to be representative of students in that grade in public and private secondary schools across the coterminous United States. The findings summarized here will be published in January in a forthcoming volume: Johnston, L. D., O'Malley, P. M., Miech, R.A., Bachman, J. G., & Schulenberg, J. E. (2018). Monitoring the Future national results on adolescent drug use: Overview of key findings, 2017. Ann Arbor, Mich.: Institute for Social Research, the University of Michigan. The content presented here is solely the responsibility of the authors and does not necessarily represent the official views of the National Institute on Drug Abuse, or the National Institutes of Health.

A note from the Center for MH in Schools & Student/Learning Supports

Watch Out for Mutant Statistics

In his 2001 book entitled: *Damned Lies and Statistics: Untangling the Numbers from the Media, Politicians, and Activists*, Joel Best stresses the dangers of data misstated and misused. He begins with a nomination for what can be seen as the worst (most inaccurate) data-based statement in a scholarly journal. The statement made in an 1995 issue of the journal read: "Every year since 1950, the number of American children gunned down has doubled." For many folks concerned about children's well being, such a statement not only might go unchallenged, but would be repeated to support the need to do something about a growing problem. Unfortunately, as Joel Best cogently notes, the statement is statistical nonsense.

"Just for the sake of argument, let's assume that the 'number of American children gunned down' in 1950 was one. If the number doubled each year, there must have been two ... in 1951, four in 1952, eight in 1953, and so on. ... By 1965, it would have been 32,768 (in 1965, the FBI identified only 9,960 criminal homicides in the entire country, including adult as well as child victims). In 1970, the number would have passed one million; in 1980, *one billion*...." and so forth.

In tracing the source of the statement, Best found that it was a transformation of one that had been published by the Children's Defense Fund in *The State of America's Children Yearbook – 1994.* The statement made in that source was "The number of American children killed each year by guns has doubled since 1950." The statement was not that the number was doubling each year, but that there were twice as many deaths in 1994 as in 1950.

No one wants that many children killed by guns. But we do need some other data to help interpret the scope of the problem. For example, as Best notes, the U.S. population grew about 73 percent. He also notes that it is unclear what the primary source was for the data. How were they gathered? Did the method of counting child gunshot victims change over the period cited? Do the data combine homicides, suicides, and accidents?

The point is that the demand for data can increase the tendency to grab statements citing compelling statistics and then inappropriately reword, uncritically repeat, and frequently misuse the statistics. To underscore the danger in all this, Best has coined the term *mutant statistics* to describe the phenomena where data are "garbled almost beyond recognition."

We would add a corollary term – *politically and economically motivated statistics.* These are data that are inappropriately extrapolated and overgeneralized in order to justify policies and practices. When data are distorted in these ways, major issues are masked. Good policy and practice requires critical analyses of available data – especially when the data are as limited as they are in the mental health field.

Quick Find On-line Clearinghouse

http://smhp.psych.ucla.edu/qf/misdiagnosis.htm

TOPIC: Misdiagnosis

The following represents a sample of information to get you started and is not meant to be exhaustive. And of course many of the other Quick Find topics provide links to resources that have relvance to this topic.
(Note: Clicking on the following links causes a new window to be opened. To return to this window, close the newly opened one).

Center Developed Documents, Resources, and Tools

Information Resources

- Arguments About Whether Overdiagnosis of ADHD is a Significant Problem
- Schools and the Challenge of LD and ADHD Misdiagnoses

Practice/Guidance Notes

- Common Behavior Problems at School: A Natural Opportunity for Social and Emotional Learning
- Countering the Over-pathologizing of Students' Feelings & Behavior: A Growing Concern Related to MH in Schools
- Determinants of Students' Problems
- Just a Label? Some Pros and Cons of Formal Diagnoses of Children "
- Minimizing Referrals Out of the Classroom
- Prereferral Interventions
- Response to Intervention

Newsletters

- Labeling Troubled and Troubling Youth: The Name Game

Other Relevant Documents, Resources, and Tools on the Internet

- ADHD among American school children: Evidence of overdiagnosis and overuse of medication.
- Childhood mania, attention deficit hyperactivity disorder and conduct disorder: a critical review of diagnostic dilemmas
- Disparities in ADHD assessment, diagnosis, and treatment
- Disproportionality and Learning Disabilities: Parsing apart race, socioeconomic status, and language
- Evaluating the evidence for and against the overdiagnosis of ADHD
- Increasing prevalence of parent reported Attention Deficit/Hyperactivity Disorder among children
- Is ADHD diagnosed in accord with diagnostic criteria? Overdiagnosis and influence of client gender on diagnosis

- Misdiagnoses of disabilities
- Misdiagnosis of bipolar disorder in children and adolescents: A comparison with ADHD and major depressive disorder
- Overdiagnosis of mental disorders in children and adolescents (in developed countries)
- Psychiatric Disorders in Adolescents with Developmental Disabilities: Longitudinal Data on Diagnostic Disagreement in 150 Clients
- Reducing the overidentification of childhood ADHD: a stepwise diagnostic model

For updated references to this topic, go to Google Scholar

We hope these resources met your needs. If not, feel free to contact us for further assistance. For additional resources related to this topic, use our search page to find organizations, websites and documents. You may also go to our technical assistance page or contact ltaylor@ucla.edu for more specific technical assistance requests.

If our website has been helpful, we are pleased and encourage you to use our site or contact our Center in the future.

C. Increasing Rates?

Regularly reported are significant increases in the number of children and adolescents diagnosed with mental disorder and special education disabilities (see following example). One of the critiques of the reporting is the problem of overdiagnosis. Concerns have been raised in particular related to the diagnoses of teen depression, specific learning disabilities, and attention-deficit/hyperactivity disorder.

Factors influencing overdiagnosis include diagnostician biases, imprecise diagnostic criteria and differential diagnostic categorization and methodology, ambiguous and misleading assessment data, parental pressure, school and health care system factors (especially funding and reimbursement requirements), and more.

Epidemiology and Impact of Health Care Provider-Diagnosed Anxiety and Depression Among US Children.

J Dev Behav Pediatr. 2018 Jun;39(5):395-403. doi: 10.1097/DBP.0000000000000571.

Bitsko RH , Holbrook JR , Ghandour RM , Blumberg SJ , Visser SN , Perou R , Walkup JT .

https://www.ncbi.nlm.nih.gov/pubmed/29688990

Abstract

OBJECTIVE: This study documents the prevalence and impact of anxiety and depression in US children based on the parent report of health care provider diagnosis.

METHODS: National Survey of Children's Health data from 2003, 2007, and 2011-2012 were analyzed to estimate the prevalence of anxiety or depression among children aged 6 to 17 years. Estimates were based on the parent report of being told by a health care provider that their child had the specified condition. Sociodemographic characteristics, co-occurrence of other conditions, health care use, school measures, and parenting aggravation were estimated using 2011-2012 data.

RESULTS: Based on the parent report, lifetime diagnosis of anxiety or depression among children aged 6 to 17 years increased from 5.4% in 2003 to 8.4% in 2011-2012. Current anxiety or depression increased from 4.7% in 2007 to 5.3% in 2011-2012; current anxiety increased significantly, whereas current depression did not change. Anxiety and depression were associated with increased risk of co-occurring conditions, health care use, school problems, and having parents with high parenting aggravation. Children with anxiety or depression with effective care coordination or a medical home were less likely to have unmet health care needs or parents with high parenting aggravation.

CONCLUSION: By parent report, more than 1 in 20 US children had current anxiety or depression in 2011-2012. Both were associated with significant comorbidity and impact on children and families. These findings may inform efforts to improve the health and well-being of children with internalizing disorders. Future research is needed to determine why child anxiety diagnoses seem to have increased from 2007 to 2012.

Trends in depression prevalence in the USA from 2005 to 2015: widening disparities in vulnerable groups.

Psychol Med. 2018 Jun;48(8):1308-1315. doi: 10.1017/S0033291717002781. Epub 2017 Oct

[12]Weinberger AH , Gbedemah M , Martinez AM , Nash D , Galea S , Goodwin RD .

https://www.ncbi.nlm.nih.gov/pubmed/29021005

Abstract

BACKGROUND: Major depression is associated with significant disability, morbidity, and mortality. The current study estimated trends in the prevalence of major depression in the US population from 2005 to 2015 overall and by demographic subgroups.

METHODS: Data were drawn from the National Survey on Drug Use and Health (NSDUH), an annual cross-sectional study of US persons ages 12 and over (total analytic sample N = 607 520). Past-year depression prevalence was examined annually among respondents from 2005 to 2015. Time trends in depression prevalence stratified by survey year were tested using logistic regression. Data were re-analyzed stratified by age, gender, race/ethnicity, income, and education.

RESULTS: Depression prevalence increased significantly in the USA from 2005 to 2015, before and after controlling for demographics. Increases in depression were significant for the youngest and oldest age groups, men, and women, Non-Hispanic White persons, the lowest income group, and the highest education and income groups. A significant year × demographic interaction was found for age. The rate of increase in depression was significantly more rapid among youth relative to all older age groups.

CONCLUSIONS: The prevalence of depression increased significantly in the USA from 2005 to 2015. The rate of increase in depression among youth was significantly more rapid relative to older groups. Further research into understanding the macro level, micro level, and individual factors that are contributing to the increase in depression, including factors specific to demographic subgroups, would help to direct public health prevention and intervention efforts.

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The ADHD Explosion: Myths, Medication, Money and Today's Push for Performance

Attention-deficit/hyperactivity disorder (ADHD) is one of the most controversial and misunderstood medical conditions today. Skyrocketing rates of diagnosis and medication treatment have generated a firestorm of controversy. Alarming questions have been raised about ADHD in recent years, including: Why are one in nine children and adolescents in the U.S. now diagnosed with ADHD, with projected rates still rising? Why are nearly 70% of those diagnosed with ADHD prescribed medication? What is causing the fast-rising diagnosis and medication of *adults*? What happens when over a quarter of all college students use stimulants for academic performance? What is driving the ADHD explosion—parents, doctors, schools, culture, the healthcare system, or Big Pharma? And will it end?

Stephen Hinshaw, a distinguished psychologist, and Richard Scheffler, an eminent health economist, uniquely blend clinical wisdom, current science, medical and school policy, health economics, and global trends to debunk myths and set the record straight in *The ADHD Explosion*. They describe the origins of ADHD and its huge costs to society; the science behind its causes as well as medication and behavioral treatment; and the major variation in diagnosis and treatment across the U.S. Dealing directly with stimulants as "smart pills," they describe the epidemic of medicalization, arguing that accurate diagnosis and well-monitored care could ease the staggering economic burden linked to ADHD.

http://adhdexplosion.com/

Overdiagnosis of mental disorders in children and adolescents (in developed countries)

Eva Charlotte Merten , Jan Christopher Cwik , Jürgen Margraf and Silvia Schneider

Child and Adolescent Psychiatry and Mental Health 2017 **11**:5 https://doi.org/10.1186/s13034-016-0140-5

Abstract

During the past 50 years, health insurance providers and national registers of mental health regularly report significant increases in the number of mental disorder diagnoses in children and adolescents. However, epidemiological studies show mixed effects of time trends of prevalence of mental disorders. Overdiagnosis in clinical practice rather than an actual increase is assumed to be the cause for this situation. We conducted a systematic literature search on the topic of overdiagnosis of mental disorders in children and adolescents. Most reviewed studies suggest that misdiagnosis does occur; however, only one study was able to examine overdiagnosis in child and adolescent mental disorders from a methodological point-of-view. This study found significant evidence of overdiagnosis of attention-deficit/hyperactivity disorder. In the second part of this paper, we summarize findings concerning diagnostician, informant and child/adolescent characteristics, as well as factors concerning diagnostic criteria and the health care system that can lead to mistakes in the routine diagnostic process resulting in misdiagnoses. These include the use of heuristics instead of data-based decisions by diagnosticians, misleading information by caregivers, ambiguity in symptom description relating to classification systems, as well as constraints in most health systems to assign a diagnosis in order to approve and reimburse treatment. To avoid misdiagnosis, standardized procedures as well as continued education of diagnosticians working with children and adolescents suffering from a mental disorder are needed.

D. Are they Served?

There are regular reports on the extent to which the mental health needs of youth are underserved. And there are reports on the degree to which schools play a role in providing mental health *services.* As with other data on mental health concerns, the reports provide useful findings but have obvious limitations that call for various caveats.

That said:

- SAMHSA indicates that "States reported a total of 1,602,571 individuals aged 17 years and younger served during the 2016 reporting period (accounting for 28 percent of all individuals served); 1,379,353 individuals aged 17 years and older had a valid mental health diagnosis code, of which 885,889 were reported to have, or be at risk of, SED." See attached excerpt from SAMHSA's report.

- The National Center on Educational Statistics reports the following data from the School Survey on Crime and Safety (https://nces.ed.gov/surveys/ssocs/): "In school year 2015-16, some 71 percent of public schools reported having diagnostic assessments for mental health disorders available to students, and 64 percent of schools reported having treatment available." See attached excerpt.

  Note: Services included those available at school by a mental health professional employed by the school or district (e.g., school psychologist, counselor, social worker); services available at school by a mental health professional other than a school or district employee, funded by the school or district; and services available outside of school by a mental health professional other than a school or district employee, funded by the school or district. Mental health disorders were defined for respondents as, collectively, all diagnosable mental disorders or health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.

From: SAMHSA's *2016 Mental Health Client-level Data (MH-CLD) Annual Report*
https://www.samhsa.gov/data/report/2016-mental-health-client-level-data-mh-cld-annual-report

[*This report presents results from the Mental Health Client Level Data (MH-CLD) and Mental Health Treatment Episode Data Set (MH-TEDS) for individuals receiving mental health treatment services in 2016, as well as selected trends in data collected from such individuals between 2013 and 2016. The report provides information on mental health diagnoses, mental health treatment services, and demographic and substance use characteristics of individuals in mental health treatment in facilities that reported to individual state administrative data systems. Chapter 2 presents data on children and adolescents aged 17 years and younger who received mental health services through SMHAs in the 2016 reporting period.*]

Data on NOMs and clinical measures are presented by demographic characteristics and mental health diagnoses for all children and adolescents. Characteristics for the subpopulation of children and adolescents with, or at risk for, SED are presented only where they differ from the characteristics of all children and adolescents.

The mental health diagnoses presented in the chapter tables are adjustment disorders; anxiety disorders; attention deficit disorder and attention deficit hyperactivity disorder (ADD/ADHD); conduct disorder; mood disorders (bipolar disorders and depressive disorders); oppositional defiant disorder; pervasive developmental disorders; and other disorders. Of these, four—ADD/ADHD, conduct disorder, oppositional defiant disorder, and pervasive developmental disorders—are typically identified in childhood.

Number Served

From Table 1.2b and Tables 2.1a-2.2c. [See report for tables.]

States reported a total of 1,602,571 individuals aged 17 years and younger served during the 2016 reporting period (accounting for 28 percent of all individuals served); 1,379,353 individuals aged 17 years and older had a valid mental health diagnosis code, of which 885,889 were reported to have, or be at risk of, SED.

During this period, the data indicate that mental health diagnoses for all children and adolescents differed across categories for several characteristics, including gender, race, ethnicity, living arrangements, SED status, level of functioning, timing of admission, and service setting.

A comparison of the findings for all children and adolescents and the subpopulation of children and adolescents with SED found similar patterns in the distribution of characteristics during the 2016 reporting period.

Gender

Tables 2.1a-2.2c. Tables 2.1a–2.1c present the most frequently reported diagnoses, by gender, among individuals aged 17 years and younger, while Tables 2.2a–2.2c present the most frequently reported diagnoses, by gender, for individuals aged 17 years and younger with SED. In the 2016 reporting period, the most frequently reported diagnoses differed by gender among individuals served aged 17 years and younger. [See report for tables.]

Among males aged 17 years and younger served in the 2016 reporting period, the most frequently reported diagnoses were ADD/ADHD (29 percent), adjustment disorders (18 percent), and anxiety disorders (9 percent).

Among females aged 17 years and younger served in the 2016 reporting period, the most frequently reported diagnoses were adjustment disorders (25 percent), depressive disorders (20 percent), and ADD/ADHD (15 percent).

The greatest difference, by gender, in diagnoses reported among individuals aged 17 years and younger served in 2016 was ADD/ADHD (29 percent of males and 15 percent of females).

Race

[From Tables 2.1a-2.2c.] The most frequently reported diagnoses among individuals aged 17 years and younger served in the 2016 reporting period varied by race. Adjustment disorders were reported most frequently among American Indians or Alaskan Natives (29 percent), Asians (22 percent), Native Hawaiian or Other Pacific Islanders (20 percent); ADD/ADHD was most frequently reported among Blacks or African Americans (33 percent) and Whites (23 percent).

Ethnicity

[From Tables 2.1a-2.2c.] Among Hispanic individuals aged 17 years and younger served in the 2016 reporting period, the most frequently reported diagnoses were adjustment disorders (21 percent).

Living Arrangements

[From Tables 2.3a-2.4c.] Among individuals aged 17 years and younger served in the 2016 reporting period who were in foster care or were homeless, the most frequently reported diagnoses were adjustment disorders (37 percent). During the same period, peers living in a private residence were most frequently reported with an ADD/ADHD diagnosis (25 percent), while peers in residential care were most frequently reported with diagnoses of adjustment disorders or depressive disorders (16 percent each).

SED Status

[From Tables 2.3a-2.4c.] Among individuals aged 17 years and younger with SED served in the 2016 reporting period, the most frequently reported diagnosis was ADD/ADHD (25 percent), while among peers without SED, the most frequently reported diagnoses were adjustment disorders (27 percent).

Level of Functioning

[From Tables 2.3a-2.4c.] Among individuals served aged 17 years and younger who had a lower level of functioning according to the Children's Global Assessment Scale (CGAS) (i.e. a score of 1 to 50 on the 100-point scale), the most frequently reported diagnoses were depressive disorders (21 percent).

The most frequently reported diagnoses among individuals served aged 17 years and younger who had a higher level of functioning (i.e., a CGAS score of 51 to 100) was adjustment disorders (23 percent).

Client Treatment Status at the Start of the Reporting Period

[From Tables 2.5a-2.6c.] Among individuals aged 17 years and younger who were newly admitted to treatment in the 2016 reporting period, the most frequently reported diagnoses were adjustment disorders (23 percent).

Among individuals aged 17 years and younger who were continuing treatment during the 2016 reporting period, the most frequently reported diagnosis was ADD/ADHD (27 percent).

SED Status and Level of Functioning, by Service Setting

[From Table 2.7.] SED status and level of functioning varied by service setting among individuals aged 17 years and younger served in the 2016 reporting period. It should be noted that individuals may have received services in more than one setting, and therefore may be counted in multiple columns of Table 2.7.

During the 2016 reporting period, 99 percent of individuals aged 17 years and younger were served in community-based programs. Among individuals aged 17 years and younger served in a community-based programs during the 2016 reporting period, 65 percent had SED; by contrast, among those served in a state psychiatric hospital and in institutions under the justice system, 82 percent and 80 percent, respectively, had SED.

Among individuals aged 17 years and younger served during the 2016 reporting period, greater proportions in community-based programs (45 percent) or institutions under the justice system (42 percent) had higher levels of functioning (i.e., a CGAS score of 51 to 100) compared with those in residential treatment centers (32 percent), state psychiatric hospitals (22 percent), and other psychiatric inpatient settings (26 percent).

Data on Mental Health Services in K–12 Public Schools

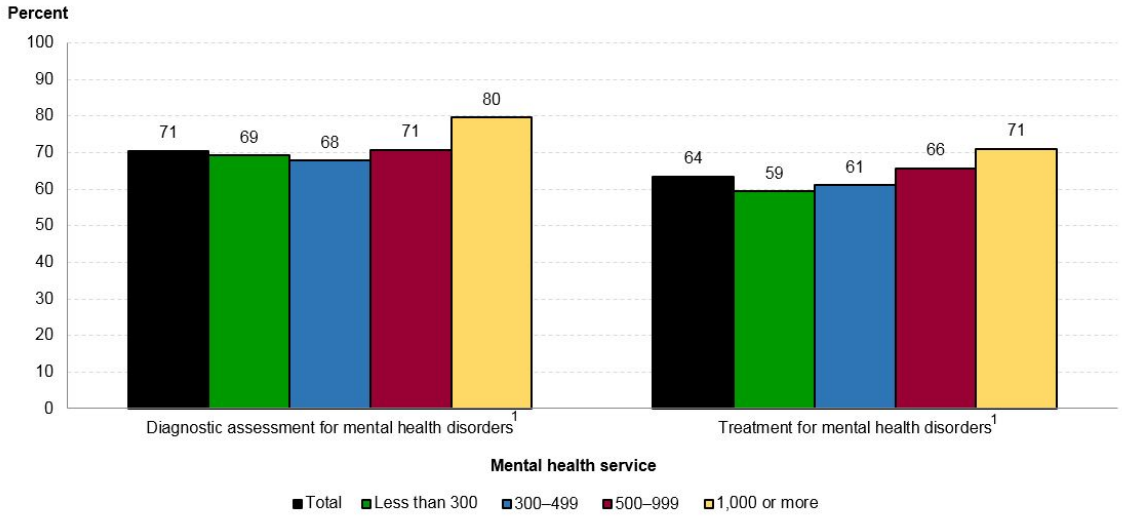
May 30, 2018

The 2015–16 SSOCS questionnaire (https://nces.ed.gov/surveys/ssocs/pdf/SSOCS_2016_Questionnaire.pdf) added new questions asking principals to report whether diagnostic assessment and treatment services for mental health were available to students under the official responsibilities of a licensed mental health professional.

Diagnostic assessments are used to identify whether a student has one or more medical and/or mental health diagnoses. Treatment is a clinical service, such as psychotherapy, medication, or counseling, which is intended to lessen or eliminate the symptoms of a disorder.

The prevalence of mental health services varied by school characteristics. In both middle and high schools, diagnostic assessment services were more common than treatment services: 74 percent of middle schools and 79 percent of high schools reported diagnostic assessments were available, compared with 66 percent of middle schools and 69 percent of high schools reporting treatment services were available. Compared to primary schools, a higher percentage of high schools reported that both types of mental health services were available.

Figure 1. Percentage of public schools reporting the availability of mental health services under the official responsibilities of a licensed mental health professional, by type of mental health service and school enrollment size: School year 2015–16



[1]Mental health disorders were defined for respondents as, collectively, all diagnosable mental disorders or health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.

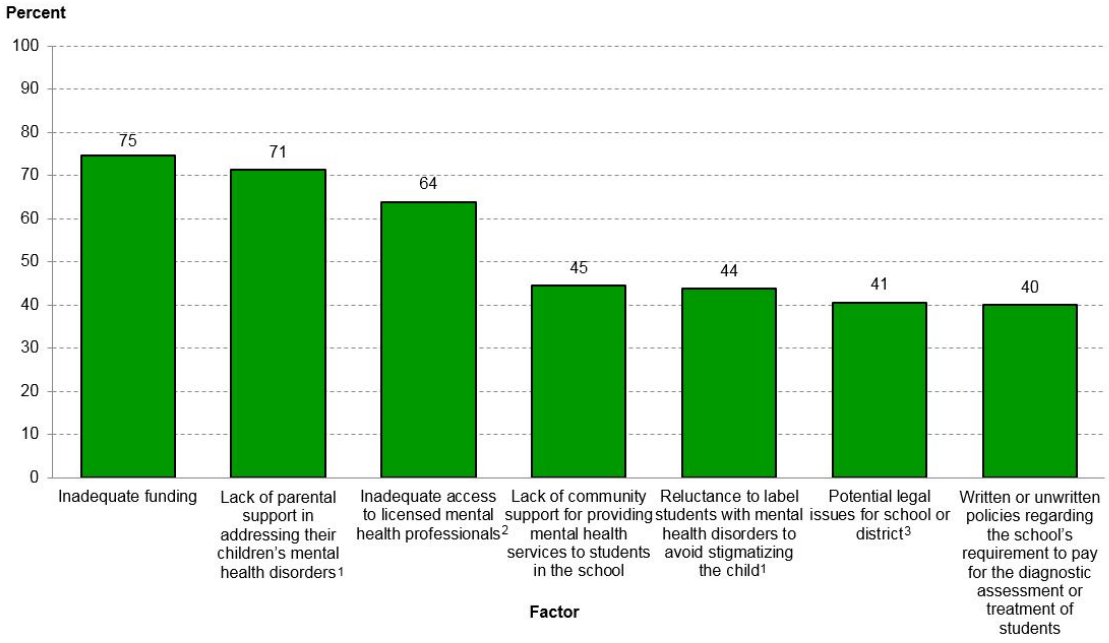
NOTE: Mental health services are provided by several different types of mental health professionals, each of which have their own training and areas of expertise. The types of professionals who may provide mental health services include psychiatrists, psychologists, psychiatric/mental health nurse practitioners, psychiatric/mental health nurses, clinical social workers, and professional counselors. Responses were provided by the principal or the person most knowledgeable about school crime and policies to provide a safe environment.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 School Survey on Crime and Safety (SSOCS), 2016. See table 40 (https://nces.ed.gov/surveys/ssocs/tables/all_2016_tab_40.asp?referrer=css).

The percentage of schools with 1,000 or more students that reported having diagnostic assessment services available (80 percent) was higher than the percentages of schools with fewer than 300 students (69 percent), 300–499 students (68 percent), and 500–999 students (71 percent).

The questionnaire also asked principals to report to what extent certain factors limited the school's efforts to provide mental health services to students. The most common limiting factors reported by schools were inadequate funding (75 percent) and lack of parental support (71 percent).

Figure 2. Percentage of public schools reporting that their efforts to provide mental health services to students were limited in a major or minor way due to specified non-school-level factors: School year 2015–16



[1]Mental health disorders were defined for respondents as, collectively, all diagnosable mental disorders or health conditions that are characterized by alterations in thinking, mood, or behavior (or some combination thereof) associated with distress and/or impaired functioning.

[2]Mental health services are provided by several different types of mental health professionals, each of which have their own training and areas of expertise. The types of professionals who may provide mental health services include psychiatrists, psychologists, psychiatric/mental health nurse practitioners, psychiatric/mental health nurses, clinical social workers, and professional counselors.

[3]Examples of legal issues provided to respondents were malpractice and insufficient supervision.

NOTE: Respondents were asked to rate the level of limitation in their school's efforts to provide mental health services to students for each factor. Survey response options included "limits in major way," "limits in minor way," or "does not limit." Responses were provided by the principal or the person most knowledgeable about school crime and policies to provide a safe environment.

SOURCE: U.S. Department of Education, National Center for Education Statistics, 2015–16 School Survey on Crime and Safety (SSOCS), 2016. See table 39 (https://nces.ed.gov/surveys/ssocs/tables/all_2016_tab_39.asp?referrer=css).

CHCS Center for Health Care Strategies, Inc.

FACES OF MEDICAID DATA BRIEF
December 2013

IDENTIFYING OPPORTUNITIES TO IMPROVE CHILDREN'S BEHAVIORAL HEALTH CARE:
An Analysis of Medicaid Utilization and Expenditures

By Sheila Pires, Katherine Grimes, Todd Gilmer, Kamala Allen, Roopa Mahadevan, and Taylor Hendricks

IN BRIEF

Children with behavioral health needs served by Medicaid require an array of services to support their health and well-being, but the current system often does not meet their needs, resulting in missed opportunities to improve outcomes. To better understand the patterns of service use and costs for these children, the Center for Health Care Strategies analyzed behavioral health care use and expense for children in Medicaid in all 50 states. This brief highlights key findings from the analysis, revealing that:

- Children using behavioral health care represented under **10 percent** of the overall Medicaid child population, but an estimated **38 percent** of total spending for children in Medicaid;
- Children in foster care and those on SSI/disability together represented **one-third** of the Medicaid child population using behavioral health care, but **56 percent** of total behavioral health service costs; and
- Almost **50 percent** of children in Medicaid who were prescribed psychotropic medications received no identifiable accompanying behavioral health treatment.

These findings point to significant opportunities for quality improvement in the organization, delivery, and financing of care for children with behavioral health needs in Medicaid. For complete study findings, access the full report, *Faces of Medicaid: Examining Children's Behavioral Health Service Utilization and Expenditures*, at **www.chcs.org**.

Children with significant behavioral health needs typically require an array of services to support their physical, intellectual, and emotional well-being. These children, however, are often served through fragmented systems, leading to inefficient care, costly utilization, and poor health outcomes. As a significant source of funding for children's behavioral health care,[1] Medicaid programs can advance fundamental improvements in care coordination and delivery for these vulnerable children.

To identify ways to improve behavioral health care, the Center for Health Care Strategies (CHCS) conducted a nationwide analysis, *Faces of Medicaid: Examining Children's Behavioral Health Service Utilization and Expenditures* (*Faces of Medicaid*). This study analyzes data from all 50 states to explore: (1) behavioral and physical health service use, expense, and diagnoses; (2) use of psychotropic medications; and (3) service use and expense for children in foster care and those with developmental disabilities. This analysis, which uses 2005 data (the most recent data available when the study began), provides a critical baseline for examining child behavioral health utilization and expenses for Medicaid populations. CHCS is pursuing a follow-up study using 2008 data to further explore trends in this area.

State policymakers and other key stakeholders can use the findings to inform quality improvement efforts in children's behavioral health systems, such as:

- **Expanding access to appropriate and effective behavioral health care**, particularly therapeutic interventions with an existing or emerging evidence base, and home- and community-based services;
- **Investing in care coordination** models that use a wraparound approach to facilitate delivery of needed supports and services for vulnerable populations; and
- **Ensuring collaboration across child-serving systems** to increase care coordination and improve oversight and monitoring of psychotropic medication use.

Made possible by the Annie E. Casey Foundation, with additional support from the Substance Abuse and Mental Health Services Administration and The Commonwealth Fund.

III. Concluding Comments

Have we done better over the Last 20 Years in addressing Youngsters MH Needs?

In 2001, drawing on recent research,[1] a RAND report on the national picture of mental health costs and utilization for children ages 1-17 indicated:

(1) Most youth do not get the care they need and Hispanic and African American children are the most likely to go without needed care.

>Based on an estimate that 9% of youth need help with emotional problems, on average, nearly three-quarters of these youth do not get the care they need

(2) The current cost of treating children and adolescents is estimated at nearly $12 billion, with most of the money spent on outpatient rather than inpatient care.

>Privately insured youth account for nearly half of total mental health expenditures. This finding runs contrary to the popular notion that Medicaid recipients generate the majority of the costs. In fact, they generate only about one-quarter of the costs. However, Medicaid recipients account for more services *per child* because they make up only about 16 percent of the child population. Privately insured children, who make up about 70 percent of the child population, account for far more services *as a group*. (From the data, the researchers could only tell what kind of insurance coverage the children had, not if that insurance actually paid for the mental health services. For example, even when children have private insurance, more than half of the mental health services they receive are covered in other ways. Many services are provided outside of insurance plans, such as through schools. Some children may receive care through charity and public providers, or their families pay out-of-pocket when they reach the coverage limit on their private insurance.)

>About 7% of all families cite financial barriers as the reason for not getting their troubled youth the mental health care they need

>One estimate, arguably at the high end, suggests that the United States spends more than $4 billion annually on school-related services from mental health professionals

>Adolescents (ages 12-17) are the biggest users of services, accounting for 60 percent of total costs (even though they only make up 35 percent of the population)

>Children (ages 6-11) account for about 35 percent of the bill and also make up about 35 percent of the population.

>Preschoolers (ages 1-5) account for about 5 percent of the bill and make up about 30 percent of the population.

>Outpatient care now accounts for nearly 60 percent of all mental health expenditures for young people, a large portion probably from school-based programs.

>Inpatient care accounts for about 33%, with an additional 7% of the costs going for medication and other related services

(3) On average, only 5-7 percent of all youth are treated by mental health specialists each year.

>Although the data are sparse, they suggest that many troubled youth are turning to the family doctor for help. For example, more than one-third of mental health visits by privately insured children are to a primary care physician rather than to a specialist. A similar trend can be seen for adults.

(4) Use of psychotropic medication has grown dramatically.

>More than $1 billion was spent in 1998 on psychotropic medications to treat, on average, percent of all youth, predominantly those ages 6-17.

>Stimulants and antidepressants accounted for nearly three-fourths of the bill.

>Stimulants were the most common medication for children ages 1-11; antidepressants were used nearly as often as stimulants for adolescents.

[1]Ringel J.S., Sturm R. (2001). National Estimates of Mental Health Utilization and Expenditures for Children in 1998. *Journal of Behavioral Health Services Research, 28,* 319–333. Stein B., Sturm R., Kapur K., Ringel J.S. (2001). Psychotropic Medication Costs Among Youth with Private Insurance. *Psychiatric Services,* 52, 152.

And the *National Comorbidity Survey Replication* estimated that "approximately 80% of all people in the U.S. with a mental disorder eventually seek treatment, but that the median delay between first onset of the disorder and first treatment contact is nearly a decade.... Age of onset is significantly related to treatment contact...the exceptions being 2 childhood-onset disorders (SAD, ADHD), with a consistent pattern of increasing treatment contact with increasing age at onset...." (Wang, et al., 2005 – https://jamanetwork.com/journals/jamapsychiatry/fullarticle/208673)

The investigators noted that:

- "The most consistent element in the pattern is that students generally have higher odds of treatment than people who have completed their education...."
- "We found that early-onset disorders are consistently associated with longer delays and a lower overall probability of initial treatment contact. The same pattern has consistently been found in previous studies of delays in initial treatment contact. Minors may be less likely to receive timely treatment because they need the help of parents or other adults and recognition is often low along these adults unless symptoms are extreme. In addition, child- and adolescent onset mental disorders might be associated with normalization of symptoms or the development of coping strategies (e.g., social withdrawal in social phobias) that interfere with help-seeking during adulthood. The paucity of available or accessible child mental health services may also be an important factor...."
- "... epidemiological studies suggest that school failure, teenage child-bearing, marital violence, and marital instability are associated with early-onset untreated mental disorders."
- "School-based screening programs using brief self-report and/or informant scales may be needed to detect early-onset mental disorders. Demand management and other outreach strategies could also help reduce critical delays and failures in initial help-seeking once mental disorders are identified. Training non-health care professionals to recognize individuals with mental disorders and make timely referrals for health care should also be explored...."

So: ***Has the Situation Improved in the last 20 Years?***

Available data doesn't provide a satisfactory answer. At this stage in the development of the field, the best available data are still rather limited. They provide snapshots, but the pictures are for the most part fuzzy and too often the data limitations call for extreme caution in formulating conclusions.

Data on youngsters mental health and psychosocial status have the power to influence life-shaping decisions for better and for worse. We must analyze the data critically and use findings cautiously.

And, we must support the development of better systems for gathering quality and generalizable data on the status of children and adolescents. Such data systems are fundamental to improving policy and practice. As this report shows, a beginning has been made related to some fundamental matters. But policy is needed that focuses on building a comprehensive system for gathering a full set of indicators that can be used to understand the nature and scope of the problems experienced by children and adolescents and what is being done to address their needs. Such data are a critical facet of any report on the well-being of the young people in any society.

See our Center's online clearinghouse Quick Finds for more on these matters -- http://smhp.psych.ucla.edu/quicksearch.htm