Highlights
Chapter II—Mentally Healthy Teens

Virtually every domain in an adolescent's life has an impact on a teen's mental health. Mental health affects almost every decision an adolescent makes about behavior and is a basic element in the life of every successful teen. Adolescence is the age when serious mental health problems may emerge, the most common being depression, attention and hyperactivity disorder and bipolar (manic-depressive) disorder.

Colorado Trends

Suicide is the second leading cause of death for Colorado teens. In 2000, the suicide rate for teens 15-19 fell to 12.6 deaths per 100,000 teens, but remains well above national target levels.

- Boys complete suicide at rates three to four times higher than girls.
- The proportion of high school youth seriously considering suicide was 19.3 percent in 2001.
- In 2001, 14 percent of Colorado high school students report actually planning how they would commit suicide.

2000 Objectives

Progress Report

- By 2000, reduce the five-year average suicide rate among adolescents aged 15-19 to 15.0 per 100,000, from the 1990 baseline of 16.6 per 100,000
  Status: Objective met. Five-year suicide rates decreased to 12.6 per 100,000
  Source: Vital Statistics, Colorado Department of Public Health and Environment

Best Practices

- *Support Mental Health Services in Primary Care and School Settings* – Colorado has 40 comprehensive school-based health centers, 30 of which are in secondary schools.
- *Promote Integrated Community Initiatives* – Programs are more likely to be successful if they are comprehensive and intensive, and designed to address suicide and suicidal behavior as part of a broader focus on mental

health, coping skills in response to stress, depression, substance abuse and aggressive behaviors.

- *Establish Programs That Promote Healthy Social Skills and Relationships* – Relationships of high quality have a beneficial impact on psychological health.
- *Support Effective Treatment Approaches* – Effective approaches that work to change a person's thoughts in order to change a behavior or emotional state, drug therapy and environmental strategies appear to reduce mental health disorders, including depression and anxiety.

2010 Objectives

Reduce Suicide Deaths

- By 2010, reduce the 5-year average suicide death rate among 10-14 year olds to 2.2 per 100,000, from the 2000 baseline of 2.8 per 100,000
- By 2010, reduce the 5-year average suicide death rate among 15-19 year olds to 10.1 per 100,000, from the 2000 baseline of 12.6 per 100,000
  Source: Vital Statistics, Colorado Department of Public Health and Environment

Reduce Depression

- By 2010, reduce the proportion of high school students who attempted suicide one or more times in the past 12 months to 5.4%, from the 2000 baseline of 10.7%
- By 2010, reduce the proportion of high school students who were depressed for 2 weeks or more during the past 12 months to 20%, from the 2000 baseline of 25.7%
  Source: 2001 Colorado Youth Risk Behavior Survey, Colorado Department of Public Health and Environment

Websites

American Academy of Child and Adolescent Psychiatry
www.aacap.org

Bright Futures, Georgetown University
www.brightfutures.org

Center for Health and Health Care in Schools
www.healthinschools.org

Center for Mental Health in Schools at UCLA
www.smhp.psych.ucla.edu.

Child and Adolescent Bipolar Foundation
www.bpkids.org

Colorado Health Information Dataset (CoHID)
www.cdphe.state.co.us/cohid

Colorado Trauma Registry/Colorado Trauma Program
www.cdphe.state.co.us/tp

The Colorado Trust
www.thecoloradotrust.org

Colorado Youth Risk Behavior Survey Results
www.cdphe.state.co.us/hs/coyrbs.html

Federal Interagency Forum on Child and Family Statistics
www.childstats.gov

Healthy Generations, University of Minnesota
www.epi.umn.edu/mch

Healthy People 2010
www.healthypeople.gov/

National Alliance for the Mentally Ill
www.nami.org

National Assembly on School-Based Health Care
www.nasbhc.org

National GAINS Center for People with Co-Occurring Disorders in the Justice System
www.gainsctr.com

National Institute of Mental Health
www.nimh.nih.gov

National Mental Health Association
www.nmha.org

Office of Juvenile Justice and Delinquency Prevention
www.ojjdp.ncjrs.org

Office of Suicide Prevention
www.cdphe.state.co.us/pp/Suicide/suicidehom.asp

President's New Freedom Commission on Mental Health
www.mentalhealthcommission.gov

RAND
www.rand.org

Substance Abuse and Mental Health Services Administration
www.samhsa.gov

Urban Institute
www.urban.org

US Surgeon General
www.surgeongeneral.gov

Youth Risk Behavior Surveillance System
www.cdc.gov/nccdphp/dash/yrbs

Chapter II
Mentally Healthy Teens

Social and emotional well-being provides adolescents with a strong foundation to make healthy choices. However, experts estimate that anywhere between 10 and 15 percent of all children and adolescents have symptoms of a mental health disorder severe enough to cause some level of impairment.[1] These conditions can include: depression, substance abuse, post traumatic stress disorder, stress, anxiety disorders, attention deficit and hyperactivity disorder (ADHD), bipolar (manic-depressive) disorder[2] and eating disorders (anorexia, bulimia, binge-eating).

Myths & Facts

Myth: It's Just A Phase

Fact: Twenty-one percent of adolescent boys and 13 percent of adolescent girls report that they have "no one" to talk to when they feel stressed, overwhelmed or depressed. In the United States, emotional and behavioral problems and associated impairments among children ages 1-19 are most likely to lower their quality of life and reduce their life chances. No other set of conditions is close in the magnitude of its deleterious effects on children and youth in this age group.

Source: Children's Mental Health: A National Call to Action, US Surgeon General (2001)

Prevention Pays

Poor mental health for adolescents is a costly proposition. The current estimated bill for caring for troubled youth is $12 billion annually. In 1998, Americans spent more than $1 billion on psychotropic medications (stimulants and antidepressants) to treat, on average, 4 percent of all youth, predominantly those aged 6-17.[3]

It's All About Mental Health

The mental health of today's teens is a real health concern, because virtually every domain in an adolescent's life has an impact on that child's mental health. Furthermore, mental health affects almost every decision an adolescent makes about behavior. Many factors have an effect on good mental health during adolescence:[4]

- Self-esteem and resilience in handling failure
- Stability of moods, depression and suicidal ideation
- Perceived physical appearance and weight
- Peer support and influence
- Several sexual health factors, including sexual development, behavior and identity; parental expectations and communication; pregnancy and HIV/AIDS; and sexual abuse and rape
- Family issues, including support, independence, parental expectations and limit setting, conflict and family history of mental health and substance abuse
- Several school-related factors, including transition through grade levels, academic success, harassment and bullying, extracurricular

This chapter will examine the following issues:

- The importance of mental health in the life of an adolescent
- Data snapshots that highlight family stress and self-injury
- Serious mental health problems among adolescents, including depression, bipolar disorder and attention deficit and hyperactivity disorder (ADHD)
- National and state trends around teen suicide, the second leading cause of death in Colorado adolescents
- Best practices: the key recommendation being improved access to care for mental health problems

activities, absenteeism and dropping out and transition from high school to college

- High-risk behaviors, such as substance use, violence, firearm use and exposure to violence
- When teens experience multiple risk factors, such as poverty, criminal behavior, violence or substance abuse, the probability of mental health problems increases.[5]
- Children in juvenile justice facilities have a very high proportion of diagnosable mental health problems – maybe as high as 75-80 percent – including depression, post traumatic stress disorder, anxiety and mood disorders.[6]
- Adolescents with learning disabilities are at greater risk of emotional distress than their peers.[7]
- Gay, lesbian, bisexual, transgender or questioning (GLBTQ) youth also are at higher risk for mental health problems and poor access to care, especially among youth of color.[8]
- Homeless teens also suffer disproportionately from issues concerning mental health. Adolescents that are GLBTQ *and* homeless are even more vulnerable.[9]

Differentiating normal adolescent behaviors from serious problem behaviors can also be challenging. Involvement of qualified mental health professionals is indicated for severe or chronic disorders or violent or self-destructive behavior.

The Family Stress Index

Today's adolescents live stressful lives. A national study, which included Colorado, utilized the Family Stress Index, defining a stressful environment as: family unable to pay mortgage, rent or utility bills; more than two persons per bedroom; food and health care insecurity; poor physical or mental health or learning disability in a parent; poor physical or mental health or learning disability in a child. This study estimated that about 22 percent of American youth and 18 percent of Colorado youth live in such an environment, with higher stress varying directly with lower family income level, defined as below 200 percent of the federal poverty level. The research also indicated that adolescents, defined as ages 12 to 17, experiencing a stressful family environment had higher levels of behavioral and emotional problems (20 percent) than other youth (5 percent).[10]

Serious Mental Health Problems Among Teens

Depression

In a national study of almost 7,000 7th-12th graders in public school, depression affected an estimated 10 percent of the students.[11]

- Symptoms of depression include sadness, lethargy, disinterest in activities normally enjoyed, self-criticism, pessimism and suicidal thoughts.
- An average episode usually lasts from seven to nine months,[12] but 20 to 40 percent of children with depression experience another episode of depression within two years, and most (70 percent) will do so by adulthood.[13]
- Risk factors for depression include stress; loss of a parent or loved one; break-up of a romantic relationship; attentional, conduct or learning disorders; chronic illnesses; abuse or neglect; and witnessing or being personally involved in other trauma, including natural disasters. Cigarette smoking appears to be associated with teens at higher risk of developing depression.
- Younger boys and girls appear to be at equal risk for depressive disorders, but as they progress through adolescence, girls are twice as likely as boys to develop depression.[14]

Depression, with or without alcoholism or other substance abuse problems, substantially increases the risk of suicide; more than 90 percent of children and adolescents who commit suicide have an identifiable mental disorder.[15]

Perhaps more than depressed adults, depressed teenagers often appear irritable, aggressive and hostile. Given that these traits are often seen in adolescents without depression, it is hardly surprising that less than one-third of adolescents with depression are actually diagnosed. The teen, his or her peers, parents, teachers or health care providers may not realize that an angry teen might have a mental health condition such as depression. Many youth do not voluntarily discuss their symptoms with adults, and may choose instead to "self-medicate" with drugs and alcohol.

KidSpeak

Why do kids smoke marijuana? Depression, problems with parents, feeling lonely and trying to fit in.

Boy, age 17, Garfield County

Bipolar Disorder

Mood swings are expected during adolescence, but when these feelings persist and interfere with daily functioning, bipolar disorder may be the cause.[17] Bipolar disorder is a serious mental illness characterized by chronic irritability, recurrent episodes of depression, mania and/or mixed symptom states. It is believed to occur in at least 1 to 2 percent of the adolescent and adult population. Fortunately, bipolar disorder is treatable with medications. It is difficult to diagnose in youth, because it does not fit precisely the symptom criteria established for adults.

A word of caution is necessary: the symptoms of bipolar disorder resemble symptoms of attention deficit and hyperactivity disorder (ADHD), which is much more common. The psychostimulant medications such as Ritalin, often prescribed for ADHD, may actually worsen the manic symptoms found in bipolar disorder.

KidSpeak

Adolescents talk about their experiences with serious emotional disturbances.

Source: "In their own words," Monitor on Psychology 31(9) (2000), American Psychological Association

Attention Deficit and Hyperactivity Disorder

Life can be hard for adolescents with attention deficit and hyperactivity disorder (ADHD). They are the ones who are often in trouble in school, are unable to finish a game and have trouble making friends. These frustrations can increase family conflict, and place the adolescent at increased risk for motor vehicle accidents, tobacco use, early pregnancy and lower educational attainment.

Attention deficit and hyperactivity disorder is an illness characterized by inattention, hyperactivity and impulsivity. Here are some known facts about ADHD.

ADHD is the most commonly diagnosed behavior disorder in young people, affecting an estimated 3 to 5 percent of school-age children, or about one in every U.S. classroom.

The impact of ADHD may be seriously underestimated. A study of a typical county of rural and suburban homes in North Carolina surveyed parents, and found that more than 15 percent of boys in grades one through five had been diagnosed with ADHD, and about 10 percent were taking medications for it.[18]

Boys have been shown to outnumber girls with ADHD at a rate of about three to one.

There are three types of ADHD, each with different symptoms: predominately inattentive, predominantly hyperactive/impulsive and combined. Girls are more likely to be identified as predominantly inattentive, whereas boys are more likely to be diagnosed as hyperactive.

A definitive diagnosis is made when an individual displays at least six symptoms common in the disorder, and clear impairment in at least two settings, such as home and school.

ADHD is often not diagnosed until adolescence, and half of the children with the disorder retain symptoms throughout their adult lives.

Symptoms of ADHD are often mistaken for or found occurring with other disorders. Nearly half of all children with ADHD also have oppositional defiant disorder, and conduct disorder is found to co-occur in an estimated 40 percent of children with ADHD. Twenty-five percent of children with ADHD also suffer from some type of communication or learning disorder. Research is also beginning to show that ADHD-like symptoms are sometimes actually manifestations of childhood-onset bipolar disorder.[19]

Scientific evidence supports the conclusion that ADHD is a biologically based disorder. Brain scans have observed significantly lower activity in regions of the brain controlling attention, social judgment and movement among those with ADHD than among those without the disorder.

The most proven treatments for ADHD are medication (the most common of which is Ritalin) and behavior therapy.[20]

Access to mental health services varies greatly among children of different racial groups. While there are no significant differences in the incidence of ADHD between Caucasian and African American young people, African Americans are much less likely than their Caucasian counterparts to receive psychotropic medications.[21]

Cutting/Self-Injury

Self-injury or cutting, also called self-harm, carving, parasuicidal cutting, self-abuse and self-mutilation, is the act of attempting to alter a mood state by inflicting physical harm serious enough to cause tissue damage to one's body without suicidal intent. Cutting (using some sort of sharp edge) is the most common form of self-injury, but burning or hitting oneself also are methods. The behavior is not categorized as "self-injury" if its primary

purpose is sexual gratification, body decoration such as body piercing and tattooing, spiritual enlightenment via ritual or fitting in or being "cool." Research suggests that self-injury is a coping mechanism; that is, when people who self-injure get emotionally overwhelmed, hurting themselves reduces the emotional discomfort quickly. Self-injury typically begins in adolescence, and most commonly affects teenaged girls. Researchers estimate that the incidence of self-injury is about the same as that of eating disorders. However, because the practice is highly stigmatized, most hide their scars, and also have excuses ready when someone asks about the scars.[16]

Suicide

National Trends

Approximately 2,000 U.S. adolescents die by suicide each year; approximately two million, or about one in five, attempt suicide; and almost 700,000 receive medical attention for an attempt. More than 90 percent of the adolescents who have died from suicide also suffered from an associated psychiatric disorder. More adolescent suicide fatalities are boys because they tend to use methods that are more lethal, such as firearms. However, more girls attempt suicide than boys. Again, the factors that increase youth vulnerability are varied and often interwoven. (See Table 1.)

KidSpeak

I looked at my life and realized people would miss me.
Girl, age 17, Broomfield County

- Substance and/or alcohol abuse significantly increases the risk of suicide in teens aged 16 and older.
- *Attempted* suicide rates are higher for Hispanic youth than for white and African American youth. Gay, lesbian, bisexual, transgender and questioning youth are at increased risk for suicide attempts. Adolescents who have experienced childhood sexual or physical abuse are also at increased risk for suicide attempts. These three groups of adolescents often have multiple risk factors.[22]
- Adolescents with learning disabilities have twice the risk of emotional distress, and females with learning disabilities are at twice the risk of attempting suicide and for being involved with violence than their peers.[23]

Table 1: Risk Factors for Adolescent Suicide

PERSONAL FACTORS	PSYCHOLOGICAL FACTORS
• Sexual and physical abuse • Alcohol and drug use and abuse • Homosexuality • Previous suicide attempt • Chronic illness	• Depression • Conduct disorder • Bipolar disorder • Psychosis • Schizophrenia
FAMILY FACTORS	**ANTECEDENT EVENT FACTORS**
• Firearm in home • Low income • History of substance abuse • Suicide in first degree relative • History of domestic violence • Family conflict	• Recent death of family/friend • Romantic conflict/breakup • Divorce/remarriage of parent • School failure

Source: G McIntosh and M Moreno, "Fatal injuries in adolescents," *Wisconsin Medical Journal* 99(9)

Prevention Pays

In 1996, researchers estimate the cost of completed and medically treated suicides for youth (under age 20) in Colorado at over $321 million. Medical costs alone are estimated at about $19 million, $59 million in future earnings lost, and $243 million in quality of life losses.[24]

Colorado Trends

Suicide Completion

Suicide is the second leading cause of death for Colorado teens.[25] In 2000, there were 39 suicides among Colorado teens ages 15-19, for a rate of 12.6 deaths per 100,000 teens. Even though the 2000 rate is the second lowest rate since 1990, the rate of adolescent suicides in Colorado is still well above the Healthy People 2000 target of 8.2 per 100,000 and certainly above the Healthy People 2010 goal of 5.0 per 100,000. (See Figure 1.) No Colorado County is close (within 20 percent) to meeting the 2010 goal.[26]

KidSpeak
I was 16 when a friend suicided. I couldn't do anything. Girl, age 17, Eagle County

As with homicides, national trends in suicide rates differ substantially by age, gender, race/ethnicity and method.

KidSpeak
I tried to cut myself with a knife. Boy, age 15, Garfield County

- During the first half of the 1990s, African American adolescents of all ages had lower suicide rates than other racial/ethnic groups. Suicide rates are now above those for white and Hispanic teens. (See Figure 1.)
- Boys completed suicide at rates three to four times higher than girls. The suicide rate for boys has been declining over the decade. (Data for 1996 for girls has been surpressed due to small numbers.) (See Figure 2.)
- Suicide rates for Hispanic teens, while decreasing over the last few years, are now nearly the same as those of white non-Hispanics and the average for all ethnic groups combined.
- Older teens regardless of race/ethnicity had higher rates for suicide than younger teens, with 18- and 19-year-old teens having the highest rates.
- Within age and race/ethnicity groups there were even more striking differences, which may be of importance in planning successful prevention programs. The rate of suicide for white, Hispanic and African American 18- and 19-year-old teens was twice that of younger teens (ages 16-17) in their respective race/ethnicity groups.

Three Year Average Death Rates due to Suicides Among Teens Ages 15-19 by Race/Ethnicity, Colorado 1990-2001

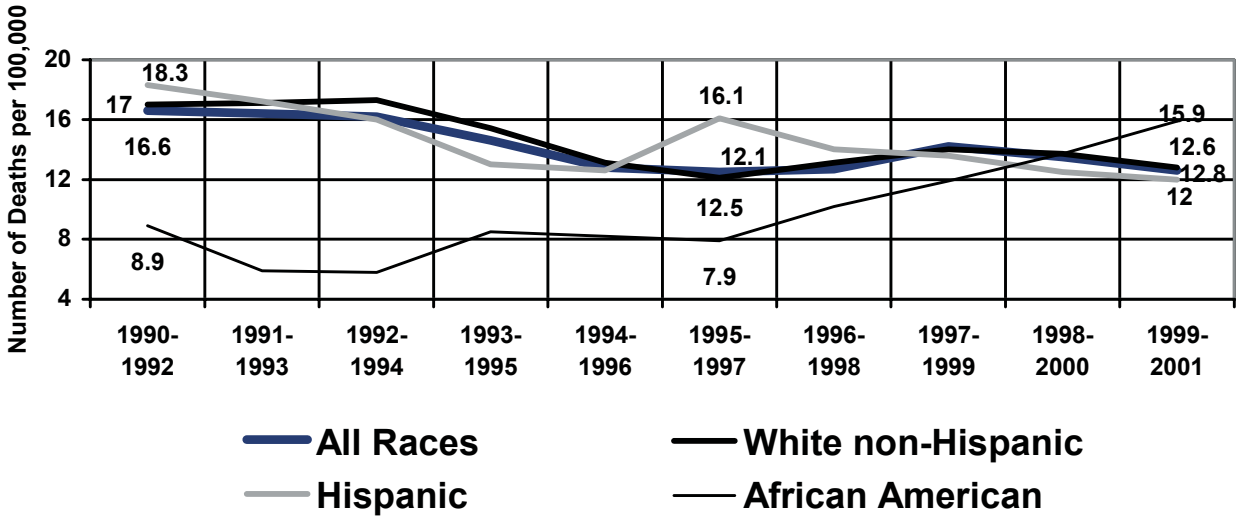

Figure 1. *Source*: Maternal and Child Health Block Grant Program Application for FY 2003, Colorado Department of Public Health and Environment.

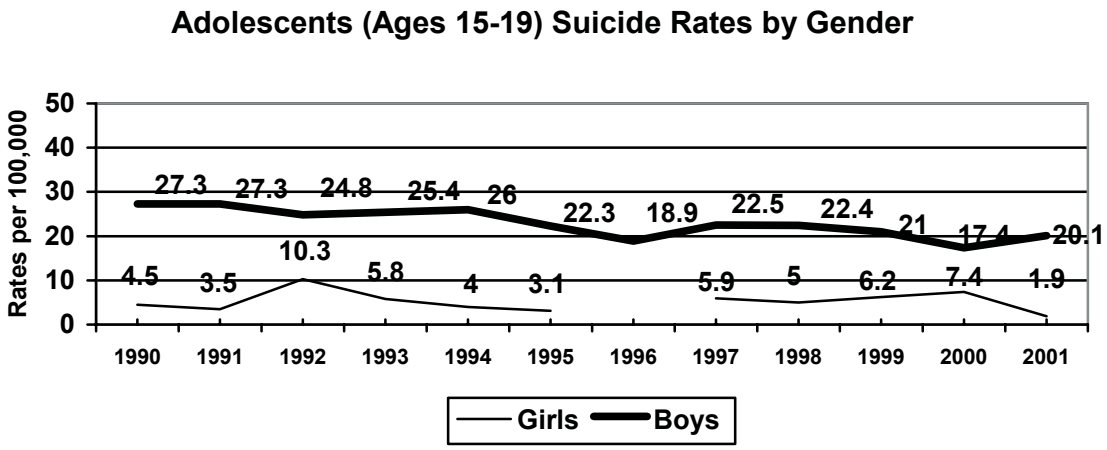

Figure 2: *Source:* Colorado Health Information Dataset

The rate of suicide for white non-Hispanic 16- to 17-year-olds, however, was three times higher than the rate for younger white non-Hispanic adolescents (ages 10-15).[27] (See Figure 1.)

Thinking about Suicide

Even though adolescent suicide rates have been decreasing, teens are still thinking about suicide and acting upon those thoughts. According to Colorado Youth Risk Behavior Survey (CoYRBS) data:

- The proportion of high school youth seriously considering suicide was 22.2 percent in 1995 (weighted data); 24.2 percent in 1997 (unweighted data); and 19.3 percent in 2001 (also unweighted data).
- More than one in 10 Colorado high school students report actually planning how they would commit suicide (16.9 percent in 1995 CoYRBS; 13.8 percent in 2001 CoYRBS).

(Note: These data cannot be interpreted as a trend because of the limitations in the data.)

These self-reports are reflected in the number of hospitalizations due to suicide attempts. Figure 3 clearly shows that the actual numbers of suicide deaths are only the tip of the iceberg.

Suicide Method

The method adolescents use to complete a suicide may differ by the age of the adolescent. Over the past decade, younger teens (ages 10-15) were as likely to use a firearm or hang themselves; older teens were much more likely to use a firearm (60-62 percent.)[28]

Between 1990 and 2001, firearms accounted for an average of 60 percent of the 461 suicide deaths over that time period. In 2001, firearms accounted for 21 of the suicide deaths, or 57 percent of all suicides.[29]

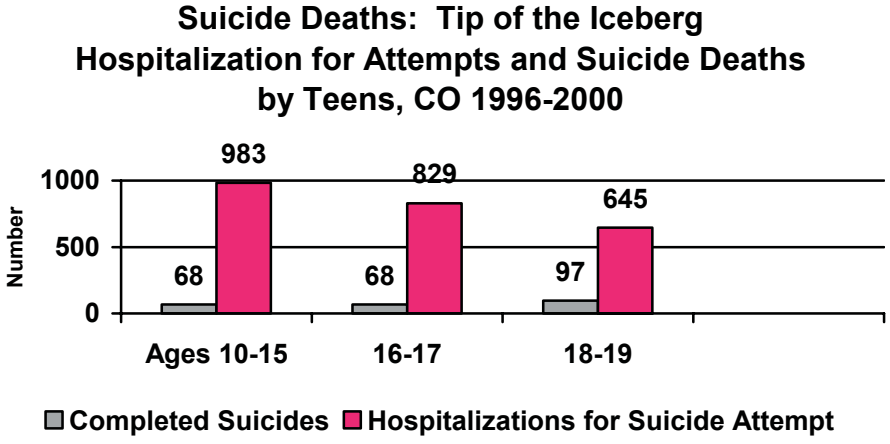

Figure 3: Source: Emergency Medical Services and Injury Prevention Section, Colorado Department of Public Health and Environment.

In terms of suicide attempts requiring hospitalization, from 1996 to 2000, about four out of five (82-85 percent) attempted suicides by teens were by drugs. Older teens were more likely than younger teens to attempt suicide through this method.[30]

Best Practices: Access To Services

Assure Early Access to Preventive Services

According to a recent report, the U.S. mental health system is in crisis, "unable to provide even the most basic services and supports."[31] The unmet needs and barriers to mental health care that are common in the United States are exacerbated for children. According to the President's New Freedom Commission on Mental Health, the "mental health maze is even more complex and inadequate for children" than it is for adults. While there are more programs set up to serve children, the commission concluded, they are supported with uncoordinated funding streams and differing eligibility requirements. Frequently, eligibility is cut off after age 18, when many disturbed youth need additional support to move toward emancipation.[32]

Accessing mental health services before a crisis is obviously a "best practice" for prevention. The primary consequence of not receiving care early enough is often the spiraling cycle of missed opportunities and poor outcomes. On average, only one-fourth of children who need mental health care get the help they need.[33] Certain youth populations suffer disproportionately. National researchers estimate that Hispanic and African American adolescents have the highest rates of need for mental health services, and that Hispanic teens are the least likely of all teens to access mental health care.[34] (See Figure 4.)

As is the case in other states, many adolescents in Colorado still fall through the cracks. Priority in Colorado's mental health safety net programs for youth goes to children and adolescents aged 0-17 that have emotional or mental health problems so serious that their ability to function is significantly impaired and, as a result, their ability to stay in their natural homes may be in jeopardy. Services for persons of all ages are delivered through contracts with five specialty clinics and 17 private, non-profit community mental health providers. To a large extent, the persons served are those with major mental illnesses who are either Medicaid-eligible, or are "working poor" without health insurance or who have limited health insurance. In addition, two state mental health institutions at Pueblo and Fort Logan provide inpatient hospitalization for Colorado residents with serious mental illness.

Support Mental Health Services in Primary Care and School Settings

Research and expenditure studies indicate that most insured children with mental health issues are more likely to visit their primary care provider or pediatrician rather than a mental health specialist. Well-teen checkups seem like obvious settings to recognize and address adolescent emotional or mental health issues. In some health care delivery settings, the limited duration of the average visit spent with a provider, between 11 and 15 minutes, poses a barrier.[35]

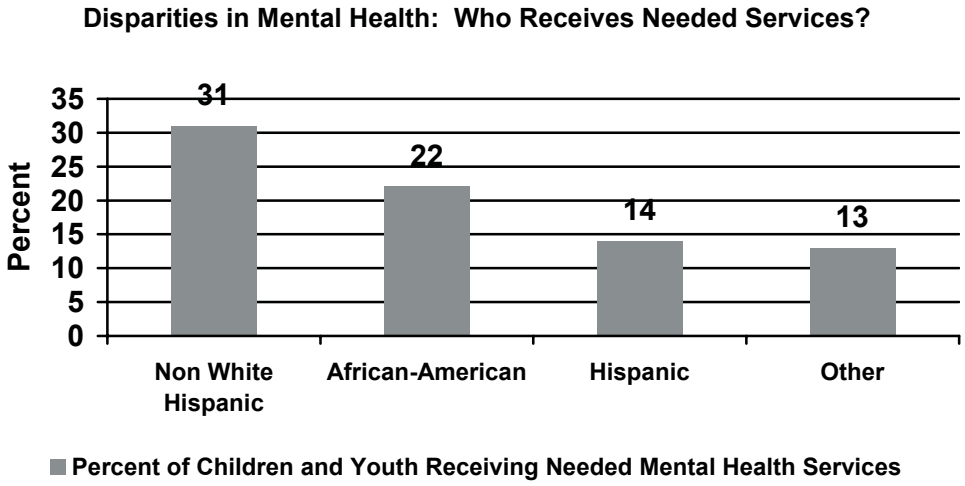

Figure 4 Source: ***RAND Health Research Highlights. Calculations are based on data from the National Health Interview Study, 1998.***

The President's New Freedom Commission on Mental Health identified model programs that might be replicated, including school-based programs that offer accessibility, reduce the stigma of mental illness that is common in American culture and provide the opportunity for melding school district and mental health funds. "Wraparound" programs were also identified as a promising approach; these programs strive to integrate services and funding for the most seriously affected adolescents at a single site to improve access.[36]

Schools often serve as the de facto mental health system for school-age children and youth. Research indicates that of those adolescents who receive care, most (70-80 percent) receive that care in a school setting.[37] Schools employ a variety of means to provide these services:

- School-financed services, including school nurse, school psychologists, social workers
- Colorado school districts can provide such services and may be able to draw federal matching funds for services provided to Medicaid-enrolled students, under the Colorado School Health Services Act.
- School health unit, including school-based or linked health center, wraparound services and formal linkages between schools and community mental health providers. Nearly all of Colorado's 40 school-based health centers provide on-site mental health services, and many are linked with the local mental health safety net agency. About a third of Colorado school districts provide on-site clinical mental health services.[38]
- Classroom-based curriculum and counseling provided at school: About two-thirds of Colorado school districts offer mental health-related programming, such as anti-drug programs, screening and referral services and general relational skill building.[39]

School-based health centers have been shown to have an impact on school measures of success. In one study, students served by the centers in Dallas, Texas had fewer discipline problems, course failures and school absences.[40]

The U.S. Surgeon General's reports in 1999 and 2001 on children's mental health identify schools as major settings for addressing the mental health needs of children and adolescents, but recognize the shortages of trained staff and limited options for referral to specialty care.[41] Other barriers to mental health services in schools are the current emphasis on educational mission, fear of infringement on family rights, insufficient funding and general discomfort about addressing issues of mental health.[42]

A major study of suicide by The Colorado Trust and the Office of Suicide Prevention at the Colorado Department of Public Health and Environment surveyed Colorado school districts to identify the roles that schools played in suicide prevention efforts. Responding districts (half of the existing school districts in Colorado) offered a variety of suicide-related programming, the most common of which were anti-drug programs (63 percent), anti-violence programs (52 percent), screening and referral services (52 percent) and general skill building (49 percent). About two-thirds of the responding schools had written suicide crisis plans. The study concluded that there was "ample room for further program development" regarding suicide prevention in Colorado school districts.[43]

Promote Integrated Community Initiatives

Many of the most thoroughly researched, evidenced-based programs in the mental health arena relate to suicide prevention and provide an example with potential broader applications.

Preventive interventions for suicide must be comprehensive and intensive if they are to have lasting effects. While an adolescent's suicide may be related to an underlying psychiatric disorder, other factors or risk behaviors come into play, such as co-occurring substance abuse, an eating disorder, a homicide or adverse life experiences.[44] Programs, school-based or otherwise, are more likely to be successful if they are designed to address suicide and suicidal behavior as part of a broader focus on mental health, coping skills in response to stress, substance abuse and aggressive behaviors.[45]

Colorado's new teen suicide prevention pilots serve as examples. In May 2000, the Colorado Legislature passed a bill creating the Office of Suicide Prevention within the Colorado Department of Public Health & Environment.[46] The Office of Suicide Prevention is working with state partners and local communities to implement the recommendations of the 1998 Governor's Commission on Suicide Prevention

through a federal grant from the Substance Abuse and Mental Health Services Administration. Jefferson County, Mesa County and the San Luis Valley have been selected to establish or strengthen community coalitions for suicide prevention; link suicide prevention to other local prevention efforts, such as youth substance abuse, youth violence prevention and mental health services; and implement a national model teen suicide prevention program. Model programs include training in suicide intervention skills for community members who interact with youth aged 10-19, either professionally or personally.[47]

The key components of a successful suicide prevention program depend upon linking intervention opportunities with service-oriented programs that are available in a range of settings. (Table 2.)

Establish Programs That Promote Healthy Social Skills and Relationships

Along with the physical and cognitive changes of adolescence, relationships with parents and peers change too. Relationships of high quality have a beneficial impact on psychological health.

TABLE 2: KEY COMPONENTS OF A COMPREHENSIVE SUICIDE-PREVENTION SYSTEM

INTERVENTION OPPORTUNITY	SERVICE-ORIENTED PROGRAMS	SERVICE SETTINGS
Provide outreach to individuals at-risk of committing suicide	Screening, assessment and referral programs	Primary-care settings Schools
	Peer support programs	Schools
Educate those in gatekeeper positions to recognize individuals exhibiting suicidal behaviors	Gatekeeper training(Gatekeeper programs are educational programs designed to help community members recognize those contemplating suicide and refer them to appropriate caregivers.)	Schools
		Community
		Health care setting
Respond effectively to those in a suicide crisis and those who have made a previous suicide attempt	Crisis treatment	Mental health setting
	Telephone crisis hotlines	
Provide professional services to suicide survivors	Mental health treatment	Mental health setting
		Community support group
Offer support to the families and loved ones of suicide victims	Suicide support programs	Medical care and mental health agencies
		Community support group
Educate the community about the suicide problem and prevention strategies	Community education	Community-wide
	Restricting access to lethal means	

Source: Suicide in Colorado, The Colorado Trust (2002), p. 38

Child Trends, a non-profit, non-partisan research organization, carried out a review of more than 360 research studies that relate to social competency in adolescence. Social competence is defined as "the ability to achieve personal goals in social interaction, while at the same time maintaining positive relationships with others over time and across situations."[48] Only programs proven through research were included in the review of "what works." Effective programs were found to influence a number of social competency dimensions.

- Good parent-child relationships appear to influence the quality of other relationships, such as friends and romantic partners, and also affect adolescents' psychological and psychosocial development. Programs designed to develop teens' social skills and mentoring programs can boost the quality of the parent-adolescent relationship.
- Non-parental adults, especially grandparents, can serve as role models, teachers and supporters to teens by providing information about family history and culture. A program to help people become better grandparents is promising.
- Teens who have friendships with adults outside their families get along better with their parents. Successful mentoring programs match teens with adults based on similar interests, structure meetings at regular times, offer social activities, ensure that the programs are youth-driven and responsive, maintain long-term relationships and train participants before and during the program.

Support Treatment Approaches That Improve Mental and Emotional Health

Our culture often portrays teens as moody, dramatic and difficult. However, some have serious mental and emotional problems that go beyond this common stereotype. Policymakers should be aware of the harmful consequences of these conditions, and develop sound prevention and intervention strategies to address these challenges.

Child Trends also carried out a review of more than 300 research studies on teens' mental health and emotional well-being.[49] The review contains a number of recommendations that could improve mental health programs targeting this age group.

- Programs that use comprehensive, integrated approaches appear to be most effective in preventing such programs as conduct disorder, attention deficit and hyperactivity disorder and drug and alcohol abuse.
- Approaches that work to change a person's thoughts in order to change a behavioral and emotional state (also known as cognitive-behavioral therapy), drug therapy and environmental strategies appear to reduce mental health disorders, including depression and anxiety.
- Early prevention programs may head off a number of mental and behavioral health problems in adolescents.

End Notes

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