### Infancy & Early Childhood
- Difficult temperament
- Insecure attachment
- Hostile to peers, socially inhibited
- Irritability
- Fearfulness
- Difficult temperament
- Head injury
- Motor, language, and cognitive impairments
- Early aggressive behavior
- Sexual abuse
- Parental drug/alcohol use
- Cold and unresponsive mother behavior
- Marital conflict
- Negative events
- Cold and unresponsive mother behavior
- Parental drug/alcohol use
- Family dysfunction
- Disturbed family environment
- Parental loss
- Poor academic performance in early grades
- Specific traumatic experiences
- Negative events
- Lack of control or mastery experiences
- Urban setting
- Poverty

### Middle Childhood
- Negative self-image
- Apathy
- Anxiety
- Dysthymia
- Insecure attachment
- Poor social skills: impulsive, aggressive, passive, and withdrawn
- Poor social problem-solving skills
- Shyness
- Poor impulse control
- Sensation-seeking
- Lack of behavioral self-control
- Impulsivity
- Early persistent behavior problems
- Attention deficit/hyperactivity disorder
- Anxiety
- Depression
- Antisocial behavior
- Head injury
- Self-reported psychotic symptoms
- Parental depression
- Poor parenting, rejection, lack of parental warmth
- Child abuse/maltreatment
- Loss
- Marital conflict or divorce
- Family dysfunction
- Parents with anxiety disorder or anxious childrearing practices
- Parental overcontrol and intrusiveness

### Risk and Protective Factors for Mental, Emotional, and Behavioral Disorders Across the Life Cycle
#### Disorders
- Depression
- Anxiety
- Substance abuse
- Schizophrenia
- Conduct disorders

#### Type of Factor
- Risk factor
- Protective factor

#### Sources of Risk/Protective Factors
- Individual
- Family
- School/community

---

(family risk factors continued)
- Parents model, prompt, and reinforce threat appraisals and avoidant behaviors
- Marital conflict; poor marital adjustments
- Negative life events
- Permissive parenting
- Parent-child conflict
- Low parental warmth
- Parental hostility
- Harsh discipline
- Child abuse/maltreatment
- Substance use among parents or siblings
- Parental favorable attitudes toward alcohol and/or drug use
- Inadequate supervision and monitoring
- Low parental aspirations for child
- Lack of or inconsistent discipline
- Family dysfunction
- Peer rejection
- Stressful life events
- Poor grades/achievements
- Poverty
- Stressful community events such as violence
- Witnessing community violence
- Social trauma
- Negative events
- Lack of control or mastery experiences

(school/community risk factors continued)
- School failure
- Low commitment to school
- Peer rejection
- Deviant peer group
- Peer attitudes toward drugs
- Alienation from peers
- Law and norms favorable toward alcohol and drug use
- Availability and access to alcohol
- Urban setting
- Poverty
- Mastery of academic skills (math, reading, writing)
- Following rules for behavior at home, school, and public places
- Ability to make friends
- Good peer relationships
- Consistent discipline
- Language-based rather than physically-based discipline
- Extended family support
- Healthy peer groups
- School engagement
- Positive teacher expectations
- Effective classroom management
- Positive partnering between school and family
- School policies and practices to reduce bullying
- High academic standards

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### Risk and Protective Factors for Mental, Emotional, and Behavioral Disorders Across the Life Cycle

#### ADOLESCENCE

- Female gender
- Early puberty
- Difficult temperament: inflexibility, low positive mood, withdrawal, poor concentration
- Low self-esteem, perceived incompetence, negative explanatory and inferential style
- Anxiety
- Low-level depressive symptoms and dysthymia
- Insecure attachment
- Poor social skills: communication and problem-solving skills
- Extreme need for approval and social support
- Low self-esteem
- Shyness
- Emotional problems in childhood
- Conduct disorder
- Favorable attitudes toward drugs
- Rebelliousness
- Early substance use
- Antisocial behavior
- Head injury
- Marijuana use
- Childhood exposure to lead or mercury (neurotoxins)

#### EARLY ADULTHOOD

- Early-onset depression and anxiety
- Need for extensive social support
- Childhood history of untreated anxiety disorders
- Childhood history of poor physical health
- Childhood history of sleep and eating problems
- Poor physical health
- Lack of commitment to conventional adult roles
- Antisocial behavior
- Head injury
- Parental depression
- Spousal conflict
- Single parenthood
- Leaving home
- Family dysfunction
- Decrease in social support accompanying entry into a new social context
- Negative life events
- Attending college
- Substance-using peers
- Social adversity

#### Type of Factor

- Risk factor
- Protective factor

#### Sources of Risk/Protective Factors

<table>
<thead>
<tr>
<th>Individual</th>
<th>Family</th>
<th>School/Community</th>
</tr>
</thead>
</table>

#### Disorders

- Depression
- Schizophrenia
- Anxiety
- Conduct disorders
- Substance abuse

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(family risk factors continued)

- Marital conflict
- Family conflict
- Parent with anxiety
- Parental/marital conflict
- Family conflict (interactions between parents and children and among children)
- Parental drug/alcohol use
- Parental unemployment
- Substance use among parents
- Lack of adult supervision
- Poor attachment with parents
- Family dysfunction
- Family member with schizophrenia
- Poor parental supervision
- Parental depression
- Sexual abuse
- Peer rejection
- Stressful events
- Poor academic achievement
- Poverty
- Community-level stressful or traumatic events
- School-level stressful or traumatic events
- Community violence
- School violence
- Poverty
- Traumatic event
- School failure
- Low commitment to school
- Not college bound
- Aggression toward peers
- Associating with drug-using peers
- Societal/community norms about alcohol and drug use

(school/community risk factors continued)

- Urban setting
- Poverty
- Associating with deviant peers
- Loss of close relationship or friends
- Positive physical development
- Academic achievement/intellectual development
- High self-esteem
- Emotional self-regulation
- Good coping skills and problem-solving skills
- Engagement and connections in two or more of the following contexts: school, with peers, in athletics, employment, religion, culture
- Family provides structure, limits, rules, monitoring, and predictability
- Supportive relationships with family members
- Clear expectations for behavior and values
- Presence of mentors and support for development of skills and interests
- Opportunities for engagement within school and community
- Positive norms
- Clear expectations for behavior
- Physical and psychological safety
Mental, emotional, and behavioral (MEB) disorders—which include depression, conduct disorder, and substance abuse—affect large numbers of young people. Studies indicate that MEB disorders are a major health threat and are as commonplace today among young people as a fractured limb—not inevitable but not at all unusual. Almost one in five young people have one or more MEB disorders at any given time. Among adults, half of all MEB disorders were first diagnosed by age 14 and three-fourths by age 24.

Many disorders have life-long effects that include high psychosocial and economic costs, not only for the young people, but also for their families, schools, and communities. The financial costs in terms of treatment services and lost productivity are estimated at $247 billion annually. Beyond the financial costs, MEB disorders also interfere with young people’s ability to accomplish developmental tasks, such as establishing healthy interpersonal relationships, succeeding in school, and making their way in the workforce.

Clear windows of opportunity are available to prevent MEB disorders and related problems before they occur. Risk factors are well established, preventive interventions are available, and the first symptoms typically precede a disorder by 2 to 4 years. And because mental health and physical health problems are interwoven, improvements in mental health will undoubtedly also improve physical health. Yet the nation’s approach to MEB disorders has largely been to wait to act until a disorder is well-established and has already done considerable harm. All too often, opportunities are missed to use evidence-based approaches to prevent the occurrence of disorders, establish building blocks...
for healthy development in all young people, and limit the environmental exposures that increase risk—approaches likely to be far more cost-effective in addressing MEB disorders in the long run.

Interventions before a disorder manifests itself offer the best opportunity to protect young people. Such interventions can be integrated with routine health care and wellness promotion, as well as in schools, families, and communities. A range of policies and practices that target young people with specific risk factors; promote positive emotional development; and build on family, school, and community resources have proven to be effective at reducing and preventing MEB disorders. Making use of the evidence-based interventions already at hand could potentially save billions of dollars by preventing or mitigating disorders that would otherwise require expensive treatment.

PROVEN APPROACHES

A recent study by the National Research Council and the Institute of Medicine reviewed the research on the prevention of mental disorders and substance abuse among young people and recommended multiple strategies for enhancing the psychological and emotional well-being of young people. Research including meta-analyses and numerous randomized trials demonstrate the value of:

- **Strengthening families** by targeting problems such as substance use or aggressive behavior; teaching effective parenting skills; improving communication; and helping families deal with disruptions (such as divorce) or adversities (such as parental mental illness or poverty).
- **Strengthening individuals** by building resilience and skills and improving cognitive processes and behaviors.
- **Preventing specific disorders**, such as anxiety or depression, by screening individuals at risk and offering cognitive training or other preventive interventions.
- **Promoting mental health in schools** by offering support to children encountering serious stresses; modifying the school environment to promote prosocial behavior; developing students’ skills at decision making, self-awareness, and conducting relationships; and targeting violence, aggressive behavior, and substance use.
- **Promoting mental health through health care and community programs** by promoting and supporting prosocial behavior, teaching coping skills, and targeting modifiable life-style factors that can affect behavior and emotional health, such as sleep, diet, activity and physical fitness, sunshine and light, and television viewing.

The key to most of these approaches is to identify risks—biological, psychological, and social factors—that may increase a child’s risk of MEB disorders. Some of these risks reside in specific characteristics of the individual or family environment (such as parental mental illness or substance abuse or serious family disruptions), but they also include social stresses such as poverty, violence, lack of safe schools, and lack of access to health care. Most risk factors tend to come in clusters and are associated with more than one disorder. Currently, treatment interventions tend to isolate single
problems, but there is growing evidence that well-designed prevention interventions reduce a range of problems and disorders and that these efforts are sustained over the long term. These programs often help children, families, and schools build strengths that support well-being. A focus on prevention and wellness can have multiple benefits that extend beyond a single disorder.

**POLICY IMPLICATIONS**

Officials at the local, state, and federal levels all play a role in mental health promotion and the prevention of MEB disorders. Many providers and agencies are responsible for the care, protection, or support of young people: the child welfare, education, and juvenile justice systems, as well as medical and mental health care providers and community organizations. Yet resources within these agencies are scattered, not coordinated, and often do not effectively support prevention programs or policies. The result is a patchwork that does not perform as an integrated system and fails to serve the needs of many young people and their families.

National leadership is necessary to make systematic prevention efforts a high priority in the health care system as well as an integral aspect of the network of local, state, and federal programs and systems that serve young people and families. Leaders at the national, state, and local levels need to pursue specific strategies, such as:

- **A White House initiative to develop an inter-departmental strategy** that identifies specific prevention goals, directs multiple federal agency resources toward these goals, and provides guidance to state and local partners.

- **Development of state and local systems involving partnerships among families, schools, courts, health care providers, and local programs to create coordinated approaches that support healthy development.**

- **Investment in prevention and promotion**, including setting aside resources for evidence-based prevention in mental health service programs and investment in proven prevention approaches by school systems.

- **Workforce training**, including development of prevention training standards and training programs across disciplines including health, education, and social work.

- **Long-term tracking** of the prevalence and frequency of MEB disorders.

- **Implementation and evaluation of screening with community involvement, parental support, valid tools, and interventions to address identified needs.**

- **Continued research** on both the efficacy of new prevention models and real-world effectiveness of proven prevention and wellness promotion interventions;

- **Adaptation of research-based programs to cultural, linguistic, and socioeconomic subgroups;**

- **Public education**, with mass media and the internet offering the opportunity to greatly expand the reach of specific messages about risk factors and available resources, to reduce stigma, and to deliver some kinds of interventions.

Implementing a systems focus will require innovative efforts to provide societal institutions that affect young people—families, schools, health care systems, and community programs—with the tools to promote healthy development and prevent MEB disorders. Policies are also needed to help ensure families’ financial security, provide safe neighborhoods and schools, improve access to health care and other services, and provide enriched early childhood environments.

Tools to equip young people who are at risk with the skills and habits they need to live healthy, happy, and productive lives are available. What is lacking are the will, social policies, and collaborative strategies to adequately support the healthy development of the nation’s young people.
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FOR MORE INFORMATION ...

Copies of the report, Preventing Mental, Emotional, and Behavioral Disorders Among Young People: Progress and Possibilities, are available for sale from the National Academies Press at (888) 624-8373 or (202) 334-3313 (in the Washington, DC metropolitan area) or via the NAP home page at www.nap.edu. Full text of the report and a free pdf copy of the Summary are also available at www.nap.edu. The study was funded by the Substance Abuse and Mental Health Services Administration, National Institute of Mental Health, National Institute on Drug Abuse, and the National Institute on Alcohol Abuse and Alcoholism.

This policy brief is one in a series of three briefs with highlights from the report.

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