

# Children's Mental Health in Washington State

## **A Public Health Perspective Needs Assessment**

March 2006

Data Revised November 2007



Office of Maternal and Child Health



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Maternal and Child Health Assessment  
Child and Adolescent Health

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# Contents

Acknowledgement of Key Informants.....	1
Executive Summary.....	5
History .....	5
Assessment Process, Data Collection and Identification of At-Risk Populations ..	6
Roles of Public Health.....	6
Key Informants’ Recommendations and Strategies.....	7
Limitations .....	9
Introduction .....	11
History .....	11
Purpose .....	12
Process .....	12
The Role of Public Health: Setting the Stage for Mental Health Activities.....	15
Primary Prevention .....	15
Early Intervention .....	16
Non-Stigmatized Health Services Provider.....	16
Research.....	16
Health Promotion .....	16
Connection to Physical Health Providers and Services.....	17
Referral Source .....	17
Surveillance .....	17
Health Education .....	17
Promote Mind-Body Connection .....	18
Policy and Advocacy.....	18
Convener of Partners/Collaborator.....	18
Screening .....	18
Access to Care .....	19
Data: Painting the Picture of Children’s Mental Health .....	20
Risk and Protective Factors .....	20
Diagnoses and Behavior.....	26
Outcomes of Poor Mental Health .....	29
Future Data Sources .....	31
Key Informants: Issues & Suggested Recommendations and Strategies .....	35
Statewide Concerns.....	35
MCH Regional Issues and Concerns.....	43
High Risk Groups .....	46
Populations at Risk as Inferred by National or Other State Data Sources.....	49

Next Steps.....	53
Research Questions .....	54
Appendix A - Methods .....	56
Framework .....	56
Key Informant Interviews.....	61
Appendix B: Data Tables.....	65
Individual Risk Factors.....	65
Individual Protective Factors.....	66
Family Risk Factors.....	68
Family Protective Factors.....	70
School Risk and Protective Factors .....	71
Peer Risk Factors.....	72
Peer Protective Factors.....	74
Social Environmental Risk and Protective Factors .....	75
Sources.....	77

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## Executive Summary

The Surgeon General defines mental health as, “the successful performance of mental function, resulting in productive activities, fulfilling relationships with other people, and the ability to adapt to change and to cope with adversity.”<sup>1</sup> In 2004, the Washington State Department of Health’s Office of Maternal and Child Health (OMCH) initiated the formal process of examining this definition’s components among children in Washington. This report summarizes the findings from that effort. The purpose of this report is to: investigate mental health data sources; explore the prevalence of mental illness among children; explore the prevalence of mental health risk and protective factors among children; identify children at risk for future mental illness; obtain mental health services providers’ perspective on the current issues impacting mental health; determine mental health service needs based on feedback of mental health providers and other key informants; reveal gaps in mental health data; and to identify and describe public health’s role in mental health.

### History

In 2002, Department of Health’s OMCH received survey results from stakeholders in local health jurisdictions (LHJs) that expressed concern about the mental health of children and youth in Washington State. In response to stakeholders’ interest in addressing mental health, OMCH determined the best course of action was to design and implement a children’s mental health needs assessment that ascertained both the prevalence of mental illness and the need for mental health services among children and youth.

When the children’s mental health needs assessment process began in late 2004, no other state had completed a children’s mental health needs assessment from a public health perspective. Dr. Eric Trupin at the University of Washington produced a children’s mental health needs assessment for Washington State, but it was completed in 1988, and was only done on acute care and treatment. This report intends to cover the entire spectrum of mental health, from prevention to the presence of serious emotional disturbances.

The report was updated in 2007. The chapter, “Data: Painting the Picture of Children’s Mental Health” was revised providing new data from the 2006 Healthy Youth Survey, the 2005 Washington Pregnancy Risk Assessment Monitoring System (PRAMS), and 2003-2005 death certificates. A section was also added to the chapter describing key future sources for data on the mental health of children in Washington State.

### **Assessment Process, Data Collection and Identification of At-Risk Populations**

The assessment process consisted of three distinct stages: 1) data collection and analysis to explore the prevalence of mental health conditions among children and the risk and protective factors associated with those conditions, 2) identification of service capacity for children’s mental health, the role of public health in mental health, and urgent issues through key informant interviews, and 3) the dissemination of findings. Populations were considered at-risk for mental illness if the prevalence of mental illness among them was above 20%, which is the national prevalence rate of mental illness among children.<sup>1</sup> These populations are children in foster care; children and youth with special health care needs; children and youth in the juvenile justice system; and children of parents with mental illness.

Data sources were identified based on relevance to the mental health continuum: risk and protective factors for mental health, diagnosis & behavior, and outcomes of poor mental health. The results are listed in both the data sections of this report and appendix B.

### **Roles of Public Health**

Public Health, although not in the role of providing acute care and treatment services for the mentally ill, is capable of contributing several activities to promote mental health including:

- Primary Prevention
- Early Intervention
- Non-Stigmatized Health Services Provider
- Research
- Health Promotion
- Connection to Physical Health Providers and Services
- Referral Source
- Surveillance
- Health Education
- Promote Mind-Body Connection
- Policy and Advocacy
- Convener of Partners/Collaborator
- Screening
- Access to Care
- Social Marketing
- Translation of Scientific Materials for Lay Audiences
- Social Services (not treatment)
- Mental Health Licensing (individual professional licenses and mental health facilities)

## Key Informants' Recommendations and Strategies

Key informants' comments were analyzed to identify specific themes of concern for what they believed to be the most pressing issues affecting the mental health of children in Washington State. The general categories of key informant strategies and recommendations are separated into two categories: statewide concerns and high-risk groups. Recommendations and strategies in **bold** are those activities that were described by key informants as within the role of public health and within the scope of OMCH's work. The bolded strategies will influence OMCH's work in mental health. Recommendations and strategies by key informants were given as follows:

### ***Key Informant Recommendations and Strategies to Address Statewide Concerns***

1. Mental Illness Prevention Efforts
  - Increase mental illness prevention resources in Washington State
  - Mental health screening for children and infants in schools, child care settings and after school programs
2. Stigma
  - Allocate resources to reduce stigma for people suffering from mental illness
  - Make education on mental illness a requirement in elementary schools
3. Integration of Mental Health: substance abuse services, medical care, developmental disabilities and child care settings.
  - Station a licensed mental health therapist at each substance abuse rehabilitation facility in Washington State
  - Develop a joint chemical dependency/mental health license and Washington Administrative Codes (WACs) to cut down on both cost and paperwork associated with applying for both licenses
  - **Promoting Bright Futures in Practice: Mental Health as a screening resource for primary care physicians**
4. Child Care – Increase capacity of child care providers to understand and address mental health needs of children in their care
  - **Continue to provide training and consultation for child care providers on child development and mental health**
  - Increase the capacity of after-school program providers to identify children coping with mental illness in their programs, and to provide services or referrals as needed

## Executive Summary

5. Misdiagnosis of mental health conditions
  - Improve and increase training of mental health providers that work with children— especially those who work with young infants and toddlers and their parents
  - Adopt a common coordinated screening/intake assessment tool and, as appropriate, provide information to facilitate linkage with other systems of care
  - Adjust systems of care to permit psychiatrists to spend an amount of time with their patients that allows them to establish trusting patient/provider relationships.
6. General Funding and Access to Care – Expand frequency of services as well as expand Medicaid coverage for specific diagnoses
  - Expand Medicaid coverage to include Autism Spectrum Disorder
  - Lower caseloads of publicly funded mental health case managers
  - **Pursue additional funding for home visiting services by public health nurses**
  - Provide incentives for psychiatrists to practice in Washington State
  - Improve communication from state mental health planners to Medicaid financed mental health providers regarding funding allowances and restrictions
7. Racism
  - **Develop a mental health surveillance project that identifies the prevalence and factors associated with mental health and racial/ethnic populations**

### ***Key Informant Recommendations and Strategies for High Risk Groups***

1. Children in Foster Care
  - Station a mental health provider at each local child welfare office in order to triage, plan and consult for cases at high-risk for mental illness
  - Educate attorney and judges about the mental health needs of foster children
2. Children and Youth with Special Health Care Needs (CSHCN)
  - **Develop resources for social/support groups for children with special health care needs, to make the experience of being a child with a special health care need less isolating**

- Co-locate mental health professionals who are trained in early childhood mental health in early intervention programs
  - **Support an anti-bullying curriculum with a focus on prevention that includes differently abled children. Curriculum should begin in child care settings and carry on through high school**
  - **Provide education to teachers about how to best meet the needs of children with special health care needs**
3. Children in the Juvenile Justice System
- Provide local jails with a mental health provider to screen, refer, and treat adolescents and children in juvenile correctional settings.
  - Promote programs to prevent children from engaging in criminal activity, such as public health nurse home visiting programs.
4. Children of Parents with Mental Illness
- **Make the practice common among physical and mental health providers in Washington State to ask clients and patients if they are parents, and refer for parenting education, family support and other services as appropriate**
  - Increase child care and summer camp resources for children with parents who have mental illness
  - Develop and fund mentorship programs for children with parents who have mental illness

### Limitations

Despite the OMCH's best efforts to include as much information about children's mental health in Washington State as possible, data was not always available to describe every aspect of the mental health status of children. Infant mental health prevalence data is currently non-existent. Information about the prevalence of specific disorders is not available outside of Attention Deficit Hyperactivity Disorder, Attention Deficit Disorder, Depression, and Autism. Some specific populations that have national data to indicate a higher level of risk for mental illness, do not have Washington State-based data sources to provide evidence of their risk level. These populations include: gay, lesbian, bisexual, transgender and questioning youth; children who are immigrants and refugees; children of incarcerated parents, homeless children, and American Indian children.



## Introduction

As Washington State, the United States and the global community make great strides towards the alleviation of physical health burdens, mental health is often left behind as a secondary health concern. The World Health Organization (WHO) reported in 2004 that, “five out of the ten leading causes of death and premature disability in the world are psychiatric conditions.”<sup>2</sup> Children are especially vulnerable to mental illness —WHO also estimates that worldwide, one out of five adolescents has significant developmental, emotional, or behavioral problems.<sup>2</sup> In the United States, the Surgeon General reported in 1999, that one out of five children (ages birth to 18) experiences symptoms of mental disorders, and approximately 5% to 9% of children experience symptoms so severe, that they impair his/her ability to function.<sup>1</sup>

In Washington State, there is little known about the extent to which mental illness ultimately impacts children. There are some estimates of mental illness, such as 7.4% of children experience multiple symptoms of mental conditions<sup>3</sup>, but there is a great deal of information about mental status among children and youth that remains unknown. At the time of this report, no other known state public health department has assembled a children’s mental health needs assessment. This report will outline what is known about children’s mental health in Washington State, and what additional information we need in order to comprehend the impact of mental illness on one of the most vulnerable age groups.

## History

The Washington State Department of Health’s (DOH) Office of Maternal and Child Health (OMCH) receives an annual federal Maternal and Child Health Services Block Grant (Title V) to assure quality health services for women and children in Washington State. The Maternal and Child Health Bureau, the federal agency responsible for oversight of the block grant, requires that each state applying for the block grant complete a five-year needs assessment. The needs assessment includes health data and information about children and families in Washington State by various categories such as injuries, children with special health care needs, and immunizations. Once the needs assessment data is collected and analyzed, the information is used to develop MCH priorities and for ongoing planning. In 2000, OMCH created a mental health state performance measure based on results from a local health jurisdiction survey. The State Performance Measure is: “to increase our capacity to assess the mental health needs of children and adolescents in Washington State and to promote mental health.” (Washington State Title V Block Grant Narrative, 2000)

From 2000 to 2004, the OMCH worked to identify and qualify relevant mental health data in order to fulfill the performance measure. Competing priorities, staff availability, and the breadth of mental health data made the task of aggregating

## Introduction

mental health information difficult. In 2004, OMCH applied for a post-graduate fellow from the Centers for Disease Control and Prevention's Public Health Prevention Service (PHPS), and was successful in their bid for a CDC Prevention Specialist. This individual was able to focus and coordinate the formal children's mental health needs assessment process.

The report was updated in 2007. The chapter, "Data: Painting the Picture of Children's Mental Health" was revised providing new data from the 2006 Healthy Youth Survey, the Washington Pregnancy Risk Assessment Monitoring System (PRAMS), and 2003-2005 death certificates. A section was also added to the chapter describing key future sources for data on the mental health of children in Washington State.

## Purpose

The purpose of the children's mental health needs assessment and the purpose of this report is to:

- Identify and analyze various data sources that describe the mental health status of children in Washington State.
- Explore the prevalence of mental illness among children.
- Distinguish specific population groups of children at higher risk for mental illness than other groups.
- Obtain mental health services providers' perspective on the current issues impacting mental health.
- Determine gaps in services for children and youth based on mental health providers' and other key informants' feedback.
- Determine gaps in mental health data.
  - Devise a list of research and study questions that complement current data sources to provide a comprehensive foundation for decision making purposes.
- Provide recommendations and strategies via key informants to enhance mental health among children.
- Develop a data and community driven foundation for future public health interventions and strategic planning in the area of mental health.
- Identify and describe public health's role in mental health.

## Process

The steps of the needs assessment were three-fold: 1) data collection and analysis to determine prevalence of mental health conditions among children and the risk and protective factors associated with those conditions, 2) identification of service capacity for children's mental health, the role of public health in mental health, and

urgent issues through key informant interviews, and 3) the organization and dissemination of findings. This needs assessment attempted to cover the entire spectrum of mental health by paying attention to not only the needs of children and families with acute psychiatric conditions, but also children who have not yet begun to experience mental illness, but have risk of developing mental illness later on in their lives.



# The Role of Public Health: Setting the Stage for Mental Health Activities

*“If you’re going to talk about health, we need to talk about mental health. It needs to be all over.” —Judie Ebbert-Rich, former Program Manager, Statewide Action for Family Empowerment of Washington.*”

To begin the needs assessment, public health’s role in mental health needed to be defined in order to guide the Department of Health’s (DOH) response to the results. To obtain more clarification on public health’s role, the Office of Maternal and Child Health (OMCH) enlisted the help of 63 key informants from around the state to describe the assets public health could provide to the mental health field. In each of the interviews, key informants were asked to describe the role of public health in mental health. Key informants could identify as many roles as they desired, and their responses were tabulated to determine the more prominent roles that the mental health/public health community believes rest with public health. Many of the key informants alluded to the notion of including mental health as a part of health overall, and a few explicitly made the comment that public health includes mental health. Key informants stated the roles should be the same for mental illness as any other disease such as diabetes, cancer and HIV infection. Although these roles have been identified by our key informants as being held by public health, they are not mutually exclusive. There are other agencies who would not consider themselves public health service providers such as mental health and after-school programs who engage in the following roles. There is no specific order to these roles i.e., the most important is not listed first and the least important listed last because the question is qualitative in nature, which does not allow for assigning ranks.

## Primary Prevention

Primary Prevention received a high number of endorsements as a role of public health from the key informants. Primary prevention is defined as those activities that are intended to prevent the onset of disease before it occurs. Primary prevention is different from health promotion in that it addresses the *reduction of risk factors* rather than the promotion of protective factors (see Health Promotion below). Primary prevention is also differentiated from health promotion in that it targets specific groups at-risk for mental illness, while health promotion provides well-being messages to the general population. Many of the key informants discussed the role of public health nurses and primary prevention. An example of primary prevention in mental health is enhancing the connectedness of a parent and child, assessing the siblings of a child with mental illness, or promoting community connections through volunteering or mentorship.

## Role of Public Health

### Early Intervention

Early intervention, or secondary prevention, refers to those services that are provided once a condition or disease is present in its early stages, with the goal of slowing down or stopping their progression. Early intervention was rated highly as another role for public health. Examples of early intervention would be: working with families with a substantiated case of child abuse and neglect to understand what developmentally appropriate expectations are for their child; discussing with parents who have been abused themselves as children that discipline should be non physical, and what natural consequences mean for different situations.

*“During infancy and early childhood, the foundations are laid for the development of trusting relationships, self-esteem, conscience, empathy, problem solving, focusing learning and impulse control.”— Ulrike Kauffman, Public Health Nurse, Spokane Regional Health District*

### Non-Stigmatized Health Services Provider

Several key informant interviews identified public health nurses as being service providers who do not face the same stigma as other professionals such as child protective services investigators and county designated mental health professionals. This discrepancy may be due to the acute mental health needs addressed by these other professionals i.e., intervening when a mental illness has resulted in potential harm to self or others versus early intervention long before the problem progresses to a heightened state.

*“Public health nurses are seen as a positive important support in the community, and are really in the line of prevention.” — Karen Walker, Washington State Office of the Superintendent of Public Instruction, former Child Development Center program director.*

### Research

Research was listed as another role of public health by key informants. One out of five key informants indicated that population-based studies can give us insight into which child population groups are at risk, and which programs are effective in preventing mental illness and promoting mental health within these populations. Included in this category is epidemiology of all mental illness and specific diagnoses (i.e., identifying patterns of disease), and program evaluation. Public health research has uncovered the link between physical and emotional disorders, as well as validated interventions such as the Early Child Home Visitation program listed in the Centers for Disease Control and Prevention’s Community Guide to Preventative Services.<sup>4</sup>

### Health Promotion

Health promotion was listed as a role of public health in many of the key informant interviews. Health promotion is the *enhancement of protective factors*, thus providing a buffer against those factors that boost the likelihood of mental illness. Health promotion is also an intervention employed in the general population rather than in

a specific group considered at-risk for mental illness. One key informant had reservations about using health promotion activities as a public health intervention for improving mental health, stating the results of such campaigns are difficult to measure in terms of health or social impact.

### **Connection to Physical Health Providers and Services**

One component of feedback from key informants that was repeated throughout several interviews was the role of obtaining physical health services for people with mental illness. Many people with mental illness frequently neglect their physical needs because improving mental health becomes their priority. This can often be due to socio-economic factors, which are closely tied to symptoms of mental illness such as depression and anxiety disorders.

*“Kids here who are acutely mentally ill have no idea about how to care for their physical bodies.”— Ilys Hernandez, Social Worker, Child Study and Treatment Center.*

### **Referral Source**

Health care providers and other allied health professionals, although not often able to provide direct mental health services, can be brokers of referrals for patients with mental illness. Public health programs such as Women Infants and Children (WIC) Supplemental Nutrition Program, Healthy Child Care Washington, First Steps and Children with Special Health Care Needs (CSHCN) are often tapped for referrals to community resources by clients.

### **Surveillance**

Several key informants indicated that collecting data about mental health disorders was also an important contribution public health can make to the field of mental health. A public health approach to mental health includes the collection of information about specific populations in order to identify groups of people at risk. The Centers for Disease Control and Prevention’s endorsed definition of public health surveillance is “the ongoing systematic collection, analysis, and interpretation of outcome-specific data for use in the planning, implementation, and evaluation of public health practice.”<sup>5</sup> DOH has access to several data sets that include mental health information, as well as the capacity to analyze that data.

### **Health Education**

Health education as a specific vehicle of health promotion and illness prevention can be instrumental in providing insight about mental health issues, as well as in educating people with mental illness about their physical health needs. Several key informants felt that public health education campaigns have been successful for other issues such as tobacco and reproductive education and could be applied to mental health.

### **Promote Mind-Body Connection**

Not to be confused with the earlier role of acting as a connection to health care providers, the mind-body connection emphasizes the exchange of influence between both physical and mental health. According to the 2004 Healthy Youth Survey, 10<sup>th</sup> grade students who had either physical disabilities or long-term health problems expected to last six months or more self-reported they were significantly more likely to have symptoms of depression. The relationship is also significant vice versa, meaning 10<sup>th</sup> graders with symptoms of depression were also more likely to self-report being disabled or have a long term health problem.<sup>6</sup>

*“The connection between emotional and physical health is clear, so public health needs to be involved that way.”—Melanie DeJong, County Designated Mental Health Professional, Columbia River Mental Health*

### **Policy and Advocacy**

The last phase of an epidemiological process is to implement policies based on the findings of an investigation. Public health has supported effective health policies in smoking, injury prevention, and HIV/AIDS. Key informants stated that the same measures could be applied to mental health.

*“Pediatricians and family physicians can often do a good job at advocacy because we are often looked at by legislators as an unbiased source.” —Dr. Chris Olson M.D., Pediatrician, American Academy of Pediatrics Washington State Chapter*

### **Convener of Partners/Collaborator**

DOH has acted as both a team member, and a convener of partners, in children’s mental health. OMCH convenes a partnership group that makes children’s mental health policy recommendations called Partnerships for Supporting Children’s Mental Health. OMCH also has an internal Mental Health Workgroup that crosses several sections within OMCH to address the mental health needs of children served by the various programs. Several key informants stated that public health has been effective at gathering committed stakeholders as well as non-traditional partners. Several key informants identified the ability to think from a multiple systems perspective as a public health role. Some felt that the population focus of public health makes it easier for public health entities to understand systems and bring them together.

*“We think both individually and on a system wide basis.” —Quen Zorah, Public Health Nurse, Jefferson County*

### **Screening**

Considered part of secondary prevention, screening allows for early detection of mental illness before it begins to interfere significantly in the lives of those afflicted. Public health nurses often provide health screenings in order to assess risk and

conditions. An example of this would be the administering of mental illness screenings during home visits or at a community clinic.

*“I think proactive identification of kids with mental health issues is the first and foremost concern.” —Dr. Jim Mazza Ph.D., Assistant Professor in Educational Psychology, University of Washington, Department of Education*

### **Access to Care**

The 1988 Institute of Medicine Report characterized assurance of health services as a core public health function.<sup>7</sup> A few of the key informants also made the same observation about the role of public health. Access to mental health services for populations that typically do not take advantage of health care resources or do not have access to health care resources is a primary issue for public health in Washington State. One example of this is access to mental health assessments for pregnant women and new mothers available from First Steps, a joint program of DOH and Department of Social and Health Services (DSHS). Currently, Medicaid is managed by the Department of Social and Health Services’ Medical Assistance Administration, which assures access to care for people in Washington who are impoverished and in high need of medical care.

*“If you’re busy making choices about housing, food and electricity it’s really hard to have the resources to care for children in the way they need to be cared for.”— Nancy Parker Associate Director, Columbia River Mental Health Services.*

Other roles that either one or two key informant(s) thought were important for public health to undertake were:

- Social Marketing
- Translation of Scientific Material for Lay Audiences
- Social Services (not treatment)
- Mental Health Licensing (individual professional licenses and mental health facilities)

# Data: Painting the Picture of Children's Mental Health

## Risk and Protective Factors

Mental, behavioral and cognitive problems have precursors known as risk and protective factors. Mental health promotion and illness prevention allow health professionals to impact the presence of mental illness in children through the reduction of risk factors (prevention) and the enhancement of protective factors (promotion). Although the data listed in this section are not comprehensive, the statistics reveal some concerning trends and comparisons that public health can intervene upon, such as the connection between harassment and symptoms of depression. The data also reveal characteristics of emotionally healthy youth that can potentially be translated into mental health interventions for at-risk youth, e.g. the promotion of eating dinner together as a family. The risk/protective factor segment is based on the domains listed in the chart described in the methods section: individual, family, school, peers, and social environment. The methods section is located in Appendix A, and more detailed statistics are available in Appendix B. Data was used to inform key informants about the condition of children's mental health in Washington State.

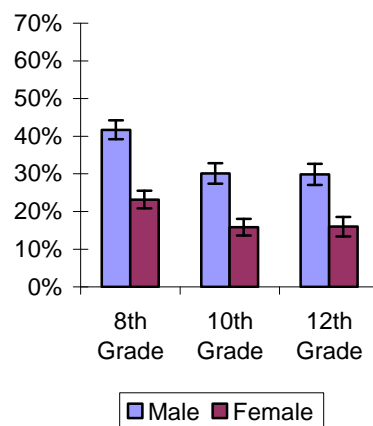
Most of the information detailed in this section is from the Healthy Youth 2002, 2004 and 2006 Surveys, and the National Survey of Children's Health 2003 (NSCH) – Washington State based dataset. Both of these surveys rely on self-report, indicating there may be some bias in the responses, which is true of any survey instrument.

Most of the data is in the form of percentages and are encompassed by 95% confidence intervals. Confidence intervals provide a measure of how much a rate, percent, or other point estimate might vary due to random factors or chance. They do not account for several other sources of uncertainty, including missing or incomplete data, bias resulting from non-response to a survey, or inaccurate data collection. Confidence intervals are used with survey data to account for the difference between a sample from a population and the population itself. When comparing percentages, a general rule to determine if the percentages are statistically different is to compare confidence intervals. If they do not overlap, they are generally found to be significantly different.

### ***Individual Risk & Protective Factors***

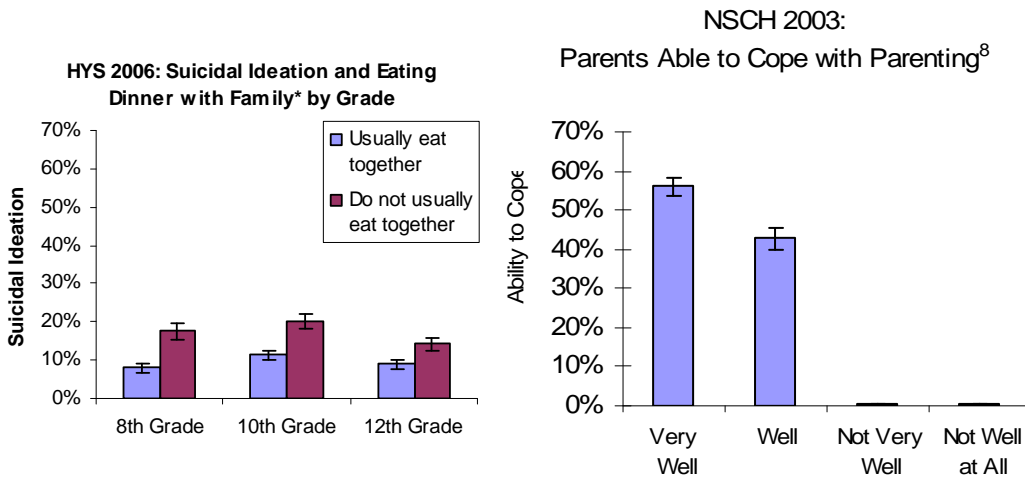
- **Drug Use:** According to the 2006 Healthy Youth Survey (HYS), approximately 33% of 10<sup>th</sup> grade students had consumed alcohol in the past 30 days. About 15% of them smoked cigarettes, and 18% smoked marijuana.<sup>6</sup>
- **Physical Exercise:** Research indicates a lack of physical exercise can be a risk factor for depression.<sup>1</sup> Student responses in the HYS indicate that 10<sup>th</sup> graders who exercise enough to break a sweat at least three days a week for 20 minutes per day are significantly less likely to be depressed than students who did not exercise at least three days.<sup>6</sup>
- **Self Esteem:** Females in Grade 8, 10, or 12 responding to the HYS 2006 survey were significantly less likely than males in those grades to say they felt completely good about themselves.<sup>6</sup>
- **Parenting and Self Esteem:** In the 2003 National Child Health Survey, in about 51% of Washington households surveyed, caregivers indicated they were a little or a lot concerned about their child's self esteem. The survey encompassed children ages birth to 18.<sup>8</sup>
- **Maternal Depression:** Maternal depression is linked to infant mental health including attachment. In a 2005 survey of new mothers, about 9% of mothers reported they often or always felt depressed since the birth of their child.<sup>9</sup>

HYS 2006: I feel good about myself,  
response of completely true<sup>6</sup>



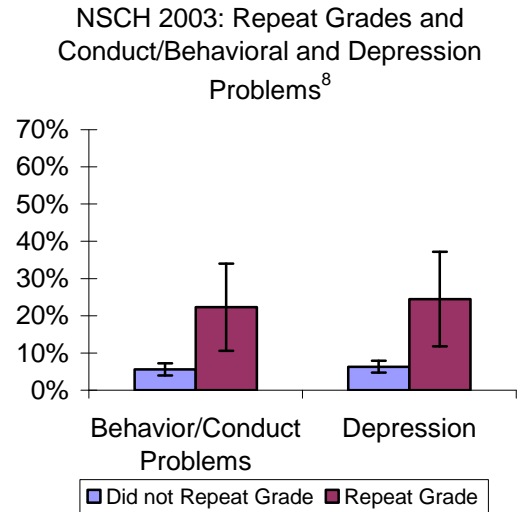
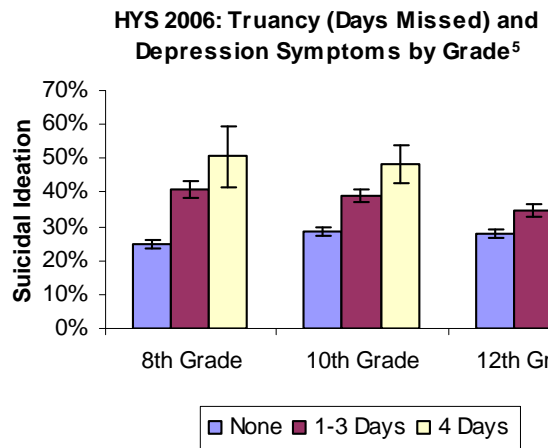
### Family Risk and Protective Factors

- **Quality Family Time:** HYS 2006 respondents in Grades 8, 10, and 12 who regularly ate dinner with their families were less likely to report suicidal ideation.<sup>6</sup>
- **Parental Mental Health:** Caregivers responding to the NSCH 2003 survey indicated that approximately 4.5% of mothers and 3.8% of fathers in Washington State have fair or poor mental health as opposed to 6.5% of mothers and 3.5% of fathers nationwide.<sup>8</sup>
- **Family Rules:** HYS 2006 respondents in Grades 8, 10, and 12 who indicated that the rules in their families were clear, were significantly less likely to have drunk alcohol in their lifetime.<sup>6</sup>



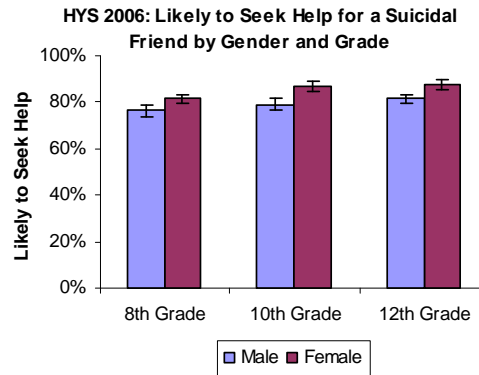
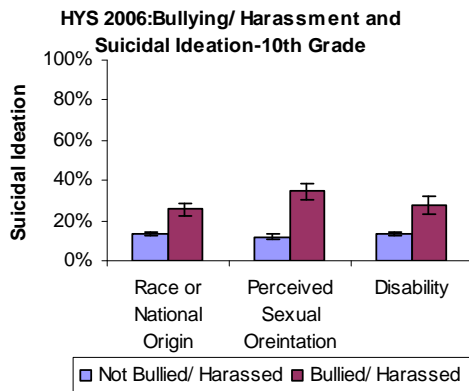
**School Risk and Protective Factors**

- **School Safety:** 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students who indicated they felt safe at school were significantly more likely to state they look forward to their future.<sup>6</sup>
- **Truancy:** Students in Grades 8, 10, and 12 who skipped school in the past month were significantly more likely to experience feelings of depression than students who were not truant.<sup>6</sup>



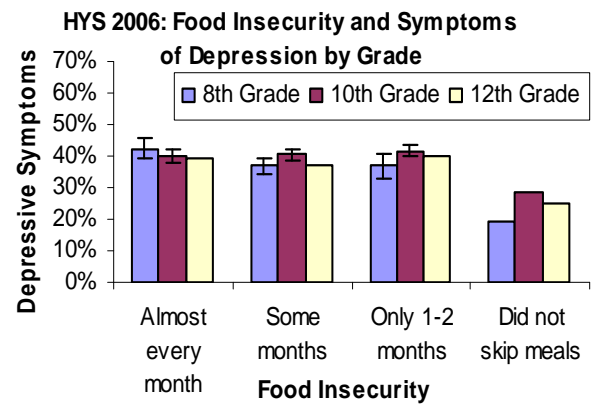
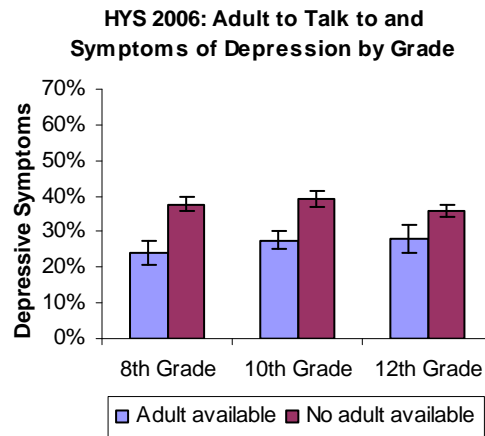
**Peer Risk and Protective Factors**

- **Harassment:** Results of the HYS 2006 Survey revealed 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students who were harassed in the past 30 days based on their race, religion, perceived sexual orientation, gender, perceived disability, or any other reason were significantly more likely to consider attempting suicide.<sup>6</sup>
- **Bullying:** Students in those grades who were bullied in the past 30 days were also significantly more likely to consider suicide.<sup>6</sup>
- **Seeking Help (General):** Overall, approximately four out of five students in the 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grades would seek help for a suicidal friend.<sup>6</sup>
- **Seeking Help (Gender):** Female students in the 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grades were significantly more likely to seek help for a suicidal friend than male students.<sup>6</sup>



### Social Environment Risk and Protective Factors

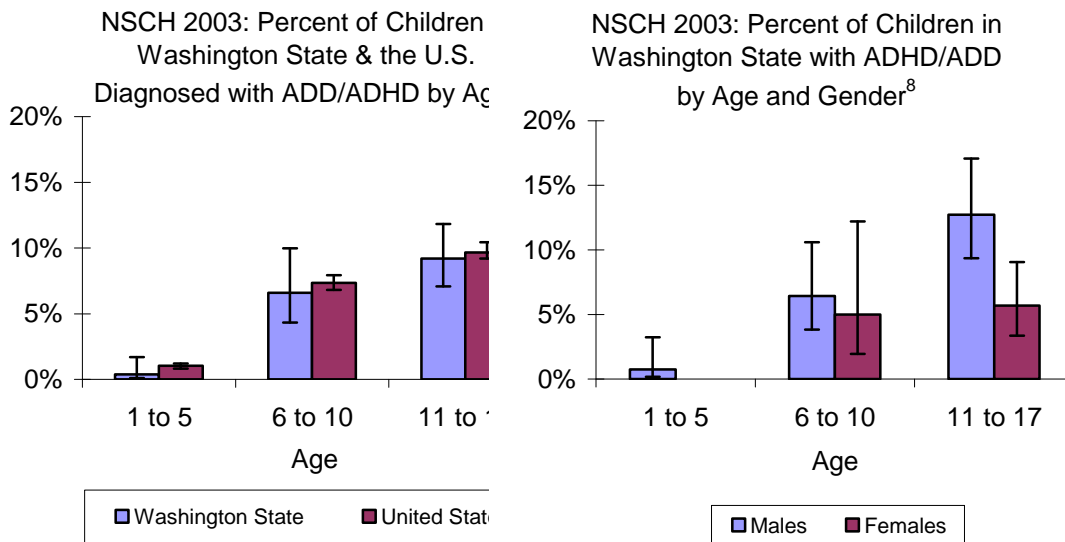
- Relationship with an Adult:** Responses from the HYS 2006 indicate that students in the 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grades who have adults in their neighborhood they could speak to about something important are less likely to experience symptoms of depression than students who do not have adults in their neighborhood to talk to.<sup>6</sup>
- Poverty:** Many research studies have found links between economic status and the presence of mental illness.<sup>10</sup> Results from the HYS 2006 indicate that 8<sup>th</sup>, 10<sup>th</sup>, and 12<sup>th</sup> grade students who are food insecure (had to skip or reduce meals in the last year because of lack of money) were more likely to experience symptoms of depression than students who never had to skip meals.<sup>6</sup>



## Diagnoses and Behavior

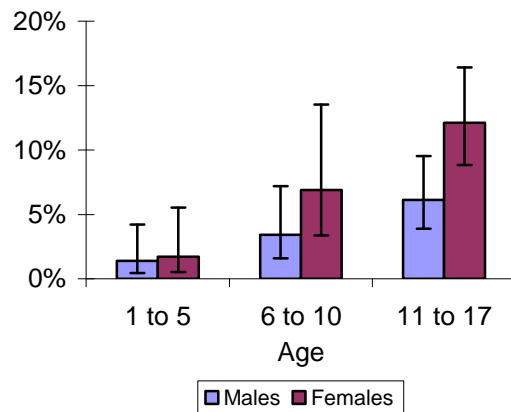
Mental health diagnoses are not conditions that health providers are required to report to the Washington State Department of Health like AIDS or West Nile Virus. Many of the estimates for mental illness prevalence and incidence use symptoms reported in surveys, rather than large scale prevalence studies that require in-depth interviews for each participant that determines their level of mental health. The 1999 “Mental Health: A Report of the Surgeon General” indicated that upwards of one in five children has a diagnosable mental illness, and 5% to 9% of children have a mental illness that results in “extreme functional impairment.”<sup>1</sup> Washington State does not have this kind of prevalence data for the general children’s population (only for public mental health system consumers). There are a few state-based prevalence studies that indicate specific populations with high rates of mental illness, although none of these studies have control groups for comparison. These studies are discussed at the end of this report in greater detail. Washington State is in need of a comprehensive study identifying the prevalence of mental illness among children by diagnosis. There are however, a few surveys and one data collection system that document information regarding mental illness diagnoses and behaviors.

- **ADD/ADHD:** Approximately 6% of surveyed caregivers in the NSCH 2003 (Washington State data only) indicated their child (all ages) has been diagnosed by a physician or other health professional with Attention Deficit Hyperactivity Disorder (ADHD), or Attention Deficit Disorder (ADD).<sup>8</sup>

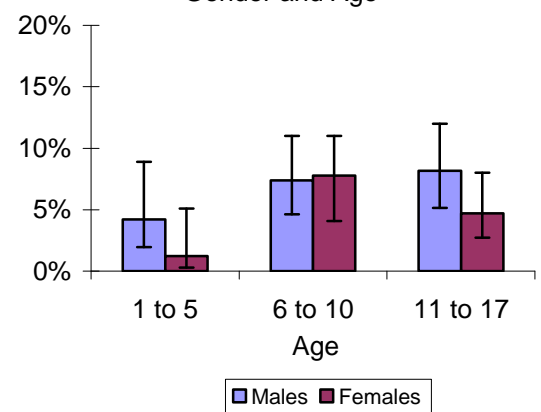


- **Depression:** Washington State-based data from the NSCH 2003 indicated about 6% of surveyed caregivers have a child diagnosed with depression. Diagnoses had to be provided by a physician or other health provider.<sup>8</sup>
- **Autism:** In the United States it is estimated that between one in 166 to one in 500 children are diagnosed with Autism.<sup>11</sup> NSCH 2003 data in Washington State indicates it is about one in 176 children.<sup>8</sup>
- **Behavioral/Conduct Disorder:** NSCH 2003 results also revealed that approximately 6% of caregivers in Washington State reported their physician or another health provider diagnosed their child with a behavioral or conduct disorder.<sup>8</sup>
- **Depression (youth self report):** In the 2006 HYS, about 25% of 8<sup>th</sup> grade students, 30% of 10<sup>th</sup> grade students, and 29% of 12<sup>th</sup> grade students reported having experienced symptoms of depression in the past year. In 2004, youth with disabilities were significantly more likely than youth with no disabilities to report symptoms of depression (52% versus 25%) and to report they had attempted suicide in the past year (20% versus 6%).<sup>6</sup>

NSCH 2003: Percent of Children in Washington Diagnosed with Depression by Age<sup>8</sup>

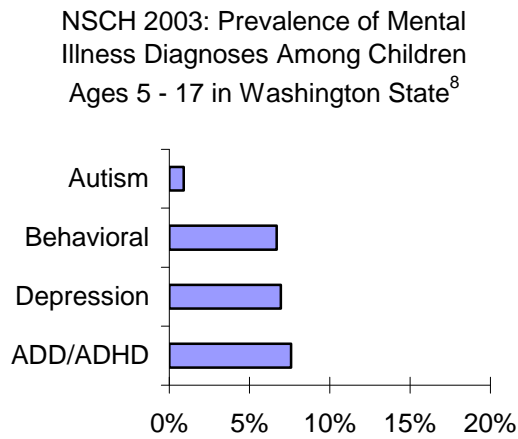


NSCH 2003: Percent of Children in Washington State Diagnosed with a Behavioral/Conduct Disorder by Gender and Age<sup>8</sup>



## Data

**Overall Mental Health Condition:** NSCH 2003 results indicated approximately 11% of surveyed caregivers in Washington State reported their physician or other health provider had diagnosed their child with a behavioral disorder, depression, autism, attention deficit [hyperactivity] disorder, or any combination of these four mental illness diagnoses.<sup>8</sup>



\*Diagnosis must have been provided by a physician or other health professional

## Outcomes of Poor Mental Health

### Jail

In Washington State, most children and youth initiated into the local jail system undergo a risk assessment known as the Case Management Assessment Process or CMAP. This tool asks specifically about mental health history, but not about current symptomology. About 24% of kids taking the CMAP at the county level jail have had a history of mental illness.<sup>12</sup> When a youth involved in the juvenile correction system is transferred to state custody, much more rigorous mental health testing is done to determine his or her mental health status. Approximately two out of three, or 63% of youth in the state juvenile justice system have a current mental illness.<sup>13</sup>

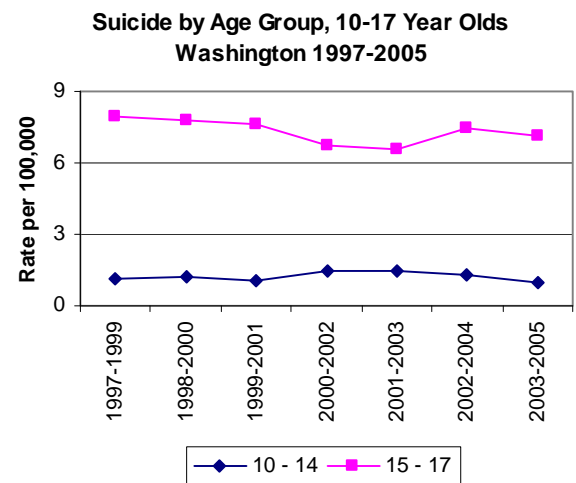
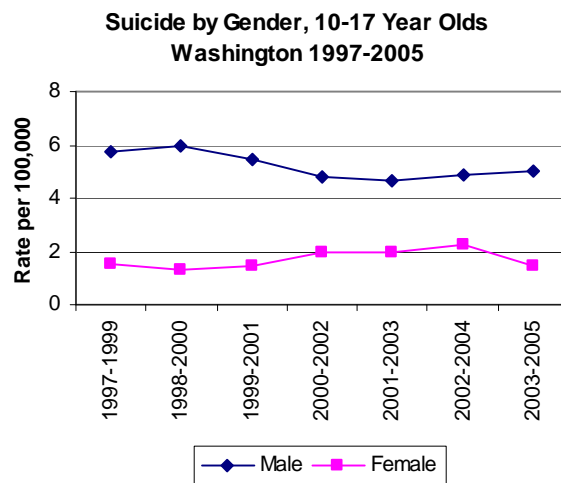
### School Expulsion

Recently, a report was published by the Yale Child Study Center indicating Washington State had a Kindergarten through 12<sup>th</sup> grade expulsion rate of 3.7 per 1,000.<sup>14</sup> If applied to the 2003-2004 school year, the number of children permanently expelled from school is 4,062. This does not include children temporarily suspended for inappropriate behavior. The reasons for expulsion vary by school district, and are not aggregated at the state level. The report did not state if the expulsion rate was for public schools only or included alternative schools and/or private schools as well. If alternative schools and private schools are not included, the rate could be either over or under reported.

### Suicide

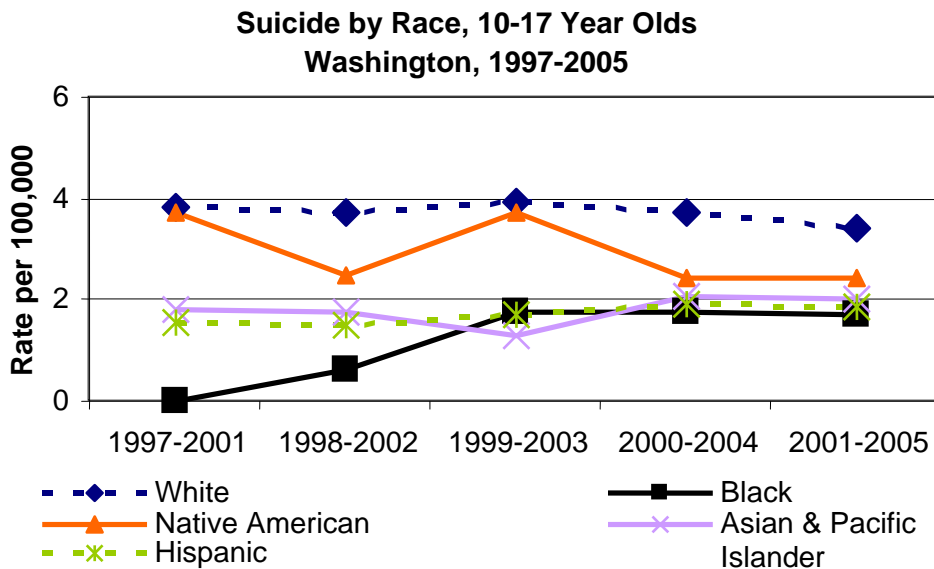
Suicide is viewed by many in Washington State as the ultimate failure of coping strategies for mental illness. The suicide rate in Washington State of youth ages 10 to 17 in 2005 was 2.8 deaths per 100,000 population which was not significantly different from the rate of 3.1 per 100,000 in 2004.<sup>15</sup> In 2005, suicide rates among youth 15-17 years old were significantly higher than youth 10-14 years old.

- **Suicide (Gender):** Males are more likely to complete suicide, while females are more likely to attempt suicide.<sup>15 16</sup>

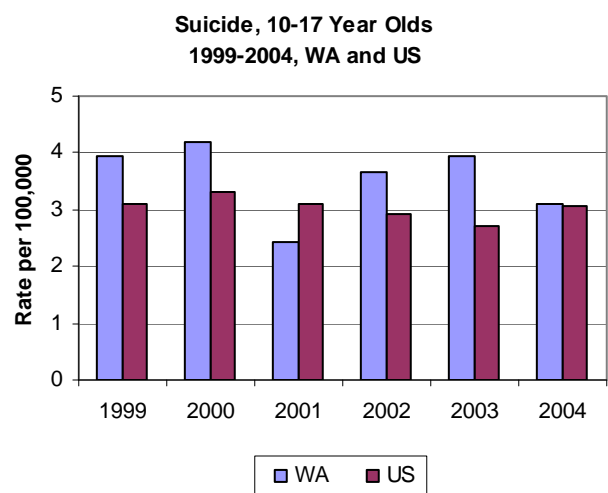
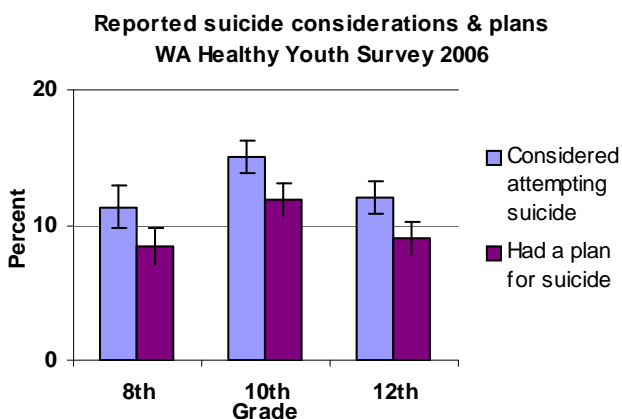


## Data

- White youth were at significantly higher risk of suicide for combined years 1997-2001, 1998-2002, and 1999-2003 compared to Blacks and Hispanics. Differences in suicide rates were not significant between the racial, ethnic groups in 2000-2004 and 2001-2005. There were no other significant racial or ethnic differences.<sup>16</sup>

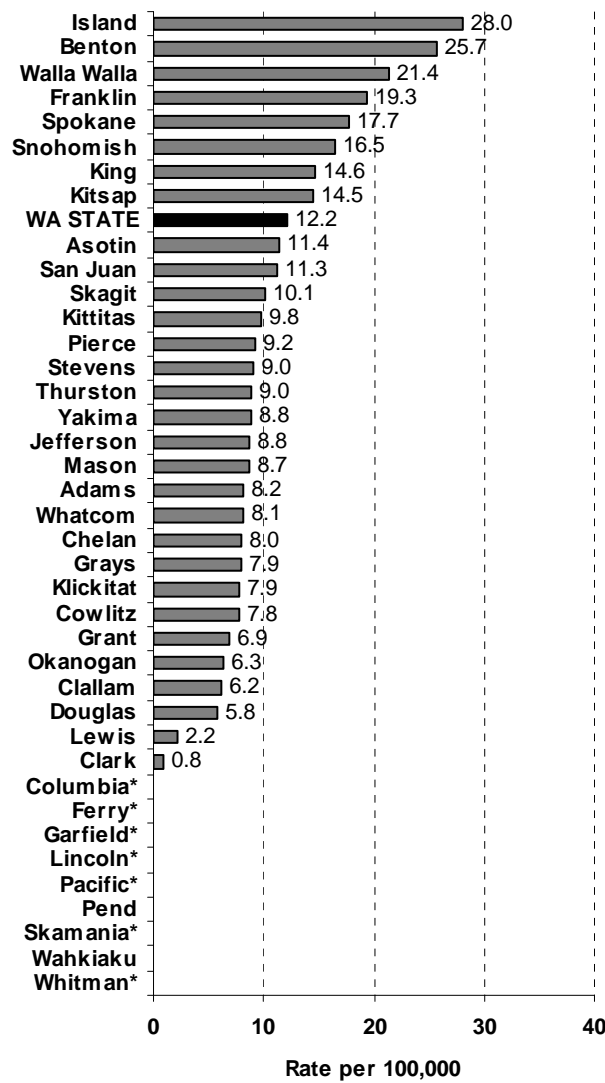


- Suicidal Ideation:** About 11% of 8<sup>th</sup> graders, 15% of 10<sup>th</sup> graders, and 12% of 12<sup>th</sup> graders considered attempting suicide. About 3/4 of them had a plan for suicide.<sup>6</sup>
- Suicide:** Washington State's youth suicide rate was not significantly different compared to the United States from 1999 - 2004.<sup>16</sup>



# Hospitalization <sup>1</sup>

Hospitalization Due to Mental Illness,  
Ages 10-17  
WA, 2003-2005



From 2003-2005, mental illness was the leading cause of hospitalization among youth ages 10-17 in Washington State.<sup>15</sup> Because hospitalizations do not include data from the Children’s Long-Term Inpatient Program, the number of hospitalizations of children and youth is underreported.<sup>15</sup>

\* Counties with less than five hospitalizations were not calculated

\*\* Does not include hospitalizations at Children’s Long Term Inpatient Program

## Future Data Sources

### ***New Healthy Youth Survey Question on Residence for 2008***

Based on national data, homeless children and youth are a high risk population for mental health problems. In 2006, this report recommended research on the prevalence of mental illness among homeless children and youth in Washington State. There is Washington State specific data that identifies children and youth in foster care as at high risk for mental health problems. In 2006, this report included a recommendation that a demographic question be added to the Healthy Youth Survey to identify this population of youth in school. Based on this data gap and the usefulness of additional information, the interagency Healthy Youth Survey Committee decided that the following questions will be included in the 2008 Healthy Youth Survey:

1. ***Do you currently live with a parent or guardian?***
  - a. *Yes*
  - b. *No*
  
2. ***Which of the following best describes where you currently live? (Choose only one answer.)***
  - a. *My parent's or guardian's home*
  - b. *With friends or other families because you lost your home or cannot afford housing*
  - c. *On your own because you lost your home or cannot afford housing*
  - d. *Motel or hotel because you lost your home or cannot afford housing*
  - e. *Shelter (homeless shelter, domestic violence shelter, transitional housing program, or emergency housing)*
  - f. *Migrant labor housing*
  - g. *Car, park, campground, a public place, or place without heat, electricity or water*
  - h. *Waiting to be placed in foster care*
  - i. *Foster care home*
  - j. *An other place*

The addition of this question will result in information on both homeless youth and youth in foster care who attend school. The data potentially can be cross tabulated with other questions in the HYS that address indicators of social/emotional/mental health status and risk.

### ***New Behavioral Risk Factor Surveillance System (BRFFS) Question***

Another of the research recommendations in this report was “Research mental illness stigma from the perspective of those living with mental illness and the impact on access to care, and the perspectives of the general public in terms of understanding and awareness of mental illness.” The 2007 Washington State

Behavioral Risk Factor Surveillance System Questionnaire added a module of ten questions on mental illness and stigma that will be included biennially in alternate years with the BRFSS Depression and Anxiety questions.

The Behavioral Risk Factor Surveillance System (BRFSS) is the largest, continuously conducted, telephone health survey in the world. It enables the Center for Disease Control and Prevention (CDC), state health departments, and other health agencies to monitor modifiable risk factors for chronic diseases and other leading causes of death. Washington State BRFSS collects information about behavior that may affect health from English-speaking adults living in households in Washington State.

The new module includes six questions called the Kessler 6 (K6). The K6 is a standardized and validated measure of psychological distress that is designed to help in estimating the prevalence of serious mental illness (SMI) in community populations. The K6 has been used in both clinical and population-based settings, in both self administered and telephone administered modes. Two additional questions relate to illness severity and treatment. The last two questions relate to perception and stigma. These two questions are:

- 1. Treatment can help people with mental illness lead normal lives. Do you – agree slightly or strongly, or disagree slightly or strongly?*
- 2. People are generally caring and sympathetic to people with mental illness. Do you – agree slightly or strongly, or disagree slightly or strongly?*

When the data is available from the 2007 BRFSS it will provide information about mental illness stigma from the perspective of those living with mental illness. Because BRFSS asks about the number of children living in the home of the respondent, the results from this new module could also provide additional data on the number of children living with adults who report symptoms of, or treatment for, a mental health condition or emotional problem.

### ***Pregnancy Risk Assessment Monitoring System (PRAMS)***

One of the research recommendations in this report was “Implement a study to identify the prevalence and severity of post-partum depression in Washington State.” Questions on depression have been included in the previous PRAMS survey and new questions have been added by Centers for Disease Control and Prevention (CDC). PRAMS is a joint research project between the Washington State Department of Health and the CDC. It is an ongoing mail/telephone survey of women who have recently given birth and provides data that is not available from other sources about pregnancy and the first few months after birth. This information can be used to identify groups of women and infants at high risk for health problems, to monitor changes in health status, and to measure progress towards goals in improving the health of mothers and infants.

### ***New Mental Health Screening***

In 2005, the Washington State legislature passed Senate Bill 5763 mandating a system-wide, comprehensive and integrated screening and assessment process for detecting “which persons with mental disorders and substance abuse disorders have co-occurring disorders.” The 5-minute Global Assessment of Individual Need-Short Screener (GAIN-SS) was selected as the screening tool based on its consistency, sensitivity, discriminant validity and ease of use. It is also available in Spanish. The first three sections of the GAIN-SS will be administered. These fifteen questions screen for internalizing mental disorders, externalizing mental disorders and substance disorders. Two additional questions ask for age and gender. The fourth section of the GAIN-SS screens for crime/violence and will not be administered. The survey is a self report and is designed for self- or staff administration with paper and pen, on a computer, or on the web. The Department of Social and Health Services’ Mental Health Division, Division of Alcohol and Substance Abuse, Children’s Administration, and Juvenile Rehabilitation Administration have been using this screening tool for adults and children over the age of twelve since January 2007. The first data report to the legislature is scheduled for December 2008.

### ***Children of Parents in the Military who have been Deployed***

The Washington Department of Veterans Affairs has been funded by the Mental Health Transformation Grant (MHTG) for a project called “Operation Military Kids and the impact of deployment on behavior and school performance.” Data will be collected on the children of currently and formerly deployed military members to gather more information on the effects of war and homecoming. The first report to the MHTG will be submitted in January 2008.

The Healthy Youth Survey is also adding a question for 2008 to identify children of parents and guardians serving in the military and those who have been deployed to combat zones. The proposed HYS questions are:

- 1. In the past 6 years, has your parent or guardian served in the military (Army; Navy; Air Force; Marines; Coast Guard; National Guard; and Reserves)?***
  - a. No*
  - b. Yes*
  
- 2. In the past 6 years, was your military parent or guardian sent to Iraq, Afghanistan, or other combat zone?***
  - a. I do not have a parent or guardian in the military.*
  - b. No*
  - c. Yes*

## **Key Informants: Issues & Suggested Recommendations and Strategies**

Recommendations and strategies will be divided into several sections for the purpose of organizing the needs assessment into a useable format. This section will include: statewide concerns, specific regional concerns, at-risk populations, and concerns about populations without enough data to substantiate classifying them as at-risk. The strategies and recommendations mentioned in each section were derived directly from the testimony of the key informants. It is important to keep in mind that the recommendations and strategies are changes that are not solely within the scope of OMCH's duties, but rather within the scope of both local and statewide agencies that have a role in the prevention, early intervention, and acute care and treatment of mental illness among children.

### **Statewide Concerns**

#### ***Emphasis on Prevention and Early Intervention***

The current system errs on the side of allocating its resources toward high need cases of mental illness because if they are not properly managed they could result in harm to the service consumer or others. Many of the key informants are concerned that there is a system available for acute care and treatment, but the efforts for prevention and early intervention are fragmented and of low funding priority. In a 2001 report commissioned for the Substance Abuse and Mental Health Services Administration entitled "Estimating the Cost of Preventive Services in Mental Health and Substance Abuse Under Managed Care," researchers stated, "given the documented effectiveness of these interventions [early intervention and prevention] in improved outcomes, increased patient satisfaction, reduced use of medical resources and cost, and their low cost relative to existing premiums, it is highly recommended that Managed Care Organizations give serious consideration to implementing the interventions."<sup>17</sup> The argument could be made that this report is specific to managed care only and cannot be applied to other service delivery institutions; however the onset of managed care in both the public mental health system as well as in the private sector makes the applications of this report far-reaching. In September of 2004, the Washington State Institute for Public Policy (WSIPP) conducted a cost benefit analysis of current statewide prevention programs (these programs included some care and treatment programs that are not part of the discussion in this section). There were several state programs that showed significant long term cost savings including the Nurse Family Partnership for Low Income Women, and the Seattle Social Development Project. Although this analysis was effective in measuring cost and outcomes, the study did not incorporate social and emotional well-being as benefits of the programs due to the difficulty in ascertaining

## Key Informants

the cost in dollars of “feeling better.” Therefore, the results could be understating the impact of prevention because they are a measure of only monetary gains.<sup>18</sup>

Key informants recommended that prevention and early intervention resources for children be increased in Washington State. Specifically, a few stated they would like to see early screening of children and infants in schools, child care settings and after school programs.

### ***Stigma***

An added concern indicated by many of the key informants was the role of stigma in mental illness. Many made the observation that other chronic and infectious diseases such as influenza, cancer, or diabetes are thought of as faultless conditions, while public perception is that the responsibility for mental illness lies with the person experiencing mental illness. Two national studies have indicated that people in the early stages of mental illness are significantly less likely to seek out care because of stigma.<sup>1</sup> The stigma surrounding mental illness often results in social isolation for those with mental illness, especially disorders like schizophrenia where symptoms can often be expressed externally.<sup>19, 20</sup> There are currently no statistics in Washington State that indicate the level of stigma associated with mental illness. An article published in 2004 in the *Canadian Journal of Psychiatry*, alluded to elementary school classrooms as a venue to reduce stigma.<sup>21</sup> The study found that children in the 4<sup>th</sup> through 7<sup>th</sup> grades who were sorted into a group that received a mental health education course were significantly more likely to report they would befriend a person with a mental illness than children who were assigned to a general health course.

Key informants recommended that resources be allocated to reduce stigma for people suffering from mental illness. One potential strategy named was the use of a social marketing campaign. The campaign would aim to increase awareness in the general public about mental illness as well as to encourage those with mental illness to seek out care. Key informants also recommended elementary schools adopt a mental health curriculum focusing on stigma and identification of mental illness.

### ***Integration of Mental Health***

Mental health services and projects could be incorporated into various facets of the human service system. Many key informants were particularly concerned that they saw a lack of coordination between mental health and substance abuse rehabilitation services.

There is a particular issue of mortality associated with mental health and substance abuse. A recent study published in *Administration and Policy in Mental Health* indicated that people admitted to hospitals with both a mental illness and substance abuse problem were almost 50% more likely to die within five years than those with a mental illness condition alone.<sup>22</sup> According to the 2004 Healthy Youth Survey, 10<sup>th</sup>

graders who had used methamphetamines in the last 30 days were significantly more likely to have had suicidal ideation in the last year than students who did not use methamphetamines in the last 30 days. The same was true for alcohol, marijuana, and ecstasy.<sup>6</sup> Key informants expressed concern that, in Washington State, mental health and substance abuse services often are viewed as mutually exclusive, i.e., providing substance abuse rehabilitation with a focus on sobriety without addressing the mental health problems that co-occur or may be underlying factors that initially led to seeking escape through alcohol and drugs. Senator Hargrove was instrumental in passing the Mental and Substance Abuse Disorders Omnibus Bill (SB 5763) during the 2005 legislative session. This bill will help alleviate some of the key informants' concern by enacting a series of mental health system improvements including integration of both substance abuse and mental health screening in acute care services and access to both types of care.

Early Developmental programs were named as a potential integration site for mental health services, more specifically for infant mental health specialists. A few key informants felt that there is a general lack of services for children under the age of three and especially for children experiencing a special health care need. Key informants also stated that although many children with developmental disabilities are in need of mental health services, they are often denied the service through Medicaid and referred to the Division of Developmental Disabilities (DDD). According to key informant statements, DDD is often unable to provide services for children referred for mental health needs.

Key informants were also concerned about primary care physicians' level of knowledge about mental health and the prescribing of medication. Due to a shortage of psychiatrists, especially in rural areas, many primary care physicians prescribe psychotropic medications to patients.<sup>23</sup> According to the Pregnancy Risk Assessment Monitoring System in Washington State (PRAMS),<sup>9</sup> approximately three out of four physicians discuss post-partum depression with women while they are pregnant, although there is little information known about how they are screened and referred once their baby is born.

Key informants had several suggestions for the integration of mental health services into other human services. For substance abuse services, the stationing of a mental health provider at each rehabilitation clinic in Washington State was mentioned, as well as developing a joint Chemical Dependency/Mental Health license (to cut down on both cost and paperwork associated with applying for both licenses). Suggestions for integrating mental health services into physician practice included promoting Bright Futures in Practice: Mental Health as a screening tool for primary care physicians. Other suggestions were to provide a hotline for primary care physicians to obtain information about the prescribing of psychotropic medications, provide incentives for psychiatrists to practice in Washington State, co-locate infant mental health specialists at developmental centers.

## Key Informants

### ***Child Care***

The Washington State Child Care Resource & Referral (CCR&R) Network has 18 local CCR&R member programs that provide child care information and referrals to families and technical assistance to caregivers in Washington State. According to Elizabeth Bonbright-Thompson, the Director of the Washington State CCR&R Network, the primary reason caregivers call the local CCR&R is to seek help with social, emotional, and/or behavioral problems among children in childcare settings. “And these kids aren’t just biting, they have a whole host of problems. Child care providers have very little choice sometimes but to expel children from their care because they don’t have the resources to care for them,” she stated during her key informant interview. In a survey of Child Care Health Consultants administered by Organizational Research Services in Seattle, approximately 14% stated the referrals they receive were for social, emotional, and/or behavioral problems.<sup>24</sup> In a national study of state-subsidized preschools, Washington State ranked 13<sup>th</sup> highest for expulsion among the 40 states that fund pre-kindergarten programs, with a rate of 8.7 expulsions per 1,000 children.<sup>14</sup> The expulsions were specifically because of behavioral problems. The national rate in the study was found to be 6.7 per 1,000. The same research also found nationally that males were significantly more likely to be expelled than females and that African-American children were twice as likely to be expelled from preschool as white non-Hispanic children. Results also indicated children between the ages of four to six were more likely to be expelled than three year olds. The study proceeded to say that preschool providers who had access to mental health consultants were significantly less likely to expel children for behavioral problems. Although the study only assessed the expulsion rates of state-funded preschool programs, there were almost 6,000 children estimated to be in these programs at the time of the study. The families taking advantage of state-subsidized preschools in Washington State were also among the neediest, having to qualify by being at or below 110 percent of the federal poverty level, which is a noted risk factor for mental health problems in the literature.<sup>1</sup>

Key informants were also concerned about after school programs, more specifically, the inability of staff to adequately address social, emotional and behavioral issues in after school settings and the lack of resources for these particular children. There are no current data sources that would indicate the prevalence of social, emotional or behavioral problems related to children in these programs, or the rate of expulsion due to these problems.

Key Informants knowledgeable about child care stated they would like to increase the capacity of child care providers to understand and address social, emotional and behavioral problems in their respective facilities. One strategy included training for child care providers on child development and mental health.

### ***Misdiagnosis***

Several key informants were concerned about misdiagnoses of mental disorders in children in Washington State. Although there are no studies available specifically in Washington State to describe the prevalence of mental illness misdiagnosis, there are national studies that indicate there is a problem in the United States with misdiagnosis of mental disorders especially among racial and ethnic minorities, and the over prescribing of psychotropic medication for children.

In 2003, Dr. John Zeber of the United States Department of Veterans Affairs analyzed the 1999 National Psychosis Registry which provided a sample of 134,523 records of military veterans diagnosed with schizophrenia.<sup>25</sup> Dr. Zeber found that Latinos were three times more likely to be diagnosed with schizophrenia than whites, and African Americans were four times as likely. Although this study was done on war veterans, it raises the question of misdiagnosis of children from various ethnic and racial backgrounds. Additional research is needed to answer this question.

Dr. Charley Huffine of Seattle King County's Regional Support Network expressed concern that the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition Revised (DSM-IV TR) is being used to diagnose children when the criteria are based on adult-defined syndromes that are not developmentally relevant for children. "GAF (Global Assessment of Functioning) is an adult scale, it's not appropriate for children." According to the multiaxial diagnosis process established in the DSM-IV TR, the GAF is a measure of the psychological, social and occupational functioning of an individual and is the overall diagnostic score of mental illness severity. The concern according to Dr. Huffine, is that the Children's Global Assessment Scale (CGAS), a reliable and valid psychiatric diagnostic tool that accounts for the developmental stage of a child is not included in the DSM-IV TR. The American Academy of Child and Adolescent Psychiatry (AACAP) states that diagnostic formulations should be done only using the DSM-IV TR multiaxial diagnosis. The guidelines go on to state that complementary information about the child such as family history, predisposition factors and the child's family's strengths and weaknesses should be added to provide a more concise diagnosis.<sup>26</sup> The AACAP also recognizes that children under the age of three are not to be diagnosed with adult instruments, and makes exceptions for the use of the Diagnostic Classification of Mental Health and Developmental Disorders of Infancy and Early Childhood (DC:03) to diagnose children ages 0 to 36 months. These guidelines for both infant and toddler mental health assessment and child and adolescent mental health assessment were published in 1997.<sup>26</sup> Diagnoses from the DC:03 are allowed by the state of Washington through age 5 if the diagnoses are verified through a "crosswalk" with the International Classification of Diseases – 9<sup>th</sup> Edition (ICD-9) which corresponds to the DSM-IV TR.

A recent 2005 literature review of psychiatric decision making conducted by Dr. Cathryn A. Galanter and Dr. Vimla L. Patel of Columbia University<sup>27</sup> found that

## Key Informants

researching misdiagnosis among psychiatrists is difficult for several reasons: 1) defining a psychiatric case or mental illness is more subjective than in other fields of medicine, 2) laboratory tests, which are considered concrete evidence, do not play a major role in psychiatric diagnosis, and 3) psychiatric diagnosis and treatment have been historically based on psychodynamic theory rather than pathophysiology (although this is changing – the current focus is to treat the cognitive and behavioral issues rather than look for a physiological cause). These reasons not only insinuate a difficulty in researching mental illness diagnosis, but provide evidence of the difficulty in making psychiatric diagnoses themselves. The authors identified the use of structured interviews and diagnosis technology (such as decision algorithms or clinical guidelines) as diagnostic tools that improve diagnostic skills of psychiatrists. Dr. Huffine, although supportive of clinical tools believes the answer to misdiagnosis is not as easy as implementing structured interviews alone. “Diagnosing is best done over time in the context of a fully developed relationship between the evaluator and the child or youth and their family.” This concern stems from observations by key informants that a relationship between the child and the person providing the diagnosis is a requirement of the therapeutic process. Professionals should establish a level of trust with their patients in order to gather accurate information and assess need. Without the relationship, diagnostic professionals run the risk of determining a diagnosis based on inadequate data.

Although, as stated before, there is a lack of current information on the level of misdiagnosis of mental illness among children in Washington State and the United States, it is important to make efforts to avoid misdiagnosis because treatments that are appropriate for a particular diagnostic category can be fatal for others. For example, the National Institute of Mental Health states that children who are prescribed antidepressant medication because they have been misdiagnosed with major depressive disorder, instead of bipolar disorder may be at risk for manic symptoms if they are not also prescribed a mood stabilizer.<sup>28</sup> Attention deficit hyperactivity disorder is another mental illness that resembles bipolar disorder, but has different treatment regimens that may exacerbate symptoms if applied to the wrong condition. In order to address the concerns of the key informants about the misdiagnosis of children, additional research will be needed to identify the rate and the demographic factors associated with misdiagnosis of psychiatric conditions in Washington State.

Many key informants were concerned about the relationship between providers and mental health consumers. Most were concerned from the perspective of overarching service provision, rather than the particular service of psychiatric diagnosis. One key informant recommendation for Washington State was to provide more resources (time, funding) towards mental health diagnostic professionals so that in turn they could improve treatment relationships with their patients/clients. Another recommendation was to increase mental health diagnostic training for providers who work with children, especially those who work with young children.

### ***General Funding and Access to Care***

The outlook for insurance coverage of children from 2000 to 2002 looked optimistic. According to the Washington State Office of Financial Management, the number of children who were uninsured that were at or below the 200% federal poverty level dropped from 9.1% in 2000 to 6.2% in 2002.<sup>29</sup> The proportion of uninsured children that were over the 200% federal poverty level fell slightly from 3.5% to 3.4%. The mental health parity bill that passed in the 2004-2005 legislative session (RCW 41.05.600) guaranteed that the level of access to mental health services provided by private insurers will be the same as physical health services. Co-payments for both mental health sessions, as well as psychotropic medications, will be no greater than those for office visits or prescriptions intended to reduce physical problems. The Children's Long-Term Inpatient Program (CLIP) has also received a substantial boost in funding during the 2005 legislative session that provides additional resources for acutely mentally ill children and youth needing long-term treatment.

However, there were some setbacks this last year with regard to mental health services in Washington State. Key informants were very concerned about the recent \$82 million cut in 2004 by the federal government from public mental health services in Washington State. This funding was used to cover those individuals who were not eligible for Medicaid through the Mental Health Division (MHD) and had no other type of health insurance. Since 1997, the federal government has required that Medicaid dollars could only be used for Medicaid eligible individuals. Nevertheless, this policy was not enforced and many states including Washington used the funds to cover the overflow of clients not covered by Medicaid. In 2004, states were informed that the federal government would begin to heavily enforce the policy, or risk losing the Medicaid dollars. Governor Christine Gregoire was able to recover most of that lost federal funding through state funds for mental health in 2005, but the change in Medicaid eligibility requirements does not allow those who lost benefits through ineligibility to regain them. This measure impacted a large number of children with mental illness. Key informants were also concerned about specific diagnoses that are not covered by Medicaid such as Autism Spectrum Disorder, or diagnoses that required additional documentation in order to receive services such as Attention Deficit Hyperactivity Disorder. Because of limited resources, the Mental Health Division and the Regional Support Networks (the agencies responsible for the local implementation of mental health services in Washington State) have had to ration services.

Acute care services, such as involuntary inpatient treatment for children is always covered by Medicaid, however earlier intervention services are not easy to access. In the Washington State dataset results of the National Survey of Children's Health 2003 approximately 8.0% of children needed mental health services in the last year. Of those children, about 42.7% did not receive the mental health services that they needed.<sup>8</sup>

## Key Informants

Although MHD is a large provider of mental health services in Washington State, the purpose of MHD is to provide mental health care to low-income individuals and individuals in crisis. In Washington State, Medicaid is also directing its resources towards those who are most acutely mentally ill because of the potential risks for destructive behavior. In the 2002 DSHS report “Facing the Future: The State of Human Services in Washington,” (<http://www1.dshs.wa.gov/FacingtheFuture/>) states: “Even in the most liberal interpretation of ‘acute, chronic or severe’ mental illness, the mental health system excludes people who are in the early stages of illnesses that may become more severe, more debilitating, and more of a threat to public safety when they are left untreated. The concept of prevention – prevention of failure in school, job loss, homelessness, criminal behavior and untold suffering – seems hardly to exist within the public mental health system. Even for children, mild or early stages of emotional disturbance do not merit prompt treatment.”

Key informants recommended that the Medicaid coverage be expanded to include Autism Spectrum Disorder. Key informants also wanted to see better communication from the state on what is a covered mental health service versus what is not. This was evidenced by several key informants proposing service strategies that already exist such as: funding therapy done in-home; funding more than 12 sessions (sessions are not limited in Medicaid managed care plans or fee for service plans, but are limited to only 12 sessions in the Healthy Options plan); and reimbursing all team members for case consultation (Medicaid does reimburse for individuals on a team who are *not* receiving funding from their employer to engage in the case consultation process). Key informants at the state level felt that providers need more effective venues for disseminating information about Medicaid services to mental health stakeholders but were unable to identify what venues could be used. Key informants stated they would also like to see the caseloads of publicly funded mental health providers be reduced. Last, the recommendation was made to provide incentives for psychiatrists to practice in Washington State.

### ***Racism***

Many key informants serving American Indians and Latinos reported racism can play a role in misunderstanding cultural concepts of mental illness, misdiagnosing mental illness, and exacerbating mental illness. According to results from the 2004 Healthy Youth Survey, 10<sup>th</sup> grade students who were harassed because of their race were significantly more likely to have symptoms of depression and were more likely to have attempted suicide in the last year.<sup>6</sup> In the Healthy Youth Survey there is low representation of minority students, making the experiences of surveyed minority students difficult to generalize.

Many key informants recognized racism as a problem in the mental health system but had little feedback in terms of strategies. The general consensus was the need for more data on specific racial and ethnic minority populations.

**MCH Regional Issues and Concerns**

This section will outline the issues and current concerns expressed by key informants in the MCH Regions. The counties assigned to each region are listed in the table below. While this list is most likely not an exhaustive account of the issues present in each region, there are a number of concerns expressed by regional contacts that warranted inclusion in this report. Because many of the issues and concerns have not been thoroughly assessed, the recommendations for this section are located in the future research topics at the end of this report.

Washington State Office of Maternal and Child Health Regions and Corresponding Counties				
Olympic	Northwest	Southwest	Central	East
<ul style="list-style-type: none"> <li>▪ Clallam</li> <li>▪ Jefferson</li> <li>▪ Grays Harbor</li> <li>▪ Mason</li> <li>▪ Kitsap</li> <li>▪ Pacific</li> </ul>	<ul style="list-style-type: none"> <li>▪ Whatcom</li> <li>▪ Skagit</li> <li>▪ Snohomish</li> <li>▪ King</li> <li>▪ San Juan</li> <li>▪ Island</li> </ul>	<ul style="list-style-type: none"> <li>▪ Pierce</li> <li>▪ Thurston</li> <li>▪ Lewis</li> <li>▪ Wahkiakum</li> <li>▪ Cowlitz</li> <li>▪ Skamania</li> <li>▪ Clark</li> <li>▪ Klickitat</li> </ul>	<ul style="list-style-type: none"> <li>▪ Okanogan</li> <li>▪ Chelan</li> <li>▪ Douglas</li> <li>▪ Kittitas</li> <li>▪ Grant</li> <li>▪ Yakima</li> <li>▪ Benton</li> <li>▪ Franklin</li> <li>▪ Walla Walla</li> </ul>	<ul style="list-style-type: none"> <li>▪ Ferry</li> <li>▪ Stevens</li> <li>▪ Pend Oreille</li> <li>▪ Lincoln</li> <li>▪ Spokane</li> <li>▪ Adams</li> <li>▪ Whitman</li> <li>▪ Columbia</li> <li>▪ Garfield</li> <li>▪ Asotin</li> </ul>

***Olympic Region***

- Funding structures for private and public health insurance do not allow children to be treated in the context of their family, but rather individually.
- Health care providers are not asking parents about their mental health or the mental health status of their children.
- Poverty is a large risk factor for many families suffering with mental illness.
- Uninterrupted generational mental illness is another risk factor for mental illness.

***Southwest Region***

- Substance abuse in this region is a huge problem, specifically methamphetamine use, and the acceptability of alcohol use among underage youth.
- High occurrence of violence and the connection to mental illness, such as post traumatic stress disorder and depression.
- Not a very safe environment for GLBTQI youth.
- Dual diagnosis is difficult to treat because funding structures do not allow agencies to treat them in tandem, but rather as separate disorders.

## Key Informants

- Developmental Disorders and Autism Spectrum Disorders are not covered by most insurance plans.
- Teachers are often unprepared for children with mental or behavioral problems in their classrooms.

### ***Northwest Region***

- Urban parts of the region have adequate access to mental health services for GLBTQI youth.
- In the northern areas of the Northwest Region, migrant and refugee families (Russian, Latino(a) and Iraqi) families often struggle with receiving culturally appropriate services and need more bilingual/bicultural service providers.
- Generational poverty (poverty among multiple generations of family members) was discussed as a mental illness risk factor in this region.
- There are a disproportionate number of African-American youth in the juvenile justice system in King County. Early intervention and prevention may improve these detainment figures.
- Access to care is problematic for the most acutely mentally ill children. Many of the key informants stated they could only serve about half of the children that need mental health services the most.
- There is no reimbursement from public and private mental health insurance for providing needed services outside the scope of normal work duties.
- Public health nurses have a difficult time influencing physicians to do developmental screening that includes mental health, and few of them use standardized screening tools.
- King County Pregnancy Risk Assessment Monitoring System (PRAMS) data indicates there is a three-fold difference in life stressors between African American women, and Asian/Pacific Islander or White women.
- Stigma of receiving mental health services prevents parents from accessing mental health care and treatment.
- Children are often diagnosed improperly. Providers should be using an age appropriate diagnostic tool such as the Children's Global Assessment Scale (CGAS) rather than the DSM-IV TR..
- Reduce the caseloads of mental health service providers.
- Child care providers lack awareness of, and skills to deal with children experiencing social, emotional and behavioral problems.

### ***Central Region***

- Lack of bilingual staff (Spanish and English) is causing problems with access to care in the southern part of the region.

- Lack of coordination between service providers. One family may be seeing multiple providers, but there is a disconnect between those providers.
- Prevention services are always the first services cut in this region.
- Culturally appropriate service provision is a challenge for some providers in this region.
- American Indian population continues to feel persecuted and underserved.
- GLBTQI youth with mental health problems are not readily accessing the mental health system. Also, many GLBTQI in rural areas have to go to Spokane to receive mental health services.
- With the lack of hospitals in close proximity, an added consequence of hospitalization includes being transported far away from family members during treatment.
- Unless mentally ill children have a mental health provider before they come into the jail system, they will usually not be treated while they are in jail, or they will leave without any coping strategies or resources.
- Need more psychiatrists in jail settings to prevent visits to the emergency room for medication.
- Mental health system, depending on the RSN, can be very difficult to navigate and often hard to get appropriate services from (Chelan-Douglas RSN was mentioned as an example of an easy to navigate mental health service provider).
- Lack of qualified staff to provide mental health services.
- Historical abuse of American Indians has caused mistrust of the mental health system.
- Most children have to use their primary care physician because of the psychiatrist shortage in rural areas.

### ***Eastern Region***

- Parent mental illness contributes to the mental illness of their children, and parental mental illness is not often addressed in the treatment of children.
- Early childhood mental health services in rural areas are inadequate and public health nurses often have to refer out of county (usually to Spokane).
- Transportation is not readily accessible in rural areas, making access to care difficult for lower income individuals.
- American Indians have had increases in mental health problems brought on by abuses such as: racism, change in diet, physical inactivity, lack of culturally appropriate services, and substance abuse.
- Psychiatrists are scarce.
- Unable to treat families as a whole through the RSN.

## Key Informants

- Spokane has several collaborative efforts between agencies concerned about children's mental health that are working well.
- The public mental health system requires that children become gravely mentally ill before they can receive assistance.
- Chemical dependency issues often looked at exclusively from mental health issues.
- Some programs prefer categorical funding because it means that certain categories of children will receive funding, as opposed to diverting flexible dollars towards more high profile health issues.
- Eastern region has had a significant decrease in public health nurses due to funding losses. The workload for the remaining public health nurses is too high for public health nurses to feel effective in providing prevention services.
- There are no services other than standard outpatient and one partial hospitalization program (BEST) available to youth under the age of 12. Respite services and hospitalizations are non-existent, and allow children to decompensate until they need long-term psychiatric placement at Child Study and Treatment Center over on the coast (Western Washington). Unfortunately, due to the distance, it is difficult to provide support for the family as a whole, which is needed for a child with mental health issues.

## High Risk Groups

In researching the various groups that had significant levels of risk factors, several groups were found to be at risk for mental illness. An overall finding was that mental illness is probably linked to both demographics as well as systems involvement. Therefore, mental illness is not only related to the physical or developmental characteristics of a particular child, but is also related to a particular system that child may have come into contact with, such as the foster care system.

As stated earlier, the data available that identifies these particular groups as high risk is not exhaustive, and does not pinpoint all of the populations that are high risk. Demographic variables were asked about in various surveys, assessments, and vital statistics that ultimately defined these groups as high risk. This report does acknowledge that there are other 'suspect' groups; however, there is a lack of data to identify them as such.

The 1999 Mental Health Surgeon General's Report indicated that one out of five children has a diagnosable mental illness and 5% to 9% of children experience symptoms so severe that their ability to function is significantly impaired.<sup>1</sup> The methodology of the studies discussed below are very different, meaning they are not comparable. However, a benchmark for the label of at-risk needed to be established in order to identify groups that are at adverse risk for mental illness. If the examined

study indicated a prevalence of 20% or more of mental illness diagnoses in a population group, that group was considered at-risk.

### ***Children in Foster Care***

Children in foster care are at risk for several reasons. First, they are removed from their homes because of circumstances that may have put their lives at risk. Second, it is traumatic for a child to be removed from their caregiver. Last, children in foster care may feel disconnected from their foster family and in some cases they may be further abused. In a recent study undertaken by the Casey Family Programs, 54.4% of children who left foster care in Washington State had a diagnosable mental illness as an adult.<sup>30</sup>

The Washington State Children's Administration (CA), an agency that has been under scrutiny for several high profile cases and fiscal concerns, has made great efforts to fulfill the mental health needs of children in the child welfare system. The strategic plan known as Kids Come First provides strategies to address the mental health needs of children. Also, the DSHS Children's Mental Health Initiative ([http://www1.dshs.wa.gov/Working Together/MHGroup.html](http://www1.dshs.wa.gov/WorkingTogether/MHGroup.html)), a collaborative effort between MHD, CA and Juvenile Rehabilitation Administration has been developed to address the mental health needs of the most acutely mentally ill children served by DSHS. Because CA does not provide mental health services themselves, but rather relies on Medicaid to fund services, there have not been adequate resources for early intervention and prevention for children and youth in the child welfare system – as stated earlier Medicaid does not finance early intervention or prevention services for mental illness. Placement issues are also problematic, as one out of three children in the child welfare system in the last year has changed placements – a risk factor in terms of attachment and building relationships.<sup>31</sup> During calendar year 2006, the Division of Children and Family Services served an average of 7,800 children per month in foster care.<sup>32</sup>

Key informants were very concerned about this particular population. One strategy mentioned by a key informant included the placement of a mental health provider at each local child welfare office in order to triage, plan, and consult for cases at high-risk for mental illness. Another strategy was proposed to educate attorneys and judges who serve in the child welfare system about the mental health needs of young children and infants.

### ***Children and Youth with Special Health Care Needs***

Children and Youth with Special Health Care Needs (CSHCN) are children with disabilities such as Autism Spectrum Disorder and Cerebral Palsy. CSHCN also includes children with mental disorders. While completing the analysis for this particular group, it was felt that children who qualified as being a child with a special health care need based on a mental illness should be removed from the analysis to

## Key Informants

avoid duplication (i.e., if the purpose of the analysis is to identify those at risk for mental illness, we cannot logically state that those who are mentally ill are at risk for mental illness). Results of the 2004 Healthy Youth Survey (HYS) (the most recent year these data are available) indicate children with disabilities are twice as likely to have symptoms of depression.<sup>6</sup> They are also almost four times as likely as children without disabilities to attempt suicide.<sup>6</sup>

It is important to delineate that while some of mental health problems experienced by children with special health care needs are organic, many of the key informants were concerned that they may be more social in nature, i.e., the physical, developmental, or mental disability creates a barrier between these children and the rest of society, invoking feelings of isolation and loneliness. Feeling alone is a risk factor for mental illness. Children experiencing a physical disability expected to last six months or more were significantly more likely to feel depressed, as well as feeling alone in their lives.<sup>6</sup>

Key informants who work with children with special health care needs and their families stated they would like to see resources for social/support groups become available, to make the experience of being a child with a special health care need less isolating. Key informants recommended implementing a bullying prevention curriculum throughout all grades in schools that includes the prevention of bullying of differently abled children. Integration of mental health services into agencies that provide services to children with special health care needs was the final recommendation for this high-risk group.

### ***Juvenile Justice***

Children and youth in the juvenile justice system are usually accompanied by a host of problems. The Juvenile Rehabilitation Administration (JRA) in DSHS identifies those youth who are in need of mental health services by three criteria:

1) have a current DSM-IV Axis 1 diagnosis, or 2) are on psychotropic medications, or 3) had some suicidal ideation in the last six months. These criteria exclude both Oppositional Defiant Disorder and Conduct Disorder. These two particular diagnoses are behavioral in nature and to include them would mean that 100% of the juvenile justice population would qualify for the mental health target group. The definition also excludes Pedophilia, Paraphilia and Chemical Dependency as these youth are identified for sexual offending or substance abuse treatment. According to the JRA Automated Client Tracking (ACT) System, in Fiscal Year 2007 63% of the youth served by JRA qualified for the mental health target group under the criteria noted above. Of those that met the criteria, 78% had a DSM-IV diagnosis, 48% were on psychotropic medication, and 35% met the Suicide Precaution Level.<sup>13</sup>

In many local detentions, the Case Management Assessment Process (CMAP) assessment tool is used as a way to screen juvenile offenders who may also have

mental health needs. The 2003 Governor's Juvenile Justice Advisory Committee Annual Report indicated that 24% of juvenile offenders at county level facilities were at high risk for mental illness.<sup>12</sup> Two possible explanations for the lower percentage seen in local facilities than in state run facilities: 1) the crimes committed by juveniles that warrant a state level intervention may correlate more highly with serious mental health problem, and 2) the local juvenile justice system may be the first time the child is being asked about mental illness. If until that point there has been no mental illness history, the youth would not be considered mentally ill by the pre-screen form because the form only asks about prior history of mental illness.

Key informants in local jails stated they were in desperate need of mental health staff. They recommended that local jails be provided with a mental health provider to screen, refer, and treat adolescents and children in juvenile correctional settings. Key informants would also like to see an increase in primary crime prevention resources for children such as public health nurse home visiting programs.

### ***Children of Parents with Mental Illness***

Washington Kids Count, an affiliate of the Human Services Policy Center at the University of Washington, completed analysis of the Urban Institute's National Survey of American Families in 2003. Their analysis revealed that children ages 6 to 11 years old who had parents with multiple symptoms of mental illness were three times more likely to have multiple symptoms of mental illness than children whose parents were mentally healthy. For children ages 12 to 17, the figure rises to five times more likely.<sup>3</sup>

Key informants gave several suggestions to address the mental health needs of children with mentally ill parents. The first is to make the practice common among mental health providers in Washington State to ask clients and patients if they are parents and either provide necessary services themselves or make an appropriate referral. The second proposed strategy by key informants is to promote the use of mentorship programs for children whose parents have a diagnosed mental illness. Last, key informants wanted child care resources and summer camp resources be made available to parents with mental illness, who may need respite care or assistance in raising their children.

### **Populations at Risk as Inferred by National or Other State Data Sources**

Although Washington State has a number of datasets available for analysis, the datasets are not exhaustive in terms of describing the nature of some population groups noted in the literature as being at-risk. This section aims to acknowledge there are research questions not answered in Washington State datasets. It is also intended to provide a foundation for obtaining data about these populations in the future.

## Key Informants

### ***Gay, Lesbian, Bisexual, Transgender, Questioning and Intersexed (GLBTQI) Youth***

Many studies within the United States and the rest of the world indicate higher risk among GLBTQI youth for substance abuse disorders, affect disorders, and suicide.<sup>33,34,35,36,37</sup> In 1999, Seattle Public Schools implemented a survey that included the GLB demographic. Because this question was asked, the ability to tease out data describing the collective experiences of sexual minority youth became available. The survey revealed that youth who identified as GLB were significantly more likely to have feelings of hopelessness and suicidal ideation and unpublished analyses also showed a correlation between GLB orientation and high risk for heavy drug use, not being able to think of at least one adult who cares about you, and missing whole days of school out of fear for personal safety.<sup>38</sup> Although this translates to high risk for youth in Seattle and other parts of King County, demographics need to be available on a statewide level.

In 2006, the Healthy Youth Survey in Washington State asked students if they had been the victim of bullying or intimidation in the past 30 days because someone *perceived* him or her as gay or lesbian. Students who reported bullying or harassment due to this were significantly more likely to have had feelings of depression over the last year, and were also more likely to have thought about, and attempted, suicide.<sup>6</sup> The problem with this statistic is that it does not ask whether the youth identifies him or herself as GLBTQI, but rather if other people identify them as such and we know from the Seattle data that about two-thirds of GLB-identified youth are not experiencing this kind of harassment.<sup>38</sup> The same harassment question was in the 1999 Seattle Public Schools survey, and results showed that four out of five students who said they were harassed because of sexual orientation identified themselves as heterosexual.<sup>39</sup> Building the case for stating GLBTQI youth are at risk should begin with identifying youth who consider themselves GLBTQI, rather than mixing their experiences with heterosexual youth. Until data is available statewide where youth identify themselves as a sexual minority, the mental health status of GLBTQI youth in Washington State will have to be inferred from population-based studies in Seattle and around North America.

Key informants indicated that although most of them considered this group to be at high risk, they did not feel they had adequate referral resources for these youth, especially in the rural areas of the state. Statewide data ought to be collected to support the need for additional resources; in the meantime, key informants recommended encouraging public health to support targeted programs for gay youth, especially support groups and peer education models.

“It’s the water they swim in. Our youth experience huge anti-gay sentiment in study after study.” *Beth Reis, Public Health Educator, Public Health-Seattle & King County*

### ***Children of Incarcerated Parents***

In the 2005 legislative session, the Governor signed SHB 1426 into law that directs the Department of Corrections, in partnership with DSHS to establish an oversight committee to develop an interagency plan to provide necessary services and supports for children of incarcerated parents. At the time of the signing of this bill, there was no data source that included the imprisoned parental demographic variable. The interagency plan will include identification and ongoing collection of data around this population. Providing that the plan is effective in obtaining dollars for data collection, information will be available in the future that identifies the risk level of these specific children in Washington State.

### ***Homeless Children***

In Washington State, and nationwide, there is a void in mental health data about homeless children. In 1999, Homes for the Homeless and The Institute for Children and Poverty published a study on homeless children in the United States. Results indicated that 47% of the 4,000 children interviewed for the project experienced anxiety, depression, withdrawal as well as other clinical problems and 36% exhibited delinquent or aggressive behavior.<sup>40</sup> This data is seven years old, and may not accurately depict the current state of homeless children in the United States. Although there is great interest in the well-being of homeless children in Washington State, there are no current, local, population-based studies that describe the mental health of homeless children.

“Thank you. I just didn’t want my unborn child to have a lifelong stigma of being born homeless.” From a formerly homeless pregnant Snohomish County mother entering transitional housing one week before delivery – submitted by Frank Busichio, Program Manager, Snohomish Health District.

### ***American Indian/Native American Children***

A report published by the MHD in 2002 The Mental Health Needs of American Indians gave two specific reasons for the lack of aggregated data about this population: 1) culturally, American Indians rely on the spoken word to document events rather than the use of written records, and 2) the systems that serve the mental health needs of American Indians such as the Regional Support Networks and the Indian Health Service collect limited amounts of data about American Indians.<sup>38</sup> Key informants who were American Indian service providers, or providers who served American Indian clients or both, revealed that this population is probably at high risk because of generational abuse through racism, oppression, poverty and substance abuse. Although results of the Healthy Youth Survey 2002 and 2004 showed that American Indian youth had higher rates of depression and suicidal ideation than Asian/Asian Americans and White youth, the differences were not statistically significant. One of the problems with the analysis was the large confidence intervals due to the small proportion of surveyed youth identifying as American Indian.

## Key Informants

In the MHD report mentioned above, most of the tribes agreed that if given the chance, they would conduct a study of mental health among the American Indian tribes in Washington State. The report goes on to state the data would need to be owned by the tribe, and the design of the study would have to be participatory in nature.

### ***Refugee and Immigrant Children***

Several key informants mentioned the mental health needs of people in their community who qualify as refugees. Snohomish County has a large number of Russians and Iraqis. Key informants also spoke about refugees from Rwanda who settled in Seattle/King County after the massacres of the Tutsi people in 1994. There has been some literature to denote the impact of immigration and refugee status on children; however, that research has not occurred in Washington State.

It is not necessarily the immigrant status that puts children at risk for mental illness, but rather the loss of cultural connection in their former residences, violence in their country of origin or being immersed in learning new cultural norms that can make it difficult to cope. Cross-tabulation analysis with the Healthy Youth Survey 2006, indicated 10<sup>th</sup> grade children who usually spoke a language other than English in their home did not have more depressive symptoms than English speakers, but 8<sup>th</sup> and 12<sup>th</sup> grade students who spoke a different language in their home than English were significantly more likely to report depressive symptoms. In the 2004 survey, only 12<sup>th</sup> graders who spoke a language other than English at home were significantly more likely to be depressed.<sup>6</sup> The issue with using language as a proxy measure is that using a language other than English does not automatically equal refugee status. Refugees have the added risk factor of seeing or experiencing torture, fear, and/or grief over the loss of loved ones. Risk for mental illness could also be compounded by stigma and bullying based on other children's anti-immigrant prejudice.

Currently there is no state dataset that indicates the mental health status and needs of this particular population. A study of this nature would have to be very careful to take into account the cultural implications of mental illness. For example, key informants in Snohomish County mentioned that many of the Iraqi women they work with report to the public health nurses that mentally they are feeling fine when they could be experiencing serious symptoms of mental illness. Key informants were concerned that the cultural inclination for Iraqi women is to act brave or courageous in front of others as opposed to revealing true feelings of pain and anguish. Implications such as this could make it difficult for families from various backgrounds to acknowledge that their child has a mental health condition. Key informants indicated further research needed to occur in order to better understand the immigrant and refugee experience, and to obtain interventions that are effective and culturally sensitive.

## Next Steps

Establishing public health's contributions to the mental health field and aggregating data to create a comprehensive picture of children's mental health in Washington State were primary goals of developing this report. Now that the assessment phase has been completed, the next steps are to increase OMCH's capacity to address the mental health needs of children, strengthen our partnerships with mental health stakeholders, and to use the collected data to formulate an OMCH strategic plan for children's mental health. OMCH will also pursue planning for the collection of population-based information for those groups that do not have adequate data sources to describe their experience.

As of 2005, OMCH's new performance measures for mental health are: 1) promote mental health protective factors for children and youth, and 2) promote mental health screening and prevention efforts for children and youth populations at-risk for mental illness. OMCH's assumed role will be primarily to address the earlier stages of mental illness, as defined by our key informants. The increased direction towards integrating mental health into current OMCH programs and assessment is critical. Mental illness significantly impacts the MCH population, and OMCH recognizes the need to adopt mental health as a priority because mental health is integral to public health.

## Research Questions

Throughout this document there have been many references to research questions posed that need some exploring in order to adequately address the mental health needs of children in Washington State. Suggestions for changes to current data sources and research projects are listed below. The research ideas are based on data gaps identified in Washington State.

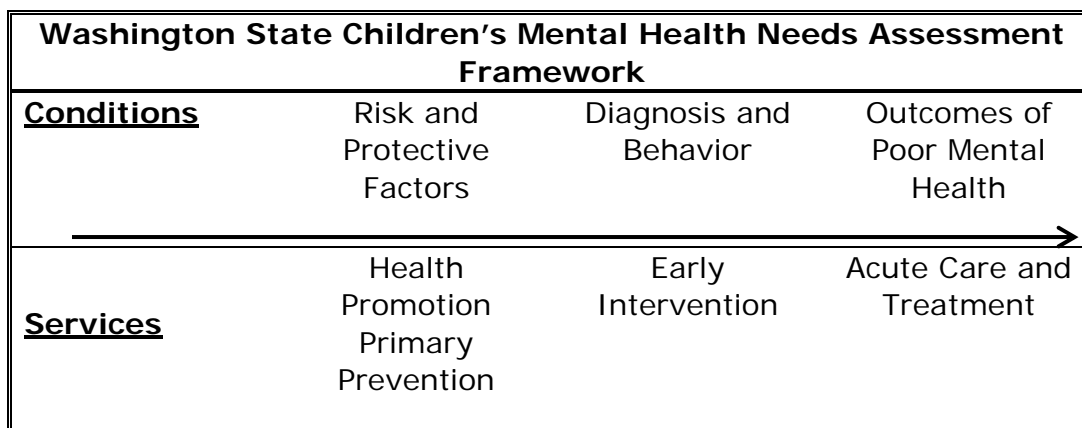
1. Questions to add to Healthy Youth Survey
  - Add GLBTQI demographic question to the Healthy Youth Survey 2006.
  - Add foster care demographic question to Healthy Youth Survey 2006.
  - Add question to Healthy Youth Survey 2006 that asks about the quality of the relationship the student has with his or her parent(s) and/or how important their parents are to him or her.
  - Add question to Healthy Youth Survey 2006 that asks the student on a Likert scale if the child would agree that they are happy.
  - Add question to the Healthy Youth Survey 2006 that asks the student if they are spiritual or religious.
  - Add question to the Healthy Youth Survey 2006 that asks if the student has been exposed to violence within their families.
  - Add question to the Healthy Youth Survey 2006 that asks if the student is supervised by an adult after school.
  - Implement a study to identify the prevalence of mental illness among homeless children and youth in Washington State.
  - Add demographic question to the Healthy Youth Survey 2006 that asks about the student's parents' marital status.
2. Research mental illness stigma from the perspective of those living with mental illness and the impact on access to care, and the perspectives of the general public in terms of understanding and awareness of mental illness.
3. Institute an infant mental health surveillance system to gather data on the prevalence of mental illness symptoms among infants.
4. Examine expulsion rates of children in after-school programs due to behavioral and/or mental health problems.
5. Evaluate youth in after-school programs to identify change in mental health status based on program attendance.

6. Research misdiagnosis of mental illness among children in Washington State and the factors that contribute to misdiagnosis.
7. Research impacts of caseload reduction on quality of services provided by mental health professionals.
8. Implement a children's mental health needs assessment of diverse cultures (see section on racism).
9. Implement a study to identify the prevalence of mental illness among children of incarcerated parents.
10. Implement a study to identify the prevalence of mental illness among refugee and immigrant children.
11. Develop a system that adequately tracks and aggregates the number of school expulsions in Washington State, and the reasons for expulsion.
12. Implement a study to identify the prevalence and severity of post-partum depression in Washington State.
13. Implement a study to identify the prevalence of mental illness among out-of-school children and youth.

# Appendix A - Methods

## Framework

To begin the needs assessment, OMCH had to establish parameters around the assessment process i.e., what particular population would we be studying, and what types of data the assessment would need to consider. An assessment framework was established based not only on public health’s role in promotion of mental health and prevention of mental illness, but also on the needs of other agencies providing early intervention and acute care services. The following diagram illustrates the needs assessment framework based on these needs.



### ***Risk and Protective Factors & Health Promotion/Primary Prevention***

Beginning at the left of the diagram, the framework begins by dividing mental health variables into conditions and services. Conditions are direct human experiences of mental health or mental illness, while services are mechanisms of assistance either sought out by those experiencing mental conditions or are provided generally to the public regardless of condition. Conditions are split into three separate categories: 1) risk and protective factors, 2) diagnoses and behavior, and 3) outcomes of poor mental health. Risk factors are those characteristics of an individual’s life that may increase his or her likelihood of developing a mental illness in the future. Protective factors are those attributes that reduce the effects of risk factors on mental health. Examples of risk factors include academic failure, poor social skills, and parental mental illness. Protective factors without the presence of risk factors do not usually result in adverse outcomes or diagnoses of mental illness. However, when risk factors are present, protective factors are very important in lessening the potential harmful effects of risk factors. A research project by Emma Werner on the island of Kauai, Hawaii that followed a cohort of children for 34 years revealed that although some of the children in the study had significant risk factors for future personal and

social disposition, if they had one of two protective factors they often went on to become productive adults. The protective factors were: 1) having an adult or peer in their lives who believed they were important, or 2) having a charismatic, outgoing personality. Children who never developed the social supports needed to overcome their inherent risks were more likely to develop psychological problems.<sup>40</sup> The National Longitudinal Study of Adolescent Health in 1997 revealed that parental connectedness and school connectedness had the highest associations with mental health.<sup>41</sup>

A literature review failed to identify an established comprehensive list of risk and protective factors for mental health. However, Dr. Robert Blum of Johns Hopkins University developed a broad list of risk and protective factors for *general* children’s health published in Improving the Health of Adolescents and Young Adults: A Guide for States and Communities by the National Adolescent Health Information Center (NAHIC) in 2004. A literature review was conducted on each of the risk/protective factors listed to identify their relevance for mental health. This process produced a list of risk/protective factors that were not exhaustive, but did include those factors that were identified by research as having the most impact on future mental status. Physical activity and ability to cope, although not listed in the NAHIC report, were also researched as having an impact on mental health status. The listing of risk and protective factors are in the table below:

Domain	Risk Factors	Protective Factors
Individual	<ul style="list-style-type: none"> <li>■ Biological Vulnerability</li> <li>■ Engaging in Health-Compromising Behaviors</li> <li>■ Intellectual Impairment</li> <li>■ Impulsivity</li> <li>■ ADHD (places a child at higher risk for other disorders)</li> <li>■ Aggressive Behavior</li> </ul>	<ul style="list-style-type: none"> <li>■ Spirituality/Religiosity</li> <li>■ Social Skills</li> <li>■ Normal Intelligence</li> <li>■ Late Maturation</li> <li>■ High Self Image</li> <li>■ Perceived Importance of Parents</li> </ul>

## Appendix A - Methods

<b>Domain</b>	<b>Risk Factors</b>	<b>Protective Factors</b>
Family	<ul style="list-style-type: none"> <li>▪ Low Parental Education</li> <li>▪ Parental Mental Illness</li> <li>▪ Maternal Stress</li> <li>▪ Poverty</li> <li>▪ Access to Weapons</li> <li>▪ Family Violence/Child Abuse</li> <li>▪ Single Parent/Female Head of Household</li> </ul>	<ul style="list-style-type: none"> <li>▪ Connectedness (parents/adult who cares about them)</li> <li>▪ Parental Presence</li> <li>▪ Parental Values Toward School</li> <li>▪ Two Parents (in the home)</li> <li>▪ Family Cohesion</li> <li>▪ Authoritative Parenting</li> </ul>
School	<ul style="list-style-type: none"> <li>▪ Retention in Grade</li> <li>▪ Absenteeism</li> </ul>	<ul style="list-style-type: none"> <li>▪ Connectedness to School</li> <li>▪ Improved Academic Performance</li> <li>▪ Consistency of Schools Attended</li> </ul>
Peers	<ul style="list-style-type: none"> <li>▪ Prejudice from Peers</li> <li>▪ High Perception of Threat</li> <li>▪ Social Isolation</li> <li>▪ Participation in Deviant Culture</li> </ul>	<ul style="list-style-type: none"> <li>▪ Peer Fairness</li> <li>▪ Having Low-Risk Friends</li> <li>▪ Peers With Pro-Social Norms</li> </ul>
Social Environment	<ul style="list-style-type: none"> <li>▪ Arrests</li> <li>▪ Rate of Neighborhood Unemployment</li> <li>▪ Exposure to Violent Media</li> <li>▪ Access to Guns, Alcohol</li> <li>▪ Television/Video Watching</li> </ul>	<ul style="list-style-type: none"> <li>▪ Educational Attainment by Age</li> <li>▪ School Enrollment for Those 16 to 19</li> <li>▪ Employment Rates of Adults (parents)</li> <li>▪ Religious Involvement</li> </ul>

These risk/protective factors were then cross referenced with current available data sources. Those data sources are:

- Healthy Youth Survey 2002 and 2004 and 2006
- Child Death Review 2003
- Behavioral Risk Factor Surveillance System (Firearm Access) 2003
- SLAITS National Survey of Children's Health 2003



- Comprehensive Hospital Abstract Reporting System (Hospitalizations, Suicide Attempts) 2003-2005
- Office of the Superintendent of Public Instruction (School Nurse Corps Program – Student Health Manager Software) 2004
- Juvenile Rehabilitation Administration (Annual Report) 2003
- Department of Social and Health Services (Medicaid data) 2003
- Washington Kids Count (National Survey of American Families by the Urban Institute) 2001
- National Survey of Children with Special Health Care Needs 2001
- Pregnancy Risk Management Assessment Survey 2005
- Seattle Public Schools Teen Health Survey 1999

Data collection included reviewing survey questions, hospital records and vital statistics for the best fit of a risk/protective factor and the type of data needed. For example, social skills are an important protective factor in determining future mental health. In the Healthy Youth Survey, there is a question about feeling alone, but there is an absence of questions that ask about how easy or difficult it is for that particular individual to make friends. There are also questions that ask about discrimination against race or perceived sexual orientation, which can indicate a problem with peers, but again the questions fail to indicate the quality of students' relationships. In these cases, the decision was made to go with the closest proxy measure rather than report that no data exists, and to make suggestions for how to capture the information in future surveys.

There are very few primary prevention/health promotion services available that collect data over a long-term period to assess impact. Those programs that do are very limited in their scope and are not generalizable to the general population. This means that statewide service data for risk/protective factors were not available for this report. It should be noted that most mental health data is not collected regularly until there are significant outcomes of poor mental health such as suicide/suicidal ideation, and mental illness hospitalizations.

### ***Diagnosis, Behavior & Early Intervention***

Diagnoses were easier to identify than risk or protective factors because of the documentation process required when a diagnosis is made. Behaviors were subject to less rigorous standards since the presence of a particular behavior does not necessitate the diagnosis of a particular mental illness. Data sources were scanned for diagnoses of mental disorders as well as symptoms that indicated a mental health condition. For example, “During the past 12 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?” was an indicator of depression from the Healthy Youth Survey.

## Appendix A - Methods

Early intervention efforts were also difficult to quantify because of the lack of aggregated data sources (with the exception of Medicaid-related data) on early intervention services. Private insurance information was considered; however, after assessing the dataset as being too costly to obtain, the decision was made to focus solely on the public mental health system.

### ***Outcomes of Poor Mental Health & Acute Care and Treatment***

Outcomes of poor mental health included: suicide/suicidal ideation, mental illness hospitalization, criminal arrests, and school/child care expulsion. Data sources were reviewed to obtain counts for each of these outcomes. Acute care and treatment data was determined to be hospitalizations and outpatient treatment.

Comprehensive information on outpatient treatment services outside of the public mental health system was inadequate due to the lack of access to private health insurance data.

*Hospitalization:* Hospitalization data was found through the Comprehensive Hospital Abstract Reporting System (CHARS); however, this data set does not include data from Children's Long-Term Inpatient Program (CLIP), a program funded by Medicaid dollars to provide intensive long-term treatment to children with serious mental illness. A large number of children are enrolled in CLIP, thus the figures from CHARS underreport the number of adolescent/child hospitalizations in Washington State.

*Arrests:* Information about arrests was gleaned from both the Governor's Juvenile Justice Advisory Committee Report and the Healthy Youth Survey 2002 and 2004.

It should be noted that the outcomes outlined in this section are not necessarily reflective of a mental illness diagnosis, but show a high association with behavioral/emotional problems. For example, being arrested does not automatically result in a diagnosis of conduct disorder if the child was unjustly accused of committing a crime he/she did not commit.

*Suicide:* Suicides are not always classified as such due to stigma, as well as the unknown circumstances surrounding an incident of suicide that may not always be interpreted as self-harm but as an accident or homicide. Factors associated with suicidal ideation were easier to capture than factors of completed suicides because the victim is available to verify their intent at the time of the attempt. Suicide information, but not always the factor(s) associated with completed suicide, was available via death certificate data. Information about suicidal ideation was available through the Healthy Youth Survey 2002 and 2004, and CHARS.

*Expulsion:* Washington State's Office of the Superintendent of Public Instruction does not aggregate any data on the expulsion of students. That information is held

at the local school district level separately, and was unavailable at the time of the needs assessment. Recommendations around data collection at the end of this report will include some commentary on the use of expulsion as an indicator of behavioral/mental illness issues in schools. Expulsion from child care settings data was collected from a national study coordinated by the Yale Child Study Center.<sup>14</sup>

## **Key Informant Interviews**

### ***Selection of Key Informants***

Once the data sources were identified and analyzed for salient information, there were several additional questions that needed to be answered:

- What are the gaps in services that providers are experiencing that may or may not be covered by the data?
- What are the most concerning risk and protective factors related to mental health?
- What is the role of public health, and what can Department of Health do to improve children's mental health?

After discussion by the DOH Mental Health Workgroup convened by the OMCH the decision was made to conduct individual key informant interviews. OMCH strategically chose key informants based on MCH regions, type of mental health services provided, special populations at-risk for mental illness, and other relevant stakeholders. The regions are made up of multiple counties, and are listed in the regional concerns section of this document.

The mental health provider types were based on the categories listed above in the framework: They included the three phases of mental health/illness: 1) primary prevention/health promotion, 2) early intervention, and 3) acute care and treatment.

It was important that Office of Maternal and Child Health receive representative input from each of these areas of mental health service provision. Populations that were found to be at higher risk through Washington State based data, or from the literature review were also represented in the key informant interviews. The at-risk populations included: children of parents with mental illness; children with special health care needs; children in the juvenile justice system; and children in foster care

Populations that OMCH did not have specific data for, but were considered at-risk through national or state-based studies were identified and discussed as groups at higher risk for mental illness. These groups included: children who are homeless; children who are impoverished; children of incarcerated parents; gay, lesbian, bisexual, transgender, questioning and intersexed youth; and refugee and recently emigrated children.

## Appendix A - Methods

Other relevant stakeholders with a significant interest in children's mental health, but not necessarily a provider of mental health services, also needed to be consulted. These groups included: schools, tribes, parents of children with mental illness, after-school programs, child care programs and Regional Support Networks.

The final matrix included 63 people from around Washington State that could comment on the landscape of children's mental health. The OMCH Mental Health Workgroup was instrumental in recruiting potential key informants based on the criteria for selecting key informants. Initially, approximately 36 individuals from around Washington State were identified by the Workgroup, however once the potential key informants were contacted, many felt their testimony would be enhanced by the addition of one of their colleagues. Key informant colleagues were then allowed to participate as supplemental sources of information on children's mental health

### ***Interview Questions***

Questions were devised based on the assessment framework described above including other areas not always addressed by the data such as services gaps, opportunities for improvement, quality of care, health disparities, and mental health screening. The questions were drafted and revised by both OMCH management and the OMCH Mental Health Workgroup. The final questions are listed below.

1. When you think of social, emotional and mental health needs of children and youth in your region, tribe, county, or population group, what type of services, systems or issues do you think of? *This question establishes a baseline of what kind of framework you as a key informant are working from i.e., acute care focus versus prevention, systems versus direct practice etc.*
2. Earlier we went over the risk and protective factors that influence mental health in Washington State. Which risk factors are of particular concern and which protective factors are prevalent in your region/tribe/county/population group?
3. Of those risk factors that are of particular concern, which ones are being addressed adequately, and which are not? Why?
4. What resources would you need in your region/tribe/county/population group to address these risk factors? What resources do you need to enhance protective factors in your area adequately?
5. What kinds of services are available that address risk factors and protective factors in your region/tribe/county/population group?
6. What are the ways to improve the risk and protective factor services in your region/tribe/county/population group?

7. Now I'd like to talk about screening. In your opinion, is screening for social, emotional and mental health issues among children and youth adequate in your region/tribe/county/population group? Why or why not?
8. Where are the majority of children and youth in your region/tribe/county are screened?
9. In your opinion, do you think more children and youth should be screened for social, emotional, and mental health issues? If yes – what resources are needed to move in this direction? If no – Why not?
10. Do you have any other suggestions of how screening in your region/tribe/county/population group could be improved?
11. Now I'd like to talk about acute mental health care provided by both the private and public (or Medicaid) providers. When you think of acute mental health care what types of services, systems, or issues do you think of? *This Establishes where on the continuum of acute care this person is thinking of i.e., hospitalization versus outpatient group therapy.*
12. In your opinion, what are the most pressing gaps that you see in the mental health acute care that currently exist in your region/tribe/county/population group?
13. In your opinion, what is being done well in terms of acute mental health care in your region/tribe/county/population group?
14. Do you have any suggestions for how services for the acutely mentally ill could be improved in your region/tribe/county/population group?
15. In your opinion, what resources does your region/county need in order to improve outcomes for the acutely mentally ill?
16. In your opinion, where do you think the needed resources should be directed so that they can best serve the acutely mentally ill in your region/tribe/county/population group?
17. Where do you see any potential opportunities to improve the mental health status of children in your region/tribe/county/population group?
18. Are there any disparities in terms of mental illness that are particularly concerning in your region/tribe/county/population group, for example: higher rates among specific groups of people, or lack of access to mental health services for the same groups of people?

## Appendix A - Methods

19. Overall, if there were just a few things you would like me to take from this interview, what would those be?

It is important to keep in mind that key informants would not be expected to answer all of these questions, as their respective fields and levels of education would vary with their ability to provide informed responses. There were however, three questions asked in every interview: 1) *how do you define mental health* 2) *what is the role of public health in mental health*, and 3) *question 19 from the list above*.

### ***Interview Process***

Interviewees were contacted via email and by telephone to ascertain their willingness to engage in the key informant interviews. Of the potential interviewees that were contacted, four key informants did not respond to requests for an interview, and subsequently did not participate. Interviewees participated in either individual or group interviews, resulting in 41 interviews with 63 different interviewees. Notes from the interviews were recorded onto a laptop computer, and were subsequently analyzed using an interview worksheet.

The notes from the interviews were used to inform the recommendations and strategies proposed by this needs assessment to improve the mental health of children in Washington State.

## Appendix B: Data Tables

### Individual Risk Factors

Risk Factor	Data Source	Question	Response	Statistic	
Engaging in Health Compromising Behaviors	HYS 2006	During the past 30 days, on how many days did you: Drink a glass, can or bottle of alcohol?	Any alcohol consumption	32.8% ( $\pm$ 1.6) of 10 <sup>th</sup> graders	
		During the past 30 days, on how many days did you: Smoke cigarettes?	Any cigarette smoking	14.9% ( $\pm$ 1.4) of 10 <sup>th</sup> graders	
		During the past 30 days, on how many days did you: Smoke marijuana?	Any marijuana smoking	18.3% ( $\pm$ 1.5) of 10 <sup>th</sup> graders	
		How many sodas or pops did you drink yesterday?	2 or more	19.8% ( $\pm$ 2.1) of 10 <sup>th</sup> graders	
Intellectual Impairment	OSPI 2004	Qualifier for special education	Mental Retardation	5575 children in Washington State	
Attention Deficit Hyperactivity Disorder/Attention Deficit Disorder	NSCH 2003	Has a doctor of health professional ever told you that [your child] has any of the following conditions: Attention Deficit Disorder or Attention Deficit Hyperactive Disorder?	Yes	6.4% ( $\pm$ 1.4) of surveyed caregivers	
Aggressive Behavior	NSCH 2003	Please tell me how often he/she bullies or is cruel or mean to others.	Always or usually	<u>Age</u>	<u>Percent</u>
				0 to 5	0%
				6 to 10	.93% ( $\pm$ .92)
Lack of Physical Exercise	HYS 2006	On how many of the past 7 days did you exercise or participate in physical activity for at least 20 minutes that made you sweat and breathe hard?	Less than 3 days	31.8% ( $\pm$ 2.7) of 10 <sup>th</sup> graders	
	NSCH 2003	During the past week, on how many days did your child exercise or participate in physical activity for at least 20 minutes that made him/her sweat and breath hard?	Less than 3 days	36.0% ( $\pm$ 3.3) of surveyed caregivers	

## Appendix B – Data Tables

### Individual Protective Factors

Protective Factor	Data Source	Question	Response	Statistic						
Spirituality	NSCH 2003	About how often does your child attend a religious service?	One time per week or Daily	47.5% ( $\pm$ 3.1) of surveyed caregivers						
Social Skills	NSCH 2003	Regarding your child’s friends, would you say that you have met all, most, some, or none of his or her friends?	Child has no friends	0.24% ( $\pm$ .3) of surveyed caregivers						
Self Image	NSCH 2003	Are you concerned a lot, a little, or not at all about how well your child gets along with others (10 -17 months old)?	A lot	0.93% ( $\pm$ 2.0) of surveyed caregivers						
		Are you concerned a lot, a little, or not at all about how well your child gets along with others (10 -17 months old)?	A little	7.3% ( $\pm$ 6.0) of surveyed caregivers						
		Are you concerned a lot, a little, or not at all about how well has your child got along with others (18 - 71 months old)?	A lot	2.8% ( $\pm$ 1.7) of surveyed caregivers						
	HYS 2006	Are you concerned a lot, a little, or not at all about how well your child gets along with others (18 - 71 months old)?	A little	9.8% ( $\pm$ 3.2) of surveyed caregivers						
			With 0 being “not at all true, “ and 10 being “completely true,” please fill in the number on the scale that best describes how closely the statement applies to you: I am satisfied with the way my life is now	8 9 10 – completely true	<table border="1"> <thead> <tr> <th>Rating</th> <th>Percent</th> </tr> </thead> <tbody> <tr> <td>8</td> <td>14.5% (<math>\pm</math> 1)</td> </tr> <tr> <td>9</td> <td>13.7% (<math>\pm</math> 1.2)</td> </tr> <tr> <td>10</td> <td>19.3% (<math>\pm</math> 1.5)</td> </tr> </tbody> </table> among 10 <sup>th</sup> graders	Rating	Percent	8	14.5% ( $\pm$ 1)	9
Rating	Percent									
8	14.5% ( $\pm$ 1)									
9	13.7% ( $\pm$ 1.2)									
10	19.3% ( $\pm$ 1.5)									
NSCH 2003	Are you currently concerned a lot, a little or not at all about your child’s self esteem?	Not at all	49.17% ( $\pm$ 3.2) of surveyed caregivers							
Regular Physical Exercise	HYS 2006	In the past 7 days, how many days were you physically active for a total of at least 60 minutes per day?	5 + days	41.9% $\pm$ 2.3 of 10 <sup>th</sup> graders						
Ability to Cope	NSCH 2003	During the past week, on how many days did your child exercise or participate in physical activity for at least 20 minutes that made him or her sweat and breathe hard?	5 to 7 days	52.5% $\pm$ 3.1 of surveyed caregivers (ages of children: 6 – 17)						



Appendix B – Data Tables

Protective Factor	Data Source	Question	Response	Statistic
	HYS 2002	In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?	Sometimes Fairly often Very often	<u>Percent</u> 30.7% ± 1.8 29.8% ± 2.1 18.9% ± 2.1

Appendix B – Data Tables

**Family Risk Factors**

Risk Factor	Data Source	Question	Response	Statistic
Low Parental Education	HYS 2006	What is the highest degree your mother earned?	No HS grad. Don't know	<u>Percent</u> 12.1% ( $\pm$ 2.8) of 10 <sup>th</sup> graders 12.9% ( $\pm$ 1.1) of 10 <sup>th</sup> graders
		What is the highest degree your father earned?	No HS grad. Don't know	<u>Percent</u> 11.6% ( $\pm$ 2.3) of 10 <sup>th</sup> graders 17.2% ( $\pm$ 1.6) of 10 <sup>th</sup> graders
Parental Mental Illness	NSCH 2003	Would you say that in general your (mother) mental health is excellent, very good, good, fair, or poor?	Fair – Poor	<u>Percent</u> 4.5% ( $\pm$ 1.2)
		Would you say that in general your (father) mental health is excellent, very good, good, fair, or poor?	Fair – Poor	<u>Percent</u> 3.8% ( $\pm$ 1.2)
Maternal Stress	NSCH 2003	In general, how well do you feel you are coping with the day to day demands of (parenthood/raising children)?	Not very well/ Not well at all	<u>Percent</u> 0.8% ( $\pm$ .5)
Poverty	HYS 2006	How often in the past 12 months did you or your family have to cut meal size or skip meals because there wasn't enough money for food?	Any	<u>Skip Meals</u> <u>Percent</u> Almost        21.7% ( $\pm$ 3.0) Every Month to Only 1 to 2 months
	NSCH 2003	Poverty Level: Below 100% Federal Poverty Level as defined by Department of Health and Human Services	Below 100%	13.3% ( $\pm$ 2.0) of surveyed caregivers
Access to Weapons	HYS 2006	If you wanted to get a handgun, how easy would it be before you to get one?	Sort of Easy/ Very Easy	21.5% $\pm$ 2.1 of 10 <sup>th</sup> graders
	BRFSS 2002	Cross tabulation: Is there a firearm in your home, AND are there children residing in the home?	Yes to both	37% of surveyed adults



Appendix B – Data Tables

Risk Factor	Data Source	Question	Response	Statistic
Family Violence	BRFSS 2001	Before you were 18, was there any time when you were punched, kicked, choked, or received a more serious physical punishment from a parent or other adult guardian?	Yes	9.0% $\pm$ 3.0 of surveyed 18 to 24 year olds
		As a child, did you ever see or hear one of your parents or guardians being hit, slapped, punched, shoved, kicked, or otherwise physically hurt by their spouse or partner?	Yes	15.0% $\pm$ 3.0 of surveyed 18 to 24 year olds

## Appendix B – Data Tables

### Family Protective Factors

Protective Factor	Data Source	Question	Response	Statistic
Connectedness to Parents	HYS 2006	If I had a personal problem, I could ask my mom or dad for help.	Yes	72.2% $\pm$ 1.9 of 10 <sup>th</sup> graders
		How often do you eat dinner with your family?	Most of the time/ always	58.2% $\pm$ 2.3 of 10 <sup>th</sup> graders
	NSCH 2003	Regarding your child's friends, would you say that you have met all, most, some or none of his or her friends?	All/ Most	85.4% $\pm$ 2.3 of surveyed caregivers
Parental Presence	NSCH 2003	Sometimes children spend time caring for themselves, either at home or somewhere else, without an adult or older child responsible for them. During the past week, did your child spend time caring for himself/herself for even a small amount of time?	Yes	16.9% $\pm$ 3.5 of surveyed caregivers

## Appendix B – Data Tables

### School Risk and Protective Factors

Protective/Risk Factor	Data Source	Question	Response	Statistic
Retention in Grade	NSCH 2003	Since starting kindergarten, has your child repeated any grades?	Yes	6.9% ( $\pm$ 1.8) of surveyed caregivers
School Attendance	HYS 2006	During the last 4 weeks, how many whole days of school have you missed because you skipped or “cut”?	1 to 3 days 4 or more days	<u>Percent</u> 15.8% ( $\pm$ 1.6) 5.9% ( $\pm$ 0.9) of 10 <sup>th</sup> graders
Connectedness to School	HYS 2006	Think back over the past year in school. How often did you: Enjoy being in school?	Sometimes/ Often/ Almost Always	73.7% ( $\pm$ 1.5) of 10 <sup>th</sup> graders
Consistency of Schools Attended	HYS 2004	How many times have you changed school (including change from elementary to middle and middle to high school) since kindergarten?	4 or more	23.9% ( $\pm$ 2.2) of 10 <sup>th</sup> graders

## Appendix B – Data Tables

### Peer Risk Factors

Risk Factor	Data Source	Question	Response	Statistic
Prejudice from Peers	HYS 2006	In the past 30 days, were you bullied, harassed, or intimidated at school or on your way to or from school because of your race, ethnicity, or national origin or what someone thought it was?	Yes	15.2% ( $\pm$ 1.1) of 10 <sup>th</sup> graders
		In the past 30 days, were you bullied, harassed, or intimidated at school or on your way to or from school because of your religion or what someone thought it was?	Yes	13.8% ( $\pm$ 1.4) of 10 <sup>th</sup> graders
		In the past 30 days, were you bullied, harassed, or intimidated at school or on your way to or from school because someone thought you were gay, lesbian or bisexual (whether you are or are not)?	Yes	13.3% ( $\pm$ 1.6) of 10 <sup>th</sup> graders
		In the past 30 days, were you bullied, harassed, or intimidated at school or on your way to or from school because of your gender (being male or female)? This includes sexual jokes, gestures, or comments that make you feel uncomfortable.	Yes	20.9% ( $\pm$ 1.7) of 10 <sup>th</sup> graders
		In the past 30 days, were you bullied, harassed, or intimidated at school or on your way to or from school because you have a health problem or a physical or mental disability, or someone thought you did?	Yes	10.2% ( $\pm$ 1.2) of 10 <sup>th</sup> graders
		In the past 30 days, were you bullied, harassed, or intimidated at school or on your way to or from school because of any other reason?	Yes	24.6% ( $\pm$ 1.8) of 10 <sup>th</sup> graders
		In the past 30 days, has someone used the computer or a cell phone to bully, harass or intimidate you?	Yes	11.6% ( $\pm$ 0.8) of 10 <sup>th</sup> graders

## Appendix B – Data Tables

Risk Factor	Data Source	Question	Response	Statistic
Perception of Threat	HYS 2006	During the past 12 months, how many times were you: I feel safe at my school.	Definitely NOT True/ Mostly Not True	22.6% ( $\pm$ 2.1) of 10 <sup>th</sup> graders
Social Isolation	HYS 2006	With 0 being “not at all true,” and 10 being “completely true,” please fill in the number on the scale that best describes how closely the statement applies to you: I feel alone in my life.	8 9 10 – Completely True	<u>Percent</u> 5.5% ( $\pm$ 0.7) 4.1% ( $\pm$ 0.6) 4.6% ( $\pm$ 0.8) among 10 <sup>th</sup> graders
		NSCH 2003	For each item, please tell me how often this is true for your child during the past month. Would you say never, sometimes, usually or always? He/she is withdrawn and does not get involved with others.	Usually/ Always
Participate in a Deviant Culture	HYS 2006	Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have: smoked cigarettes?	Any	40.2% ( $\pm$ 2.6) of 10 <sup>th</sup> graders
		Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have: Tried beer, wine or hard liquor when parents didn’t know?	Any	62.8% ( $\pm$ 2.5) of 10 <sup>th</sup> graders
		Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have: Used marijuana?	Any	43.0% ( $\pm$ 2.8) of 10 <sup>th</sup> graders
		Think of your four best friends (the friends you feel closest to). In the past year (12 months), how many of your best friends have: Used LSD, cocaine, amphetamines, or other illegal drugs?	Any	16.1% ( $\pm$ 1.7) of 10 <sup>th</sup> graders

Appendix B – Data Tables

**Peer Protective Factors**

Protective Factor	Data Source	Question	Response	Statistic
Peers with Pro-Social Norms	HYS 2006	Think about your four best friends. In the past year, how many of your best friends have: participate in clubs, organizations, or activities at school?	Any	83.0%(± 1.9) of 10 <sup>th</sup> graders
		Think about your four best friends. In the past year, how many of your best friends have: made a commitment to stay drug free?	Any	71.0% (± 1.5) of 10 <sup>th</sup> graders
		Think about your four best friends. In the past year, how many of your best friends have: Liked school?	Any	73.4% (± 1.7) of 10 <sup>th</sup> graders
		Think about your four best friends. In the past year, how many of your best friends have: Regularly attended religious services?	Any	69.9% (± 2.0) of 10 <sup>th</sup> graders
		Think about your four best friends. In the past year, how many of your best friends have: Tried to do well in school?	Any	90.8% (± 1.3) of 10 <sup>th</sup> graders



## Appendix B – Data Tables

### Social Environmental Risk and Protective Factors

Risk Factor	Data Source	Question	Response	Statistic
Arrests	HYS 2006	How old were you when you were first arrested?	13 or younger	<u>Age</u> ≤13 6.4% (± 1.3)
			14 or older	≥14 6.6% (± 1.0) Among 10 <sup>th</sup> graders
Single Parents	OFM 2001	Not applicable	% of families headed by single parents	27.2% of families were headed by a single parent in 2001
Access to Alcohol	HYS 2006	During the past 30 days, how did you usually get alcohol?	Any means	31.1% (± 2.1) of 10 <sup>th</sup> graders
Television Watching	HYS 2006	On an average school day, how many hours do you watch TV, including videos and DVDs?	3 or more hours per day	29.5% (± 2.4) of 10 <sup>th</sup> graders
Employment Rates of Parents/Caregivers	NSCH 2003	Was anyone in the household employed at least 50 weeks out of the past 52 weeks?	No	10.6% (± 1.7) of surveyed caregivers

## Appendix B – Data Tables



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