adverse CHILDHOOD EXPERIENCES IN MINNESOTA

FINDINGS & RECOMMENDATIONS BASED ON THE
2011 Minnesota Behavioral Risk Factor Surveillance System

EXECUTIVE SUMMARY

MINNESOTA MDH DEPARTMENT OF HEALTH

Minnesota Department of Health
P.O. Box 64975
St. Paul, MN 55164-0975

Phone 651-201-5000
Toll-free 888-345-0823

PREPARED FEBRUARY 2013

Acknowledgment

The Minnesota Department of Health (MDH) gratefully acknowledges the authors of this report including Autumn Baum, *Adverse Childhood Experiences Planner for MDH,* and Melanie Peterson-Hickey, *Senior Research Scientist for the MDH Center for Health Statistics.* MDH would like to acknowledge Assistant Commissioner Jeanne Ayers and Scott Smith, *MDH Communications Specialist*, for their time and support of this report.

The **MDH Center for Health Statistics** volunteered a great deal of their time, energy, insight and experience to this project. Their contributions were invaluable in the production of this report. Special thanks to Kim Edelman, Ann Kinney, Pete Rode, and David Stroud. Special appreciation to the coordinator and staff of the **Minnesota BRFSS,** Nagi Salem and Laurie Goldman.

MDH wishes to acknowledge Marilyn Metzler, *Senior Analyst in Health Equity in the Division of Violence Prevention at the Centers for Disease Control and Prevention* and Laura Porter, *Co-Founder of ACE Interface and Director of ACE Partnerships for the Washington State Department of Social and Health Services,* as well as MDH staff—including Assistant Commissioner Ellen Benavides, Maggie Diebel, Mark Kinde, Janet Olstad, David McCollum, and Patty Wetterling—staff at the **Minnesota Department of Human Services (DHS)**—including Glenace Edwall, Anna Lynn, and Joanne Mooney— and Nancy Riestenberg at the **Minnesota Department of Education (MDE)** for reviewing the drafts and providing comments. Much appreciation to Julia Johnsen, at the **Center for Leadership Education in Maternal and Child Public Health at the University of Minnesota;** Nikki Kovan, *Research Assistant,* and Jane Kretzmann, *Senior Fellow*, at the **Center for Early Education and Development at the University of Minnesota;** Amanda Tarullo, *Assistant Professor* at **Boston University**; and Barbara Simpson Epps and Dave Ellis, at **Three E Consulting,** for their contributions to this report.

MDH would also like to thank **Governor Dayton's Children's Cabinet**—MDH Commissioner Ed Ehlinger, DHS Commissioner Lucinda Jesson, and MDE Commissioner Brenda Casselius—for its support of this report and **DHS** for its financial support of the final production of this report.

executive SUMMARY

This report marks the first time that the Minnesota Department of Health has collected data regarding the effects of adverse childhood experiences (ACEs) on the lifelong health and well-being of adults in Minnesota. For two decades, research by the Centers for Disease Control and Prevention (CDC) and other states has demonstrated over and over again the powerful impact of ACEs on health, behavioral, and social problems. An extensive and growing body of research documents that adverse childhood experiences (ACEs)—those causing toxic levels of stress or trauma before age 18—are specifically linked to poor physical and mental health, chronic disease, lower educational achievement, lower economic success, and impaired social success in adulthood.

In 2008, the CDC developed a set of ACE questions for states to use in the **Behavioral Risk Factor Surveillance System (BRFSS)**, a survey used by individual states to determine the status of their residents' health based on behavioral risk factors. In 2011, Minnesota became the 18th state to add the ACE questions to the BRFSS survey.

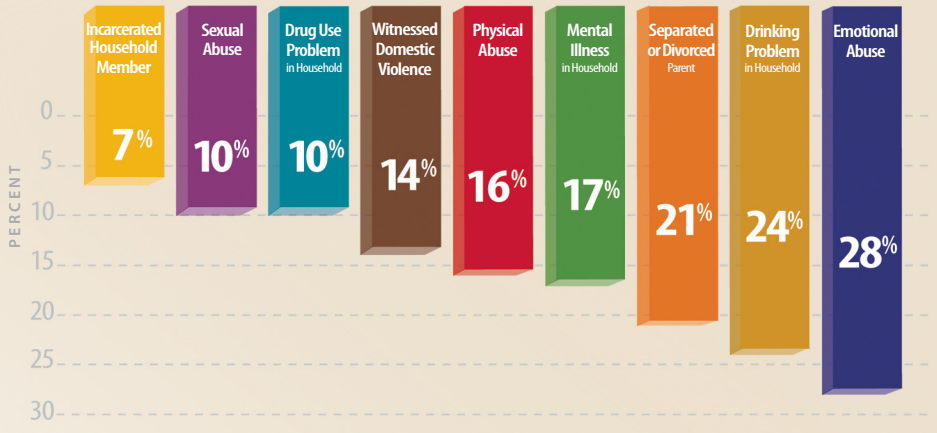
Minnesota's 2011 BRFSS ***results are consistent with the findings from the initial ACE study and other states' ACE studies.*** First, **ACEs are common**. Over half of Minnesotans have experienced at least one ACE. In particular, ACEs are more common among Minnesotans who did not graduate from high school, who were unmarried, who rented rather than owned their own home, who were unemployed, or who worried about paying their mortgage or rent or about buying nutritious food. Second, **ACEs frequently occur together**. In Minnesota, over half of Minnesotans experiencing ACEs had more than two ACEs. Third, **ACEs have a strong and cumulative impact on the health and functioning of adults.** For example, Minnesotans with more ACEs were more likely to rate their health as fair or poor, to have been diagnosed with depression or anxiety, to report smoking and chronic drinking, to have been diagnosed with asthma, and to be obese.

Despite all of this, adversity is not the end of the story. There is increasing understanding about resilience and what families, communities, and systems can do to protect children and support adults with ACEs. Resilience is positive adaptation within the context of significant adversity. In the face of adversity, neither resilience nor disease is a certain outcome. The hope of this research is to demonstrate that **by reducing ACEs, we can reliably expect a reduction in many ACE-related health and social problems.** Communities and states such as Washington have improved health and well-being by rallying around the concept of resiliency and reducing ACEs.

What is an ACE?

AN ADVERSE CHILDHOOD EXPERIENCE (ACE) describes a **traumatic experience** in a person's life occurring before the age of 18 that the person recalls as an adult. In the Minnesota BRFSS survey, respondents were asked if they had experienced any of the following **nine types of ACEs:** physical abuse, sexual abuse, emotional abuse, mental illness of a household member, problematic drinking or alcoholism of a household member, illegal street or prescription drug use by a household member, divorce or separation of a parent, domestic violence towards a parent, and incarceration of a household member.

PREVALENCE OF INDIVIDUAL ACEs MINNESOTA 2011



The ACE score is a measure of cumulative exposure to particular adverse childhood conditions. Exposure to any single ACE condition is counted as one point. If a person experienced none of the conditions in childhood, the ACE score is zero. Points are then totaled for a final ACE score. It is important to note that the ACE score does not capture the frequency or severity of any given ACE in a person's life, focusing instead on the number of ACE conditions experienced. In addition, the ACE conditions used in the ACE study reflect only a select list of experiences.

55% of Minnesotans report **experiencing one or more ACE** in childhood

ACEs are common among Minnesotans

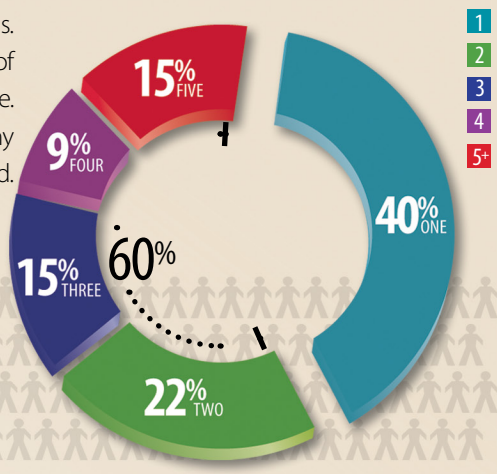
Results indicate that ACEs are common among Minnesota adults. **Over half** of the Minnesotans responding to ACE module questions reported experiencing at least one ACE in childhood. The five most common ACEs reported by Minnesotans in the survey are **emotional abuse** *(28 percent)*, living with a **problem drinker** *(24 percent)*, **separation** or **divorce** of a parent *(21 percent)*, **mental illness** in the household *(17 percent)*, and **physical abuse** *(16 percent)*.

ACEs often occur together

Minnesotans reporting one ACE are more likely to report other ACEs in childhood. The chart below illustrates that for those Minnesotans with at least one ACE, **60 percent** have **two or more** ACEs, and **15 percent** have **five or more** ACEs.

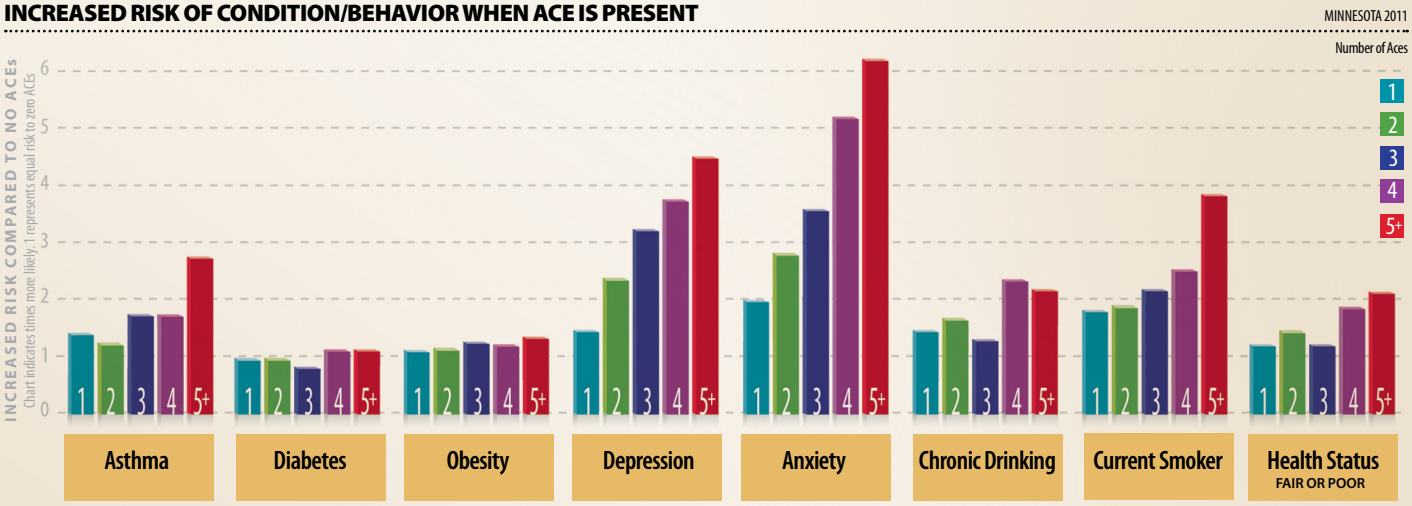
DISTRIBUTION OF ACEs MINNESOTA 2011

AMONG THOSE WITH AT LEAST 1 ACE



ACEs have a strong and cumulative impact on the health and functioning of adults in Minnesota

As the number of ACEs increases, the risk for health problems increases in a strong and graded fashion in areas such as alcohol and substance abuse, depression, anxiety, and smoking. The chart below shows the association between ACEs of Minnesotans and chronic health conditions later in life. The risk for anxiety, depression, and smoking increases as the number of ACEs increase. However, the correlation between ACEs and obesity or diabetes



is not as evident among Minnesotans. While there is a definite increased risk of asthma for Minnesotans with five or more ACEs, there is no clear pattern for those with four or fewer ACEs. There is also a clear increase in reported chronic drinking for Minnesotans with four or more ACEs; however, the association between one to three ACEs and reported chronic drinking is less clear. Minnesotans with more ACEs are more likely to rate themselves as having fair or poor health as compared to those with no ACEs.

Summary of policy recommendations

Based on the findings of Minnesota's ACE Study, we recommend the following strategies to reduce ACEs and build resiliency in Minnesota communities.

Increase awareness of ACEs, their impact on health and well-being, and Minnesotans' capacity to act.

1 Develop a ***communication strategy*** that focuses on the **social** and **economic benefits** of reducing and preventing ACEs in Minnesota.

2 Work with the state's education, child welfare, mental health, public health, health care, substance abuse, juvenile justice, corrections, and public safety systems to ***increase awareness*** of the impact of ACEs on the people these agencies serve.

Enhance the capacity of communities to prevent and respond to ACEs.

3 Support and ***develop resilience*** through **investments** that support community, government, and philanthropy partnerships.

4 Build ***collaborative leadership*** to **form a vision** and support change.

Continue to collect Minnesota-specific data on the relationship among ACEs, health outcomes, and resilience.

5 Designate ***funds*** to continue the collection, analysis, and dissemination of **ACE data** from Minnesota residents.

6 Develop a thorough ***inventory*** of existing agency and community ***efforts*** to **reduce** ACEs and **support** resilience.

Minnesota Department of Health
P.O. Box 64975
St. Paul, MN 55164-0975

Phone 651-201-5000
Toll-free 888-345-0823

02/2013