

A Task Force to Build a More Effective System for Preventing Children's Behavioral, Psychological, and Health Problems

The Potential of Prevention

Prevention science has reached a point where Oregon communities can ensure that virtually every young person reaches adulthood with the skills, interests, and health habits needed to lead a productive life in caring relationships with others (National Research Council & Institute of Medicine, 2009). The 2009 IOM report identified numerous tested and effective programs, policies, and practices from the prenatal period through adolescence to prevent development of the most common and costly problems of youth, including academic failure, delinquency, alcohol and drug use, depression, and pregnancy. If Oregon continues its efforts to implement these effective interventions, practically every Oregonian will benefit.

The Cost of Youth Problems

The cost of the psychological and behavioral problems of youth is substantial. Economist Ted Miller (2004) estimated the cost of these common youth problems: antisocial behavior, binge drinking, cocaine/heroin abuse, high-risk sexual behavior, tobacco use, high school dropouts, and suicide attempts. He estimated the total cost in the U. S. due to youth with multiple problems to be about \$608 billion yearly in 2012 dollars. To estimate Oregon's cost of the multiple problems we fail to prevent, we prorated the national figures for Oregon's population and adjusted for inflation: thus, the annual cost Oregon incurs is about \$5.74 billion.

Youth with Multiple Problems

Youth problems are inter-related (Biglan, Brennan, Foster, & Holder, 2004). Oregon Research Institute studied the relationships among the most common problems for a large representative sample of Oregon eighth graders (Boles, Biglan, & Smolkowski, 2006). Having any one problem makes it highly likely that a young person will have at least one other. For example, a teen with substance use problems was 5.5 times more likely to engage in antisocial behavior, 8.5 times more likely to engage in risky sexual behavior, and 3.6 times more likely to be depressed.

Multiple Problems Stem from the Same Set of Common Conditions

Children facing high levels of conflict and criticism at home are put on a path toward multiple psychological, behavioral, and health problems throughout life. They are more likely to lack self-regulation and to become aggressive (Dishion & Patterson, 2006). This leads to academic failure, peer rejection, and association with other troubled kids. By early adolescence, groups of troubled youth experiment with substance use, delinquency, and risky sexual behavior. Depression and suicide also become common (Seeley, Rohde, & Jones, 2010). These adverse experiences in childhood and adolescents result in a significantly high risk of cardiovascular disease and all-cause mortality in adulthood (Miller et al., 2009).

Building a Comprehensive Prevention System in Oregon

Oregon can significantly improve the success of its youth by ensuring that Oregon establishes tested and effective programs, policies, and practices. It is a big task that will take several years, but if everyone unites around a common understanding of what is needed, we can build a system to support child and adolescent development and prevent problems to a

degree never before seen in human history. The first step will be to create a task force that combines representatives from state agencies with an impact on family and school wellbeing with representatives of the behavioral science community.

Numerous tested and effective programs are available to Oregon schools. Many were first developed and tested in Oregon. School interventions include:

- **Positive Behavioral Intervention and Support**, a schoolwide system for promoting young people's prosocial behavior that has proven benefit in reducing disruptive behavior, increasing students' sense of safety, and improving academic performance (Bradshaw, Reinke, Brown, Bevans, & Leaf, 2008; Horner et al., 2009; Metzler, Biglan, Rusby, & Sprague, 2001). As of September 2014, 591 Oregon schools are implementing PBIS. This represents 46% of all public schools in Oregon.
- **Positive Action**, a similar schoolwide program to promote prosocial behavior is in place in seven Oregon school districts. Studies have shown it to prevent multiple psychological and behavioral problem behaviors (Beets et al., 2009; Lewis et al., 2012, 2013a, 2013b) and improve academic performance (Snyder et al., 2010).
- The **Good Behavior Game (GBG)** is a simple positive approach that rewards elementary school students for working and playing together cooperatively. A very careful, long-term study of the effects of GBG showed that, when high-risk students received GBG in only first or second grade, it prevented a significant number of them from smoking and exhibiting antisocial behavior in middle school, and prevented drug abuse, suicidality, and antisocial behavior even into adulthood. An independent analysis of the economic benefit of this intervention indicated that \$1.00 spent on the Good Behavior Game could save about \$84 through reduced special education and victim, healthcare, and criminal justice costs (Aos et al., 2013). Based on results obtained in existing studies, we estimate that if Oregon provided GBG to every first grade in Oregon, among the 46,000 first graders there would be
 - **4,029** fewer young people needing special education services
 - **6,764** more students graduating from high school
 - **6,378** more students attending college
 - **4,503** fewer young people developing serious drug addictions

In Oregon, numerous tested and effective family interventions are also in place. Below are some examples of them.

- **Parent Management Training, Oregon (PMTO)** provides a state-of-the-art behavioral parenting skills training program for families in need of assistance because of a serious misbehavior of children. An evaluation of it for recently separated mothers indicated that children's behavior improved significantly. An important unexpected benefit was that mothers who received the program earned higher incomes, experienced less depression, and reported increased marital satisfaction nine years after the program ended. A study of the program in Norway found an economic benefit of \$36,000 per child who received treatment (Rambøll Management Consulting, 2013).

- **The Family Check-Up (FCU)** provides brief, strengths-based support to families who have concerns about their children. A randomized trial of the program conducted in Portland with middle school students found that, by the time those students reached age 18 38% fewer arrests occurred among those receiving the FCU (Van Ryzin, Stormshak, & Dishion, 2012).
- **Positive Parenting Program (Triple P).** After more than 30 years of research and practice, this highly effective program is now helping families from all socio-economic groups in 25 countries. It provides parents from diverse cultures in the U.S. and around the world with easy-to-implement, practical, yet powerful methods of raising their children. Parents learn to build healthy and rewarding relationships with their children; and children come of age with healthy relationships and fewer problems and they do better in school (Prinz, Sanders, Shapiro, Whitaker, & Lutzker, 2009).
- **Multidimensional Treatment Foster Care** places youth who have been adjudicated as delinquent into the homes of carefully trained and supported foster parents and provides skills training and monitoring to ensure that the targeted youth get their education and do not hang out with delinquent youth. The program cuts in half the number of arrests of these high-risk young people (<http://www.mtfc.com/what-is-mtfc/program-effectiveness/>). For every dollar spent on the program, it saves about \$4.12 in reduced victim and taxpayer costs (Lee et al., 2012).

The Need for a Systematic, Statewide Strategy

The evidence shows very clearly that Oregon could significantly reduce the rates of psychological, behavioral, and health problems that are most costly to young people, their families and our communities. But Oregon does not have a systematic plan to ensure that these interventions are made available to everyone who would benefit from them. We therefore propose that the legislature create a task force that is composed of representatives of all relevant state agencies, as well as behavioral scientists who do are not developers of any of these programs.

Charge to the Task Force. Increase the availability and appropriate implementation of evidence-based family, school, and preschool interventions that can prevent the development of multiple psychological and behavioral problems that are undermining children’s social and academic development.

Timeline and activities. Within 12 months, the Task Force will recommend to the legislature and the Governor specific legislation and regulations that will increase the availability and appropriate implementation of evidence-based family, preschool, and school interventions. Specifically, the Task Force will:

- Conduct a budget analysis of all state expenditures related to family, school, and preschool interventions relevant to reducing the behavioral and psychological problems of children. Consider budget implications of prevention and treatment with children in reducing costs, for example costs from incarceration and from identification and education of severely emotionally disturbed children, and treatment of adolescents and adults. If appropriate, make recommendations as to how governance and budgets

might be reconfigured to better support the selection and implementation of evidence-based programs and the determination of their effectiveness.

- Review existing legislation and regulations that define evidence-based family and school practices and programs and specify how they will be implemented.
 - Assess the degree to which existing legislation and regulations regarding evidence-based practices are being implemented.
 - If needed, recommend changes in the definition of evidence-based interventions and regulations concerning their identification and implementation.
- Review accountability procedures for state funded interventions targeting behavioral and psychological problems of children.
 - Determine whether the measures reported by counties and or school districts provide sufficient and standardized information to allow district, county and state officials to evaluate evidence based programs in terms of whether they are reducing behavioral and psychological problems of children. Make recommendations if appropriate
 - Analyze how data from the current measures are being used for accountability and for improving professional practice. Make recommendations if appropriate.
- To support the success of local interventions, the task force should define how each relevant state agency can identify and clearly communicate its expectations to Counties, Tribes, and Coordinated Care Organizations by, for example:
 - Publishing statewide priorities and strategic framework for county priorities related to the behavioral and psychological problems of children.
 - Publishing a manual for county prevention and treatment agencies to communicate state agency expectations and provide explanatory materials to help foster the success of interventions
 - Updating the agency's list of approved prevention programs (or adopt a nationally-recognized list of evidence-based programs and practices) with input from Oregon prevention scientists.
 - Require each county, Tribe, and CCO to use at least 75% of its state prevention funds for approved prevention activities chosen from the list.
 - Streamline and standardize prevention reporting forms so that local prevention plans and periodic monitoring reports clearly:
 - Reflect the requirement that 75% of funds expended be for evidence-based interventions.
 - Specify the purpose of each intervention, the reach (number of children served), the duration and frequency of the intervention and its cost.
 - Consider the need for each county to create and maintain an annual inventory of evidence-based family and school interventions that are being implemented and determine if the evidence-based family and school interventions are producing the intended results. This is the first step toward increasing prevention's reach and efficacy.

Literature Cited

- Beets, M. W., Flay, B. R., Vuchinich, S., Snyder, F. J., Acock, A., Li, K.-K., ... & Durlak, J. (2009). Using a social and character development program to prevent substance use, violent behaviors, and sexual activity among elementary-school students in Hawai'i. *American Journal of Public Health, 99*, 1438-1445.
- Biglan, A., Brennan, P. A., Foster, S. L., & Holder, H. D. (2004). *Helping adolescents at risk: Prevention of multiple problem behaviors*. New York: Guilford.
- Boles, S., Biglan, A., & Smolkowski, K. (2006). Relationships among negative and positive behaviors in adolescence. *Journal of Adolescence, 29*, 33-52.
- Bradshaw, C. P., Reinke, W. M., Brown, L. D., Bevans, K. B., & Leaf, P. J. (2008). Implementation of school-wide Positive Behavioral Interventions and Supports (PBIS) in elementary schools: Observations from a randomized trial. *Education and Treatment of Children, 31*, 1-26.
- Dishion, T. J., & Patterson, G. R. (2006). The development and ecology of antisocial behavior in children and adolescents. In D. Cicchetti, & D. D. Cohen (Eds.), *Developmental psychopathology* (pp. 503-41). Somerset, NJ: Wiley.
- Horner, R. H., Sugai, G., Smolkowski, K., Eber, L., Nakasato, J., Todd, A. W. et al. (2009). A randomized, wait-list controlled effectiveness trial assessing school-wide positive behavior support in elementary schools. *Journal of Positive Behavior Interventions, 11*, 133-144.
- Lee, S., Aoi, S., Drake, E., Pennucci, A., Miller, U., & Anderson, L. (2012). *Return on investment: Evidence-based options to improve statewide outcomes*. Olympia: Washington State Institute for Public Policy.
- Lewis, K. M., Bavarian, N., Snyder, F. J., Acock, A., Day, J., DuBois, D. L., ... & Flay, B. R. (2012). Direct and mediated effects of a social-emotional and character development program on adolescent substance use. *International Journal of Emotional Education, 4*, 56-78
- Lewis, K. M., DuBois, D. L., Bavarian, N., Acock, A., Silverthorn, N., Day, J., ... & Flay, B.R. (2013). Effects of Positive Action on the emotional health of urban youth: a cluster-randomized trial. *Journal of Adolescent Health, 53*, 706-711.
- Lewis, K.M., Schure, M.B., Bavarian, N., DuBois, D.L., Day, J., Ji, P., ... & Flay, B.R. (2013). Problem behavior and urban, low-income youth: a randomized controlled trial of Positive Action in Chicago. *American Journal of Preventive Medicine, 44*, 622-630.
- Metzler, C. W., Biglan, A., Rusby, J. C., & Sprague, J. R. (2001). Evaluation of a comprehensive behavior management program to improve school wide positive behavior support. *Education and Treatment of Children, 24*, 448-479.
- Miller, G. E., Chen, E., Fok, A. K., Walker, H., Lim, A., Nicholls, E. F. et al. (2009). Low early-life social class leaves a biological residue manifested by decreased glucocorticoid and increased proinflammatory signaling. *Proceedings of the National Academy of Sciences, 106*, 14716-14721.
- Miller, T. R. (2004). The social costs of adolescent problem behavior. In A. Biglan, P. A. Brennan, S. L. Foster, & H. D. Holder, *Helping adolescents at risk: Prevention of multiple problem behaviors* (pp. 31-56). New York: Guilford.
- National Research Council & Institute of Medicine (2009). *Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities*. Committee on

Prevention of Mental Disorders and Substance Abuse Among Children, Youth, and Young Adults: Research Advances and Promising Interventions. Washington, DC: The National Academies Press.

National Research Council & Institute of Medicine. (2009). *Preventing mental, emotional, and behavioral disorders among young people: progress and possibilities.* Committee on Prevention of Mental Disorders & Substance Abuse among Children, Youth, and Young Adults: Research Advances & Promising Interventions. Washington, DC: National Academy of Science.

Prinz, R. J., Sanders, M. R., Shapiro, C. J., Whitaker, D. J., & Lutzker, J. R. (2009). Population-based prevention of child maltreatment: The US Triple P system population trial. *Prevention Science, 10*, 1-12.

Rambøll Management Consulting (2013). *Analysis of the economic impact of the Parent Management Training – Oregon (PMTO).* Copenhagen, DK: The National Board. Document available (in Danish) at <http://shop.socialstyrelsen.dk/products/analyse-af-de-okonomiske-konsekvenser-parent-management-training-oregon-pmto>.

Seeley, J.R., Rohde, P., & Jones, L. (2010). School-based prevention and intervention for depression and suicidal behavior. In MR Shinn, HM Walker, G Stoner (Eds.), *Interventions for achievement and behavior problems in a three-tier model including response to intervention* (pp. 363-96). Silver Spring, MD: NASP.

Snyder, F., Flay, B. R., Vuchinich, S., Acock, A. C., Washburn, I., Beets, M. W., & Li, K-K. (2010). Impact of the Positive Action program on school-level indicators of academic achievement, absenteeism, and disciplinary outcomes: A matched-pair, cluster randomized, controlled trial. *Journal of Research on Educational Effectiveness, 3*, 26-55.

Van Ryzin, M. J., Stormshak, E. A., & Dishion, T. J. (2012). Engaging parents in the family check-up in middle school: Longitudinal effects on family conflict and problem behavior through the high school transition. *Journal of Adolescent Health, 50*, 627-633.