



# The New York Academy of Medicine

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## PREVENTION

Drug misuse in New York is a leading cause of premature morbidity and mortality and one of the state's most intractable public health problems.<sup>1,2</sup> To reduce the harmful effects of drug misuse on our families and communities, we need a comprehensive and integrated public health approach that includes prevention, treatment, harm reduction, and public safety. We need the cooperation and participation of all sectors of society to reorient our policies towards new measures of success. Successful policies will lead to improvements in the health of individuals, families, and communities. Reductions in overdose and other drug-related deaths; decreases in incidence of blood-borne diseases, like HIV and hepatitis; drops in drug-related injuries and emergency room visits; increases in the proportion of those needing treatment who receive it; fewer disruptions in families caused by incarceration, child abuse and neglect, and domestic violence – these should become the metrics by which we judge the effectiveness of our policies.

There is a large body of research on elements of effective drug prevention programming, its tremendous success in reducing the use of both legal and illicit substances. Current use of illicit drugs among young people declined 24% between 2001 and 2008.<sup>3</sup> Research-based prevention programs can be cost effective; for \$1 spent on prevention communities can save up to \$10 in drug abuse treatment and counseling costs.<sup>4</sup> Too often, however, prevention programs are under-funded and operate in isolation from other health promotion programs and from other efforts to reduce drug use and drug-related harm. Moreover, there are no defined systems for provision and financing of prevention services or training and credentialing of providers.<sup>5</sup>

### Community Prevention

Increasingly, research suggests that to most effectively prevent the use of drugs, we need to address both risk and protective factors at the community, school/peer, family, and individual levels.<sup>6,7</sup> Strengthening the health and safety of our communities is a form of prevention. According to a comprehensive review by researchers in Australia, poverty, community disorganization, low neighborhood attachments, mobility or turn-over in schooling and community, and the availability of drugs are all risk factors for increased drug use.<sup>8</sup> Other research similarly suggests that neighborhood level indicators -- like income inequality, poverty, unemployment, community norms, literacy issues, deteriorating housing, -- affect alcohol and drug use, the health of drug users, and the differential morbidity among drug users from different racial and ethnic groups.<sup>9,10,11,12,13,14</sup> Stability and connectedness, strong relationships with an adult, community attitudes towards drug use, and opportunities for fitting into a community all act as protective factors.<sup>15</sup> Programs that link broader community mobilization strategies with school and/or parenting programs are more effective than these programs alone to reduce drug use, change peer norms, and improve parent-child communication.<sup>16</sup>

In other countries, like the United Kingdom and Canada, policy makers are working to prevent drug use by intervening at the structural level – focusing their efforts on building healthy environments,

strengthening social connections, and addressing poor housing, low income, unemployment, and high crime areas.<sup>17</sup>

### Prevention among Youth

Discussions about school-based prevention programming tend to be polarized between those advocating for an abstinence-based (“just say no”) message and those advocating for a more nuanced message that helps young people make informed decisions. Several reviews of the literature suggest that skills-based programs that are interactive, focus on social norms, and are tailored to the needs of the specific audience are the most effective.<sup>18,19,20,21</sup> “Safety First” is one example of an innovative program that uses a reality-based approach to promote abstinence while acknowledging the truth that many young people have experimented with drugs.<sup>22</sup> School-based prevention is important, but prevention must extend beyond the classroom. Family-focused interventions, for example, have shown promise at preventing drug use,<sup>23</sup> and it is well documented that young people who are engaged in after-school programs or activities are much less likely than their peers to use drugs or engage in other risk behaviors.<sup>24</sup> Efforts to strengthen parent-child communication and to build positive bonds to other adults, peers and their community have also been suggested as prevention techniques.<sup>25</sup> Research about effective public health approaches to drug prevention is growing, and evidence-based strategies must guide our policy decisions.

### Prevention among Adults

While much prevention research has focused on youth, prevention targeting adults is also important. Medical care settings are one arena that shows great promise in reaching adults with prevention messages. The Substance Abuse and Mental Health Administration (SAMHSA) has developed the Screening, Brief Intervention, and Referral to Treatment (SBIRT) program that encourages health care professionals to screen patients for substance use, deliver prevention messages for those at risk, and refer those with substance use problems to treatment. In a recent study of SBIRT programs in six states, 23% of patients were identified as having problematic drug use, and of those who used illicit drugs at baseline, rates of drug use 6 months later were 67.7% lower. Those who were referred to treatment through this program reported improved physical and mental health, higher rates of employment, better housing situations, and reduced criminal behavior.<sup>26</sup> Efforts to educate and train medical professionals to play a more active role in preventing and reducing substance use must be expanded.<sup>27</sup>

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<sup>1</sup> Galea, S., et al., 2003. Racial/ethnic disparities in overdose mortality trends in New York City, 1990-1998. *J Urban Health*, 80(2): p. 201-11.

<sup>2</sup> Bernstein, K.T., et al., 2007. Cocaine- and opiate-related fatal overdose in New York City, 1990-2000. *BMC Public Health*, 7(147): p. 31.

<sup>3</sup> Office of National Drug Control Policy. 2008. What Works: Effective Public Health Responses to Drug Use. Available at <http://www.whitehousedrugpolicy.gov/publications/>

<sup>4</sup> National Institute on Drug Abuse. 2003. Preventing Drug Use among Children and Adolescents: A Research-Based Guide for Parents, Educators, and Community Leaders, Second Edition. Available at <http://www.nida.nih.gov/Prevention/Prevopen.html>

<sup>5</sup> Office of National Drug Control Policy. Undated, Accessed 1/15/09. Prevention Research. Available at <http://www.whitehousedrugpolicy.gov/prevent/research.htm>.

<sup>6</sup> Catford, J. 2001. Illicit Drugs: effective prevention requires a health promotion approach. *Health Promotion International*, 16(2): 107-110.

<sup>7</sup> Victoria Drug Policy Expert Committee, 2000. Drugs: Meeting the Challenge: Stage Two Report. State Government of Victoria, Melbourne. Available at [www.dhs.vic.gov.au/phd/dpec/index.htm](http://www.dhs.vic.gov.au/phd/dpec/index.htm).

<sup>8</sup> Ibid.

<sup>9</sup> Galea, S. and D. Vlahov, 2002. Social determinants and the health of drug users: socioeconomic status, homelessness, and incarceration. *Public Health Rep.*, 117 Suppl 1: p. S135-45.

<sup>10</sup> Ibid. 1.

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- <sup>11</sup> Ahern, J., et al., 2008. Population vulnerabilities and capacities related to health: a test of a model. *Soc Sci Med.*, 66(3): p. 691-703.
- <sup>12</sup> Bernstein, K.T., et al., 2007. The built environment and alcohol consumption in urban neighborhoods. *Drug Alcohol Depend.* 91(2-3): p. 244-52.
- <sup>13</sup> Fuller, C.M., et al., 2005. Effects of race, neighborhood, and social network on age at initiation of injection drug use. *Am J Public Health.* 95(4): p. 689-95
- <sup>14</sup> Ezard, N., 2001. Public health, human rights and the harm reduction paradigm: from risk reduction to vulnerability reduction. *Int J Drug Policy.* 12: p. 207-219.
- <sup>15</sup> Ibid. 7.
- <sup>16</sup> Ibid. 6.
- <sup>17</sup> Ibid. 6.
- <sup>18</sup> Ibid. 4.
- <sup>19</sup> Hawkins, JD and RF Catalano. 2002. *Communities that Care: Action for Drug Abuse Prevention.* San Francisco Communities that Care: Action for Drug Abuse Prevention: Jossey Bass Publishers.
- <sup>20</sup> Beck, Jerome. 1998. "100 Years of 'Just Say No' Versus 'Just Say Know' " *Evaluation Review*, Vol.22, No.1, 15-45.
- <sup>21</sup> Skara, S. and S. Sussman, A review of 25 long-term adolescent tobacco and other drug use prevention program evaluations. *Prev Med*, 2003. 37(5): p. 451-74.
- <sup>22</sup> More information about "Safety First" is available at <http://www.safety1st.org/tnd/>
- <sup>23</sup> NIDA. 1998. *Drug Abuse Prevention Through Family Intervention: NIDA Research Monograph #177.* Bethesda: NIDA. Available at <http://www.nida.nih.gov/pdf/monographs/monograph177/download177.html>
- <sup>24</sup> U.S. Department of Education. 1998. *Safe and Smart: Making After-school Hours Work for Kids.* Washing, D.C.: U.S. Department of Education.
- <sup>25</sup> Ibid. 19.
- <sup>26</sup> B. Madras, W. Compton, D. Avula, T. Stegbauer, J. Stein, H. Clark, 2009. Screening, brief interventions, referral to treatment (SBIRT) for illicit drug and alcohol use at multiple healthcare sites: Comparison at intake and 6 months later. *Drug and Alcohol Dependence*, Volume 99, Issue 1, Pages 280-295
- <sup>27</sup> Wyatt, S.A. and M.A. Dekker, Improving physician and medical student education in substance use disorders. *J Am Osteopath Assoc*, 2007. 107(9 Suppl 5): p. ES27-38