

# Identifying Health Risk Behaviors to Develop Evidence-Based Interventions and Inform Public Health Policy and Practice

**Research Goals:** To develop, implement, and validate theory-driven, evidence-based interventions through identification of cognitive, social, policy, and environmental

## HEALTH RISK BEHAVIORS

### Teen Dating Violence



Getty Images. Digital Image. U.S. News. U.S. News & World Report L.P., April 2016. Web. January 2016.

### Sexual Risk Taking



Getty Images. Digital Image. The Huffington Post. The Huffington Post.com, Inc., October 2014. Web. January 2016.

### Substance Abuse



Digital Image. Centers for Disease Control and Prevention. U.S. Department of Health & Human Services, October 2016. Web. January 2016.

### Smoking



### Energy Drink-Alcohol Consumption



Getty Images. Digital Image. CNN. Cable News Network-Turner Broadcasting System, Inc., November 2010. Web. January 2016.

## EVIDENCE-BASED RESEARCH / INTERVENTIONS

### Current Status: Implementing & Validating Interventions

- Develop and validate dating violence prevention curriculum for public middle and high school students in Paso del Norte Health Foundation service region (El Paso and New Mexico)
- Develop online training for teachers



### Current Status: Implementing & Validating Interventions

- Deliver and evaluate evidence-based sexuality education curricula to students in two low-SES communities in Santa Rosa and Maverick counties, on the Texas-Mexico border



### Current Status: Conducting Research to Inform Evidence-Based Interventions & Seeking Funding

- Explored the differences in rural and urban adolescent access points for licit substances such as alcohol and tobacco
- Exploring the differences in rural and urban adolescent access points for other substances such as marijuana, inhalants, prescription medications, and other drugs
- Use information on adolescent access points to inform intervention and/or public policy strategies for prevention

### Current Status: Implementing & Collecting Data

- Smoking cessation programs open to Texas State students, faculty, staff, and the local community
  - » *The Last Drag*, cessation program designed specifically for the LGBT population
  - » *Fresh Start*, cessation program for all populations
- Analyze indoor air quality in smoking and smoke-free restaurants and bars to determine the effectiveness of smoke-free ordinances. Six-month time-phased measurement to determine levels of second-hand and third-hand particulate matter



### Current Status: Conducting Research to Inform Evidence-Based Interventions & Seeking Funding

- Continued analysis of epidemiological data related to adolescent use of energy drinks
- Further exploration of the behavioral correlates associated with energy drink use, including high-risk personal and social behaviors
- Collaborators will be identified to develop interventions aligned with findings based on secondary analysis of data sets
- Initiating partnership with Hays-Caldwell Council on Alcohol and Drug Abuse to explore energy drink consumption patterns among adolescents in treatment and post-treatment

## RESEARCH FINDINGS

- 32 teachers and community members trained in the curriculum using a web-based platform
- Pilot testing of curriculum during spring 2017 in El Paso ISD and Deming (NM) Public Schools
- Pre/post intervention pilot testing by measuring attitudes and potential behaviors related to dating violence prevention
- Pilot testing results will inform curriculum modifications, with full implementation in fall 2017

- Two evidence-based sexuality education curricula presented to over 500 middle and high school youth in Santa Rosa and Maverick counties
- Pre/post assessment of sexual risk-behaviors at 3, 6, and 12 months following intervention
- 3-month follow-up beginning spring 2017
- Delivering additional teacher training in curriculum
- Development of institutionalization plans underway

- Easiest access to both alcohol and tobacco is through adolescent peers
- Tobacco is easily accessed through adult family members, while alcohol is easily accessed through non-family adults
- Self-access is the most difficult for both substances; however, males are likely to self-purchase both alcohol and tobacco when compared to females
- Females are more likely to gain access to both alcohol and tobacco from non-peer youth

- = "Very Unhealthy" pollution, based on EPA standards
- Smoke-free ordinances provide significant public health protection from exposure to particulate matter in restaurant, bars, and hospitality venues
- Reductions in particulate matter continue up to six months after ordinance implementation
- Developed the *Campus Tobacco Policy Scale* to assist university health professionals in measuring student readiness for tobacco-free campus policies

- Among adolescents, early consumption of energy drinks increases various high-risk health behaviors such as alcohol use, non-medical use of prescription drugs, risky sexual behavior, risky driving behavior
- Early energy drink use is related to lower consumption of healthy, low-sugar beverages (water and low-sugar milk) and higher consumption of high-sugar beverages (sodas, fruit juices, sports drinks, sweetened fruit drinks)
- Adolescents who consume energy drinks are at greater risk for higher body mass index
- Adolescents who combine alcohol and energy drinks engage in risky behavior more frequently than those who use alcohol alone, despite students' beliefs that energy drinks help them stay sober

## Future Research

- Longitudinal study to monitor short- and long-term attitudes and health risk behaviors of students completing sexuality education and dating violence prevention programs
- Examine the social-ecological influences on health behaviors related to substance use, including alcohol, tobacco, illicit and licit drugs
- Conduct secondary analyses of multiple national databases to expand emerging research on energy drink consumption among adolescents by examining health-related behavioral correlations, including physical activity, nutrition, sexual activity, tobacco, and illicit drug use
  - » National Institute on Drug Abuse – *Monitoring the Future Annual Survey*
  - » Centers for Disease Control and Prevention – *Youth Risk Behavior Surveillance System, National Health and Nutrition Examination Survey*
  - » National Cancer Institute – *Family Life, Activity, Sun, Health, and Eating Study*
- Identify cognitive, social, and environmental factors that influence adolescent energy drink/alcohol consumption within a national sample
- Develop survey items/instruments to reflect broader population of energy drink consumers (e.g., shift workers, medical residents and interns)

## Research Assets

- Evidence-based sexuality education curricula
- Evidence-informed dating violence prevention
- Validation protocols for school-based curricula
- Expertise in analysis of secondary governmental data
- SidePak™ Aerosol Monitor for indoor air quality testing of particulate matter
- Professional network of leading substance abuse researchers



### Needed Resources and Collaborators

Additional personnel and technology for data collection, analysis, and secure storage

## Researchers

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