CHILDREN’S HEALTH IN ALL POLICIES

POLICY OPTIONS FOR ADDRESSING ADOLESCENT HIGH RISK BEHAVIORS

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The Kansas Health Institute is an independent, nonprofit health policy and research organization based in Topeka, Kansas. Established in 1995 with a multi-year grant from the Kansas Health Foundation, the Kansas Health Institute conducts research and policy analysis on issues that affect the health of Kansans.

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**What Do State Legislators Need to Know About Adolescent Risk Behaviors?**

- Alcohol and KS high school students (2007)
  - 42.4% drank at least once in the past month
  - 27.1% binge drank (5+ drinks in 2 hours) at least once in the past month
  - 30.7% rode in the vehicle of an intoxicated driver at least once in the past month
  - 15.3% drove a vehicle while intoxicated at least once in the past month

**SLIDE 2 NOTES:**

1. More than two in five (42.4 percent) Kansas high school students who were surveyed in the 2007 Youth Risk Behavior Surveillance Survey (YRBSS) reported that they consumed at least one drink of alcohol on at least one day during the 30 days before taking the survey.1

2. About 27 percent of Kansas high school students reported having consumed five or more drinks of alcohol in a row within a couple of hours (binge drinking) at least once during the 30 days before taking the survey.2

3. Among Kansas high school students who participated in the 2007 YRBSS, 30.7 percent reported having ridden in a car or other vehicle that was driven by someone who had been drinking alcohol, within 30 days prior to the study.
   a. Kansas high school students participated in this risk behavior more than students from Arkansas, Iowa, Missouri, or Oklahoma.

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4. The proportion of students who chose to drive while intoxicated was also quite high. 15.3 percent of Kansas high school students reported having driven a car or other vehicle after consuming alcohol, 30 days prior to taking the 2007 YRBSS.

![Bar chart showing the percentage of high school students who reported having driven a vehicle while intoxicated during the 30 days prior to answering the 2007 YRBSS, by state.](chart.png)

5. According to a study which compared MRI images from the brains of 14-21-year-olds who abused alcohol, cited by the American Medical Association (AMA), “drinkers had about 10 percent smaller hippocampi – the area of the brain that handles memory and learning. Researchers call such a reduction significant and possibly irreversible.”

   a. Adults would have to consume twice as many drinks to suffer the same damage as adolescents and even occasional heavy drinking injures developing adolescent brains.

   b. “Adolescent drinkers also scored worse than non-users on vocabulary, visual-spatial and memory tests and were more likely to perform poorly in school, fall behind and experience social problems, depression, suicidal thoughts and violence.”

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ADOLESCENT HIGH RISK BEHAVIORS IN KANSAS: SLIDE 3

WHAT DO STATE LEGISLATORS NEED TO KNOW ABOUT ADOLESCENT RISK BEHAVIORS?

- Drugs and Kansas high school students
  - In 2007, 8.7% reported having tried cocaine, 6.2% have tried methamphetamines
  - In 2009, 18% of 12th graders reported having abused prescription drugs

Students who have used inhalants at least once during their life, 2009

SLIDE 3 NOTES:

1. According to the 2007 YRBSS, 8.7 percent of Kansas high school students report ever having used any form of cocaine.
2. 2007 YRBSS data show that 6.2 percent of Kansas high school students report having used methamphetamines.
   a. Arkansas, Iowa, Missouri, and Oklahoma students all report less use.
   b. The national average for methamphetamine use among high school students is 4.4 percent, according to the 2007 YRBSS.

3. The 2009 Communities That Care (CTC) survey indicates that 18 percent of Kansas high school seniors have taken prescription drugs (i.e., Xanax, Valium, OxyContin, Ritalin, Vicodin) not prescribed to them by a doctor.4

4. CTC data from 2009 show that an alarming number of Kansas students have sniffed glue, breathed the contents of an aerosol spray can or inhaled other gases or sprays, in order to get high.5
   a. 10.5 percent of sixth graders report having abused inhalants.
   b. 13.8 percent of eighth graders report inhalant abuse.
   c. 11.7 percent of tenth graders report inhalant abuse.
   d. 9.9 percent of twelfth graders report inhalant abuse.

5. In addition to cocaine and methamphetamines, Kansas high school students try heroin and other injectable drugs at higher rates than their counterparts in Arkansas, Iowa, Missouri, or Oklahoma.6

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5 Southeast Kansas Education Service Center. (2009).
ADOLESCENT HIGH RISK BEHAVIORS IN KANSAS: SLIDE 4

WHAT DO STATE LEGISLATORS NEED TO KNOW ABOUT ADOLESCENT RISK BEHAVIORS?

- Sex and Kansas high school students
  - In 2007, many students were having sex, doing so under the influence and with sporadic protection
    - 45% of students are sexually active
    - 20.8% of females and 31.3% of males drank or used drugs before the last time they had sex
    - 62.6% used a condom when last having sex
  - 2008: 5,371 teenage pregnancies in KS
  - 2009: 3,488 chlamydia cases among teens in KS

SLIDE 4 NOTES:

1. According to the 2007 YRBSS, 45 percent of Kansas high school students reported ever having sexual intercourse.\(^7\)
   a. 34.4 percent of Kansas high school students reported having sexual intercourse with at least one person during the 3 months prior to answering the survey.
   b. The 2007 YRBSS data indicate that 20.8 percent of Kansas high school females and 31.3 percent of Kansas high school males drank alcohol or used drugs before the last time they had sexual intercourse.
      i. The rates of intoxicated intercourse for both sexes are higher than among students in Arkansas, Iowa, Missouri, and Oklahoma.
   c. 62.6 percent of students report using a condom the last time they had sex.

\(^7\) Centers for Disease Control and Prevention. (2008).
2. According to the Kansas Department of Health and Environment (KDHE):
   a. In 2009, there were 3,488 reported cases of chlamydia among teenagers ages 10-19 in Kansas.\(^8\)
   b. There were 5,371 pregnancies in 2008 among female adolescents ages 10-19.\(^9\)

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ADOLESCENT HIGH RISK BEHAVIORS IN KANSAS: SLIDE 5

**What Can State Legislators Do?**

- Reform alcohol advertisements and prices
- Enact legislation to prevent inhalant abuse
- Broaden risk behavior surveillance
- Expand school health education requirements
  - Prevention and treatment programs
  - Implement data-driven curricula

**SLIDE 5 NOTES:**

1. *Alcohol advertisement and price reformation*
   
a. The Center on Alcohol Marketing and Youth recommends that states establish explicit jurisdiction over in-state media (television and radio programming) as a way to influence advertising targeted toward young people.\(^\text{10}\)
   
   i. Studies cited by the CDC found that of the 40,000 commercials that children and adolescents watch each year, approximately 2,000 advertise for alcohol.\(^\text{11}\)

   1. Young people also report more positive feelings about drinking and their likelihood of drinking after viewing alcohol advertisements.

b. The AMA and the National Conference of State Legislatures (NCSL) also support increasing state and federal excise taxes on alcohol as a way to prevent underage consumption.
   
   i. Teenagers are more sensitive to changes in price than adults. Even small price increases have led to decreased alcohol use.\(^\text{12}\)

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ii. “There is strong evidence that increased alcohol consumption reduces the probability of a student’s high school graduation.”

2. Inhalant abuse legislation
   a. As of April 2007, 23 states, including Colorado, Oklahoma and Texas, had passed some form of legislation restricting the abuse of inhalants.  
   b. Please see the next slide, “What Are Other States Doing?” for more information.

3. Surveillance practices
   a. The European Monitoring Centre for Drugs and Drug Addiction conducts a study similar to the YRBSS in the United States, called the European School Survey Project on Alcohol and Other Drugs (ESPAD).  
      i. The ESPAD tracks the types of alcohol that teenagers drink (beer, wine or spirits), estimates how much total or “pure” alcohol teenagers consume during a given period of time and asks questions about the motivation behind teenage drinking and where they drink when they choose to partake.  
   b. KDHE, much like other health monitoring organizations in other states, tracks only chlamydia, gonorrhea, HIV/AIDS, and syphilis among the population. Considering the CDC’s estimates that 35 percent of adolescents age 14-19 have HPV and about 19 percent of adolescents in that same age group have herpes, it may be helpful to expand Kansas’ surveillance system to include additional STIs.

4. School health education requirements
   a. Please refer to the information contained in the next slide, “What Are Other States Doing?”
ADOLESCENT HIGH RISK BEHAVIORS IN KANSAS: SLIDE 6

WHAT ARE OTHER STATES DOING?

- Implementing broad health education requirements
  - IA, MO and OK require high schools to teach students about prevention topics
  - AR, IA and MO require post-secondary training for health education teachers
  - AR, IA, MO and OK provide opportunities for health-related professional development
- Enacting inhalant abuse legislation
  - Arizona §13-3403, Oregon §409.425

SLIDE 6 NOTES:

1. According to the 2006 CDC School Health Policies and Programs Study, Kansas lags behind Arkansas, Iowa, Missouri, and Oklahoma on almost every measure of recommended school health educational standards.\(^{16}\)
   a. Kansas does not require senior high schools to teach about prevention topics such as alcohol or other drug use, HIV and STD acquisition or violence.

<table>
<thead>
<tr>
<th>Health Topic</th>
<th>Kansas</th>
<th>Iowa</th>
<th>Missouri</th>
<th>Oklahoma</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alcohol or Other Drug Use Prevention</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>HIV Prevention</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>STD Prevention</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Violence Prevention</td>
<td>No</td>
<td>No</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

b. Kansas does not require health education teachers to have undergraduate or graduate training in health education.

<table>
<thead>
<tr>
<th>State</th>
<th>Middle Schools</th>
<th>High Schools</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kansas</td>
<td>No</td>
<td>No</td>
</tr>
<tr>
<td>Arkansas</td>
<td>Yes</td>
<td>Yes</td>
</tr>
<tr>
<td>Iowa</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td>Missouri</td>
<td>Yes</td>
<td>Yes</td>
</tr>
</tbody>
</table>

c. Kansas provides less funding for continuing education on health education topics for health education teachers (HET) and school nurses (SN).

<table>
<thead>
<tr>
<th>Health Topic</th>
<th>Kansas</th>
<th>Arkansas</th>
<th>Iowa</th>
<th>Missouri</th>
<th>Oklahoma</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>HET</td>
<td>SN</td>
<td>HET</td>
<td>SN</td>
<td>HET</td>
</tr>
<tr>
<td>Alcohol or Other Drug Use</td>
<td>N</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Prevention</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HIV Prevention</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>STD Prevention</td>
<td>Y</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Violence Prevention</td>
<td>Y</td>
<td>N</td>
<td>N</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

2. Arizona and Oregon have developed two different strategies to address the issue of adolescent inhalant abuse.¹⁷

a. **Arizona §13-3403**: Focuses on the legality of inhalants, banning actions and sales.

   i. Lays out guidelines that establish the legality around getting high through inhalants, selling or transferring inhalants to minors and vendor licensure.

   ii. Makes abusing or selling inhalants a felony.

   iii. Provides protocols for vendors and establishes the types of recordkeeping necessary to sell inhalants.

   iv. Outlines punishment for minors attempting to purchase inhalants or trying to persuade others to sell them inhalants.

b. **Oregon §409.425**: Focuses on community education about inhalants.

   i. Places the burden on the Director of Human Services in Oregon to develop educational materials for parents about inhalants and the risks of inhalant use.

   ii. The director also must develop educational resources for businesses that sell products containing inhalants and must encourage merchants to do their part in educating the public about the legal and health consequences of inhalant abuse.

ADOLESCENT HIGH RISK BEHAVIORS IN KANSAS: SLIDE 7

KEY QUESTIONS FROM CHAP ROUNDTABLES

- How can we channel risk behaviors into healthy activities?
  - Do after-school activities decrease risk behaviors?
- Are zero-tolerance policies effective?
- What are other countries doing to address adolescent risk behaviors?
  - Why do they believe adolescents engage in risk behaviors?

SLIDE 7 NOTES:

1. **After-school activities**
   a. **School sports**: A recent economic report from the University of Pennsylvania shows that female athletic participation has causal effects on women’s educational and employment outcomes, both of which are protective factors in the lives of adolescents and young adults.¹⁸
      i. “A 10 percentage point increase in girls’ sports participation in a state generates an average increase of 1.3 percentage points in the probability that girls in that state get some post-secondary education.”
   b. **Mentoring / tutoring programs**: Mentoring and tutoring programs have been found to be the most effective component of after-school programs, compared to activities that focus on parental involvement/training or life skills training for adolescents.¹⁹

Big Brothers-Big Sisters (BB-BS) programs serve as the gold standard among after-school programs for adolescents, according to the Brookings Institution.

1. “After 18 months of participation in BB-BS, youth were 46 percent less likely to start using illegal drugs and 27 percent less likely to initiate alcohol use during the study than were controls.”
   a. “The effect was ... stronger for the minority participants who were 70 percent less likely to initiate drug use.”
2. “Program youth earned moderately higher grades, skipped half as many days of school, skipped fewer classes, and felt more competent about doing their schoolwork than did control youth.”
   a. “The impacts were larger for girls, particularly minority girls.”
3. “Program participants reported better relationships with peers and parents than did the controls at the end of the study.”

Zero-tolerance policies: The American Psychological Association, in their 2006 Zero Tolerance Task Force Report, analyzed policies in schools which dole out severe punishments for all behavioral violations. According to the publication, zero tolerance policies:

a. Do not increase the consistency of school discipline;
b. Promote the use of suspension and expulsion which, in turn, decrease academic achievement across the school;
c. Contribute to the disproportionate punishment of African American students even though data show they do not display higher rates of disruption or violence that would warrant higher rates of discipline;
d. May be at odds with the developmental maturity of adolescents. When addressing behavior that does not pose a threat to safety, zero tolerance may overly punish poor decision-making that can be seen as a normal part of adolescent neurological immaturity and development.

International Perspectives:

a. Adolescent development: Why do young people drink?21
   i. One study from the United Kingdom divided motivations among 12-17 year olds into three categories:
      1. Individually based reasons — such as relaxation, coping with stressful events, escaping reality.
      2. Socially based reasons — disinhibition induced by social and sexual settings.
      3. Peer influence — alcohol is seen as a marker of maturity and adulthood.

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b. Alcohol advertisements: \(^{22}\)
   i. Belgium, Lithuania, Norway, Poland and Sweden have passed total bans on alcohol advertising except for sporting and cultural events.
      1. In Belgium, Poland and Sweden, strict advertising restrictions, in conjunction with other legal measures to protect adolescents (such as restrictions on sales, age limitations and price increases) have been accompanied by a decrease in regular alcohol consumption.
   ii. One 1998 study in the UK found that “television viewing was related to initiation of drinking over an 18-month period ... Each 1-hour increase in television viewing at baseline was associated with a 9 percent increased risk for initiating drinking during the following 18 months.” \(^{23}\)
      1. In this case, television watching in general was used as a measure of advertisement exposure.

c. Alcohol taxation: \(^{24}\)
   i. “If alcohol taxes were used to raise the price of alcohol in the EU15 by 10%, over 9,000 deaths would be prevented during the following year and around €13 billion of additional excise duty revenues would be gained.”
      1. The EU 15 is comprised of Austria, Belgium, Denmark, Finland, France, Germany, Greece, Ireland, Italy, Luxembourg, the Netherlands, Portugal, Spain, Sweden and the United Kingdom.
   ii. “Increasing the price of alcohol and beer reduces road traffic accidents and fatalities among people of all ages, but particularly for younger drivers.”

d. Prevention strategies:
   i. The World Health Organization recommends that all prevention strategies should: \(^{25}\)
      1. Aim to affect “health-related attitudes, convictions and competences and to offer attractive alternative behaviors” from an early age.
      2. “Enable adolescents to deal with alcohol in a deliberate and moderate manner.”
      3. Be gender-specific in order to pay “attention to the different causes and functions of drinking among boys and girls.”
      4. Focus on teaching appropriate coping strategies, favorably influencing behavioral intentions, improving people’s expectations of their ability to affect their own lives, and improving the risk behavior itself.
      5. Provide training in how to resist social influences, develop general problem-solving skills and promote social, interactive capabilities such as competence in stress control.

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ADOLESCENT HIGH RISK BEHAVIORS IN KANSAS: SLIDE 8

WHAT ARE PROMISING POLICY SOLUTIONS?

- Limiting alcohol advertisements that target young people
- Increasing alcohol prices by 10% to deter adolescent consumption
- Expanding the scope of risk behavior surveillance
- Enacting legislation to combat inhalant use
- Supporting evidence-based mentoring programs

SLIDE 8 NOTES:

1. The Center on Alcohol Marketing and Youth at Georgetown University outlines 12 aspects for complying with best practice in terms of restrictions on alcohol advertisements: 26

<table>
<thead>
<tr>
<th>State Alcohol Advertising Provisions</th>
<th>Best Practice States</th>
</tr>
</thead>
<tbody>
<tr>
<td>Prohibit false or misleading alcohol advertising</td>
<td>ID, IL, MA</td>
</tr>
<tr>
<td>Prohibit alcohol advertising that targets minors</td>
<td>AL, DE, ME, NH, NJ, NC, OR, UT, VT, VA, WV</td>
</tr>
<tr>
<td>Prohibit images of children in alcohol advertisements</td>
<td>CT, IL, MI, MN, NE, NH, OH, WA, DC</td>
</tr>
<tr>
<td>Prohibit images or statements that associate alcohol with athletic achievement</td>
<td>CT, NJ, NC, UT, VA, WA</td>
</tr>
<tr>
<td>Prohibit images or statements that portray or encourage intoxication</td>
<td>DE, NC, OH, OR, UT, VT, VA, WA, WV</td>
</tr>
<tr>
<td>Establish explicit jurisdiction over in-state electronic media</td>
<td>IL, KY, MD, MS, MO, NH, NC, OH, OR, PA, TN, UT, VA</td>
</tr>
<tr>
<td>Restrict outdoor alcohol advertising in locations where children are likely to be present</td>
<td>AK, HI, ME, VT</td>
</tr>
<tr>
<td>Prohibit outdoor alcohol advertising near schools, public playgrounds</td>
<td></td>
</tr>
<tr>
<td>Restrict alcohol advertising on alcohol retail outlet windows and outside</td>
<td>VA</td>
</tr>
</tbody>
</table>

26 Center on Alcohol Marketing and Youth, Georgetown University (2003).
### areas

<table>
<thead>
<tr>
<th>Prohibit alcohol advertising on college campuses</th>
<th>NH, PA, UT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Restrict sponsorship of civic events</td>
<td></td>
</tr>
<tr>
<td>Limit giveaways</td>
<td></td>
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</tbody>
</table>

* Kansas does not meet any of these areas of best practice*

As an example, Alabama provides a statute regarding advertisements that target minors: 27

“No advertisement shall include anything which might appeal to minors by implying that the consumption of alcoholic beverages is fashionable or the accepted course of behavior.”

2. The AMA and the NCSL support increasing state and federal excise taxes on alcohol as a way to prevent underage consumption. Even a 10 percent price increase, according to the NCSL, could have a profound impact on adolescent alcohol use. 28

   a. For a 10 percent rise in the price of beer, demand among adolescents would fall by about 3 percent. Furthermore, if beer prices were indexed to inflation, overall youth drinking would drop by 9 percent and heavy drinking by 20 percent.

   b. “For those under 21, a 10 percent price increase would reduce drunk-driving rates by 12.6 percent for males and by 21.1 percent for females. In addition, this price change would reduce youth motor vehicle fatalities by between 7 percent and 17 percent.”

   c. “A 10 percent increase in price would increase graduation rates by 3 percent.”

   d. “An additional $1 tax on each case of beer would increased the probability of [a high school student’s future] college graduation by 6.3 percent.”

3. Expanding the scope of risk behavior surveillance

   a. The YRBSS and the Kansas Communities that Care survey ask basic questions about substance use. Neither, however, ask questions such as:

      i. What kinds of alcohol do teenagers drink (e.g., beer, wine, hard liquor, wine coolers, alco-pops, liqueurs)?

      ii. How much pure alcohol do teenagers consume over a given period of time?

      iii. Why are teenagers motivated to engage in high risk behaviors?

      iv. When teens engage in high risk behaviors, where do they partake?

   b. KDHE currently receives data from across the state on HPV and herpes. It is unable to track these widespread STIs, however, because surveillance and reporting on these diseases are not legally required.

4. Arizona and Oregon provided examples of approaches on opposite ends of the spectrum to combat inhalant abuse among young adolescents. Twenty-one other states also offer examples between those extremes that Kansas policymakers could use in order to suit the needs of its youth.

5. Considering the research from the Brookings Institution on mentoring and tutoring programs and their dramatic effects on risk behaviors of all kinds, Kansas policymakers

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27 Center on Alcohol Marketing and Youth, Georgetown University (2003).
may consider investigating the impact that supporting and funding such activities may have on adolescents throughout the state.