Injury and Accident Prevention Among Louisiana Public School Students
Introduction

The Youth Risk Behavior Surveillance Survey (YRBSS) is a national school-based survey supported by the Centers for Disease Control and Prevention (CDC) and implemented by Louisiana state agencies to monitor priority health-risk behaviors among youth. In 2011, the YRBSS was administered to a total of 1,160 students at a random sample of 24 public high schools in Louisiana. Results from the YRBSS are used to guide programs and policies that support health as well as set and track progress towards health goals. For more information on the CDC’s YRBSS, please visit http://www.cdc.gov/HealthyYouth/yrbs/index.htm.

In 2010, the School Health Profiles Survey (Profiles) was completed by 231 principals and 225 lead health teachers (as designated by the principal) in Louisiana, representing approximately 74% and 72% of Louisiana public high school principals and lead health teachers, respectively. School Health Profiles is a system of surveys that assess school health policies and practices.

A comparison of results from the 2011 YRBSS and the 2010 School Health Profiles Survey provides useful insight into how well policies and student health practices are aligned, as well as how accurately school personnel perceive student behavior related to health-risk behaviors. Implications and recommendations are presented herein based on these perceptions and practices. For more information on the background, content, results and trends from the 2010 School Health Profiles Survey, please visit http://www.cdc.gov/healthyouth/profiles/2010/profiles_report.pdf.

Figures 1 – 5 represent findings from the 2011 YRBSS. Figures 6 and 7 display findings from the 2010 School Health Profiles, and reference relevant questions from the YRBSS in the same figure.
Injury and Accident Prevention in Louisiana:
What are the Students Saying?

Figure 1. 2011: Never/Rarely Wore a Bicycle Helmet

- Among students who rode a bicycle during the 12 months prior to the survey, 95% of Louisiana students never/rarely wore a helmet, and 88% of students nationwide never/rarely wore a helmet (Never/rarely Wore a Bicycle Helmet).
- 97% of females and 94% of males who rode a bicycle never/rarely wore a helmet.
- 97% of Caucasian students and 94% of African-American students who rode a bicycle never/rarely wore a helmet.
- 97% of 9th graders, 93% of 10th and 11th graders, and 98% of 12th graders who rode a bicycle never/rarely wore a helmet.

![Graph showing percentage of students never/rarely wearing a bicycle helmet by gender, race, and grade level.]

Figure 2. 2011: Never/Rarely Wore a Seat Belt

- 11% of Louisiana students never/rarely wore a seat belt when riding in a car driven by someone else, compared to a national rate of 8% (Never/Rarely Wore a Seat Belt).
- Male students never/rarely wore a seat belt at a significantly higher rate (17%) than female students (5%).
- 10% of Caucasian students and 9% of African-American students never/rarely wore a seat belt.
- 11% of 9th, 10th, and 12th graders never/rarely wore a seat belt, while 8% of 11th graders never/rarely wore a seat belt.

![Graph showing percentage of students never/rarely wearing a seat belt by gender, race, and grade level.]
Figure 3. 2011: Never/Rarely Wore an ATV Helmet

- 44% of Louisiana students never/rarely wore a helmet when riding an ATV during the 12 months prior to the survey (Never/Rarely Wore an ATV Helmet). *
- Male students never/rarely wore a helmet while riding an ATV at a significantly higher rate (17%) than female students (5%).
- Caucasian students never/rarely wore a helmet while riding an ATV at a significantly higher rate (62%) than African-American students (22%).
- 9th graders never/rarely wore a helmet while riding an ATV at the highest rate (48%) and 12th graders never/rarely wore a helmet while riding an ATV at the lowest rate (39%).

Figure 4. 2011: Drove When Drinking

- 12% of Louisiana students drove a car or other vehicle while drinking alcohol during the 30 days prior to the survey, compared to the national rate of 8% (Drove When Drinking).
- 10% of female students drove while drinking, while 14% of males drove while drinking.
- 14% of Caucasian students drove while drinking, while only 8% of African-American students drove while drinking.
- Rates of drinking and driving increased with grade level, with 5% of 9th graders and 19% of 12th graders reporting drinking and driving in the 30 days before the survey.
Figure 5. 2011: Drove With a Drinking Driver

- 32% of Louisiana students rode as a passenger in a car with a driver who had been drinking alcohol in the 30 days prior to the survey, compared to the national rate of 24% (Drove With a Drinking Driver).

- 30% of female students and 34% of male students rode as a passenger in a car with a driver who had been drinking alcohol.

- Rates of riding as a passenger in a car with a driver who had been drinking alcohol were similar among Caucasian students (31%) and African-American students (30%).

- 11th grade students rode in the car with a driver who had been drinking at the lowest rate (27%) while the rate for 9th, 10th, and 12th graders ranged from 32%-35%.
Injury and Accident Prevention in Louisiana: What are the School Leaders Saying?

Figure 6. Injury Prevention: Knowledge, School Policy, and Student Bicycle Helmet Behavior

95% of public school students in LA reported rarely or never wearing a bicycle helmet, despite the fact that 94% of teachers in 2010 reported trying to increase student knowledge of injury prevention and safety. However, only 43% of administrators reported having assessed the school policies, activities, and programs for injury and violence prevention. It is important to note that the percentage of students that have a bicycle is unknown.

Figure 7. Injury Prevention: Knowledge, School Policy, and Student Seat Belt Behavior

Figure 15. Suggests that student behavior is consistent with the surveyed schools’ implementation of physical violence interventions. For instance, 22% of students were reportedly in a physical fight, while only 4% were in a fight on school property. Similarly, 36% of LA students carried a weapon, while only 16% carried a weapon to school.
Limitations

- YRBSS and Profiles are both based on self-reported responses, potentially leading to some response bias by students and school administrators while completing their surveys. For students, this could be due to both the inability to recall all risk behaviors and the conscious decision to not report all risk behaviors accurately due to fear or discomfort. For school health leaders, this could be due to both the inability to recall policies and practices and the conscious decision not to report on said policies and practices accurately.

- The School Health Profiles were conducted one year prior to the 2011 YRBSS surveys, and differ in the methodology, and sampling. Therefore, the relationship between the results of the two reports should be interpreted with caution.

- The current findings do not capture risk behaviors of Louisiana youth that are not enrolled in the public school system. Approximately 14% of Louisiana students (k-12) are enrolled in private schools.

- The sample size for 12th grade students was less than 100, which may affect generalizability.

Conclusions & Recommendations

Results from the 2011 YRBSS indicate that injury and accident prevention programming may be particularly useful if specific attention is given to Caucasian males as a target group. Caucasian students reported higher rates of risky behaviors that can lead to injury and/or accident in all survey questions, when compared to African-American students (see figures 1-5). Additionally, males reported higher rates of drinking and driving, riding with a driver who had been drinking, not wearing a seat belt, and not wearing a helmet when riding an ATV (see figures 2-5).

The data suggests that more Louisiana public schools could benefit from having School Improvement Plans that include injury and accident prevention. Louisiana students reported higher rates of never or rarely wearing a bicycle helmet, never or rarely wearing a seat belt, drinking and driving, and riding with a driver who had been drinking, than the national average. Future work in injury and accident prevention should focus on expanding education regarding safety procedures, especially wearing a helmet during recreational activities. Additionally, programming should also be targeted towards increasing awareness of the dangers of driving under the influence of alcohol. Educational programs are also important outside of the school system, as not all of Louisiana’s youth are enrolled in public school. Moreover, an expansion of these services outside of the school system as well as efforts towards more parental and community education will also lead to enhanced exposure and reinforced messaging of safety promotion and injury and accident prevention efforts for students who are enrolled in school.