Youth Risk Behavior Surveillance Surveys 2011 & School Health Profiles Comparison 2010:

Asthma 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/healthyyouth/profiles/2010/profiles_report.pdf.

Figures 1 – 4 represent findings from the 2011 YRBSS. Figures 5 and 6 display findings from the 2010 School Health Profiles, and reference relevant questions from the YRBSS in the same figure.
Asthma in Louisiana: What are the Students Saying?

Figure 1. 2011: Lifetime Asthma

- 24% of Louisiana students reported that they had been told by a doctor or nurse that they had asthma in their lifetime (Lifetime Asthma).
- More males (27%) than females (21%) were told that they had asthma in their lifetime.
- 20% of Caucasian students had been told they had asthma, while 25% of African-American students had been told they had asthma.
- Rates of lifetime asthma were similar among all grade levels, ranging from 23%-26%.

Figure 2. 2011: Current Asthma

- 8% of Louisiana students had asthma at the time of the survey, compared to a national rate of 12% (Current Asthma).
- 9% of males and 7% of females had asthma at the time of the survey.
- 7% of Caucasian students and 6% of African-American students had asthma at the time of the survey.
- 5% of 12th graders who ever had asthma still had asthma, while 8-9% of 9th through 11th graders had asthma at that time.
**Figure 3. 2011: Missed School Due to Asthma**

- 6% of Louisiana students missed at least one day of school in the 12 months prior to the survey due to asthma (Missed School Due to Asthma). *

- 7% of males and 5% of females missed school due to asthma.

- 5% of Caucasian students and 7% of African-American students missed school due to asthma.

- Rates of missing school due to asthma were similar among all grade levels, ranging from 5%-8%.

**Figure 3. Percentage of public high school students in LA (N=1,129) who had missed school because of their asthma one or more days during the 12 month prior to the survey. *National data not available**

**Figure 4. 2011: Received Asthma Action Plan**

- 8% of Louisiana students reported that they had ever been given an asthma action plan (Received Asthma Action Plan). *

- 6% of females received an asthma action plan, while 11% of males received an asthma action plan.

- 6% of Caucasian students and 8% of African-American students received an asthma action plan.

- 9th graders reported having received an asthma action plan at the highest rate (11%), while 12th graders reported having received an asthma action plan at the lowest rate (5%).

**Figure 4. Percentage of public high school students in LA (n=1,122) who have ever been given an asthma action plan. *National data not available**
Youth Asthma in Louisiana:
What are the School Leaders Saying?

Figure 5. Asthma Action Plans: School Reports vs. Student Reports

![Asthma Action Plans: School Reports vs. Student Reports](image)

- **Principal Report (Profiles):** Schools in which all students with known asthma have an asthma action plan on file.
- **Student Report (YRBSS):** LA students who were told they had asthma and still had asthma.
- **Student Report (YRBSS):** LA students who had received an asthma action plan.

Figure 5. This figure suggests that school policies regarding asthma plans may actually be working better than principals reported, as the student responses are not consistent with the policies being implemented in Louisiana public schools. In 2010, only 67% of principals reported that all students with asthma had an action plan on file. In 2011, the same percentage of LA public school students with current asthma reported that they received an asthma action plan. However, some students may be receiving asthma action plans from their pediatricians.

Figure 6. Asthma: Teacher Knowledge, School Policy, and Student Behavior

![Asthma: Teacher Knowledge, School Policy, and Student Behavior](image)

- **Principal Report (Profiles):** Schools that monitor absences due to asthma to identify students with poorly controlled asthma.
- **Lead Health Teacher Report (Profiles):** Teachers who received professional development on asthma.
- **Student Report (YRBSS):** LA students who were told they had asthma and still had asthma.
- **Student Report (YRBS):** LA students who missed at least one day of school due to asthma in the 12 months prior to the survey.

Figure 6. In 2011, 6% of LA public school students reported missing school in the preceding 12 months due to asthma, compared to the 8% of public school students who had asthma at the time. In 2010, only 24% of school administrators reported having a system in place to monitor absences due to asthma, in order to identify students with poorly controlled asthma. Also in 2010, only 19.5% of teachers reported receiving professional development on asthma, which may enable teachers to better identify and assist students with asthma.
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 6% of students missed school due to asthma in the year prior to the survey, which is close to the percentage of students with asthma at the time (see figures 2-3). According to the CDC, asthma is one of the leading chronic illnesses among youth in the United States, and a leading cause of school absenteeism. Teachers and educators can play a role in helping children manage their asthma. (1) At the administrative level, schools are successful in administering asthma action plans to students with asthma (see figure 5), however, programming should be directed towards identifying students with poorly controlled asthma, as only 24% of administrators reported that absences due to asthma were being monitored (see figure 6). At the educator level, programming should focus on professional development regarding asthma management, as only 20% of Louisiana teachers reported having received it (see figure 6). Additionally, coordination between school administration and health care providers, such as pediatricians, community health centers or school based health centers, is necessary for effective monitoring and protection of students with asthma.

References