Executive Summary

Analysis of Obesity Rates for School Children in Pennsylvania

By: Shailendra Gajanan, Ph.D., and Lisa Fiorentino, Ph.D., RN,
University of Pittsburgh-Bradford

June 2019

This research tracked childhood obesity rates in rural and urban Pennsylvania public school districts over the 10-year period of 2005-2016, using data from the Pennsylvania Departments of Education and Health, and the U.S. Census Bureau. The research compared historical trends in childhood obesity at the district level with various socio-economic variables, such as education, income, and employment, and various school district factors, such as PSSA scores and participation in the free and reduced school lunch programs, to identify any relationships between those indicators and obesity rates among Pennsylvania public school students.

The researchers also surveyed school district personnel to learn how their districts are addressing the obesity/overweight issue among students.

The key findings are:

• The percent of overweight students and students who are at-risk of being overweight in Pennsylvania has been somewhat steady at 32.6 percent, on average, over the study period. On average, 17 percent of students are overweight and 15.7 percent of students are at-risk of being overweight.

• The percent of students in grades K-6 who are overweight and at-risk of being overweight mimics the overall trend, with averages of 17.6 percent in the overweight category, and 16 percent in the at-risk category.

• The percent of overweight students in grades 7-12 is greater than the overall trend, at about 19 percent, on average. The percent of students in grades 7-12 who are at-risk of being overweight is around 17 percent. Almost 36 percent of students in these higher grade levels are either overweight or at-risk of being overweight.

• The percent of rural students in grades K-6 who are overweight consistently exceeded those in urban districts by at least 3 percentage points. Over the 10-year study period, about 19 percent of rural students and 16
percent of urban students, on average, are overweight.

- The percent of overweight students in rural school districts in grades 7-12 also consistently exceeded those in urban districts by at least 4 percentage points. On average, about 21 percent of rural students and 17 percent of urban students in these grades are overweight.
- These results indicate that youth obesity is an important issue in Pennsylvania, particularly among rural students, and rural students in grades 7-12.
- Overall, lower educational attainment levels, lower employment rates, lack of health insurance, and poverty status among adults are key economic variables that are positively associated with youth overweight status. The incidence of youth overweight status declines as family income increases.
- Other variables that are positively associated with youth obesity, especially in urban districts, are the percentage of families receiving public cash assistance and SNAP benefits, and the percentage of students participating in the free and reduced lunch programs.
- Pennsylvania school officials who responded to the research survey said they are aware of the issue of youth obesity, and many schools have adopted U.S. Department of Agriculture and Pennsylvania Department of Education vending machine guidelines and menu-labeling systems. These schools also encourage student activity and undertake partnerships with local community health groups and related networks to increase awareness and help students make healthy choices.

For a copy of the report, *Analysis of Obesity Rates for School Children in Pennsylvania*, visit the Center’s website at www.rural.palegislature.us.