New York State Student Weight Data Explorer

Overview

Office of Public Health
Center for Community Health
Bureau of Chronic Disease Evaluation and Research

Last Reviewed: June 2019
Introduction

Obesity has reached epidemic proportions in New York State (NYS) and across the nation. While many epidemics can be defeated with a pill or a vaccine, preventing or reversing obesity requires changes in behavior as well as access to affordable, nutritious foods and opportunities for physical activity in the places where people live, learn, eat, shop, work and play.

The Student Weight Status Category Reporting System (SWSCR) was established by amendments to the New York State Education Law (§ 903 and 904) in 2007 to support state and local effort to address childhood obesity. (http://www.p12.nysed.gov/sss/schoolhealth/schoolhealthservices/s903.html)

The amendments added body mass index (BMI) and weight status category based on BMI-for-age (underweight, healthy weight, overweight and obese) to the school health certificates and health appraisals required at school entry and for students in grades 2, 4, 7 and 10. They also required a sample of school districts to report aggregate weight status category to the Department of Health each year. Public schools in the five boroughs of New York City, BOCES and Charter Schools were exempt from the annual reporting requirement.

Since the 2010-11 School Year, public school districts have reported data on the weight status of students to the Student Weight Status Category Reporting using consistent methods. The system enables estimates of the prevalence of childhood obesity and overweight among public school students in Upstate New York. Data from SWSCR are used to understand the severity and distribution of obesity among youth of various ages in different regions of the state. The information is also used to evaluate whether actions taken by local schools, school districts and communities to improve access to healthy foods and to increase physical activity are making a difference and reducing childhood obesity rate.

More information about ongoing obesity prevention program and activities in New York is available at: https://www.health.ny.gov/prevention/obesity/prevention_activities/

Dashboard Data Sources and Methods

Each year, a 50% sample of public-school districts (excluding those in the five boroughs of New York City (NYC) which are exempt from NYS Education Law Sections 903 and 904) is notified that they have been selected to report aggregated student weight status category information to the New York State Department of Health (NYSDOH) electronically, using the Health Commerce System (HCS). The following year, the remaining 50% of school districts are notified to submit weight status information to the HCS. Data from both years are then combined and reported for a two-year sampling period. For example, 50% of schools report for school year 2016-2017, the other 50% report for school year 2017-2018. The data are then combined and reported as 2016-2018.
Student BMI is reported from health examination forms (certificates/appraisals) provided to the school from the PREVIOUS school year. Forms submitted for students in grades Pre-K/K, 2, 4, 7 and 10 are used as the documentation for students currently in grades 1, 3, 5, 8 and 11. Schools are required to report aggregated student weight status category data for either pre-Kindergarten (Pre-K) or Kindergarten based on a student’s official school entry. If students attended Pre-K in the previous year, the mandated exam form from Pre-K would be used to report for those students currently in Kindergarten. Values are aggregated by grade and sex for each school district based on the following sex-specific BMI-for-age percentiles: underweight (less than 5th), healthy weight (5th through 49th), healthy weight (50th through 84th), overweight (85th through 94th), obese (95th and greater).

Student weight status category data is combined by three grade levels for all schools in the school district. The three grade levels are: Pre-K, K, 2 and 4 (Elementary), 7 and 10 (Middle/ High) and Pre-K, K, 2, 4, 7 and 10 (District Total).

To maintain compliance with the federal Family Educational Rights and Privacy Act (FERPA), school districts are not allowed to report data to the NYDOH when the number of students in a weight status category is less than 5. If the number of students in a weight status category is less than five, then the field is blank.

County codes assigned by New York State Department of Education (NYSED) are used to generate the county level estimates of student weight status. Data from school districts within a county were aggregated to produce estimates of the percent of students who were reported to be in each of the five weight status categories. Percentages were calculated by dividing the number of reported students in a weight status category by the total number of students with weight status category information. The dataset includes separate estimates of the percent of students that are overweight, obese or overweight and obese for all reportable grade groups (elementary and middle/high) within the county.

Region level estimates were calculated by aggregating county data using the regional groupings outlined below (see “Regions” in the Definitions section).

In 2018 the New York State Education Department changed the grades when a health examination form is required for students. Starting with the 2018-19 school year, health examination forms were required for public school students at school entry (pre-Kindergarten or Kindergarten) and for grades 1, 3, 5, 7, 9 and 11. These changes will be reflected in the data school districts report to the NYDOH starting with the 2019-2020 school year.
Definitions

**BMI**: Body Mass Index. A measure of body fat based on weight and height.

**FERPA**: Family Educational Rights and Privacy Act. A federal law that protects the privacy of student education records.

**Grade-Level**: Elementary (students in Pre-K, K, Grades 2 and 4), Middle/High (students in Grades 7 and 10), District Totals (students in Pre-K, K, grades 2, 4, 7, 10, where applicable by school district).

**HCS**: Health Commerce System. A secure online communications system operated by the NYSDOH. It supports the exchange of routine and emergency statewide health information by local health departments and health facilities, providers and practitioners.

**Need/Resource Index**: A measure of a school district’s ability to meet the needs of its students with local resources. 

**NYSED**: New York State Department of Education

**Percent Obese**: Percent of all students with a body-mass-index at or above the 95th and greater percentile

**Percent Overweight**: Percent of all students with a body mass-index in the 85th to 94th percentile

**Percent Overweight or Obese**: Percent of all students with a body mass-index at or above the 85th and greater percentile

**Regions:**


**Central New York**: Cayuga, Cortland, Herkimer, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, St. Lawrence, Tompkins

**Finger Lakes**: Chemung, Livingston, Monroe, Ontario, Schuyler, Seneca, Steuben, Wayne, Yates

**Hudson Valley**: Dutchess, Orange, Putnam, Rockland, Sullivan, Ulster, Westchester

**Nassau-Suffolk**: Nassau, Suffolk
New York – Penn: Broome, Chenango, Tioga
Western New York: Allegany, Cattaraugus, Chautauqua, Erie, Genesee, Niagara, Orleans, Wyoming

How to Interpret the Data

The School District Profile tab provides information on rates of overweight, obese, and overweight or obese by grade level (elementary or middle/high, and district total) for a single public-school district (note: NYC school districts are not included). Data from the county in which a district is located, as well as statewide rates, are also provided in the circles within the bar charts for comparison. Trends over time for a given school district from 2010-2012 through to 2016-2018 are provided. For smaller school districts, complete reporting may not have been achieved, and variations in trends may be observed.

The Compare School District tab provides the ability to compare 2016-2018 rates of overweight, obese, and overweight or obese by grade level for multiple school districts. Highlight a given county to obtain a drop-down list of school districts within that county. Then, hold the ‘Ctrl’ key to highlight multiple counties/school districts. The Needs Resource Index and 2018 School District Enrollment are provided to allow comparison of school districts by student size or need/capacity index.

The Compare Counties tab provides the ability to compare 2016-2018 rates of overweight, obese, and overweight or obese by grade level for multiple counties. Highlight a given county and then hold the ‘Ctrl’ key to then highlight one or more other counties. Statewide (excluding New York City) data are listed on the left-hand side for additional comparison information.

The Explore Statewide Trends tab provides rates of overweight, obese, and overweight or obese by grade level for NYS overall (excluding NYC), region or county over time from 2010-2012 through to 2016-2018.

Overall for NYS, rates of obesity have increased from 18.2% in 2012-2014 to 18.8% in 2016-2018 while rates of obesity among elementary school students have decreased from 17.2% in 2010-2012 to 16.0% in 2016-2018. Reviewing data by school district, county and/or region can provide additional information to better focus obesity related school and community interventions among children and adolescents. More information about evidence-based interventions to address childhood obesity and the root causes, unhealthy eating and inadequate physical activity, can be found in the New York State Prevention Agenda within the Prevent Chronic Disease Action Plan:
Limitations

Because school district boundaries do not align with county boundaries, the county estimates reflect data from students attending school within schools assigned a particular county-code by NYSED. County assignment is not based on student county of residence. These data should not be considered to represent all school aged-children attending school in that county because of: restrictions in reporting due to FERPA, parents'/guardians’ ability to request that their child's weight status data be excluded from reporting and other sources of missing data.

Because of restrictions in reporting due to the FERPA there can be wide variation in how much of the student population is represented in the data that school districts submit. This can limit researchers’ ability to draw absolute conclusions about observed differences in student weight status among counties. Starting with the 2010-11 school year, the reporting system was changed to require reporting of aggregate data for grade categories (as opposed to grades) from schools to aggregate data by school districts. Changes made to the SWSCR effective 2010-11 enable more data from smaller school districts to now be represented.

De-identification

The NYSDOH adheres to all applicable federal and state rules, regulations and standards for the de-identification of protected health information. For more information on de-identification methods, please visit: https://www.hhs.gov/hipaa/for-professionals/privacy/special-topics/de-identification/index.html#_edn1.

Contact Information

For more information or questions about this data, please contact nysapd@health.ny.gov.