



Chronic Absence across the United States

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This [interactive map](#) describes the prevalence of chronic absence, the share of students missing 15 or more days of school, during the 2015-16 school year. The interactive allows anyone to explore rates of chronic absence at the school, district, state, and national levels by school and student characteristics.

Data Matters
Using Chronic Absence to Accelerate Action for Student Success

Co-authored by Hedy N. Chang, Lauren Bauer, and Vaughan Byrnes, [this report](#) provides a national and state analysis of how many schools face high levels of chronic absence and discusses the implications for state and local action. The analysis is based upon national data released by the U.S. Department of Education’s Office for Civil Rights Civil Rights Data Collection (CRDC). The report compares differences in school chronic absence levels from 2013-14 and 2015-16 school years, and portrays the connection between chronic absence levels and demographics.

Data Sources

Chronic absence data: U.S. Department of Education Office for Civil Rights [2015-16 Civil Rights Data Collection](#).

Supplemental geographic location data: [Stanford Education Data Archive](#)

Shapefiles:

- State-level from [U.S. Census Bureau Cartographic Boundary Shapefiles](#)
- School districts (except Vermont) from [National Center for Education Statistics 2017 Census Geograpy Year](#)
- Vermont school districts from [Vermont Open Geodata Portal](#)
- School geolocations from [National Center for Education Statistics 2016-17 School Data](#)

Definitions

Chronic absence: In the 2015-16 wave of the Civil Rights Data Collection, chronic absenteeism is defined as a student missing 15 or more days of school in a school year.

School level: Primary schools are defined as schools in which the lowest grade is not higher than grade 3 and the highest grade is not higher than grade 8 or those that serve elementary school students. Middle schools are defined as schools in which the lowest grade is not lower than grade 4 and the highest grade is not higher than grade 9 or those that serve middle school students. High schools are defined as schools in which the lowest grade is not lower than grade 9 and the highest grade is not higher than grade 12 or those that serve high school students. Combined schools include all other combinations of grades, including K-12 schools as well as other configurations.

Sample restrictions

The 2015-16 CRDC contains population-level information about school districts and schools in the United States. Schools are identified by their National Center for Education Statistics (NCES) identification number, so schools that lack the correct NCES identification number are dropped from the sample.

In order to populate the map, we used geographic school districts, meaning that schools within the physical boundary of a given public school district are assigned to that district. Using information provided by the Stanford Education Data Archive, we matched certain schools, such as some charter schools, to geographic school districts using their provided crosswalk. Traditional public schools were assigned to their districts. Schools were excluded if there was no crosswalk provided.

We did not omit schools if they did not provide chronic absence information.

Calculating the share of students chronically absent

The rate of chronic absenteeism, overall and by student and school subgroups, is calculated by dividing the number of students reported chronically absent by the total number of students in that unit. For example, to calculate the share of students chronically absent in Pennsylvania, the total number of students chronically absent in Pennsylvania is divided by the total number of students in Pennsylvania. To calculate the share of Limited English Proficiency (LEP) students in elementary schools in the Pittsburgh Public School District, the total number of LEP elementary school students who were chronically absent in Pittsburgh is divided by the total number of LEP elementary school students in Pittsburgh.

Interactive chart

This interactive chart was built using the Shiny package from RStudio. The app relies on a variety of other R packages, available for free to the R users community. These packages include:

- [Leaflet](#) (interactive mapping)
- [dplyr](#) (data manipulation)
- [plotly](#) (interactive plots)
- [data.table](#) (fast subsetting of dataframes)
- [shinydashboard](#) (app layout)
- [shinyWidgets](#) (custom inputs for apps)
- [rgdal](#) (for reading geospatial data)

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BROOKINGS

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