



THE SCHOOL DISTRICT OF
PHILADELPHIA

Office of Evaluation, Research, and Accountability

Food Insecurity in SDP: *What is it? How do we measure it?* *What can we do with the data?*

June 29, 2022

This institution is an equal opportunity provider. This material was funded by USDA's Supplemental Nutrition Assistance Program (SNAP) through the PA Department of Human Services (DHS).

Agenda

- **About ERA and the Research Roundup Webinar Series**
- **Part 1:** Why is food insecurity an important issue in schools?
- **Part 2:** How do we measure food insecurity? What does the data tell us?
- **Part 3:** How do SDP programs/partners use the data?
- **Q & A**

This webinar is being recorded.

The recording and a PDF of the slide deck will be available at: philasd.org/research/roundup

Please introduce yourself in the chat!

Evaluation, Research, and Accountability

philasd.org/era

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What can we help you find?

Every year, we collect millions of data points on student achievement, leadership, school climate, and progress.

Our offices work with the data to evaluate and report outcomes and develop informational tools.



Office of Research and Evaluation

District Performance Office

Planning and Evidence-Based Supports Office

Office of Assessments

Office of Data Governance

Evaluation, Research, and Accountability

THE SCHOOL DISTRICT OF PHILADELPHIA

Compare Schools | User Guide | Video Tutorials

SCHOOL PROFILES

Find out how a school or group of schools is performing. Search for a school or narrow your search using the filters below. You can also view data for groups of schools (for example, all Charter Schools or all Network 1 schools) by clicking on "School Groupings."

Find a School | School Groupings

Search for a school:
Begin typing | Search

Filters | +

- ACADEMY AT PALUMBO
- ACADEMY FOR THE MIDDLE YEARS (AMY) AT NORTHWEST
- AD PRIMA CHARTER SCHOOL
- ADAIRE, ALEXANDER SCHOOL
- ALLEN, DR. ETHEL SCHOOL
- ALLEN, ETHAN SCHOOL
- ALLEN, RICHARD PREPARATORY CHARTER SCHOOL
- ALLIANCE FOR PROGRESS CHARTER SCHOOL
- ALTERNATIVE MIDDLE YEARS (AMY) AT JAMES MARTIN
- ANDERSON, ADD B. SCHOOL
- ARTHUR, CHESTER A. SCHOOL
- ARTS ACADEMY AT BENJAMIN RUSH

PHILADELPHIA PUBLIC SCHOOLS

DATA FOR DISTRICT, CHARTER, ALTERNATIVE, AND OTHER/CYBER STUDENTS AND SCHOOLS
Enrollment: 2021-2022 (next update November 2022)
Performance data: 2020-2021 for Attendance and Career data: 2019-2020 for suspension rates; 2020-2021 for Survey results; 2018-2019 for all other data due to COVID (next update February 2022)

In Spring 2020, students and schools were impacted by COVID-19, including related closures and assessment cancellations. Comparison of 2019-20 data to prior years should be made with caution.

TOTAL ENROLLMENT 198,645

SCHOOL DISTRICT OF PHILADELPHIA
CENTRAL OFFICE
440 N. Broad Street
Philadelphia, PA 19130
p: 215-400-4000

SUPERINTENDENT
William R. Hite, Jr., Ed.D.

2018-19 PSSA & KEYSTONE - ELA PERFORMANCE (ALL GRADES)

36% | 1 POINT DECREASE FROM LAST YEAR

The percentage of students who scored Proficient or Advanced on the state standardized English Language Arts exam.

TOTAL SCHOOLS 325

DISTRICT SCHOOLS 216
ENROLLMENT 114,902

CHARTER SCHOOLS 85
ENROLLMENT 66,890

ALTERNATIVE SCHOOLS 24
ENROLLMENT 2,766

OTHER/CYBER CHARTERS
ENROLLMENT 14,087

DISTRICT PROGRESS TOWARDS GOALS AND GUARANTEES
MORE PUBLIC SCHOOLS DATA
DISTRICT FACTS

2018-19 PSSA & KEYSTONE -

2018-19 READING ON GRADE

schoolprofiles.philasd.org

philasd.org/opendata

School Information

Click below to expand the table to view a description of the data and download a data set for a specific school year. You can also download a Zip file that contains all available years for a specific School Information category.

The public release of this data supports our goals to promote greater transparency and community engagement. Before accessing these data, please review the [Terms and Conditions](#).

- + School Lists
- + School Enrollment & Demographics
- + District Enrollment & Demographics
- + Pre-School Information
- + Catchment Feeder Schools
- + School Catchment Areas
- + School Catchment Retention Details
- + School Catchment Retention Counts
- + District Wide Surveys
- + Youth Risk Behavior Survey
- + School Reopening Information
- + School Selection
- + Household Food Insecurity

Data Sets

- School Information**
Information on schools' attributes
- School Performance**
Student performance and climate through the school year
- District Employees and Finance**
Expenditure, Employee, Budget, and FTE Data
- Advancing Education Safely**
Information on hybrid learning and COVID-19 testing
- Terms and Conditions**
Please read!

Quick Data

- School Profiles**
View individual school profile information
- PSSA & Keystone Exam Data**
Details on PSSA and Keystone results

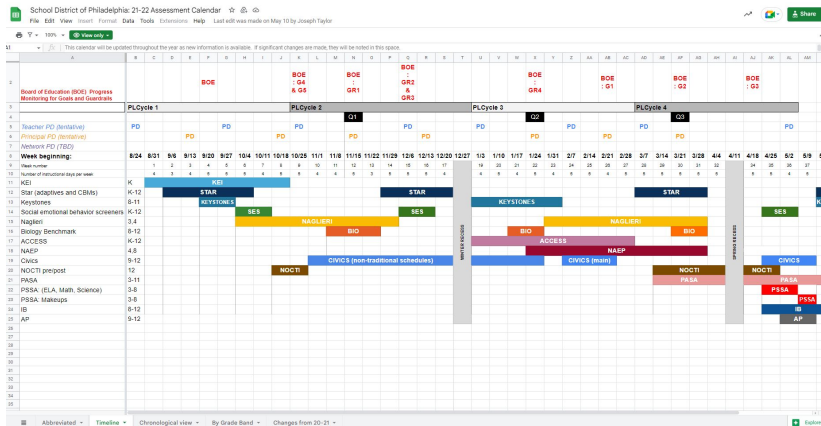
Evaluation, Research, and Accountability



GUARDRAIL 1.1: CLIMATE & INSTRUCTION

GUARDRAIL 1.3: MENTAL HEALTH SUPPORT

HOW?



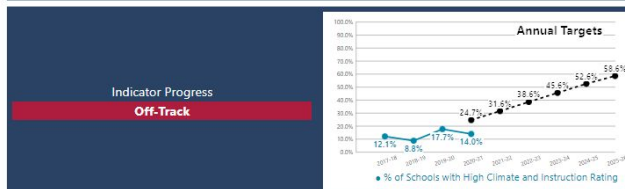
philasd.org/era/assessment/

- Sections**
- Overall and by School Group
 - By Survey Subtopic and Respondents
 - By School and Student Groups
 - Ennotes
 - Guardrail 1 Links
 - Mental Health Support
 - How?

Overall and by School Group

Indicator 1.1

The percentage of schools with both a high Overall District-Wide Survey Climate rating and a high Overall District-Wide Survey Instruction rating will grow from 17.7% (38 schools) in August 2020 to 58.6% (126 schools) by August 2026.



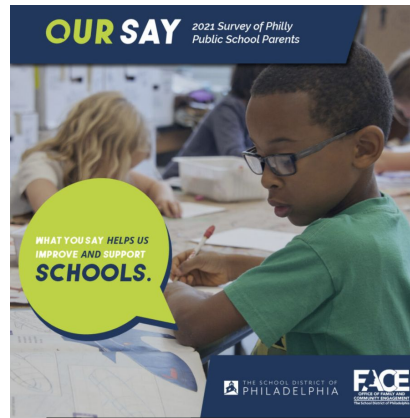
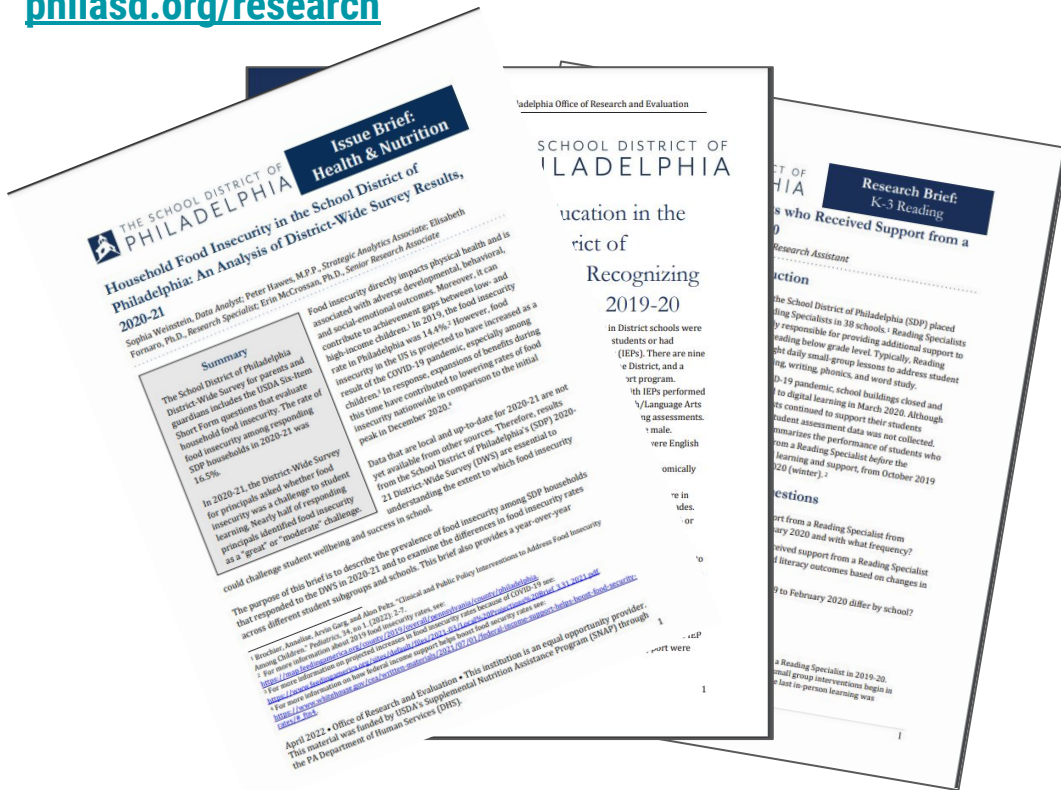
	2017-18	2018-19	2019-20	2020-21 ¹	2020-21 Annual Target	Distance to 2020-21 Target	Distance to 2021-22 Target	2025-26 Final Target
All District Schools	12.1%	8.8%	17.7%	14.0%	24.7%	-10.7	-17.6	58.6%

School Group (Based on School Performance on Guardrail Indicator 1.1) ²	District-Wide Survey Climate and Instruction Topic Scores, All District Schools											
	2018-19				2019-20				2020-21 ¹			
	Topic Scores		Schools		Topic Scores		Schools		Topic Scores		Schools	
On Track - Group A High Instruction, High Climate	7.6	8.2	19	8.8%	7.6	8.1	38	17.7%	7.8	8.1	30	14.0%
Near Track - Group B Either High Instruction or High Climate	7.2	7.8	45	20.9%	7.3	7.8	46	21.4%	7.4	7.7	61	28.4%
Near Track - Group C Near Instruction, Near Climate	6.5	7.5	83	38.6%	6.4	7.4	84	39.1%	6.7	7.5	84	39.1%
Off Track - Group D Low Instruction and/or Low Climate	5.7	7.0	68	31.6%	5.7	7.0	38	17.7%	5.7	7.3	14	6.5%

philasd.org/era/goals-and-guardrails

Office of Research and Evaluation

philasd.org/research



philasd.org/dws



External Research Review

Comprehensive information about the Research Review Committee process - a requirement before conducting any research in SDP



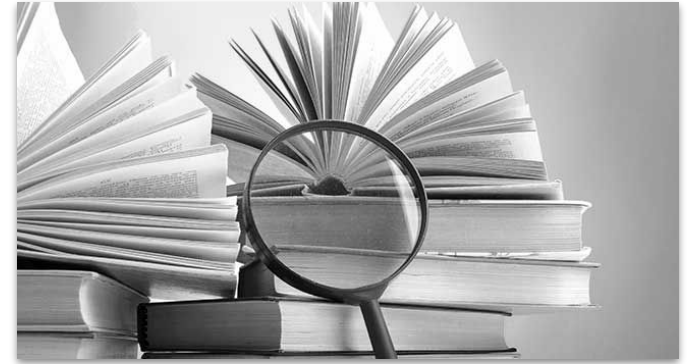
phledresearch.org/

philasd.org/research/programsservices/reports/

What is a Research Roundup?

- Monthly webinar series with a topical focus
- Work in progress
- Sign up to be notified when webinars are scheduled and when recordings are available

www.philasd.org/research/roundup



Goals for This Presentation

Attendees will better understand:

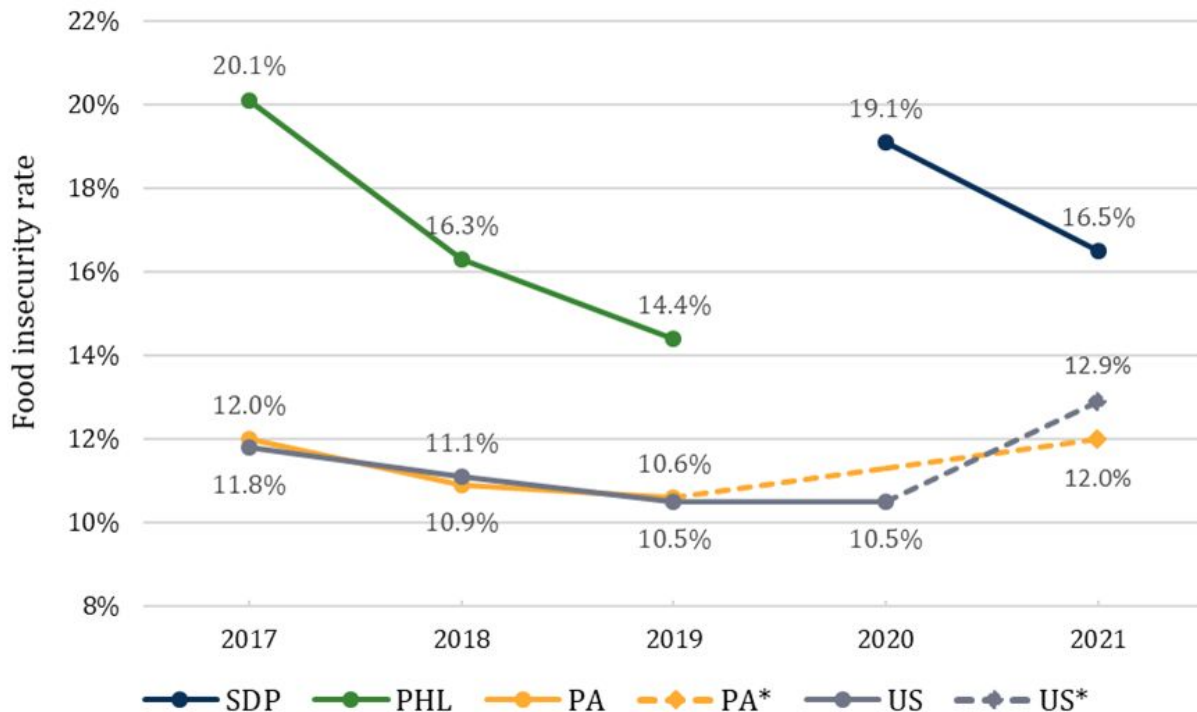
1. How we measure food insecurity
2. What the food insecurity data can and cannot tell us
3. How SDP partners and programs use the data to meet the needs of students and families

ORE Report related to food insecurity:

<https://www.philasd.org/research/2022/04/29/household-food-insecurity-in-the-school-district-of-philadelphia-an-analysis-of-district-wide-survey-results-2020-21/>

Part 1: Why is food insecurity an important issue in schools?

SDP households reported greater food insecurity compared to city, state, and national averages



Data Notes

SDP data based on Parent/Guardian District-Wide Survey results from 2019-20 (N=14,163) and 2020-21 (N= 14,473). Philadelphia and PA food insecurity rates data for 2017-2019 from Feeding America available at: <https://map.feedingamerica.org/>. US national food insecurity rates data for 2017-2021 from USDA ERS available at:

<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/key-statistics-graphics/#map>.

*Projected PA and US food insecurity rates for 2021 available at:

<https://www.feedingamerica.org/research/coronavirus-hunger-research>.

Food insecurity is related to negative educational outcomes

Children experiencing food insecurity are:

- Aware of food insecurity in their household¹
- More likely to miss school²
- Lower reading and math test scores³
- Higher stress, trauma, difficulty with self-control, and aggression^{1, 4, 5}
- More likely to be suspended⁶
- More at risk for substance abuse, depression, and suicidal ideation in adolescents and young adults.^{7, 8}

Signs of Food Insecurity

- They ask about food every day and they're not picky about what they eat.
- They suddenly lose or gain weight but don't change their activity level.
- They hoard snacks and food.
- They bully others or behave badly.
- They have a poor attention span, memory or trouble concentrating.
- They are hyperactive or impulsive.
- They show aggressive or antisocial behaviors.⁹



EAT RIGHT PHILLY

PA SNAP-Ed

Inspiring health, wellness, and better learning.

Board Goals and Guardrails

GOALS

- 01 Grade 3-8 Reading
- 02 Grade K-3 Reading
- 03 Grade 3-8 Math
- 04 High School Keystones
- 05 High School CTE

GUARDRAILS

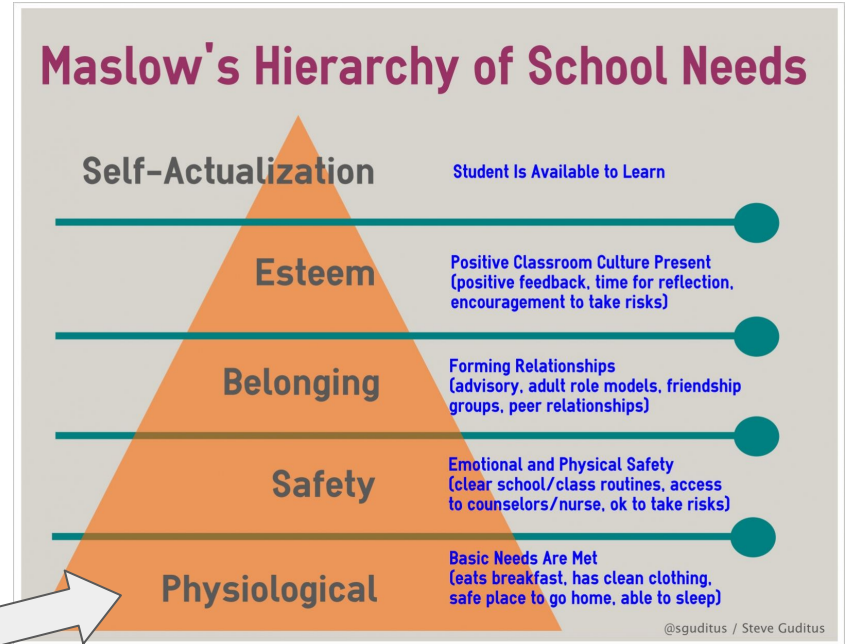
- 01 Welcoming and Supportive Schools
- 02 Enriching and Well-Rounded School Experiences
- 03 Partnering with Parents and Families
- 04 Addressing Racist Practices

philasd.org/goalsandguardrails
philasd.org/era/goals-and-guardrails/



Connections to Guardrails

Guardrail 1: Every school will be a safe, welcoming and healthy place where our students, staff and community want to be and learn each day. This means that our schools will be: 1) environmentally safe and clean; and 2) spaces with inclusive climates that provide students with access to robust social, emotional, and mental health supports.



Connections to Guardrails

Guardrail 3: Every parent and guardian will be welcomed and encouraged to be partners in their child's school community.



Connections to Guardrails

Guardrail 4: Our students' potential will not be limited by practices that perpetuate systemic racism and hinder student achievement.

Food insecurity is caused by:

- Decades of disinvestment and failed social policy
- Housing segregation
- Concentrated poverty
- Employment discrimination
- Racial wealth divide
- Discrimination in health care
- Barriers to accessing government assistance
- Community violence and trauma

See the "Applying a racial equity lens to end hunger" report for more on this topic:
<https://www.paperturn-view.com/us/bread-for-the-world/applying-racial-equity-to-u-s-federal-nutrition-assistance-programs?pid=NTq58712&p=11&v=3>

Key Takeaway: Food insecurity disproportionately affects Black and Brown families, and has negative educational impacts. Not addressing it perpetuates the opportunity gap in education.

Part 2: How do we measure food insecurity? What does the data tell us?

How is food insecurity different from Economic Disadvantage (ED)?

USDA definition of Food Insecurity

- Limited or uncertain availability of nutritionally adequate and safe foods, or limited or uncertain ability to acquire acceptable foods in socially acceptable ways.
- Based on a measurement tool that asks about respondents' ability to afford enough food as well as whether members of their households skipped meals.

The Community Eligibility Provision (CEP) Economic Disadvantage (ED) rate

- Based on whether students qualify for government assistance programs.
- Does not directly address food insecurity.
- Purpose is to determine schools' eligibility for free and reduced lunch programs, not to assess individual levels of economic disadvantage.

For more information about how the USDA evaluates food insecurity:
<https://www.ers.usda.gov/topics/food-nutrition-assistance/food-security-in-the-u-s/measurement/>

How is food insecurity different from Economic Disadvantage (ED)?

- The CEP Economic Disadvantage rate is an *estimate*.
 - Not all students or families participate in benefit programs for which they are eligible, which may result in an underestimate.
- Households with incomes above the federal poverty level can still be food insecure.
 - Approximately 30% of food-insecure households have incomes above the federal poverty level.¹⁰

USDA Six-Item Short Form for Food Insecurity

- A validated and frequently used tool¹¹
- Measures *food security* according to a scale:
 - **High:** no reported indications of food-access problems or limitations
 - **Marginal:** one or two reported indications – typically of anxiety over food sufficiency or shortage of food in the house. Little or no indication of changes in diets or food intake
 - **Low:** reports of reduced quality, variety, or desirability of diet. Little or no indication of reduced food intake
 - **Very Low:** reports of multiple indications of disrupted eating patterns and reduced food intake
- “Low food security” and “very low food security” in combination are often referred to as “food insecurity.”

The USDA Six-Item Short form for measuring food security is available here: <https://www.ers.usda.gov/media/8282/short2012.pdf>

Parent/Guardian District-Wide Survey food insecurity data

- Beginning in 2019-20, the parent/guardian District-Wide Survey (DWS) included the Six-Item Short Form of the USDA Household Food Security Module.
 - Responses to these module questions on the DWS allowed the Office of Research and Evaluation (ORE) to determine the extent of food insecurity among SDP households District-wide and at individual schools.
 - Individual survey responses are confidential and used only for research purposes to determine District and school rates.

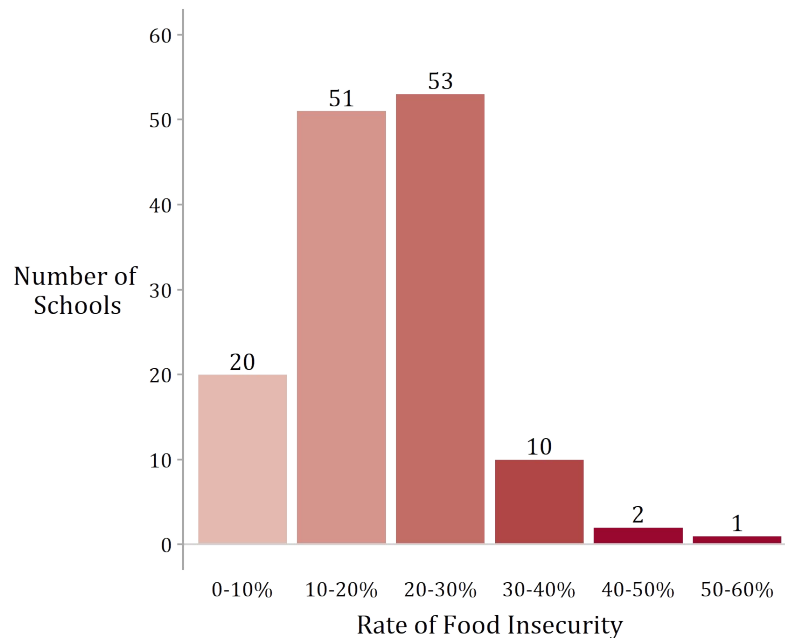


Parent/Guardian DWS Food Insecurity Questions

Question Lead-In	Question Text	Response Options
In the past 12 months, how often were the following statements true about your household?	The food that I/we bought just didn't last and I/we didn't have money to get more.	<ul style="list-style-type: none"> • Never • Sometimes • Often • Don't know/ Prefer not to answer
In the past 12 months, how often were the following statements true about your household?	I/we couldn't afford to eat balanced meals.	<ul style="list-style-type: none"> • Never • Sometimes • Often • Don't know/ Prefer not to answer
In the past 12 months...	did you ever eat less than you felt you should because there wasn't enough money for food?	<ul style="list-style-type: none"> • Yes • No • Don't know/ Prefer not to answer
In the past 12 months...	were you ever hungry but didn't eat because there wasn't enough money for food?	<ul style="list-style-type: none"> • Yes • No • Don't know/ Prefer not to answer
N/A	In the past 12 months, did you or other adults in your household ever cut the size of your meals or skip meals because there wasn't enough money for food?	<ul style="list-style-type: none"> • No • Yes, only 1 of 2 months • Yes, some months but not every month • Yes, almost every month • Don't know/ Prefer not to answer

The rate of food insecurity reported by parents/guardians varied widely across schools

- Most schools had food insecurity rates between 10-30%.
- Thirteen schools had food insecurity rates greater than 30% – more than double the average food insecurity rate for Pennsylvania.
- Twenty schools had rates of food insecurity less than 10% – below the statewide average.

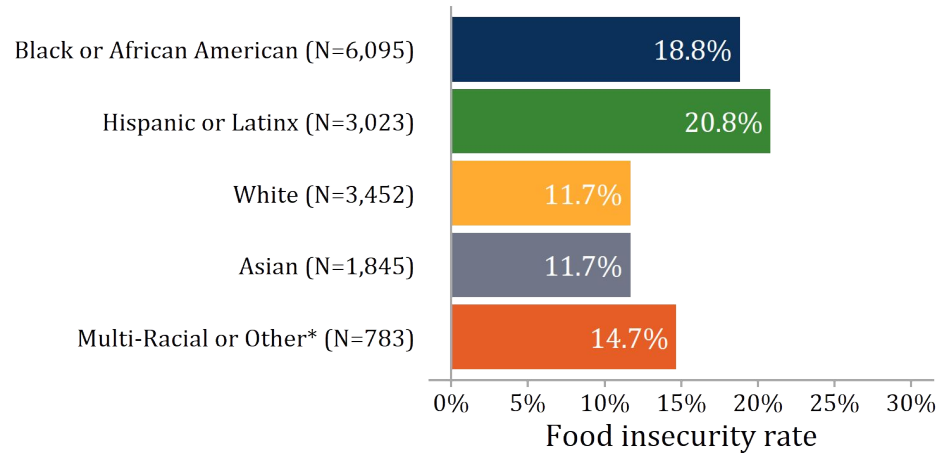


Data Notes

SDP data based on the 2020-21 Parent/Guardian District-Wide Survey for District schools (N = 14,473). Data was aggregated at the school level and reported only for District schools that met the minimum response rate of 10% (Number of Schools = 137).

Hispanic/Latino and Black/African American households reported the highest rates of food insecurity

- **Food insecurity rates varied widely by the racial and ethnic characteristics of households.**
- Hispanic/Latino and Black/African American households had the highest rates of food insecurity (21% and 19%).
- White and Asian households had the lowest rates (12%).

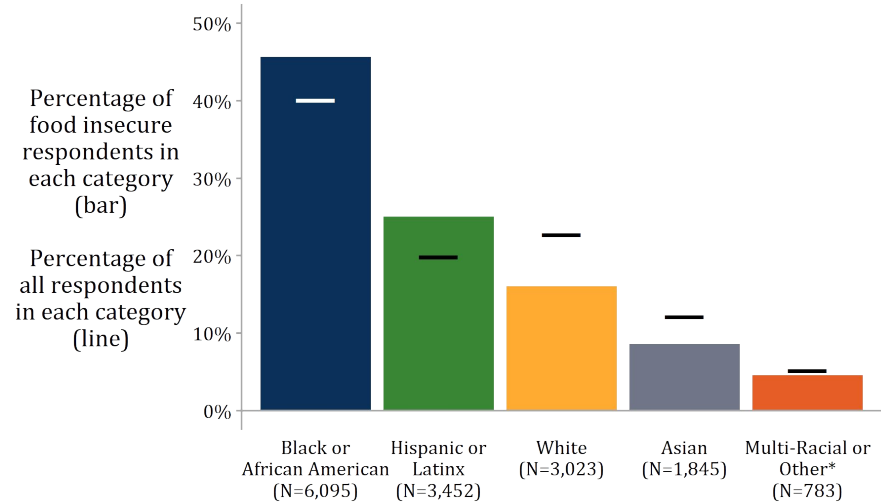


Data Notes

SDP data based on the 2020-21 Parent/Guardian District-Wide Survey for District schools (N = 14,473).

Disproportionate Rates by Race/Ethnicity

- This chart compares the difference between two data points:
 - The percentage of all respondents that belong to each race/ethnicity category (*horizontal line*)
 - The percentage of food insecure respondents belonging to each race/ethnicity category (*vertical bar*).
- **Black/African American and Hispanic/Latino households were overrepresented among respondents who were food insecure.**

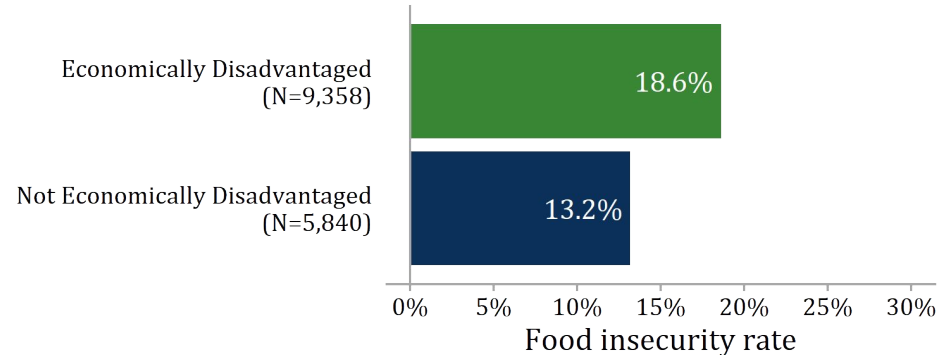


Data Notes

SDP data based on the 2020-21 Parent/Guardian District-Wide Survey for District schools (N = 14,473).

Economically disadvantaged households had higher rates of food insecurity

- SDP classifies students as economically disadvantaged if they receive certain types of government assistance (e.g. SNAP, TANF, Medicaid).
- The rate of food insecurity was higher for households classified as economically disadvantaged (19%) compared to not.
- However, food insecurity also affected a substantial percentage of households not classified as economically disadvantaged (13%).



Data Notes

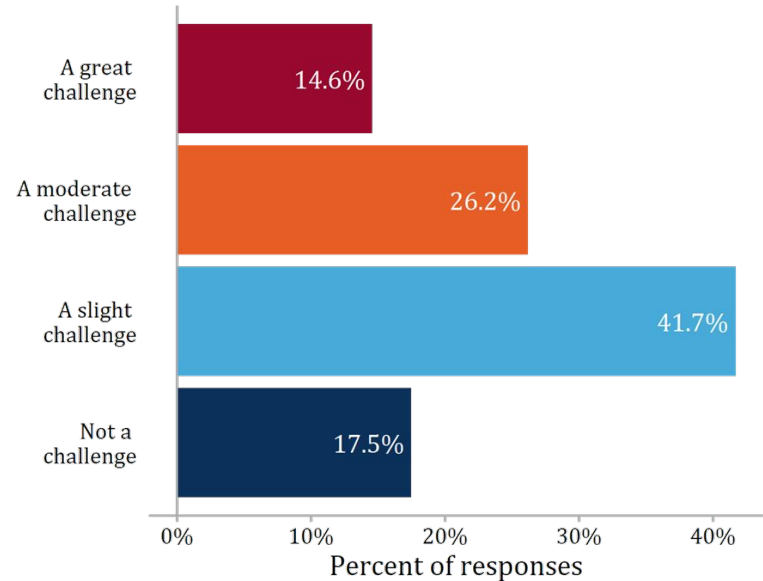
SDP data based on the 2020-21 Parent/Guardian District-Wide Survey for District schools (N = 14,473).

About 41% of SDP Principals reported that food insecurity was a great or moderate challenge

School principals were asked:

To what extent do you consider student food insecurity a challenge to student learning in your school? (A great challenge, A moderate challenge, A slight challenge, Not a challenge)

- 15% of principals said food insecurity was a great challenge.
- 26% of principals said food insecurity was a moderate challenge.
- Only 18% of principals said food insecurity was not a challenge.



Data Notes

Principal responses from District schools to the 2020-21 District-Wide Survey question, "To what extent is student food insecurity a challenge to student learning at your school?" (N=103).

Limitations of the Data

- Food insecurity is often under-reported and is likely to be underestimated.¹²
- Parent/guardian DWS data is not available for all schools and may not be representative for all households due to survey response rates.¹³
- The food insecurity data relies on parent reporting, which may not accurately represent student experiences.

For more information about the representativeness of the Parent/Guardian District-Wide Survey:

<https://www.philasd.org/research/2020/12/01/representativeness-of-the-2019-20-district-wide-student-and-parent-guardian-survey-results/>

Part 3: How do SDP programs and partners use this data?

How Eat Right Philly (ERP) uses this data

- Reviews and tiers schools by level of need
- Will be layering and considering data from the Philadelphia Department of Health
 - e.g. community mapping data on poverty, gun violence, hospitalizations due to diabetes, and accessibility to fresh produce
- Collaborates with external partners and food assistance organizations to direct resources to schools indicating a high need
 - e.g. Philabundance, Share, Coalition Against Hunger
- Combines Food Distributions with Recipe Tastings / Cooking demos and Nutrition Education to combine access, knowledge, and exposure



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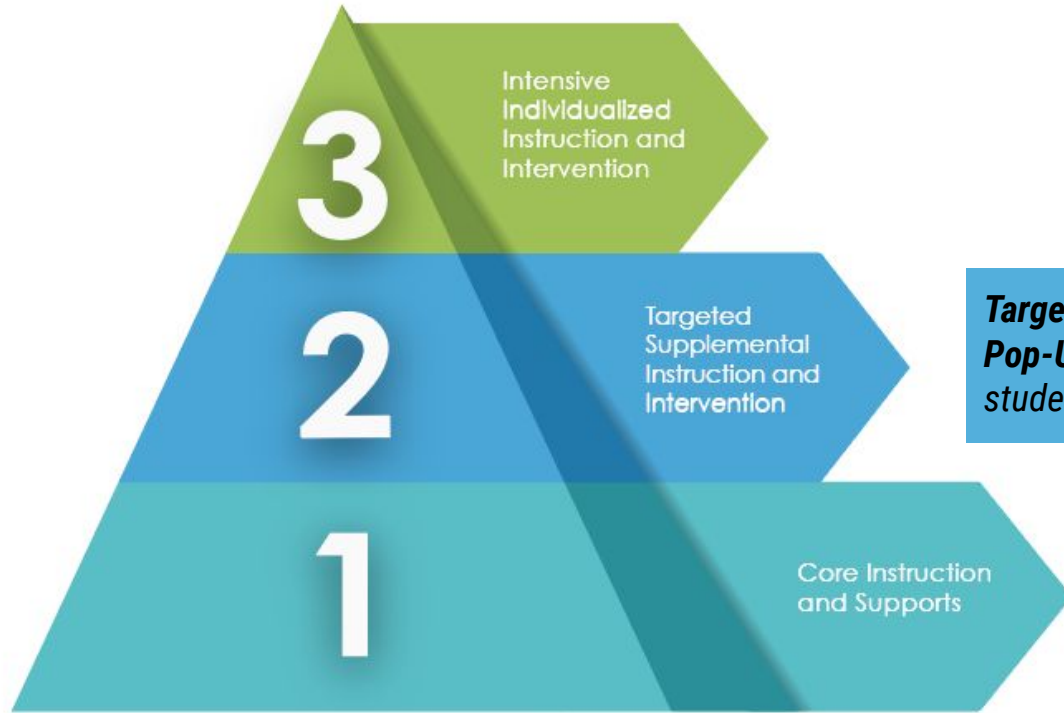
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Collaboration



Multi-Tiered System of Support (MTSS)



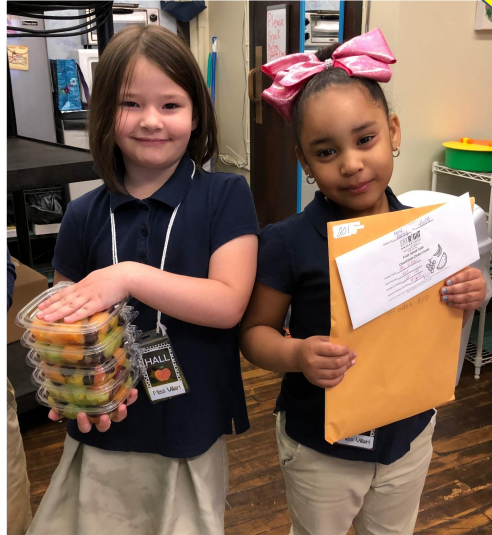
Targeted Healthy Food Distributions and/or Pop-Up Produce Stands: Resources for students/schools with demonstrated need

Access to quick links to resources and PD/Training for key staff on City-based supports: Universal supports available for all schools

Eat Right Philly's work in schools



**Lessons for Students
& Families**



**Support for a Healthy
Environment**



**Healthy Food Access
Supports**



Food Access Resources

Find free food near you!

phila.gov/food

City of Philadelphia

The City of Philadelphia and our partners would like to help you access free food!

[BenePhilly](#) offers **free one-on-one enrollment support** to help Philadelphia residents apply for **over 20 public benefits, like SNAP and WIC**. Trained counselors assist with completing applications, organizing key documents, and tracking their applications' status. Support is available in 170+ languages. **1-844-848-4376**

Additional Food Resources info:

- **Call the Coalition Against Hunger** at 215-770-4659 to [locate summer meals](#)
- **Call 311 for pantry locations near you.** Make sure to call the pantry in advance to confirm their hours.
- **Community Resource Connects:** www.communityresourceconnects.org
- **Call the WhyHunger hotline.** Call or text your ZIP code at 1-800-548-6479 to get a list of nearby food pantries.

Additional Research-Related Resources

Where to find food insecurity data for SDP?

1. District Performance Office Open Data website:
<https://www.philasd.org/performance/programsservices/open-data/>
2. Select “Household Food Insecurity”
3. Select the year to download the file

The screenshot shows the District Performance Office Open Data website. The main content area is titled "School Information" and lists various data sets. The "Household Food Insecurity" data set is highlighted with a red circle. Below the list, there is a table of available files for download. The table has columns for "School Year", "File Type", and "File Size". The rows are for "2019-2021" (Excel XLSX, 100 KB) and "2019-2020" (Excel XLSX, 38 KB). The "Household Food Insecurity" data set is also highlighted with a red circle.

School Year	File Type	File Size
2019-2021	Excel XLSX	100 KB
2019-2020	Excel XLSX	38 KB

Related ORE Briefs & Reports

- Food Insecurity Briefs
 - [2020-21](#)
 - [2019-20](#)
 - [2018-19](#)
- [Implementation of School-Based Food Backpack Programs, 2019-20](#)
- [Maximizing Students' School Breakfast Participation](#)
- [Student Hunger and School Breakfast: Analysis of District-Wide Survey Results and School Breakfast Programs, 2018-19](#)
- [Expanding School Breakfast Participation, 2017-18](#)

ORE Reports on Eat Right Philly

- [Four Reports on the Implementation and Effectiveness of SNAP-Ed Community Partnerships](#)
- [The Feasibility of Conducting an Impact Study of Share Produce Stands](#)
- [The School Health Index 2017-18 Progress and Results: An Overview of Three Related Reports](#)

Youth Risk Behavior Survey (YRBS)

- [Findings from Student Responses to Questions about Mental Health and Suicide from the 2019 YRBS](#)
- [Youth Risk Behavior Survey: Selected Results from the School District of Philadelphia](#)

Program Office Resources

- [Eat Right Philly](#)

Q&A

[Join our mailing list](#) to be notified when recordings are available and when webinars are scheduled. We also welcome your suggestions for future topics. Link in the chat!

Notes

- ¹ Mariana Chilton, Molly Knowles, and Sandra L. Bloom, "The Intergenerational Circumstances of Household Food Insecurity and Adversity," *Journal of Hunger & Environmental Nutrition* 12, no. 2 (2017): 269-297.
- ² David Shaffer et al., "A Children's Global Assessment Scale (CGAS)," *Archives of General Psychiatry* 40, no. 11 (1983): 1228-1231.
- ³ Diana F. Jyoti, Edward A. Frongillo, and Sonya J. Jones, "Food Insecurity Affects School Children's Academic Performance, Weight Gain, and Social Skills," *The Journal of Nutrition* 135, no. 12 (2005): 2831-2839.
- ⁴ Larry L. Howard, "Transitions Between Food Insecurity and Food Security Predict Children's Social Skill development during elementary school," *British Journal of Nutrition* 105, no. 12 (2011): 1852-1860.
- ⁵ Ronald E. Kleinman et al., "Hunger in Children in the United States: Potential Behavioral and Emotional Correlates," *Pediatrics* 101, no. 1 (1998): e3-e3.
- ⁶ Katherine Alaimo, Christine M. Olson, and Edward A. Frongillo. "Food Insufficiency and American School-aged Children's Cognitive, Academic, and Psychosocial Development," *Pediatrics* 108, no. 1 (2001): 44-53.
- ⁷ Lynn McIntyre et al., "Depression and Suicide Ideation in Late Adolescence and Early Adulthood are an Outcome of Child Hunger," *Journal of Affective Disorders* 150, no. 1 (2013): 123-129.
- ⁸ Katie A. McLaughlin et al., "Food Insecurity and Mental Disorders in a National Sample of US Adolescents," *Journal of the American Academy of Child & Adolescent Psychiatry* 51, no. 12 (2012): 1293-1303.
- ⁹ Jessica Schoen, "How to Tell if a Child is Facing Hunger," *Feeding America*, October 5, 2018, <https://www.feedingamerica.org/hunger-blog/how-to-tell-if-a-child-is>
- ¹⁰ Council on Community Pediatrics, & Committee on Nutrition. "Promoting Food Security for All Children." *Pediatrics*, 136, no. 5 (2015): e1431-e1438.
- ¹¹ Blumberg, Stephen J., Karil Bialostosky, William L. Hamilton & Ronette R. Briefel, "The Effectiveness of a Short Form of the Household Food Security Scale." *American Journal of Public Health*, 89, no. 8 (1999): 1231-1234. doi: 10.2105/ajph.89.8.1231
- ¹² Feeding America, *Map the Meal Gap 2019: A Report on County and Congressional District Food Insecurity and County Food Cost in the United States in 2017*, accessed June 27, 2022.