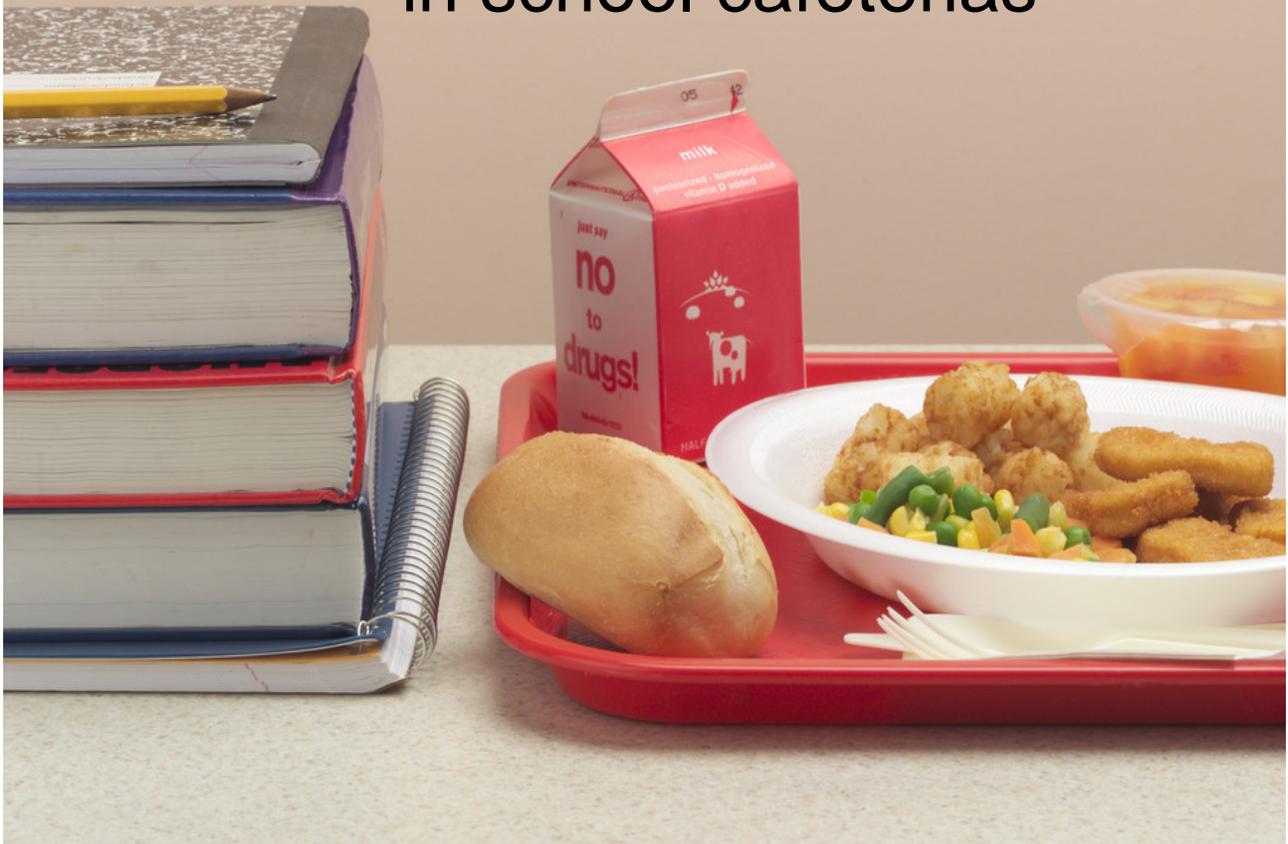


Making the Grade

An analysis of food safety
in school cafeterias



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Center for Science in the Public Interest (CSPI) is a non-profit organization based in Washington, DC. Since 1971, CSPI has been working to improve the public's health, largely through its work on nutrition and food-safety issues. CSPI is supported primarily by the 900,000 subscribers to its Nutrition Action Healthletter and by foundation grants.

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EXECUTIVE SUMMARY

While schools work hard to promote excellent academic records in the classroom, who is looking after the safety records of the school cafeteria? Cafeterias serve millions of meals each day, and it's the duty of local and state health departments to inspect and ensure that these cafeterias are serving safe food to the students. But are the nation's school cafeterias and the state and local programs that inspect them really making the grade?

In 2004, Congress passed a law requiring state agencies to ensure cafeterias participating in federally funded school meal programs are inspected regularly. Schools in these programs have to be inspected at least twice a year and the results of the inspections must be made publicly available. States agencies are charged with the duty of monitoring compliance with inspection requirements.

The Center for Science in the Public Interest (CSPI) evaluated inspection reports from high school cafeterias in 20 school jurisdictions across the country. The study examined four key categories: the rigor of the food code, frequency of food safety inspections, access to inspection information, and the results of cafeteria inspections.

The overall performance of the jurisdictions covered by this report varied greatly and no jurisdiction came close to a perfect score. The **City of Fort Worth, Texas**, performed the best out of all of the schools evaluated by CSPI, with a score of 80 out of a possible 100. The worst performing school jurisdiction was the **City of Hartford, Connecticut** with a score of 37 out of 100.

Top performers:

- Maricopa County, AZ; City of Fort Worth, TX; City of Minneapolis, MN; Farmington Valley Health District, CT; Fulton County, GA; and Hillsborough County, FL met the required biannual **inspection frequency**.
- Maricopa County, AZ and the State of Virginia provided the best **access to inspection information**.

Poorest performers:

- The District of Columbia had the lowest **inspection frequency**.
- Montgomery County, MD had the worst, most out-dated **food code**.
- The City of Hartford, CT had the most **critical violations** per school.

This study identified risky food-safety gaps, including outdated food codes and insufficient inspections. Those gaps can put students at risk for foodborne illness. In order to protect children from foodborne illness, CSPI recommends:

- State and local governments need to be funded adequately to ensure that they are inspecting schools twice a year. In addition, they must adopt up-to-date safety standards.
- Schools should request timely inspections, employ certified food handlers, and use the best food safety procedures.
- Parents should monitor conditions in their child's school cafeteria and advocate for better food safety policies.

INTRODUCTION

According to the Centers for Disease Control and Prevention (CDC) approximately 76 million cases of foodborne illness occur in the United States each year, resulting in 325,000 hospitalizations and 5,000 deaths. Nationwide data on foodborne outbreaks associated with federal school meal programs do not exist, but CSPI's outbreak database has documented over 11,000 cases of foodborne illness associated with schools between the years 1990-2004.¹ Just one foodborne illness outbreak can have devastating consequences for the health of students, productivity in the classroom, and even financially on the school system. In fact, school districts have been held liable for the damage caused by outbreaks. For example, a school district in the state of Washington was ordered to pay a \$4.6 million verdict when 11 children were sickened with *E. coli* 0157:H7 linked to ground beef in tacos.²

School cafeterias serve millions of meals each day, and most meals are perfectly safe. But when food safety problems do occur in a school lunch cafeteria, they are especially dangerous because children have a higher risk of complications from foodborne illness. And because they eat there almost every day, children attending schools with poor safety records may be at increased risk for foodborne illness.

It's an age-old dilemma for parents – should you pack your child's lunch or pay for it? Aside from cost and convenience, the safety record of the school lunch cafeteria should be a part of your decision.

The National School Lunch Program provides nutritionally balanced, low-cost or free lunches to 29 million children each day in the United States.³ A 2003 report on federal school meal programs by the United States Government Accountability Office (GAO) found that two-thirds of foodborne illness outbreaks in schools involved federally subsidized meals.⁴ Another study of foodborne illness outbreaks in schools by the CDC, found that most outbreaks were due to improper food storage, poor temperature maintenance, and contamination from food handlers.⁵ For example, *E. coli* 0157:H7 from inadequately-thawed hamburgers sickened eleven schoolchildren in Finley, Washington in October 1998.⁶ In February 2005, twenty fourth-graders in Pennsylvania became ill with Salmonellosis after eating undercooked chicken served by their school cafeteria.⁷

In 2004, Congress recognized the importance of ensuring that school cafeterias prepare safe food when it passed the Child Nutrition and WIC Reauthorization Act of 2004.

¹ Center for Science in the Public Interest, *Outbreak Alert!* 2006. The Outbreak Alert database compiles data on foodborne illness outbreaks and contains 5,000 outbreaks with food and hazard identified from 1990 to 2004.

² The Seattle Times, "State Supreme Court refuses to review E. coli verdict," Tuesday, Sept 9, 2003.

³ United States Department of Agriculture. National School Lunch Program Factsheet. Accessed January 26, 2007 at <<http://www.fns.usda.gov/cnd/lunch/AboutLunch/NSLPFactSheet.pdf>>

⁴ Dyckman, L.J. *School Meal Programs: Few Instances of Foodborne Outbreaks Reported, but Opportunities Exist To Enhance Outbreak Data and Food Safety Practices.* Government Accountability Office. 2003.

⁵ Daniels, NA, MacKinnon, L. "Foodborne disease outbreaks in United States schools." *Pediatric Infectious Disease Journal* 21(7): 623-628, Jul 2002.

⁶ Cary, Annette. "State investigators decide meat cause of E. coli in Finley." *Tri-City Herald*. Nov 11, 1998.

⁷ Hasch, Michael. "School illness blamed on undercooked food." *Tribune-Review*. February 16, 2005.

In this measure, schools participating in the National School Lunch Program and the School Breakfast Program are required to:

- Be inspected at least twice a year.
- Post the most recent inspection report in a visible location
- Release a copy of the inspection report to the public upon request.

Furthermore, it requires state agencies to monitor compliance with the inspection requirements. Congress initiated those changes so that schools would be able to identify and correct food safety problems in a more timely and consistent manner.

METHODOLOGY

CSPI conducted this research to determine the safety of school cafeterias in various jurisdictions. CSPI analyzed inspection reports from the same 25 jurisdictions used in our 2005 study, “School Food Safety Report Card,” where we analyzed ease of access to cafeteria inspection information. CSPI chose 25 localities based on geographic location and school district size. CSPI focused on high schools, which serve a large number of children and have a greater likelihood of operating a full kitchen. CSPI selected 20 high schools in each jurisdiction to provide a qualitative evaluation of cafeteria inspections based on four key categories:

1. How protective is the jurisdiction’s food code?

The food code sets the standard operating procedures for school cafeterias and restaurants that are inspected by the public health departments of the state, county or local governments. A perfect inspection score means nothing if the department is not using the best safety standards. Every four years the United States Food and Drug Administration (FDA) publishes and updates a Model Food Code to provide states and local governments with up-to-date standards for food safety inspection. However, those governments are not required to adopt the latest Model Food Code, and many jurisdictions continue to use outdated standards.

To uniformly evaluate the rigor of each food code, CSPI compared the jurisdiction-specific food codes to the Model Food Code published by the FDA. CSPI also compared the food codes to food handling practices identified by the CDC as being most often linked to outbreaks of foodborne illness. Those practices include inadequate cooking, improper holding temperatures, cross contamination, and poor personal hygiene.⁸

2. How often are schools inspected?

Federal regulations mandate that school cafeterias be inspected two times each school year. Regular inspections help ensure that the food handling procedures outlined in the food

⁸ Centers for Disease Prevention and Control. “Surveillance for Foodborne-Disease Outbreaks – United States, 1993-1997.” *CDC Surveillance Summaries*, March 17, 2000.

code are followed and provide opportunities to correct school food service workers' misunderstandings about safe procedures. CSPI tabulated the number of inspections for the schools within each jurisdiction covered by this report. Schools that met federal regulations of two inspections per year got a perfect score in this category.

3. How easy is it to access inspection information?

Schools are required by law to display the most recent cafeteria inspection report in a visible location. Making inspection reports publicly available allows parents to make informed choices and places public pressure on schools to improve their services. While parents can visit school cafeterias to check for the most recent inspection report, CSPI could not feasibly visit each school. Instead, we contacted jurisdictions to obtain inspection records and checked online to see if inspection information was available on the Internet. As public access is best served through Internet posting of inspection results, CSPI's evaluation of access heavily favored jurisdictions that post results on the Internet. CSPI evaluated the public availability of school cafeteria food safety inspections based on the following seven criteria:

- Do schools receive an inspection grade?
- Were reports provided free of charge?
- Does a website list school inspection information?
- Is the website easy to find and easy to search?
- Are comments made in the inspection reports posted online?
- Are critical violations indicated on online inspection reports?
- Were reports from more than one inspection posted?

4. How safe are the cafeterias where children eat?

Cafeteria inspection visits are typically routine inspections, but are occasionally scheduled in response to specific complaints. During each visit, the inspector notes major violations on a standardized report form. These forms vary across jurisdictions, as each has its own unique guidelines for what constitutes a violation. While the differing report forms made it difficult to directly compare jurisdictions, a number of violation criteria were common to all jurisdictions, such as food storage, food holding temperatures, pest control, handwashing, cleanliness, personnel, and maintenance of facilities.

To uniformly compare the jurisdictions, CSPI developed its own list of critical violations using CDC reports on food-service safety, CSPI's *Dine at Your Own Risk*, and the 2005 FDA Model Food Code.^{9,10} Jurisdictions were then ranked against these criteria. (See *Appendix A* for CSPI's list of critical violations.) For high schools in each jurisdiction, CSPI compared the scores, critical violations, and general findings of the two most recent inspection reports.

⁹ Centers for Disease Prevention and Control. "Surveillance for Foodborne-Disease Outbreaks – United States, 1993-1997." *CDC Surveillance Summaries*. Mar 17, 2000.

¹⁰ Smith DeWaal, C and Dahl, E. "Dine at Your Own Risk." Center for Science in the Public Interest. Nov 1996.

JURISDICTIONS

Twenty jurisdictions provided CSPI with enough information to allow for an analysis of all four key categories. The jurisdictions covered in this report, which represent 10.4% of the United States population, include:

- The City of Forth Worth, TX
- King County, WA
- The City of Houston, TX
- Maricopa County, AZ
- The City and County of Denver, CO
- Dekalb County, GA
- Farmington Valley Health District, CT
- The State of Virginia
- Fulton County, GA
- The City of Dallas, TX
- The City of Philadelphia, PA
- The City of Chicago, IL
- The City and County of San Francisco, CA
- Montgomery County, MD
- Hillsborough County, FL
- The City of Minneapolis, MN
- Dade County, FL
- The State of Rhode Island
- The District of Columbia
- The City of Hartford, CT

Five jurisdictions “flunked out” of our survey due to lack of information: Los Angeles County, California; the City of Cleveland, Ohio; New York City; the State of Florida; and the City of Boston, Massachusetts. The missing information varied depending on the jurisdiction:

- **Los Angeles County, CA.** CSPI was told that that Los Angeles County schools only perform monthly “self-inspections” and are not inspected on a regular basis, only in response to a complaint. Those cafeteria inspection reports that were found online were not performed by or in conjunction with the health department.
- **City of Cleveland, OH.** After repeated attempts to get inspection information from the City of Cleveland, CSPI was sent the most recent inspections but not previous inspections reports that would have allowed for a qualitative comparison of improvement. Our analysis required the two most recent inspection reports to be submitted for each school in order to compare scores, critical violations, and general findings.
- **The City of Boston.** The City of Boston posts information about restaurant inspections online but not school inspections. After repeated attempts, CSPI was unable to obtain adequate information from the City of Boston.
- **New York City.** In New York City, the school system works in conjunction with the health department to inspect schools. New York City only provides the most recent cafeteria inspections and does not maintain information about past inspections.
- **State of Florida.** Although a database exists for state restaurant inspections, an online database of inspection reports for schools in the state could not be found. CSPI was informed that each individual county had to be contacted for school cafeteria inspection reports.

GENERAL FINDINGS: Making the Grade on Food Safety

The overall performance of the jurisdictions covered by this report varied greatly and no jurisdiction came close to a perfect score of 100. Of the 20 jurisdictions examined by CSPI, only five had a score of 75 and above (see *Figure 1*). Jurisdictions where state and local government played an active role in updating their food code, actively performed inspections and worked with schools to address violations had the highest scores. Conversely, jurisdictions with little active engagement by state or local agencies had the lowest scores.

Spotlight: Inspection Frequency

Best: Maricopa County, AZ
Fort Worth, TX
Minneapolis, MN
 Farmington Valley, CT
Fulton County, GA
Hillsborough County, FL

Worst: District of Columbia
San Francisco, CA
 State of Rhode Island
Hartford, CT

The top jurisdiction is the City of Fort Worth, Texas. Fort Worth had an overall combined score of just 80 out of a possible 100. This reflects high marks for the rigor of the city's food code; the number of school cafeteria food safety inspections; overall inspection findings; and accessibility of the inspection information.

Fort Worth school inspections are carried out on the local level by Tarrant County. The county maintains an Internet database that allows for ready access by parents and others. The database includes the school cafeteria inspections, violations, and the number of "demerits" going back to 2003. Public health violations are ranked differently under their system of demerits. Violations are ranked and given different numbers of demerits ranging from 0 to 5. For example, five demerits are given for "temperature abuse," 4 for "personnel and their activities," and 3 for "physical conditions/equipment." All violations must be fixed within ten days, which is faster than many other jurisdictions. Finally, Tarrant County's inspections are guided by the Texas Food Establishment Rules (TFER) which has partially adopted FDA's 2005 Model Food Code, making it more up-to-date than many other jurisdictions.

Spotlight: Access to Information

Best:
 Maricopa County, AZ
State of Virginia

Worst: City of Minneapolis, MN
 Dade County, FL
State of Rhode Island
District of Columbia

At the bottom of the overall rankings is the City of Hartford, Connecticut with a score of 37 out of a possible 100. Hartford averaged roughly 2.7 critical violations for each of the schools examined in their last inspection. Hartford had more critical violations per school than any other jurisdiction. Also the Hartford schools were only inspected once rather than twice – as Congress has mandated – in the year covered by this report.

Figure 1. Overall Score

Top of the Class
 Passing
 Barely Passing
 Failing

Jurisdiction	Overall Grade out of 100
City of Fort Worth, TX	80
King County, WA	79
City of Houston, TX	78
Maricopa County, AZ	77
City and County of Denver, CO	75
Dekalb County, GA	73
Farmington Valley Health District, CT	72
State of Virginia	72
Fulton County, GA	68
City of Dallas, TX	67
City of Philadelphia, PA	67
City of Chicago, IL	65
City and County of San Francisco, CA	64
Montgomery County, MD	63
Hillsborough County, FL	60
City of Minneapolis, MN	60
Dade County, FL	59
State of Rhode Island	54
District of Columbia	46
City of Hartford, CT	37

CSPI surveyed the 20 jurisdictions and gathered information for each of the key categories. The jurisdictions' performances are outlined in the following charts accompanied by an analysis of each jurisdiction's overall score, inspection frequency, critical violations, ease of access to information, and food code.

TOP OF THE CLASS

1. City of Fort Worth, TX

Category	Grade	Range
Inspection Frequency	100%	28-100%
Critical Violations	70%	10-90%
Access to Information	86%	14-100%
Food Code	69%	31-81%
Overall Grade	80%	37-80%

- **Overall:** Fort Worth, Texas ranked number one for overall performance with an overall grade of 80%.
- **Inspection Frequency:** Schools in this jurisdiction were inspected an average of two times per year, as required by federal regulations.
- **Critical Violations:** Fort Worth schools had an average of 0.90 critical violations, and received a grade of 70%. The most commonly cited violation in Fort Worth schools was the failure to have “thermometers provided/accurate/properly calibrated,” which was cited in four of the twenty schools we sampled. Other violations were for inadequate handwash facilities and improper holding temperatures.
- **Access:** Fort Worth tied with four other jurisdictions for second place in the ease of access category with a grade of 86%. Fort Worth school inspections are performed by Tarrant County, and inspection information is accessible through an Internet database of inspection information maintained by the county.
- **Food Code:** Fort Worth received a food code grade of 69%. The county inspections are guided by the Texas Food Establishment Rules (TFER), which is based on the most recent 2005 Model Food Code. However, unlike the Model Food Code, the Texas food code allows bare hand contact with food, and therefore received a lower grade.

2. King County, WA

Category	Grade	Range
Inspection Frequency	85%	28-100%
Critical Violations	88%	10-90%
Access to Information	86%	14-100%
Food Code	61%	31-81%
Overall Grade	79%	37-80%

- **Overall:** King County ranked second among the schools evaluated by CSPI, with an overall grade of 79%.
- **Inspection Frequency:** Schools in this jurisdiction were visited an average of 1.7 times, less than required by federal regulations. However, the jurisdiction also performs periodic consultations, which were not factored into CSPI’s inspection frequency grade.
- **Critical Violations:** King County schools had an average 0.35 critical violations, second only to San Francisco schools which had an average of 0.31 violations. Despite the low number of critical violations, violations such as rodent presence in the schools were frequent.
- **Access:** King County tied with four other jurisdictions for second place in the ease of access category with a grade of 86%. King County posts inspection reports online and lists violations and a score for multiple inspections per school.
- **Food Code:** The County received a grade of 61% for the rigor of its food code. King County has adopted the Washington state food code, a modified version of the 2001 FDA Model Food Code. Despite the low score for the rigor of the food code, the Washington state food code stands out above other food codes because it requires that all workers are certified as food workers.

3. City of Houston, TX

Category	Grade	Range
Inspection Frequency	88%	28-100%
Critical Violations	72%	10-90%
Access to Information	71%	14-100%
Food Code	81%	31-81%
Overall Grade	78%	37-80%

- **Overall:** Houston ranked third overall with a grade of 78%.
- **Inspection Frequency:** Schools in Houston were visited an average of 1.75 times, which does not meet federal guidelines.
- **Critical Violations:** Houston schools had an average of 0.85 critical violations, receiving a grade of 72%. The most common violation, found in 4 of the 15 schools surveyed, was improper hot/cold holding temperatures.
- **Access:** Houston received an access to information grade of 71%. School inspection reports can be found online, or ordered from the jurisdiction directly for a small copy fee.
- **Food Code:** Houston received a food code grade of 81%, the highest grade earned in this category. However, Houston inspectors sometimes overlook temperature control violations by implementing a “four-hour rule,” allowing schools to keep food out for four hours before discarding it as unsafe rather than using thermometers to verify temperatures. This practice allows schools to pass inspections even if they do not adequately maintain cooking and holding temperatures.

4. Maricopa County, AZ

Category	Grade	Range
Inspection Frequency	100%	28-100%
Critical Violations	73%	10-90%
Access to Information	100%	14-100%
Food Code	45%	31-81%
Overall Grade	77%	37-80%

Maricopa County exceeds federal requirements for inspections – all schools are inspected biannually, and some are even inspected three times per year.

- **Overall:** Maricopa County was one of the top performing schools, with high marks in inspection frequency and information access. Maricopa County ranked fourth overall among schools with a grade of 77%.
- **Inspection Frequency:** Maricopa had the most inspections per year. While all schools were inspected twice per year, some schools were visited three times. Maricopa County conducts inspections while school is in session, which is necessary in order to observe actual food serving conditions. Some school districts conduct inspections even if school is not in session.
- **Critical Violations:** Maricopa schools had an average of 0.83 violations, earning a score of 73%. Common violations included pest control and low sanitizer concentration.
- **Access:** Maricopa County received the highest possible mark – 100% – due to the quality and ease of use of its online database of inspection reports.
- **Food Code:** Despite being exemplary in every other category, the County is well behind in its adoption of the most recent Food Code. It uses the 1999 Model Food Code and as a result, it received a low grade of 45% in the Food Code category.

5. City and County of Denver, CO

Category	Grade	Range
Inspection Frequency	93%	28-100%
Critical Violations	81%	10-90%
Access to Information	71%	14-100%
Food Code	58%	31-81%
Overall Grade	75%	37-80%

- **Overall:** Denver received an overall grade of 75%.
- **Inspection Frequency:** Denver schools were inspected an average of 1.86 times, which is less than required.
- **Critical Violations:** Schools in Denver had an average of 0.57 critical violations, earning a grade of 81%. The most frequent citation involved improper hot/cold holding temperatures.
- **Access:** Denver earned 71% for ease of access. An online database of inspection reports dating back to 2000 lists the degree of severity of violations and enforcement actions. Comments from the inspection reports are not listed.
- **Food Code:** Denver received a 58% for its food code. Denver has its own food code, which is separate from the Colorado food code. The Denver code consists of similar and sometimes stricter requirements than the Colorado code.

PASSING

6. Dekalb County, GA

Category	Grade	Range
Inspection Frequency	85%	28-100%
Critical Violations	57%	10-90%
Access to Information	86%	14-100%
Food Code	67%	31-81%
Overall Grade	73%	37-80%

- **Overall:** Dekalb County received an overall grade of 73%.
- **Inspection Frequency:** Schools are inspected an average of 1.7 times per year, less than required by federal regulations.
- **Critical Violations:** Cafeteria inspections found an average of 1.3 critical violations in Dekalb schools. For this, Dekalb County received a critical violations grade of 57%. The most common violation was improper holding temperatures.
- **Access:** Dekalb County earned a grade of 86% for ease of access to inspection report information. Dekalb County has a website listing the scores and critical violations of the most recent inspection for each school.
- **Food Code:** Dekalb County uses its own food code, which received a grade of 67%. The code should be commended on its prohibition of bare-hand contact with food.

7. Farmington Valley Health District, CT

Category	Grade	Range
Inspection Frequency	100%	28-100%
Critical Violations	73%	10-90%
Access to Information	64%	14-100%
Food Code	54%	31-81%
Overall Grade	72%	37-80%

- **Overall:** The Farmington Valley jurisdiction received an overall grade of 72%.
- **Inspection Frequency:** Farmington Valley schools are inspected an average of two times per year, as required.
- **Critical Violations:** Schools in this jurisdiction had an average of 0.8 critical violations, thus earning Farmington Valley a grade of 73% in this category. The most common citation was improper hot/cold holding temperatures.
- **Access:** Farmington Valley received a 64% for ease of access to information. Inspection scores are posted online dating back to 2004, but specific violations are not listed.
- **Food Code:** Farmington Valley uses the Connecticut Food code, based off the 1999 Model Food Code. This jurisdiction earned a grade of 54%.

8. State of Virginia

Category	Grade	Range
Inspection Frequency	88%	28-100%
Critical Violations	67%	10-90%
Access to Information	100%	14-100%
Food Code	46%	31-81%
Overall Grade	72%	37-80%

- **Overall:** Virginia received an overall grade of 72%.
- **Inspection Frequency:** Schools were inspected an average of 1.76 times per year, less than required by federal regulations.
- **Critical Violations:** Cafeteria inspections revealed an average of one critical violation per school, and earning a grade of 67%. The most common violations included improper holding temperatures (4 of the 20 schools) and low sanitizer concentrations (3 of the 20 schools).
- **Access:** Due to its thorough website and easily accessible inspection information, this jurisdiction received the highest possible mark with a 100%. The website lists inspection reports for the entire state, which are organized by county/city. Readers can also read inspectors' comments, critical violations, and non-critical violations.
- **Food Code:** Virginia received a grade of 46% for the rigor of its food code, which is based off the 1999 food code. Although some counties have adopted the 2005 Model Food Code, the State of Virginia was graded solely on its own code.

BARELY PASSING

9. Fulton County, GA

Category	Grade	Range
Inspection Frequency	100%	28-100%
Critical Violations	83%	10-90%
Access to Information	14%	14-100%
Food Code	65%	31-81%
Overall Grade	68%	37-80%

- **Overall:** Fulton County received an overall grade of 68%.
Inspection Frequency: Schools were inspected an average of two times per year, meeting federal requirements.
- **Critical Violations:** Inspectors found an average of 0.5 critical violations in Fulton County schools, earning a grade of 83%. Five of the 16 schools surveyed cited violations with hot food holding temperatures, all at less than 140°F.
- **Access:** Fulton County received its lowest grade in the area of access to information, with a 14%. Inspection reports were not available online and the county charges a fee for inspection reports requested by the public.
- **Food Code:** Fulton County received a grade 65% for the rigor of its food code. Fulton County is the only county in Georgia that uses its own food code in place of the Georgia state food code. Fulton County received a lower score than Dekalb County, GA because Fulton does not prohibit barehanded contact with food.

10. City of Dallas, TX

Category	Grade	Range
Inspection Frequency	80%	28-100%
Critical Violations	58%	10-90%
Access to Information	43%	14-100%
Food Code	80%	31-81%
Overall Grade	67%	37-80%

- **Overall:** Dallas received an overall grade of 67%.
- **Inspection Frequency:** Dallas schools are inspected an average of 1.6 times per year, less than required by law.
- **Critical Violations:** Inspectors found an average of 1.25 critical violations per school in Dallas. Dallas received a grade of 58% in this category. Frequent violations included equipment and utensil cleanliness as well as pest control.
- **Access:** Dallas received a grade of 43% for ease of access to inspection information. A city-sponsored website posts inspection grades but does not list critical violations. Grades are not available for all schools.
- **Food Code:** The City of Dallas uses the food code from the Texas Food Establishment Rules, and received a grade of 80% for the rigor of its food code.

11. City of Philadelphia, PA

Category	Grade	Range
Inspection Frequency	93%	28-100%
Critical Violations	58%	10-90%
Access to Information	86%	14-100%
Food Code	40%	31-81%
Overall Grade	67%	37-80%

- **Overall:** Philadelphia received an overall grade of 67%.
- **Inspection Frequency:** Philadelphia schools are inspected an average of 1.85 times per year, which is less than required.
- **Critical Violations:** Inspectors found an average of 1.25 critical violations per school, earning Philadelphia a grade of 58% in this category. Philadelphia schools had a high number of rodent infestations. Out of the twenty schools evaluated by CSPI, seven schools had mouse infestations.
- **Access:** Philadelphia received a grade of 86% for ease of access to inspection information. Inspection information is provided by the school district and the city. The inspections listings include comments and descriptions of critical and non-critical violations, with information from multiple inspections per school.
- **Food Code:** The Philadelphia food code is a combination of the state and local food codes, and received a grade of 40%.

12. City of Chicago, IL

Category	Grade	Range
Inspection Frequency	68%	28-100%
Critical Violations	75%	10-90%
Access to Information	71%	14-100%
Food Code	52%	31-81%
Overall Grade	65%	37-80%

Schools in Chicago fail an inspection if rodent droppings are found. This is a great rule that few other school jurisdictions follow.

- **Overall:** Chicago earned an overall grade of 65%.
- **Inspection Frequency:** Chicago schools were inspected an average of 1.36 times per year, which is less than required.
- **Critical Violations:** Schools in Chicago had an average of 0.75 critical violations, earning a grade of 75%. Inspectors use a very detailed inspection sheet, one of the best inspection sheets evaluated by CSPI. Chicago allows bare-hand contact with food and accepts inspections of schools which are not in session (e.g. on spring break, when food is not being served and food-serving conditions can not be evaluated).
- **Access:** Chicago earned a 71% for access to inspection report information. Inspection scores are posted online by the school system's Department of Operations, but the scores are not updated regularly.
- **Food Code:** The Chicago food code is based on the 1995 FDA Model Food Code, and earned a grade of 52% for the rigor of the code.

13. City and County of San Francisco, CA

Category	Grade	Range
Inspection Frequency	47%	28-100%
Critical Violations	90%	10-90%
Access to Information	71%	14-100%
Food Code	52%	31-81%
Overall Grade	64%	37-80%

- **Overall:** San Francisco schools earned a grade of 64%.
- **Inspection Frequency:** Schools were inspected an average of 0.93 times, well below federal regulations. No schools surveyed had been inspected more than once, and one school had not been inspected at all in a one-year period.
- **Critical Violations:** Inspectors found an average of 0.31 critical violations, which was the lowest violation rate in our survey. Either the schools are performing very well, despite the low inspection level, or the inspectors didn't conduct thorough inspections, something that we could not determine in our survey. Common violations were poor maintenance of handwashing stations, presence of rodent droppings, improper maintenance of freezers and peeling ceiling panels.
- **Access:** San Francisco earned a grade of 71% in this category. Information is posted online with critical and non-critical violations for the most recent inspections.
- **Food Code:** San Francisco schools follow the California food code, and earned a grade of 52% in this category. The code allows bare-hand contact with food.

14. Montgomery County, MD

Category	Grade	Range
Inspection Frequency	71%	28-100%
Critical Violations	85%	10-90%
Access to Information	71%	14-100%
Food Code	31%	31-81%
Overall Grade	63%	37-80%

- **Overall:** Montgomery County earned a grade of 63%.
- **Inspection Frequency:** Montgomery County Schools were inspected an average of 1.41 times.
- **Critical Violations:** Inspectors found an average of 0.45 critical violations, earning the County a grade of 85%. Seven out of twenty schools had holding temperature violations.
- **Access:** Montgomery County earned 71% in this category. The website, hosted on a county government site, can not be found easily on the Internet but does post school inspection information. The site posts violations and comments from inspections for all schools, as well as the actual inspection report for some schools.
- **Food Code:** The Montgomery County food code had the worst standards of all jurisdictions evaluated by CSPI, and earned a grade of 31%. The food code is based on the 1976 federally issued Model Foodservice Code. Despite this, the County squeaked through with a barely passing grade.

FAILING

15. Hillsborough County, FL

Category	Grade	Range
Inspection Frequency	100%	28-100%
Critical Violations	67%	10-90%
Access to Information	14%	14-100%
Food Code	51%	31-81%
Overall Grade	60%	37-80%

- **Overall:** Hillsborough County earned an overall score of 60%, because of poor access to inspection information and a substandard food code.
- **Inspection Frequency:** Schools are inspected an average of two times per year, which meets federal requirements.
- **Critical Violations:** Inspectors found an average of one critical violation in Hillsborough schools, earning the county a grade of 67% in this category. The most frequent violation was improper food labeling.
- **Access:** Hillsborough County performed poorly in the area of information access, earning a grade of 14%, because schools are not assigned inspection grades and because it did not post inspection information online. Interested parents should call the county, which supplied inspection reports promptly after CSPI's request.
- **Food Code:** Hillsborough County uses the Florida Health Code, which is based on the 2001 FDA Model Food Code, when inspecting schools. This food code received a grade of 51% for the rigor of the rules.

16. City of Minneapolis, MN

Category	Grade	Range
Inspection Frequency	100%	28-100%
Critical Violations	60%	10-90%
Access to Information	14%	14-100%
Food Code	56%	31-81%
Overall Grade	60%	37-80%

Despite not having inspection information online, Minneapolis was prompt and helpful in response to our requests for inspection reports.

- **Overall:** Minneapolis earned an overall score of 60%, because of poor access to inspection information.
- **Inspection Frequency:** Schools are inspected an average of two times per year, which meets federal regulations.
- **Critical Violations:** Inspectors found an average of 1.2 critical violations in Minneapolis schools, earning the city a grade of 60% in this category. Half of the schools surveyed by CSPI had citations due to mouse droppings.
- **Access:** Minneapolis performed poorly in the area of information access, earning a grade of 14%, because it did not have an online database of inspections scores, and did not assign inspection grades to schools.
- **Food Code:** Minneapolis follows the state food code, which is based on the 1995 FDA Model Food Code. The code received a grade of 56% for rigor. The code allows bare-hand contact with food.

17. Dade County, FL

Category	Grade	Range
Inspection Frequency	92%	28-100%
Critical Violations	73%	10-90%
Access to Information	14%	14-100%
Food Code	51%	31-81%
Overall Grade	59%	37-80%

- **Overall:** Dade County, one of the worst performing school jurisdictions, received an overall score of 59%.
- **Inspection Frequency:** Dade County schools were inspected an average of 1.83 times, less than required.
- **Critical Violations:** Inspectors found an average of 0.8 critical violations in Dade County schools receiving a grade of 73%. Frequent violations included broken equipment and unsuitable handwashing facilities and techniques.
- **Access:** Dade County performed poorly in the access category, earning 14%, because it did not post inspection information online, and does not give inspection grades.
- **Food Code:** Dade County uses the Florida Health Code, which is based on the 2001 FDA Model Food Code, when inspecting schools. This food code received a grade of 51% for the rigor of the rules.

18. State of Rhode Island

Category	Grade	Range
Inspection Frequency	48%	28-100%
Critical Violations	62%	10-90%
Access to Information	29%	14-100%
Food Code	70%	31-81%
Overall Grade	54%	37-80%

- **Overall:** Rhode Island, one of the worst performing school jurisdictions, received an overall score of 54%.
- **Inspection Frequency:** Schools were inspected an average of 0.95 times, well below that required by federal regulations.
- **Critical Violations:** Schools had an average of 1.15 critical violations, earning a grade of 62% in this category. Frequent violations included cross-contamination of clean and dirty utensils, improper holding temperatures, and vermin presence.
- **Access:** Rhode Island earned a grade of 29% for ease of access because there was no website of inspection information.
- **Food Code:** The Rhode Island state food code is used in inspecting schools. The state food code, which is based on the 1993 FDA food code, earned a grade of 70% for the rigor of the code.

19. District of Columbia

Category	Grade	Range
Inspection Frequency	28%	28-100%
Critical Violations	69%	10-90%
Access to Information	29%	14-100%
Food Code	53%	31-81%
Overall Grade	46%	37-80%

- **Overall:** The District of Columbia was the second worst performing school jurisdiction in CSPI's survey of schools, with an overall grade of 46%
- **Inspection Frequency:** Schools in the District were inspected an average of 0.56 times, which falls well below the federal requirement. Schools in Washington, D.C. are never inspected twice yearly, and inspectors are not required to give grades when inspecting schools.
- **Critical Violations:** D.C. schools had an average of 0.93 critical violations, earning the District a grade of 69% in this category. The most common violations concerned the upkeep and care of the facilities and equipment. Eight of the 20 schools surveyed cited violations with hot/cold hold units needing repair.
- **Access:** D.C. earned a grade of 29% for access because it does not post inspection information online.
- **Food Code:** The District's own food code, based on the 1999 FDA Model Food Code, earned 53% for rigor.

20. City of Hartford, CT

Category	Grade	Range
Inspection Frequency	50%	28-100%
Critical Violations	10%	10-90%
Access to Information	29%	14-100%
Food Code	54%	31-81%
Overall Grade	37%	37-80%

- **Overall:** Hartford was the worst performing school jurisdiction in CSPI's evaluation of school jurisdictions from around the county. Hartford had an overall grade of 37%, due to poor performance in all four areas evaluated by CSPI.
- **Inspection Frequency:** Hartford schools are inspected an average of one time per year. This does not fulfill federal requirements for biannual inspections.
- **Critical Violations:** Hartford had the highest number of critical violations, at 2.7 violations per school. Hartford earned a grade of 10% in this category. A common violation was the repair and cleanliness of the floor covering. Other common violations regarded handwashing stations and sanitation. Schools had many violations related to the maintenance and cleanliness of food contact and non-contact surfaces.
- **Access:** Hartford earned a grade of 29% for poor access to information on inspection report findings because there is no website posting inspection information.
- **Food Code:** Hartford uses the Connecticut state food code, which earned a grade of 54% for the rigor of its rules.

CHALLENGES TO CONDUCTING THE STUDY

The lack of uniformity among jurisdictions posed the biggest challenge to conducting research on school cafeteria safety. This resulted in a wide range of scores within the four key categories used to rank each of the jurisdictions. A look at the food code category demonstrates this problem.

Despite development of the Model Food Code at the federal level to provide consistent standards for states and local governments in inspecting food service establishments, this research showed that adoption of the code at the state and local level is inconsistent. None of the 20 jurisdictions CSPI surveyed has completely adopted the most recent federal guidelines, the 2005 FDA Model Food Code.

Virginia and certain other states have specific cities or counties that use the most recent Model Food Code but these standards have not been adopted by all parts of the state. Fort Worth has adopted the 2005 Model Food Code in part, but more must be done to completely update the city's food code. The jurisdiction with the highest score for the food code category, Houston, only received the top ranking because the food code has special language requiring adherence to stricter guidelines when available.¹¹

To address these inconsistencies, CSPI developed a method to uniformly compare the Food Codes used in each jurisdiction. This key category is the one that most likely resulted in the overall low scores for the jurisdictions surveyed. It is also the key category with implications that extend well beyond schools. The food code ranking would apply equally to inspections of restaurants, hospitals, and nursing homes.

For the Food Code and each of the other categories, some additional findings from individual jurisdictions follow:

Food Code

- In some states, individual counties use their own food code. For example, Fulton County is the only county in the state of Georgia that uses its own food code instead of the Georgia Food Code. However, Georgia is on the verge of adopting a new food code.
- Although Virginia uses the 1999 FDA Food Code, Arlington County has adopted the 2005 code and Fairfax County is planning to adopt the 2005 code.

Who Performs Inspections

- In some jurisdictions, several entities regulate food, making it difficult to determine where to go for inspection reports. For example, Florida regulates its schools through the health department and its restaurants through a separate department. The Florida agriculture department also regulates some food establishments.

¹¹ Texas uses the Texas Food Establishment Rules which recently adopted FDA's 2005 Model Food Code. The City of Houston has its own food code which contains language requiring the city to use the stricter of the two.

- In Minneapolis, some schools are only inspected when complaints are filed.
- King County in Washington State conducts cafeteria consultations in which inspectors observe and comment on food handling practices. No grade is given although their consultations are listed online.
- Some jurisdictions, like Chicago, conduct regular cafeteria inspections but inspections are sometimes conducted when schools are not in session. Inspectors are unable to observe food handling by food service staff or see the cafeteria during the course of its regular use.

Access to Information

- Chicago's Department of Public Health's Food Protection Division lists restaurant inspection scores on the Internet. However, the school food safety inspection reports are posted by the school system's Department of Operations. This database is not regularly updated and the results of only one inspection are posted.
- The District of Columbia started using a new inspection form in 2006. This form left grade-assignment optional and the optional grade was rarely given.
- Philadelphia only recently began posting inspection information on the Internet last spring. The city now posts school information alongside restaurants at the Environmental Health Department Site and also separately lists it on the Philadelphia Public School website.
- The City and County of San Francisco's health code requires that inspections are posted online. The online information includes the grade and critical and non-critical violations. But only the most recent inspection results are posted.

Inspectional Findings

- Dallas has a city-sponsored web page that posts inspection grades. But it does not post important information like critical violations. This page has grades for multiple inspections for a few schools but many others do not have grades at all.
- In Chicago, schools automatically fail inspections whenever rodent droppings are found. But according to the 2005 FDA Food Code and in some other jurisdictions, droppings (clear evidence of rodent infestation) are not considered critical violations.

RECOMMENDATIONS

I. What Can Parents Do?

Parents are the first line of defense against foodborne illness. Being vigilant both at home and at school is always important. At home, parents can practice and teach good food safety practices and monitor their child's health. Parents can also help by ensuring that the school is regularly inspected and by urging their local and state governments to adopt the latest food codes.

Checklist For the Home

- ✓ Encourage behaviors that ensure food safety, such as washing hands before meals, during food preparation, and after using the bathroom.
- ✓ If preparing a lunch for your child, ensure that it is properly packed and use a cold pack if necessary.
- ✓ Seek medical attention if your child suffers from gastrointestinal illness.
- ✓ Notify the school and your local health department if your child is diagnosed with a foodborne illness.

Checklist for the School

- ✓ Encourage school administrators to adopt appropriate food safety policies that comply with the law.
- ✓ Check to see if the inspection reports are posted in a visible location in the school.
- ✓ If the inspection report lists troubling violations, follow up with the school to ensure these are addressed immediately.
- ✓ Ask questions, especially about food handling that doesn't look right. Talk to the food service manager or the principal.
- ✓ If it has been more than seven months since the last cafeteria inspection, call the city or county public health department and request an inspection.

II. What Can Schools Do?

Schools and food service staff can play a critical role in protecting students from foodborne illness. School administrators should make sure that food service staff are properly trained on food safety policies and procedures.

<i>Checklist for School and Food Service Staff</i>	<ul style="list-style-type: none">✓ Develop risk-based food safety procedures.✓ Create a certification system for foodservice personnel to ensure that all food is properly stored, prepared and served.✓ Encourage family involvement in food safety education by hosting events such as a food safety week or sending information to parents about safe food handling procedures.✓ Incorporate food safety into the school crisis management plan. As part of this plan, school administrators should keep files of students who report gastrointestinal illness.✓ Work with the local health department to develop a mechanism to report suspected outbreaks and ensure that school cafeterias are inspected at least twice a year.✓ Request that inspections be done when the kitchen is operating and not during school holidays.✓ Use existing resources like the Action Guide provided by the National Coalition for Food Safe Schools (See <i>Appendix B</i>).
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III. What Can Local/State Government Do?

Local and state governments have a responsibility to help schools improve their food safety policies and practices.

<i>Checklist for Local & State Governments</i>	<ul style="list-style-type: none">✓ Help schools address and resolve food safety violations by funding necessary on-site improvements to prevent problems from reoccurring.✓ Inspect and monitor schools at least twice a year to ensure compliance with federal law.✓ Regularly adopt the most recent FDA Model Food Code to improve food safety in schools and restaurants.
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IV. What Can Congress Do?

In 2004, Congress changed the law governing school cafeteria inspections which resulted in additional duties being placed both on the schools and the state or local agencies that monitor cafeteria inspections. Congress can do more to promote food safety in school cafeterias.

<i>Checklist for Congress</i>	<ul style="list-style-type: none">✓ Ensure that state and local agencies are complying with changes in the law.✓ Provide the agencies responsible for monitoring cafeteria inspections with additional resources.✓ Require school districts to purchase foods according to the Agricultural Marketing Service's procurement specifications.✓ Require states participating in the National School Lunch Program to adopt the most up-to-date food code.
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CONCLUSION

Students have a right to safe and nutritious food when they eat in their school cafeteria. But the safety of school meals is being compromised because of inadequacies in school food safety systems. Making the grade when it comes to food safety just takes a few simple steps:

- Adopt the latest FDA Model Food Code.
- Enforce existing federal inspection requirements.
- Provide better monitoring of foodborne outbreaks in schools.
- Ensure more local food safety oversight.
- Update and improve websites to post inspection information.

Parents play an important role as well. They are on the frontline in the battle against foodborne illness. It is important that they are not only being vigilant in monitoring conditions in their child's school cafeteria, but are also advocates for better food safety policies. Protecting children from food poisoning is clearly an area where an ounce of prevention is worth a pound of cure.

APPENDIX A: Critical Violations

To standardize a review of inspection reports, as well as to uniformly evaluate the rigor of each food code, CSPI developed a list of standard critical violations that put students' health at risk. CSPI used food handling standards from the 2005 FDA Model Food Code, reports from the Centers for Disease Control and Prevention (CDC), and CSPI's *Dine at Your Own Risk* report. The critical violations used in analyzing jurisdictional food codes related to the following standards:

1. Person in charge demonstrates food safety knowledge
2. Proper use of reporting, restriction, and exclusion
3. Proper eating, drinking, or tobacco use
4. No discharge from eyes, nose, and mouth
5. Hands clean and properly washed
6. Bare hand contact appropriate
7. Adequate handwashing facilities
8. Handwashing facilities supplied
9. Food obtained from approved source
10. Food received at proper temperature
11. Food in good condition, safe, and unadulterated/separated and protected
12. Food contact surfaces clean
13. Proper cooling time and temperatures/methods
14. Proper thawing time and temperatures/methods
15. Proper cooking time and temperatures
16. Proper reheating procedures for hot hold
17. Proper cold hold time and temperatures
18. Proper hot hold time and temperatures
19. Proper date marking
20. Water and ice from approved source
21. Food properly labeled
22. Washing fruits and vegetables
23. Pasteurized eggs used where required
24. Consumer advisory for raw/undercooked food
25. Toxic substances properly identified, stored, and used
26. Thermometers provided and accurate
27. Insects, rodents, and animals not present
28. Contamination prevented during food preparation, storage, and display
29. Gloves used properly
30. Hot and cold water available, adequate pressure
31. Proper return/re-service of food
32. Discarding of unsafe food
33. Dish-washing and sanitation

APPENDIX B: Resources for Schools

Food Safe Schools

In an effort to prevent foodborne illness in our nation's schools The National Coalition for Food-Safe Schools (NCFSS), the Centers for Disease Control and Prevention (CDC), and the United States Department of Health and Human Services joined forces to create the Food-Safe Schools Action Plan.



Schools can order Safe-Food action toolkits from NCFSS to help ensure that their school is a Food-Safe zone. Action toolkits include:

- *Needs Assessment Worksheet*: A straightforward questionnaire to be completed by the Food-Safe Action team, with input from teachers, parents, students, and community members.
- *Road-Map for Success*
- *Information Sheets for Administrators, Teachers, Foodservice Professionals, Nurses, Local Health Department, Families, and Students*
- *DVD/VHS: How to become a Food-Safe School*
- *Handbook for School Nurses: Prevention, Detection, and Management of Foodborne Illness*, published by the American Nurses Foundation

To request more information on the Food-Safe School initiative or to request an Action Toolkit for your school, please contact the National Coalition for Food-Safe Schools.

National Coalition for
Food-Safe Schools
www.FoodSafeSchools.org



