



CASE STUDIES: SEATTLE, WA

How an Academic Partnership and Community Engagement Helped Design a Food Safety Rating System in Seattle & King County

Public Health – Seattle & King County (Public Health) is one of the largest metropolitan health departments in the United States (U.S.). Serving a resident population of 2.1 million people¹ speaking over 100 languages, Public Health's mission is to protect and improve the health and wellbeing of all people in King County.² Between 2000 and 2016 the county's population grew by 21%, with most of this growth coming from immigrants from all parts of Asia, Latin America, Eastern Europe, and Africa.³

THE PROBLEM

An inequitable and inconsistent food safety rating system.

Each year, millions of Americans get sick, hundreds of thousands are hospitalized, and thousands die as a result of foodborne diseases.⁴ To help with this issue, local governments support access to healthy food by ensuring adequate systems are in place to monitor the safety of the food within their jurisdictions. This is primarily done through the inspection of retail food establishments by local, county, or state public health departments. Increasingly, municipalities are also passing restaurant-grading ordinances that include the requirement that retail food establishments post food safety rating or sanitation grading information in a highly visible place, such as in restaurant windows.

These schemes are meant to provide consumers with simplified food safety information at the time of decision-making or purchase, and many large U.S. cities, including New York and Los Angeles, are already using restaurant grading systems. While these ordinances are gaining in popularity, researchers have called into question the efficacy of restaurant food safety grading in decreasing outbreaks of foodborne illness.^{5,6,7,8}

In addition, the equity impacts of restaurant grading on smaller food establishments, especially those serving culturally diverse populations, can be cause for concern.⁹



KEY DEMOGRAPHICS

Population: ¹	2.1 million
Land Area (in sq. mi):	2,307
Race/Ethnicity: ²	68.7% White 6.2% Black or African American 14.6% Asian 8.9% Hispanic/Latino (of any race)
Population by Age: ²	20.7% under 18 years 68.4% 18-64 years 10.9% 65 years and older
Education: ³	92.7% High school graduate or higher 50.3% Bachelor's degree or higher
Median Household Income: ³	\$83,571
Population in Poverty: ³	10.2% (compared to 12.2% statewide and 14.6% in the U.S. as a whole)

King County's Equity and Social Justice (ESJ) Initiative, launched in 2008 and codified in 2010, calls on local government to use an equity lens in policy and decision-making, organizational practices, and engagement with the community. To create a more prosperous and inclusive region for all, ESJ created an opportunity for Public Health to understand how those "who have been most disenfranchised—low-income residents, communities of color, and immigrants and refugees—could be prioritized in decisions and practices."¹⁰

THE POLICY SOLUTION

With county leadership supporting the Equity and Social Justice Initiative in all areas of decision-making, Public Health created an equitable food safety rating system—drawing on academic partnerships and community input.

BACKGROUND: Developments That Contributed To Policy Change

The Policy Development Process

Since 2001, detailed, publically accessible restaurant inspection reports have been available online through [Public Health's Food Protection Program](#). But, in 2014, after a series of outbreaks of foodborne illness within the county and growing consumer demand for easier access to food safety information,¹¹ the King County Board of Health tasked Public Health with implementing a restaurant sanitation grading system. The King County Board of Health operates as a committee of the larger municipal council. Comprised of elected officials, the Board of Health oversees the county's department of Public Health, which is charged with day-to-day policy implementation and administering the county's programs.

To design the King County food safety rating system, Public Health embarked on a multi-year journey with a variety of internal and external stakeholders to analyze restaurant inspection reports, work with food safety inspectors, and hear and respond to concerns from community members and restaurant owners.



Timeline of Events

2013

King County residents ask for more information about restaurant inspections and food safety amidst high-profile foodborne illness outbreaks.

2014

King County's Department of Public Health (Public Health) is tasked by the county's Board of Health with the development of a new food safety rating system.

2014

Public Health hosts meetings to hear from food safety experts and community members about how the food safety rating system can be improved.

2015

Public Health starts to develop a rating system based on community input and internally initiates a peer-review rating system to improve consistency among food inspectors.

2016

Public Health continues to engage with the community by initiating focus groups to define priorities for the restaurant rating system and develop an inclusive window sign. Public Health also promulgates an ordinance informed by community and stakeholder input to codify the food safety rating system changes.

2017

The Board of Health passes the food safety rating system ordinance and Public Health begins the preliminary stages of the policy rollout.

Academic Partnership

One of the key barriers in implementing an equitable food safety rating system was the concern among King County restaurant operators, especially owners of small, minority-owned restaurants, about a lack of consistency among the county's food safety inspectors. Knowing this was an underlying issue, in 2014 Public Health staff reached out to Dr. Daniel Ho, Stanford Law School professor and leading scholar in regulatory enforcement. This started an academic and public health agency partnership in collaboration with Stanford's Regulation, Evaluation, and Governance Lab that continues today.

Dr. Ho used his research on food safety rating systems in other locales to help King County develop and test a peer-review program that would ultimately determine how to improve consistency and reliability among food inspector ratings. Working together, the team designed a randomized control trial where they enrolled half of the food safety inspection staff in a four-month program. For one day out of the week, these staff were randomly paired and assigned to a set of establishments. The two-person teams visited food establishments within Public Health's jurisdiction, observed conditions, independently cited health code violations, and then came together to talk about where they diverged and why.

Using the findings from the trial, the team developed a series of training programs, remaining committed to the inclusive dimensions of the ESJ initiative. Supervisors, plan reviewers, and frontline inspectors were all randomized into the peer-review training program in an attempt to institute a culture of mutual learning and respect. Quantitative data showed that independent inspection scores went up as a result of the peer-review training, but the most remarkable outcome was that inspection scores increased largely for inspectors who generally awarded low scores, therefore improving the reliability of the inspection system and its consistency overall.¹² After this, King County worked to institute peer review for the staff as a whole, even before the food safety rating system ordinance was adopted.

Role of Community Engagement and Voices on the Ground

Public Health also involved restaurant operators and the community in developing the food safety rating system. They held multiple stakeholder meetings, and they put special effort into engaging owners of smaller establishments, especially immigrant and refugee families, to solicit feedback from diverse perspectives. Public Health consistently heard from these meetings that a food safety rating should not be based on a single inspection and that people wanted to know more than just whether a restaurant passed or failed an inspection.

As the signage for the food safety rating placards was developed, Public Health continued to solicit community feedback. They heard from owners of Asian food establishments that the use of yellow for the lowest category, "needs to improve," was concerning as owners felt the system was linking high food safety risk to skin color. This was an unexpected finding, but something that once identified was an easy fix for Public Health. Ultimately, the final signage design, in terms of color selections and facial expressions, as well as its simplicity, was informed by community input.

Another outcome of engaging the community in developing the food safety rating system was that it reinforced Public Health's need to address consistency among inspectors as well as the power dynamics between public health inspectors and food establishment operators. It prompted Public Health to use an equity lens not only in the development of the food safety rating system, but also in considering how to redesign food safety educational opportunities and communications materials for communities with limited English proficiency or no internet access.

THE FINAL POLICY

Ultimately, Public Health used data and community engagement to inform and develop a rating system that improved inspection quality and consistency, addressed equity concerns, and provided consumers with the food safety information they wanted. The ordinance that amended the county's existing food safety permitting law was adopted in January 2017 and addressed the following: 1) the definition of the food safety rating placard; 2) the requirement for posting window signs; and 3) the incremental penalty scale for failure to properly post the placards.¹³

Definition of the food safety rating placard

The final policy based a restaurant's rating on the last four routine inspections and only critical violations. Using the peer review evidence and years of retail food inspection reports, Dr. Ho recommended that Public Health base the system on "red" critical violations only (e.g., lack of hand washing, bare hand contact with ready-to-eat foods), and not "blue" noncritical violations (e.g., how establishments put away and use utensils), since noncritical violations were cited much more inconsistently among Public Health staff. Data analysis also informed the decision to use the average of red critical violation points from a restaurant's last four routine inspections to determine the rating. In addition, Public Health added an adjustment for the area in which the inspection was conducted in order to create a food safety disclosure system that has meaningful variation for patrons within a particular area.

The four food safety ratings that restaurants may now receive are as follows:



The requirement for posting placards in a window or other visible place

In the new Food Safety Rating System, restaurants are required to post their rating placards in an easily visible place. Because every restaurant is different, Public Health inspectors work with restaurants to find the best place to post the window sign in accordance with the code of the King County Board of Health, which requires that a sign is clearly visible to people passing by or entering the establishment.

The incremental penalty scale for noncompliance

If the food safety rating placard is not properly posted as required by the law, a penalty fee can be charged. Penalty fees are a percentage of a business' annual permit fee, which is more equitable than a flat fee because it is relative to the business size. The fee amount increases incrementally with each offense within a two-year period.

POLICY IMPACT

An in-depth evaluation of the impact of Public Health's food safety rating system is expected to be released soon. Just as in the policy development stage, Public Health continues to rely on data and community engagement to inform the effectiveness of the implementation and identify equity impacts on businesses, especially small, family, and immigrant-owned establishments struggling to maintain profitable businesses. The evaluation findings will guide possible changes that may need to be made to improve the system and ensure equity.

The feedback on the new system from the state Department of Health and most retail food establishments has been positive. Anecdotally, food establishments with businesses in multiple cities throughout Washington State have asked other health departments to follow Public Health's lead. Some food establishment operators have also shared that the rating system has increased motivation amongst their staff to follow food safety practices more consistently. Additionally, Public Health has found that posting food safety ratings has led to increased dialogue about food safety and provided an opportunity for community education. For example, the smiley-face signage is very child friendly, prompting families to talk about food safety practices as they dine out.

Public Health spearheaded the development and implementation of the food safety rating system, as local government, consumers, and the news media were all extremely engaged in the process. Although there have been a few hiccups in the roll out of the new policy, Public Health is undeterred in carrying out its mission to protect and improve the health of all people in Seattle and King County.

HOW THE DESIGN OF THE WINDOW SIGN EVOLVED BASED ON FEEDBACK

Public Health
Seattle & King County



"Make the sign's title more clear and simple."

We took out the magnifying glass and utensil graphic. We also changed the colored text to black.

"Make the Public Health logo larger to clearly mark the window sign as an official Public Health document."

We enlarged our logo to clearly mark the window sign as an official Public Health document.

FINAL DESIGN

ONLINE SURVEY
AND COMMUNITY
FAVORITE: OPTION C



"It is difficult to differentiate between the 'Needs Improvement' and 'Fair' categories."

We changed the "Needs to Improve" category to gray to make the sign more accessible to people who are color blind.

"Use emojis with more expressive faces."

We looked through many different emojis to find simple and emotive faces.

"The words 'text message' don't directly translate in some languages."

We added an image of a cell phone to make the action clear.

"The definition of 'Fair' and 'Needs to Improve' are unclear to many people. 'Okay' and 'Needs to Improve' are easier for people to understand."

We changed the category names to "Okay" and "Needs to Improve."

Courtesy: Public Health – Seattle & King County

LESSONS LEARNED

- **Health departments need time, resources, and strong leadership to do this right.** Developing an equitable food safety rating system involves incredible commitment on the part of health department leadership to invest the time and energy needed to engage staff and build trust with community members. For example, at one point in the process, Public Health had to advocate with the Board to Health for more time in order to roll out the food safety rating system changes in an equitable way. This extension of the timeline allowed Public Health to work with community members who were not accustomed to working with government or who may have felt excluded from the process.
- **Involve many partners and invest in long-term community relationships.** Public Health learned that working with as many partners as possible helped design a food safety rating system that was responsive to business owners' concerns and had the support of community members, which was critical in the roll out of the new system. In terms of equity, relationships that started around the food safety rating system have grown to include conversations around other policies that impact the most disenfranchised within the community.
- **Academic and agency collaborations can move evidence-based policy forward.** Public Health's collaboration with Dr. Ho helped create a more evidence-based, inclusive, food safety rating system. The results are not only important for other locales considering a similar system, but such a partnership may be useful for all levels of government to harness state-of-the-art evidence, to evaluate and craft better policies, and ultimately to improve citizen-government interactions and public trust.

ABOUT THE HEALTHY FOOD POLICY PROJECT

The HFPP identifies and elevates local laws that seek to promote access to healthy food while also contributing to strong local economies, an improved environment, and health equity, with a focus on socially disadvantaged and marginalized groups. HFPP is a multiyear collaboration of the Center for Agriculture and Food Systems at Vermont Law School, the Public Health Law Center at Mitchell Hamline School of Law, and the Rudd Center for Food Policy & Obesity at the University of Connecticut. This project is funded by the National Agricultural Library, Agricultural Research Service, U.S. Department of Agriculture.

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Notes

- 1 King County's Changing Demographics. Presentation by Chandler Felt, Demographer King County Office of Performance, Strategy and Budget Updated in 2016 from June 2013 County Council Presentation. Available at: <https://www.kingcounty.gov/depts/executive/performance-strategy-budget/regional-planning/Demographics.aspx>
- 2 Public Health – Seattle & King County: About Us. Available at: <https://www.kingcounty.gov/depts/health/about-us.aspx>
- 3 King County's Changing Demographics. Presentation by Chandler Felt, Demographer King County Office of Performance, Strategy and Budget Updated in 2016 from June 2013 County Council Presentation. Available at: <https://www.kingcounty.gov/depts/executive/performance-strategy-budget/regional-planning/Demographics.aspx>
- 4 CDC: Estimates of Food-Borne Illness in the United States. Available at: <https://www.cdc.gov/foodborneburden/2011-foodborne-estimates.html>
- 5 Boehnke, R.H., & Graham, C. (2000). International survey on public posting of restaurant inspection reports, and/or grade card posting schemes based upon health inspections. Region of Ottawa-Carleton Health Department Ed., Ottawa, Canada; Loewenstein G, Sunstein C, & Golman L. (2014). Disclosure: Psychology Changes Everything. The Annual Review of Economics. 6(1):391-419.
- 6 Wiant C.J. (1999). Scores, grades, and communicating about food safety. Journal of Environmental Health, 61(9), 37-39.
- 7 Ho D, Ashwood Z, & Handan-Nader C. (2019). New Evidence on Information Disclosure through Restaurant Hygiene Grading. American Economic Journal: Economic Policy (forthcoming).
- 8 Ho D. (2012) Fudging the Nudge: Information Disclosure and Restaurant Grading. Yale Law Journal. 122(3):574-688.
- 9 Ho D. (2017). Equity in Bureaucracy, Irvine Law Review 7: 401-52.
- 10 King County Equity and Social Justice Initiative. Available at: <https://kingcounty.gov/elected/executive/equity-social-justice/strategic-plan/equity-strategic-plan.aspx>
- 11 Food Safety News: Two-Time E. Coli Victim Pushes to Improve Seattle's Restaurant Grading System. Available at: <https://www.foodsafetynews.com/2013/08/two-time-e-coli-victim-pushes-to-improve-restaurant-grade-info/>
- 12 Ho, D. (2017). Does Peer Review Work? An Experiment of Experimentalism, Stanford Law Review 69(1): 1-119.
- 13 Additional documents and videos related to the promulgation of the regulation can be found here: <https://mkcclegisearch.kingcounty.gov/Legislation-Detail.aspx?ID=2914885&GUID=6EED2D0F-3971-4F76-8859-BDAA041113BB&Options=&Search>.

Key Demographics Table Notes

- ¹ Source: King County's Changing Demographics, 2016
- ² Source: 2010 U.S. Census Bureau, Quick Facts
- ³ Source: 2011-2015 American Community Survey 5-Year Profiles
- ⁴ Source: 2015 USDA/ERS Food Access Data

