Three Health Inspectors Walk Into a Bar

Utilizing peer review quality assurance practices to achieve consistency

AFDO Annual Conference
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Chipotle E. coli cases continue to rise in Washington

Originally published November 4, 2015 at 2:13 pm | Updated November 6, 2015 at 7:23 am

Salmonella cases tied to pork jump to 90

Originally published July 31, 2015 at 3:02 pm | Updated July 31, 2015 at 8:58 pm

Salmonella cases in Washington state

A team from the federal Centers for Disease Control and Prevention is coming to Washington state to help investigate an outbreak of salmonella infections apparently linked to eating pork. The number of cases has risen to 90.

 Counties with salmonella cases linked to eating pork

Source: Washington Department of Health   MARK NOWLIN / THE SEATTLE TIMES
Public Health is investigating a case of Listeria infection that is linked to two cases identified last year. In all three cases the patients with highly weakened immune systems consumed milkshakes at the University of Washington Medical Center.
“Had I known how poorly the restaurant performed, I wouldn’t have eaten there, and I would have never gotten sick.”

Create clear restaurant inspection ratings & improve access to ratings.
King County launches new Food Safety Rating System in January, 2017
Why does consistency matter?
When asked why consistency matters, here is what Food & Facilities staff said:

- **Confidence in peers and self**
- **Credibility**
- **Trust**
- **Fairness between facilities**
- **Data is Reliable**
- **Reduced friction**
- **Establishments know what to expect**
- **Public expects it**

Less gaming the system
Fudging the Nudge: Information Disclosure and Restaurant Grading

Daniel E. Ho

122 Yale L.J. 574 (2012).

One of the most promising regulatory currents consists of “targeted” disclosure: mandating simplified information disclosure at the time of decisionmaking to “nudge” parties along. Its poster child is restaurant sanitation grading. In principle, a simple posted letter grade (‘A’, ‘B’, or ‘C’) empowers consumers and properly incentivizes restaurateurs to reduce risks for foodborne illness. Yet empirical evidence of the efficacy of restaurant grading is sparse. This Article fills the void by studying over 700,000 health inspections of restaurants across ten jurisdictions, focusing on San Diego and New York. Despite grading’s great promise, we show that the regulatory design, implementation, and practice suffer from serious flaws; jurisdictions fudge more than nudge. In San Diego, grade inflation reigns. Nearly all restaurants receive ‘A’s. In New York, inspections exhibit little substantive consistency. A good score does not meaningfully predict cleanliness down the road. Unsurprisingly, New York’s implementation of letter grading in 2010 has not discernably reduced manifestations of foodborne illness. Perhaps worse, the system perversely shifts inspection resources away from higher health hazards to resolve grade disputes. These results have considerable implications, not only for food safety, but also for the institutional design of information disclosure.

Key findings:

• One inspection does not predict the next
• Grade inflation
• Consistency is a challenge across all forms of regulatory enforcement
Could conducting peer reviewed inspections to improve inspection quality and consistency?

- Ground rules
- A full day of inspections
- Inspections in neither inspector’s area
- Assign one inspector as lead, then alternate
- Full service establishments
Peer Review Process

Part 1
• Peer Review Inspections and group huddles
• Independent Inspections
• Qualitative findings

Part 2
• Huddle Process
Week 3

Peer Inspections / Huddles

Baseline

Deviation

0.00 0.02 0.04 0.06 0.08 0.10 0.12
0.00 0.02 0.04 0.06 0.08 0.10 0.12

Week 3
Week 4
Deviation
Baseline
Peer Inspections / Huddles

Week 5

Baseline vs. Deviation
Week 6

Peer Inspections / Huddles

Baseline

Deviation

0.00 0.02 0.04 0.06 0.08 0.10 0.12

0.00 0.02 0.04 0.06 0.08 0.10 0.12

Week 6
2. Peer Inspections / Huddles

Week 8
2. Peer Inspections / Huddles

Week 9

Baseline vs. Deviation

- Red dots represent baseline values.
- Blue dots represent deviation values.

The graph shows the distribution of baseline and deviation values for the week 9 data.
2. Peer Inspections / Huddles

Week 10
2. Peer Inspections / Huddles

Week 11

Baseline

Deviation

●

Baseline

0.00 0.02 0.04 0.06 0.08 0.10 0.12

0.00 0.02 0.04 0.06 0.08 0.10 0.12
2. Peer Inspections / Huddles

Week 13

Baseline Deviation

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2. Peer Inspections / Huddles

Week 14

Baseline Deviation
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Week 15

Deviation

Baseline

2. Peer Inspections / Huddles
2. Peer Inspections / Huddles

Week 16
2. Peer Inspections / Huddles

Week 16

Baseline

Deviation

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3. Independent Inspections

Week 1

Treatment

Control

Mean Red Points

Before After

Before After
3. Independent Inspections

Week 2

Treatment

Control

Week 2

Mean Red Points

Before After

Control

Before After
3. Independent Inspections

Week 3

Treatment

Control

Before After

0 5 10 15

Week 3
3. Independent Inspections

Week 4

Treatment

Control

Week 4
3. Independent Inspections

Week 5

Treatment

Control

Mean Red Points

Before After

Before After

Week 5
3. Independent Inspections

Week 6

Treatment

Mean Red Points
Before After
0 5 10 15

Control

Mean Red Points
Before After
0 5 10 15
3. Independent Inspections

Week 7

Treatment

Control

Week 7
3. Independent Inspections

Week 8

Treatment

Control

Mean Red Points

Before After

Week 8
3. Independent Inspections

Week 9

Treatment

Control

Week 9

Mean Red Points

Before

After

Before

After
3. Independent Inspections

Week 10

Treatment

Control

Mean Red Points

Before After

Before After
3. Independent Inspections

Week 11

Treatment

Control

Mean Red Points

Before After

Week 11
3. Independent Inspections

Week 12

Treatment

Control

Mean Red Points

Before After

Before After

Week 12
3. Independent Inspections

Week 13

Treatment

Control

Mean Red Points

Before After

Week 13
3. Independent Inspections

Week 14

Treatment

Control

Mean Red Points

Before

After

Week 14
3. Independent Inspections

Week 15

Treatment

Control

Mean Red Points

Before

After
3. Independent Inspections

Week 16

Treatment

Control

Mean Red Points

Before After

Before After

Week 16
3. Independent Inspections

Week 17

Treatment

Control

Mean Red Points

Before After

Before After

Week 17
3. Independent Inspections

Week 18

Treatment

Control

Mean Red Points

Before After

Before After

Week 18
3. Independent Inspections

Week 19

Treatment

Control

Mean Red Points

Before After

Before After
3. Independent Inspections

Week 20

Treatment

Control

Mean Red Points

Before After

Before After
3. Independent Inspections

Week 21

Treatment

Control

Mean Red Points
Before After
Before After

Week 21
3. Independent Inspections

Week 22

Treatment

Control

Mean Red Points

Before After

Before After

Week 22
3. Independent Inspections

Week 23

Treatment

Control
3. Independent Inspections

Week 24

Treatment

Control

Mean Red Points

Before After

Before After
3. Independent Inspections

Week 25

Treatment

Control

Mean Red Points

Before

After

Week 25
3. Independent Inspections

Week 25

<table>
<thead>
<tr>
<th></th>
<th>Before</th>
<th>After</th>
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</thead>
<tbody>
<tr>
<td>Treatment</td>
<td></td>
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<tr>
<td>Control</td>
<td></td>
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</tr>
</tbody>
</table>

**Mean Red Points**

Before After

Week 25
Qualitative Reactions

“It is good to know what tools people . . . have in their tool boxes. Some . . . have a hammer and that is all they use . . . A] conversation about the tools of the trade . . . will help.”
Qualitative Reactions

“[A] good inspector should know . . . cooking, HVAC, plumbing, people skills, psychology, project management, construction materials, mechanics, proper cleaning techniques, etc.”
“I learned shortcuts on the tablets!”
Qualitative Reactions - Unanticipated Benefits

“I learned a faster way to get to my area by taking a different road.”
“Not understanding a word . . . gave me a greater appreciation of ESL difficulties”
Qualitative Reactions

• “Some people think alike and others think differently. I find that I learn more from people who think differently if I am willing to listen.”

• “[M]y peer's mellow approach . . . will help diffuse confronting situations.”

• “[A]n imperative tool in helping me be a better inspector. . . It also helps me value my profession more, which is a godsend.”

• “Seeing the other person do their inspection helped highlight where my weaknesses are -- very interesting and is helping me to do better inspections!!! VERY COOL!!!”

• “Irrespective of study outcome, this project will have made me better and more effective at what I do.”
Takeaways

• Improved sense of **team cohesion** and sharing of knowledge

• Process for **identifying** challenges

• Increased **consistency**
WHAT DO WE WANT?
EVIDENCE-BASED CHANGE
WHEN DO WE WANT IT?
AFTER PEER REVIEW
Recreation of the Peer Review Huddle Process
Components of peer review learning

**Tools**
- WAC/Violations
  - What the code says

**Skills**
- Risk assessment
  - How to assess code/violations in full context

**Peer review inspections & surveys**
- Highlights common questions and areas where technical clarity is needed

**Peer review huddles**
- Provide technical clarity
- Discuss risk assessment

**Peer review outputs**
- Ability to identify a technical violation
- Define parameters for discretion
- Develop shared practices for assessing risk
Time As A Public Health Control Session Activity

• What is the key point of the highlighted section of the code?

• Does the inspector have discretion?

• If yes, what discretion does the inspector have?
The Five Required Concepts for Time as a Control

<table>
<thead>
<tr>
<th>Key Concept 1</th>
<th>Key Concept 2</th>
<th>Key Concept 3</th>
<th>Key Concept 4</th>
<th>Key Concept 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working Supply or RTE for Immediate</td>
<td>Written Procedures</td>
<td>Start Time (41°F or 135°F)</td>
<td>Food Marked</td>
<td>Disposition (cooked &amp; served, served, or discarded within 4 hours)</td>
</tr>
<tr>
<td>Consumption</td>
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<tr>
<td>Discretion</td>
<td>Discretion</td>
<td>Discretion</td>
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</tr>
<tr>
<td>No Discretion.</td>
<td>Some Discretion as to the detail</td>
<td>No Discretion on concept.</td>
<td>No Discretion on concept.</td>
<td>No Discretion.</td>
</tr>
<tr>
<td>May not use Time as a Control for other</td>
<td>provided in the procedures.</td>
<td></td>
<td></td>
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<tr>
<td>situations.</td>
<td></td>
<td>Some discretion on how to validate.</td>
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<td></td>
<td></td>
<td>Some discretion on how food is</td>
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<td>marked or identified.</td>
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</table>

Discretion
Scenario 1

Chicken is held in a hot case at 120°. The PIC says they are using the 4-hour rule. There are no written procedures. It is unclear what the start temperature of the chicken was. There is not a discard time marked.

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<th>Level of discretion and how to document</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
<td></td>
<td>No Discretion</td>
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<td></td>
<td>OUT</td>
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<td></td>
<td>Document in violation notes</td>
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</tbody>
</table>
Scenario 2
Various meats are fully cooked and then held on the counter next to prep table. All containers of meat are marked with a 4 hour discard time right after cooking. Upon order, meats are combined with other ingredients, reheated, and served. In what you observe, there are no meats left over. You ask the PIC what happens when there is meat leftover, and she tells you it is discarded. The PIC says they are using Time as a Control, but is not able to find the written procedures. This is the first time we have found them using Time as a Control.

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</thead>
<tbody>
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<td></td>
<td>Some Discretion</td>
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<td>Could mark as IN</td>
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<td></td>
<td>Include in notes need for written procedures by next inspection.</td>
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<td></td>
<td>Follow up during next inspection</td>
</tr>
</tbody>
</table>
Scenario 3
High school cafeteria has an unrefrigerated salad bar. Most of the potentially hazardous foods are taken directly from the walk-in cooler and placed into the salad bar. Canned beans that have been stored at room temperature are opened and placed into the salad bar. Foods are put out at 11 AM and lunch is over at noon. All left-over foods on salad bar are discarded. Written procedures are posted on the wall.

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<td>No Discretion</td>
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<tr>
<td>Follow up during next inspection</td>
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<td>Include in notes that food must start at correct temperature.</td>
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<tr>
<td>Out</td>
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</table>
Scenario 4

Packaged grated cheese is removed from refrigeration and marked with a 4 hour discard time. The cheese is placed next to the cook-line and used to make quesadillas as they are ordered. They make a lot of quesadillas – you see them go through a package and bring out another one from the refrigerator that they mark with a 4 hour discard time. Written procedures are available that reflect this process.

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</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mark in comments IN</td>
<td></td>
<td></td>
<td>Mark in comments appropriate TAAC process being used and is documented.</td>
<td>Some Discretion IN</td>
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</tbody>
</table>
Scenario 5

Wraps are prepared, packaged, and placed in the refrigerator overnight. In the morning, they are labeled with a 4 hour discard time and then placed on a grab-and-go table. Wraps that have exceeded the 4 hour time mark are still on the grab-and-go table. The PIC has written procedures available in the office.

<table>
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</tr>
</thead>
<tbody>
<tr>
<td></td>
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<td></td>
<td>No Discretion Out</td>
<td>Include in notes food not discarded as required.</td>
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<td>Follow up during next inspection</td>
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</table>
Questions or comments?

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## Staff time with in Peer Review

<table>
<thead>
<tr>
<th>Workforce Development</th>
<th>Prior professional development (based on 2080 hrs)</th>
<th>Integrating Peer review</th>
<th>Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Workforce development - Staff meetings (monthly all staff, 4x all staff)</td>
<td>40</td>
<td>36</td>
<td>Monthly staff meetings (3 hours - assumes some drive time)</td>
</tr>
<tr>
<td>Workforce development (committees - seek employee input on service improvement and provide leadership opportunities)</td>
<td>12</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Workforce development - standardization and quality assurance</td>
<td>48</td>
<td>96</td>
<td>Days conducting peer review</td>
</tr>
<tr>
<td>Workforce development - Training received (2 days DOH, 3 additional)</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
<tr>
<td>Workforce development - Providing training to other staff</td>
<td>5</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>145</strong></td>
<td><strong>189</strong></td>
<td><strong>44.00</strong></td>
</tr>
<tr>
<td><strong>Percentage of year</strong></td>
<td><strong>7%</strong></td>
<td><strong>9%</strong></td>
<td><strong>2%</strong></td>
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</tbody>
</table>