World Café: Food Safety Interventions

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Outline

• Background (Hannah)
• Group discussion
• Evidence review findings (Hannah)
• The story of the DineSafe program (Ron)
• Evidence-Informed Decision-Making for Food Safety in Ontario (Ray)
• Group Discussion
Purpose

• Present the preliminary findings from the NCCEH evidence reviews on the effectiveness of food safety interventions in food service establishments

• Share information and perspectives relevant to food safety in food service establishments
Ground Rules

• Speak up during the group discussion, we are interested in what you have to say

• We arrive with different roles, responsibilities and perspectives

• Everyone might not agree – that’s ok
Evidence-Informed Public Health

• “The process of distilling and disseminating the best available evidence from research, practice and experience and using that evidence to inform and improve public health policy and practice” (NCCMT 2011)

• National Collaborating Centres for Public Health
Evidence Informed Decision-Making Process

EIDM Process

1. Define the question
2. Search for evidence
3. Appraise the quality
4. Interpret
5. Assess applicability
NCCEH Food Safety Project

• How can health authorities most effectively allocate their resources to promote food safety in food service establishments?
Analysis of Public Policies (programs)

National Collaborating Centre for Healthy Public Policy, Morestin et al. 2010
NCCEH Food Safety Project

• How can health authorities most effectively allocate their resources to promote food safety in food service establishments?
<table>
<thead>
<tr>
<th>Type of Intervention</th>
<th>Examples</th>
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<tbody>
<tr>
<td>Inspection protocol</td>
<td>Frequency of inspection visits, inspection methodologies</td>
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<tr>
<td>Hazard Analysis of Critical Control Points (HACCP)</td>
<td>Mandatory creation and tracking of food safety/HACCP plan</td>
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<td>Risk-based inspection</td>
<td>Inspection frequency based on risk level of premise</td>
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<td>Field reporting technology</td>
<td>Electronic hand held device for inspection reporting</td>
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<td>Food handler training</td>
<td>Mandatory food handler certification for staff, certified kitchen manager training</td>
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<td>Education during inspection visits</td>
<td>Serving Safe Food Alberta</td>
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<td>Engineering and equipment use</td>
<td>Mandatory glove use, hand sanitization facilities</td>
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<tr>
<td>Managerial intervention</td>
<td>Sick leave/reporting policies, designated food handling assignments to reduce cross contamination</td>
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<tr>
<td>Disclosure program</td>
<td>Online database of inspection results, Grade card program, Dinesafe, Scores on the Doors</td>
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<td>Award and recognition for hygiene compliance</td>
<td>Elite smiley face, Elite star award</td>
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<td>Internal quality assurance</td>
<td>Quality assurance program for inspection visits</td>
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<td>Outbreak surveillance</td>
<td>Reportable Disease Information System [RDIS], Integrated Public Health Information System [IPHIS]</td>
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<td>Community partnerships</td>
<td>Partnership with ethnic restaurant associations</td>
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Disclosure Programs

• Informing members of the public about the results of food safety inspections

• Types of programs:
  – Local Health Unit Disclosure
  – Online Disclosure
  – Media Disclosure
  – On-site Food Premise Disclosure
Discussion Questions

• What are the objectives for your/a restaurant disclosure program?
• What do you think are the benefits of a restaurant disclosure system?
• What do you think are the challenges to restaurant disclosure?
• How do you think we can measure the impacts of a disclosure system?
Food4Thought

• Role of disclosure systems: transparency and consumer knowledge

• Role of public health: to prevent or reduce the burden of food-borne illness

Do these two objectives meet?

If so, how, and if not, how could they?

Paige Schell, Practicum Student
Ministry of Health and Long-Term Care, Ontario
Examples of Different Inspection Notices (or Sign) System

Letter Grades

Numerical Scores

Colour Cards

Statement Cards

Symbol

Award Schemes

Paige Schell, Practicum Student
Ministry of Health and Long-Term Care, Ontario
Figure 1: Logic model of disclosure systems on improving food safety

↑ Compliance in food hygiene
Raw restaurant inspection score
# and types of violations
Inspection data (N)
Health inspector survey (N + L)

↑ Public interest in restaurant hygiene
Customer awareness of scores
Consumer approval rate of policy
Survey, focus group, interviews (L)

↑ Motivation for improve food safety practice
# of operator initiated re-inspections
# of voluntary enrolments in training
Study data (N), Institution

Sustained ↑ in restaurant hygiene
Trends of inspection scores and/or violations
Inspection data (N)
Health inspector survey (N + L)

↑ Consumer knowledge to make informed dining choices
Consumer preference of dining choices
Consumer knowledge scores of food hygiene
Survey (N + L), study data (N)

↓ Food borne illness incidence
# of food borne illness related hospitalizations
# of reported cases of food borne illness
# of outbreaks
Hospital/Surveillance data (N)

↑ Economic incentive for good hygiene
Revenue data, based on hygiene grade
Cost-benefit evidence of improved hygiene
Linked database (N), study data (N)

↑ Consumer confidence in retail food safety
Consumer perceptions related food safety
# of customer complaints
Consumer survey (L),
Inspection data (N)

↑ Staff knowledge of food safety; improvement food
Knowledge of staff of food safety
# of handler related violations
Observation of food handler practice
Study data

Posting Scores of Inspection
# of premises with scores posted
Inspection score prior to policy
Inspection data (N)

Blue: Indicator
Red: Data Source/ Evidence
(N = quantitative, L = qualitative)
Major Stakeholders

enforcement to ensure equity among establishments
Methods

• Literature search (peer reviewed and grey literature)
• Review of document abstracts for inclusion
• Categorized type of indicators and analyzed results (Table 2)
• Limitations: Quality of evidence
Types of Indicators

• Hygiene performance
  – Raw inspector scores
  – # of critical violations

• Intervention (public health) outcomes
  – Measures of attitude, knowledge & behaviour
  – Intervention implementation
  – Reported illness (cases or outbreaks)

• Other: Stakeholders’ perceived effectiveness, program acceptability
Findings

• 12 documents: 8 peer reviewed; 4 grey lit

• No articles about online disclosure programs

• 1 peer reviewed article about disclosure through the media

• All others on on-site disclosure programs
The “evidence”

- Improvements of hygiene scores/grades
- Public health outcomes (LA & Toronto)
- Consumer confidence
- Cost and capacity
The “evidence” (2)

• Acceptability
• Equity
• Unintended effects
Discussion – Disclosure Programs

- Transparency and awareness
- Engagement and consultation
- Compliance
- Public health benefit (?)
- Resource constraints
Ron
Ray
Discussion Questions (1)

• What are your criteria for food safety programming “success”?

• What type of indicators/data are health authorities currently collecting? What information does the industry collect?
Discussion Questions (2)

• What format (e.g. paper; excel databases) is the data currently available? (Is the historical data available? In what format?)

• How are indicator data currently being used? How could we improve use of monitoring and evaluation indicators?

• How could we facilitate data sharing, analysis, research and evaluation?
Other Questions

• How do authorities with disclosure programs evaluate the display of grade cards on food premises? Do they require the food premise to correct any display violations or let it go?
Other Questions

• Are we currently considering industry perspectives in the decision making process? How can we improve the process?
• How well do you think hygiene scores communicate risk to members of the public?
Connections for Research and Practice

- **PHIRNET** – Population Health Intervention Research Network

- Student Practicum and Research
Thank You

Questions?
Comments?

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www.ncceh.ca | www.ccnse.ca

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