

Employees and Food Safety Training: A Survey of Colorado Restaurant Managers

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Introduction

- The CSRESS-USDA Food Safety and Quality National Initiative funded this study in order to:
 - Target food handler education programs for high risk and hard-to-reach clientele





Introduction

- In order to meet this objective, this study assessed the following:
 - Importance managers placed on safe food handling skills
 - Importance of public image for food service managers
 - Interest in integrating food safety training into welfare-to-work job training programs
 - Labor market implications of food safety training for these food service managers
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Background


- The Centers for Disease Control and Prevention (CDC) estimate that approximately:
 - 76 million cases of food borne illness result in 325,000 hospitalizations and 5,000 deaths annually
 - The yearly cost of lost productivity alone is estimated at between \$20 and \$40 billion in the U.S. (FDA 1997)
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Background


- The FDA's report entitled *FDA Retail Food Program Database of Food borne Illness Risk Factors** (2000) presents data to establish a national baseline of food borne illness risk factors such as:
 - Food from unsafe sources
 - Inadequate cooking
 - Improper holding temperature
 - Contaminated equipment
 - Poor personal hygiene

*FDA Retail Food Program Database of Food Borne Illness Risk Factors (2000) national baseline of food borne illness risk factors





Background


- Further, within each of these categories, the FDA recorded “out of compliance” observations of more than 40 percent in both fast-food and full-service restaurants for:
 - Cold holding at 41 degrees F or below
 - Ready-to-eat foods held cold at 41 degrees F or below
 - Commercially processed foods date-marked
 - Surfaces, utensils cleaned and sanitized
 - Proper hand washing
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Colorado Welfare-to Work Program

- Offers potential employers subsidies and tax credits and seeks to provide training and skills, which are in high demand among Colorado employers



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- One assumption motivating this study was
 - Employers may be reluctant to hire persons on welfare because of a lack of the requisite skills
 - Thus it was important to be able to provide a food safety education certificate program for welfare-to-work participants





Methodology

- A survey was designed to indirectly determine the value of food safety programs and specific skills or knowledge associated with the training






The Survey

- The survey asked questions with respect to
 - The company's operations and food safety training practices
 - Basic description of the type of food service
 - Use of external and internal training programs
 - Financial incentives to employees trained in food safety
 - Overall happiness with training received on several food safety issues
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The Survey

- In early 2000, 500 surveys were mailed to restaurant managers in Colorado, Wyoming, and Montana
 - The sample was drawn from
 - Former ServSafe participants restaurant association mailing lists and yellow pages.
 - The resulting response rate was 28 percent
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Results

- Among respondents:
 - 43% managed full-service restaurants
 - 33% managed limited service restaurants
 - The rest worked with a variety of types of establishments, including cafeterias, catering, and bars/taverns
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- On average, respondents' businesses served
 - 408 guests per day
 - Employed 18.8 full and 15.3 part-time employees at their locations
 - Approximately 45% of the meals were served at lunch, 32% at dinner, and the rest at breakfast and other times
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Results

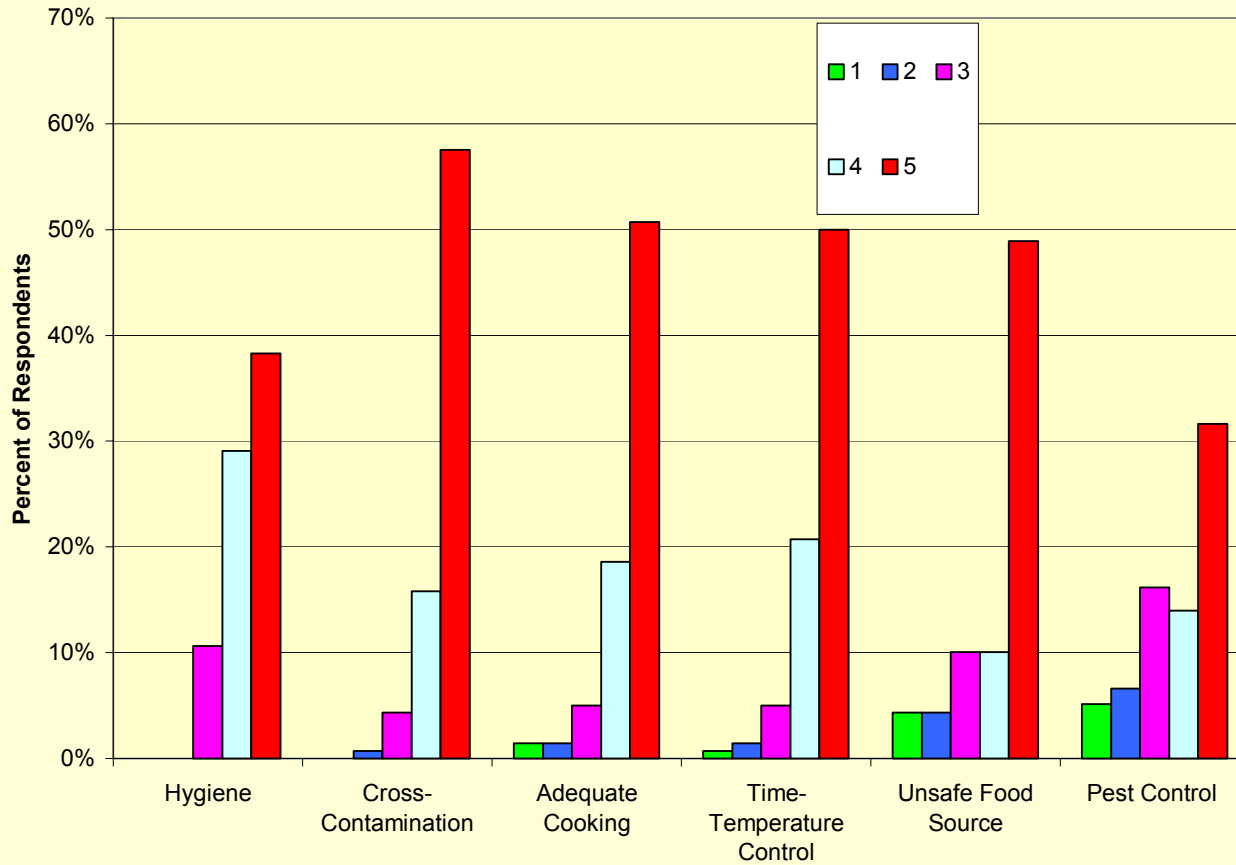
- Respondents were asked to rank the level of attention and time spent on the following food safety issues:
 - Personal hygiene
 - Avoiding cross-contamination
 - Adequate cooking
 - Time-temperature control
 - Avoiding food from unsafe sources
 - Pest control management
 - Time
- 



Results

- A ranking scale of 1 to 5 was used with 5 representing the most attention or time spent on any one factor
 - As expected, food service managers ranked all food safety skills as high
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Ranking of Food Safety Issues





Results

- Almost 60 percent of the managers ranked cross-contamination highest and pest control training received the lowest ranking
 - Only about 31 percent of respondents rated this factor a 5 while 5 percent assigned pest control training an importance value of 1





Results


- Managers were asked how satisfied they were with the training that they received for these issues from ServSafe or other sources






Training Satisfaction and Willingness to Pay

Variable	Yes
Willing to Hire Welfare-to-Work Trainees	93%
Likely to Hire Previously Trained Workers	72%
Decrease of Safety Concerns	56%
Bring in Trained Worker at Higher Level	54%
Pay a Higher Beginning Salary	39%
Give Pay Raise for Attending a Training	20%
Promote Worker after Attending a Training	20%
Pay a Signing Bonus	14%








Results

- Many were very satisfied with 56 percent (using a likert scale of 1-5) believing that the training had actually decreased food safety concerns for their business
 - 20 percent would give raises to workers who attended the training
 - 20 percent would promote employees based on their participation in food safety training
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Results

- When asked what they would be willing to pay for training programs
 - 79 percent of managers said that they would be willing to pay some dollar amount ranging anywhere from \$5 to \$150
 - The largest percentage (29 percent) were willing to pay between \$11-\$25
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- The breakdown of premiums shows that 20 percent of these managers were willing to pay at least \$0.51 to \$1.00 in additional hourly wages
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Willingness to Pay Fees for Training Programs

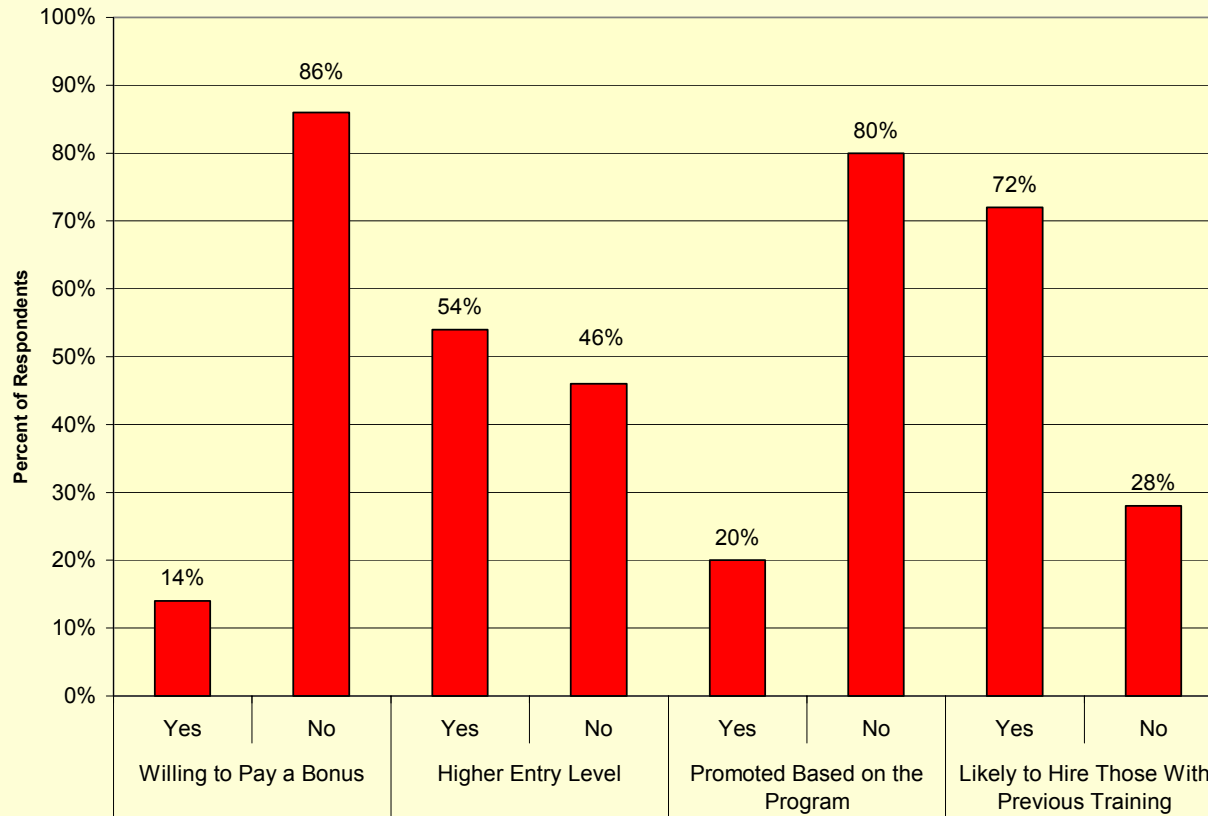
Fee For Training Program	Percent	Hourly Wage Premium	Percent
\$0	21%	\$0	34%
\$5-10	14%	\$0.05-0.25	9%
\$11-15	29%	\$0.26-0.50	27%
\$26-50	17%	\$0.51-1.00	20%
\$51-100	12%	\$1.01-1.50	3%
\$101-150	7%	\$1.51-2.00	4%
		Over \$2.00	3%



Results


- Managers were also asked if they were willing to pay signing bonuses to trained workers
 - Only 14 percent said yes
 - 54 percent of managers say they might hire those trained in food safety at a higher level
 - 72 percent were more likely hire those individuals with previous training
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Value of Training





Results

- Managers of full service restaurants indicated
 - Greater willingness to pay a higher starting salary to workers with previous food safety training than did managers of limited service restaurants
 - (75% vs. 54%)
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- 40% of managers from full service restaurants were willing to pay
 - At least \$0.50 more per hour compared to only 20% of managers of limited service restaurants






Results

- 80% of managers of full service restaurants indicated some willingness to pay for food safety training
 - Compared to 69% of limited service restaurant managers



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- 42% of full service restaurant managers indicated willingness to pay at least \$26 for food safety training
 - Compared to 21% of limited service restaurant managers







Results

- These restaurant types were almost indistinguishable
 - In their ratings on the importance of food safety issues and satisfaction with past food safety training



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- These findings would indicate that
 - The importance of food safety issues and satisfaction with food safety training do not vary by location and type of restaurant
 - But willingness on the part of restaurants to pay both directly and indirectly for food safety training does vary
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Results

- Yet many managers were unwilling to pay bonuses to workers with training were still willing to pay for the training sessions




Managers Not Willing to Pay a Hiring Bonus but Willing to Pay for a Training Session

Amount of Fee Willing to Pay	Percent
\$0	22%
\$5-10	16%
\$11-15	31%
\$26-50	14%
\$51-100	12%
\$101-150	5%




Results

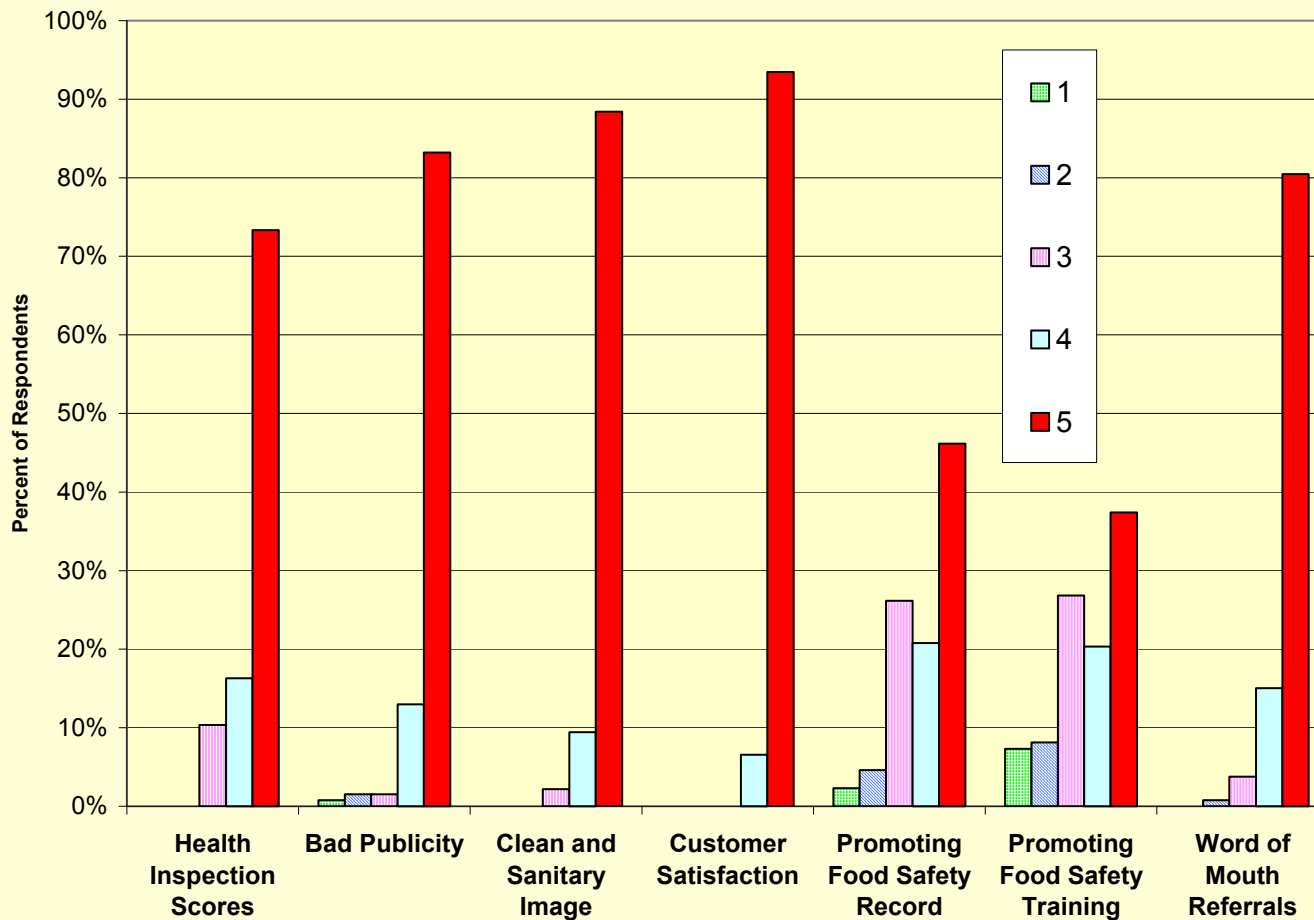
- We next asked managers to rate the importance of different factors that affected the public image of their business. These included:
 - Health inspection scores
 - Bad publicity
 - Clean and sanitary image
 - Customer satisfaction
 - Promoting food safety record to customers
 - Promoting food safety training to customers
 - Word-of-mouth referrals
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Results

- Respondents ranked all factors relatively high. The highest ranked concerns across the sample were:
 - Customer satisfaction
 - The desire to be known for a clean and sanitary image
 - Concern about bad publicity
 - Word-of-mouth referrals
 - Health inspection scores
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Importance of Various Factors on Public Image of Business





Conclusions


- Employers understand the positive and necessary value of safety training programs
 - They emphasize training as important employment qualification but few have hired trained workers
 - Most managers would choose training incentives that require no ready outlays of cash payments
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Conclusions

- Based on interviews with workforce centers around the state, however, hiring activity among food managers has been minimal
 - This shows a discrepancy between what employers say and what they may do




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- This may be explained by the challenges presented by shift work in this industry
 - Research shows that single mothers have been most likely to take advantage of increased minimum wages and welfare reform





Conclusions

- Alternatively, concerns about reliability and “soft work skills” may prevent food service managers from hiring welfare recipients
 - A National Restaurant Association policy brief (1997) noted that state welfare-reform agencies had only begun to address such key issues as:
 - The lack of available childcare
 - Health care
 - Transportation
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Conclusions

- Few welfare recipients saw food service as an attractive employment option to aspire to
 - As evidenced by the lack of interest in food safety training offered through Colorado workforce offices through this project






● There was anecdotal evidence:

- That training in hard skills that were perceived to have greater value in the labor market were more likely to draw trainees than food safety skills





Conclusions

- Indirectly, this study found that pre-employment food safety training may not be valued by labor market participants
 - Value may be created once a worker is on the job and managers communicate the need for stronger food handling skills
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Conclusions

- These findings should motivate:
 - The implicit value of food safety training
 - Help to find more ways to encourage employers to directly support food safety training through training fees or the pay incentives that they say they are willing to provide
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