

Safe Food Handling Training for Restaurant Employees: Does Phrasing Make a Difference?

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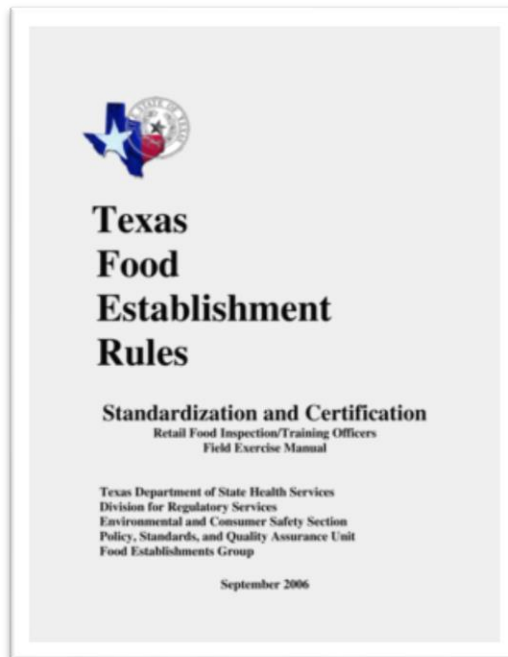
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Texas Food Establishment Rules

- Statutes and Laws for all food establishments



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Food Safety in Texas

What's required:

“all food employees [to] successfully complete an accredited food handler training course, within 60 days of employment” (Texas Food Establishment Rules, 2015).

Effective on September 1, 2016

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Food Safety in Texas

What it means:

Food employee = “an individual working with unpackaged food, food equipment or utensils, or food-contact surfaces” (TFER 2015)

Applies to all:

- cooks, servers, janitors or custodial workers, dishwashers and runners

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Complications to New Texas Legislation

How does it affect our industry?

57% of entry-level workers in a restaurant
have little to no level of education

(Shierholz, 2014)

** An employee CAN NOT work in the food establishment until
getting certified*

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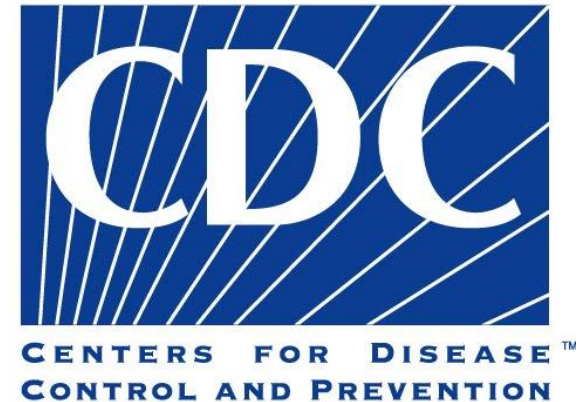
How long should you scrub your hands for?

- A) 20 seconds
- B) 10 seconds
- C) 15 seconds
- D) 10-15 seconds ← Correct answer

Why is food safety training important?

Centers for Disease Control and Prevention (CDC) estimates that each year:

- 48 million people sick
- 128,000 hospitalized
- 3,000 die



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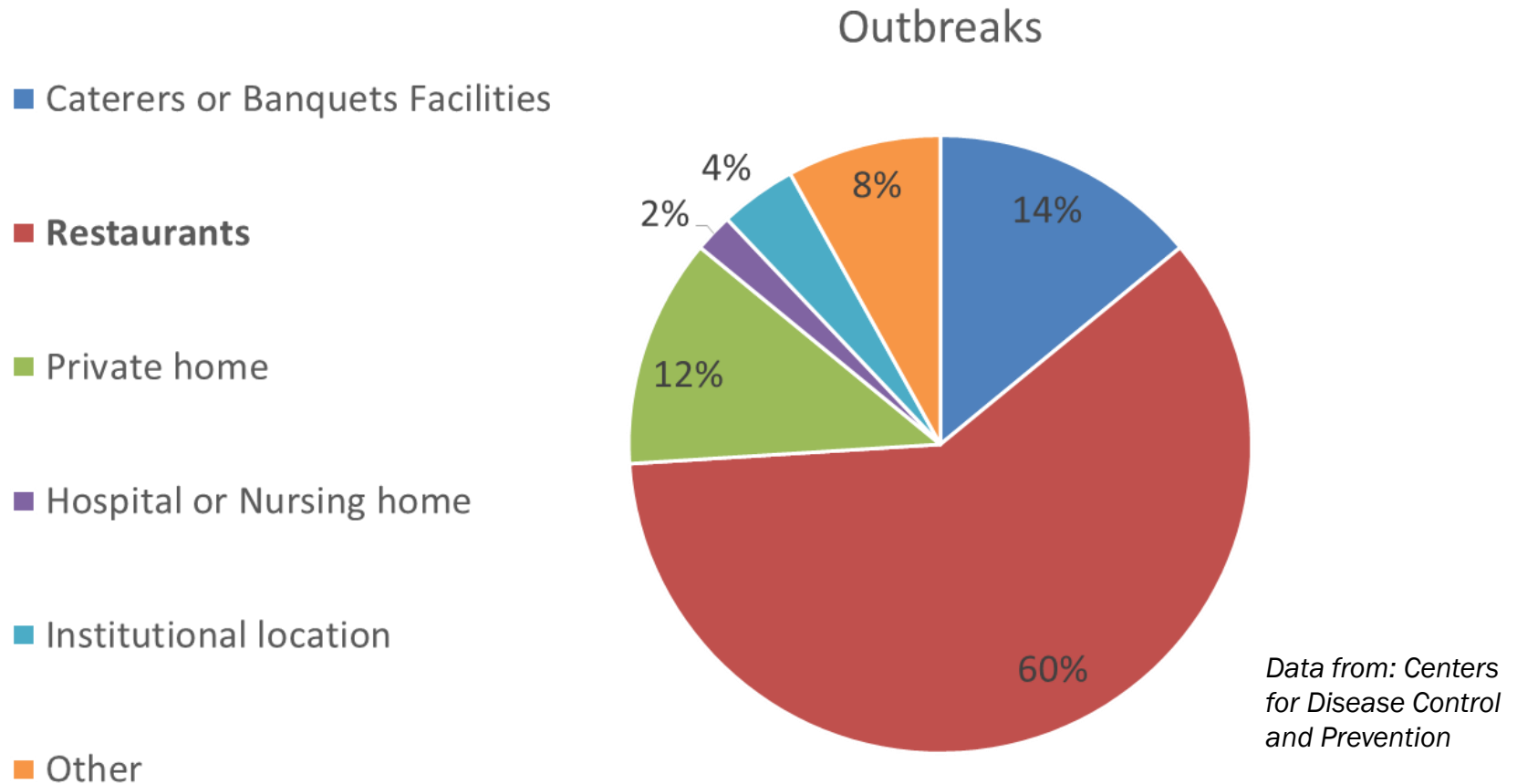
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Why is food safety training important?



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- This infers that the hospitality industry plays a significant role in foodborne illnesses and identifying **effective prevention methods** and applications are still at large.

60% of foodborne illnesses from restaurants

14% of foodborne illnesses from catering/banquets
facilities =

Hospitality industry = **~75%**

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Is mandatory food safety training effective?

- Food handler **violations decreased by** nearly **33%** after receiving mandatory food safety training (Averett et al., 2011)
- Food handler knowledge **showed** an overall **significant improvement** in food safety behaviors after food safety training was received (Park et al., 2010)

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Current Literature



What about the
examination delivery
methods?

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Methodology

- Between-subjects experimental design
- New hires taking food handler training course
- Participants were randomly selected to receive either test A or B

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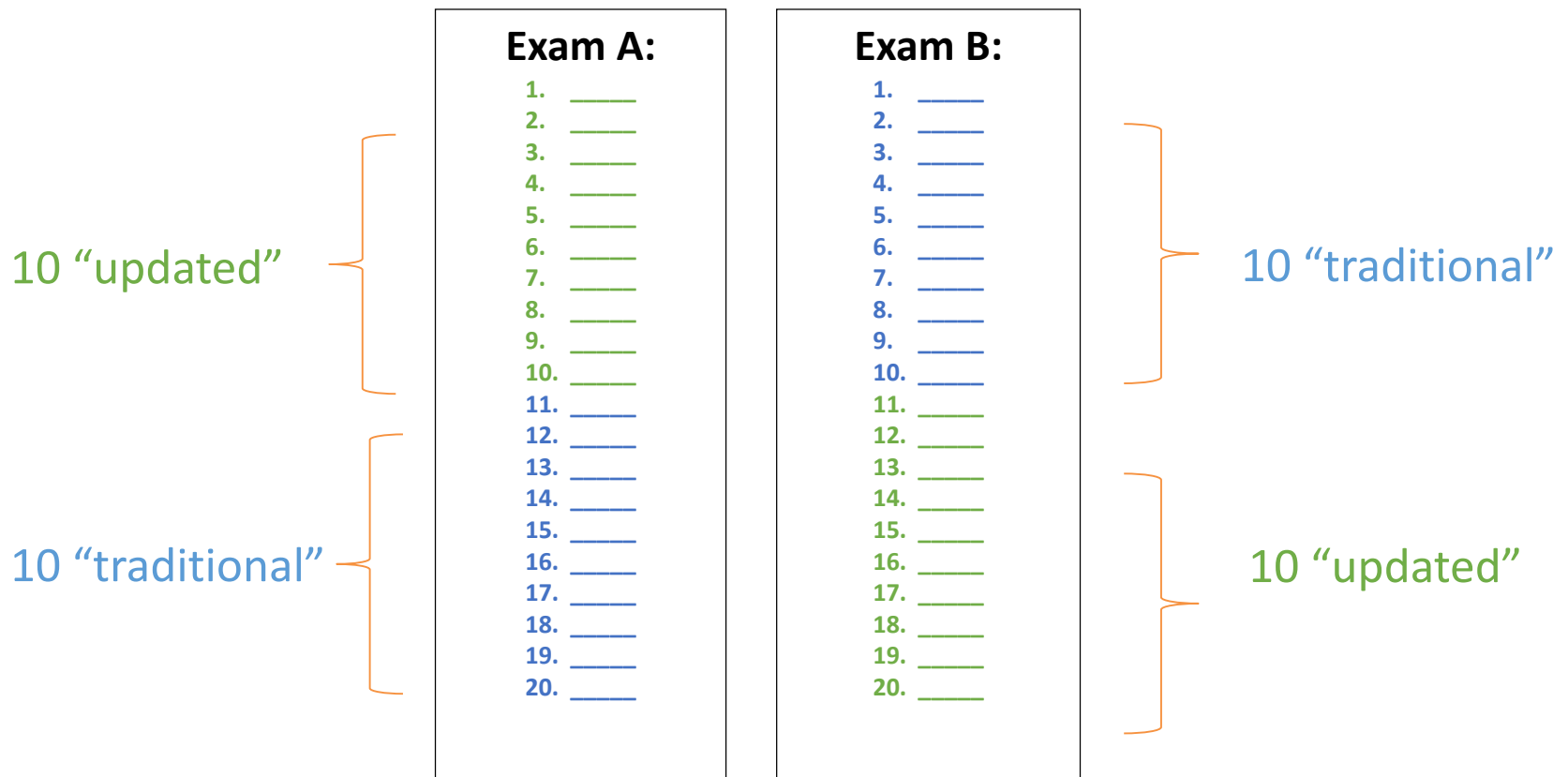
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- Between-subjects experimental design



Methodology

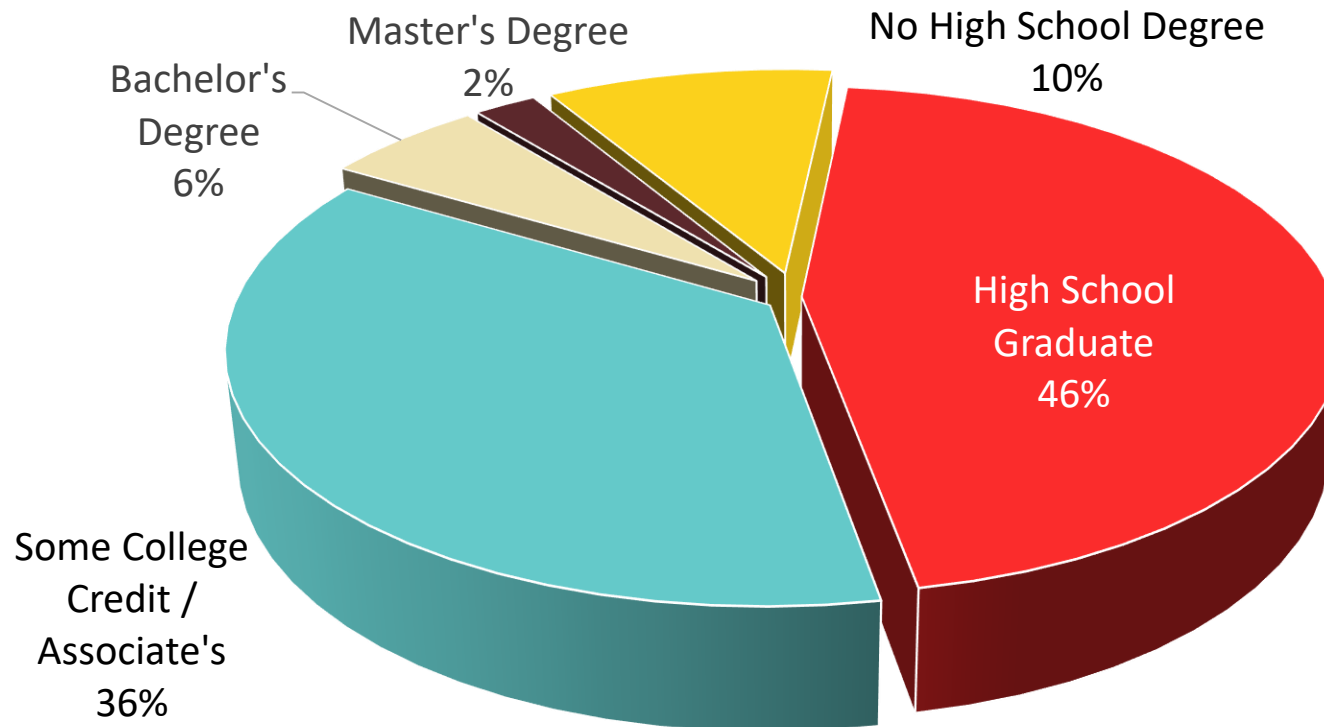
- Content of exam:
 - **CDC Risk Factor Categories**
 - Cleaning and Sanitation (CS)
 - Time and Temperature (TT)
 - Personal Hygiene (PH)
 - Cross-contamination and Allergens (CCA)
 - Basic Food Safety (BFS)

Hypothesis

- H_0 :
 - Pass all (no significant difference between both versions—answered most correctly for both versions)
 - Fail both (no significant difference between both versions—answered most incorrectly for both versions)
- H_a : Participants will answer the majority of the “updated” version of the exam correctly, while incorrectly answering the majority of the “traditional” version

Demographics:

n = 89



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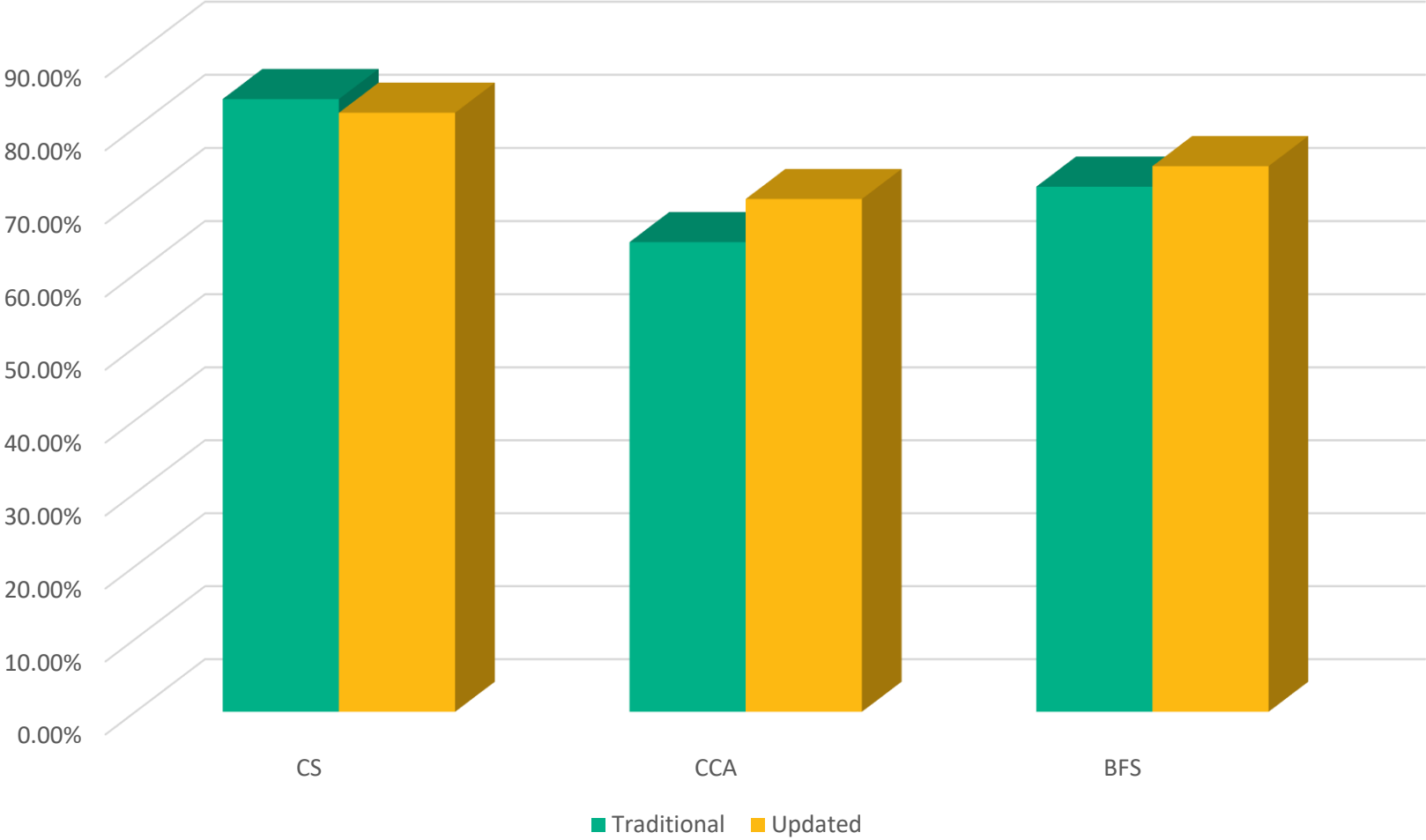


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Results

- Results indicate that the phrasing of food handlers' exam does not have a significant difference on the performance on the majority of the dependent variables (BFS, CCA, and CS).
- This finding suggests that the phrasing (traditional vs. updated) does not make a difference in the overall performance (grade) of food handlers' exam.

Exam performance comparison



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Treatment effects of phrasing on performance

CDC Risk Factor Category	F-value
Cleaning and Sanitation (CS)	0.090
Time and Temperature (TT)	3.482*
Personal Hygiene (PH)	1.221*
Cross-contamination and Allergens (CCA)	0.033
Basic Food Safety (BFS)	0.000

*Note: * $p < .05$, $df = 1$*

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Implications and Future Research

- The sample taken from food establishments located either inside or nearby a University.
 - 82% had at least a HS diploma
 - Students working at their campus?
- These results may not be generalized to all food employees.
- This study is currently being expanded to include a more representative group of food employees in the naturally diverse work force of the food industry.

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Thank you!

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