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FOOD SAFETY 101 LEVERAGING TECHNOLOGY



2020 FOOD SAFETY AND PUBLIC HEALTH MATTERS WEBINAR SERIES

FOOD SAFETY 101

The Essentials



March

Warewash Program



June

Health Inspections



September

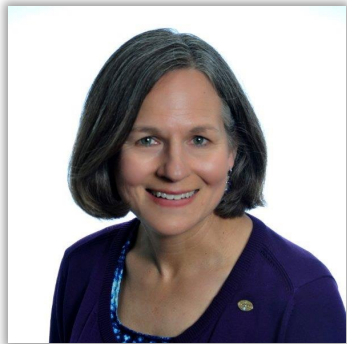
Leveraging Technology



December

➤ Available on-demand at [Ecolab.com](https://www.ecolab.com)

MEET ECOLAB



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FOOD SAFETY 101: LEVERAGING TECHNOLOGY

AGENDA

- Food Safety Issues are Real and Significant
- We Need Better Ways to Help Manage Them
- Digital Approaches Can help
- Q&A



FOODBORNE ILLNESS ANNUAL ESTIMATES



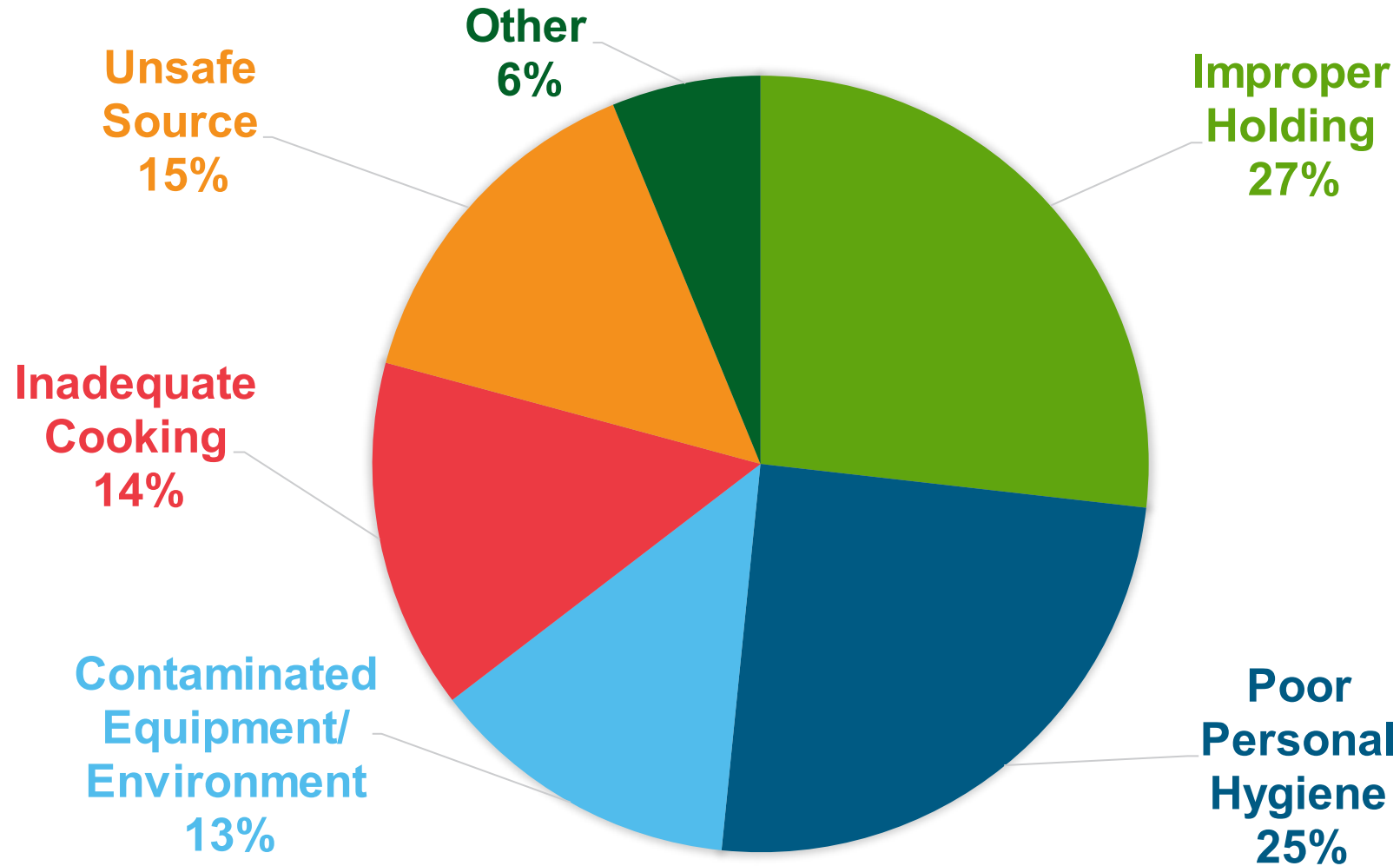
Global foodborne illness estimate: 600 million cases and 420,000 deaths

HDI INSIGHTS: TOP FINDINGS

Top 5 Health Department Citations on Routine Inspections Conducted 2020 YTD

Rank	Question #	Question Text	Criticality	% Out of Compliance
1	53	Physical facilities installed, maintained and clean	GRP	27.4%
2	47	Nonfood-contact surfaces clean	GRP	21.9%
3	45	Food and nonfood-contact surfaces cleanable, properly designed, constructed and used	GRP	20.7%
4	14	Food-contact surfaces: cleaned and sanitized	FBI	16.3%
5	8	Adequate handwashing sinks properly supplied and accessible	FBI	13.2%

CONTRIBUTING FACTORS TO FOODBORNE ILLNESS

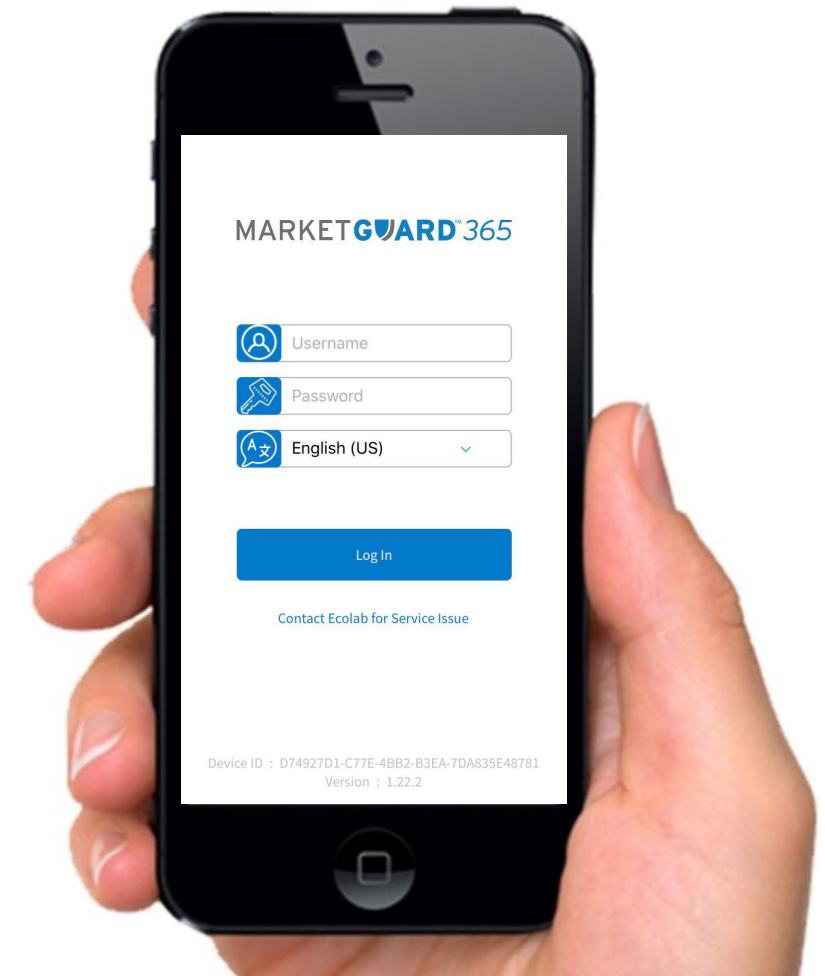


Source: CDC 2018 https://www.cdc.gov/fdoss/pdf/2016_FoodBorneOutbreaks_508.pdf

DIGITAL FOOD SAFETY

MARKET**GUARD**™ 365

- Customized checklists and corrective actions
 - Temperature logs
 - Cleaning and sanitation checks
 - Quality checks
- Corrective actions to the restaurant
- Push notifications to restaurant level
- Hierarchies for data control
- Training materials in the app
- Dashboards of store food safety metrics



CREATING VALUE

Improved compliance, efficiency savings



Accessible and
defendable data



85% of store associates acknowledge
paper checklists don't get **completed
correctly**



Time savings



75% reduction in the **number of checklists**
2 hours per week spent printing,
storing and replacing paper logs



Supplies savings

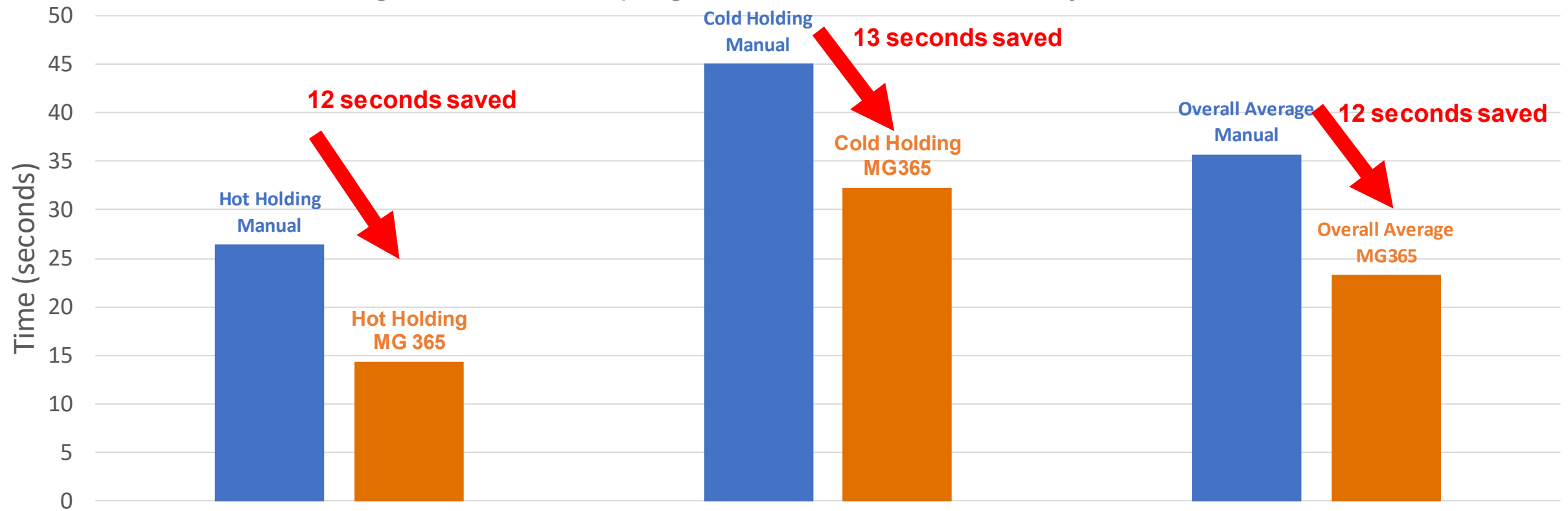


\$10 per store per month **paper, pen, clip
board savings**

TIME STUDY – REAL WORLD

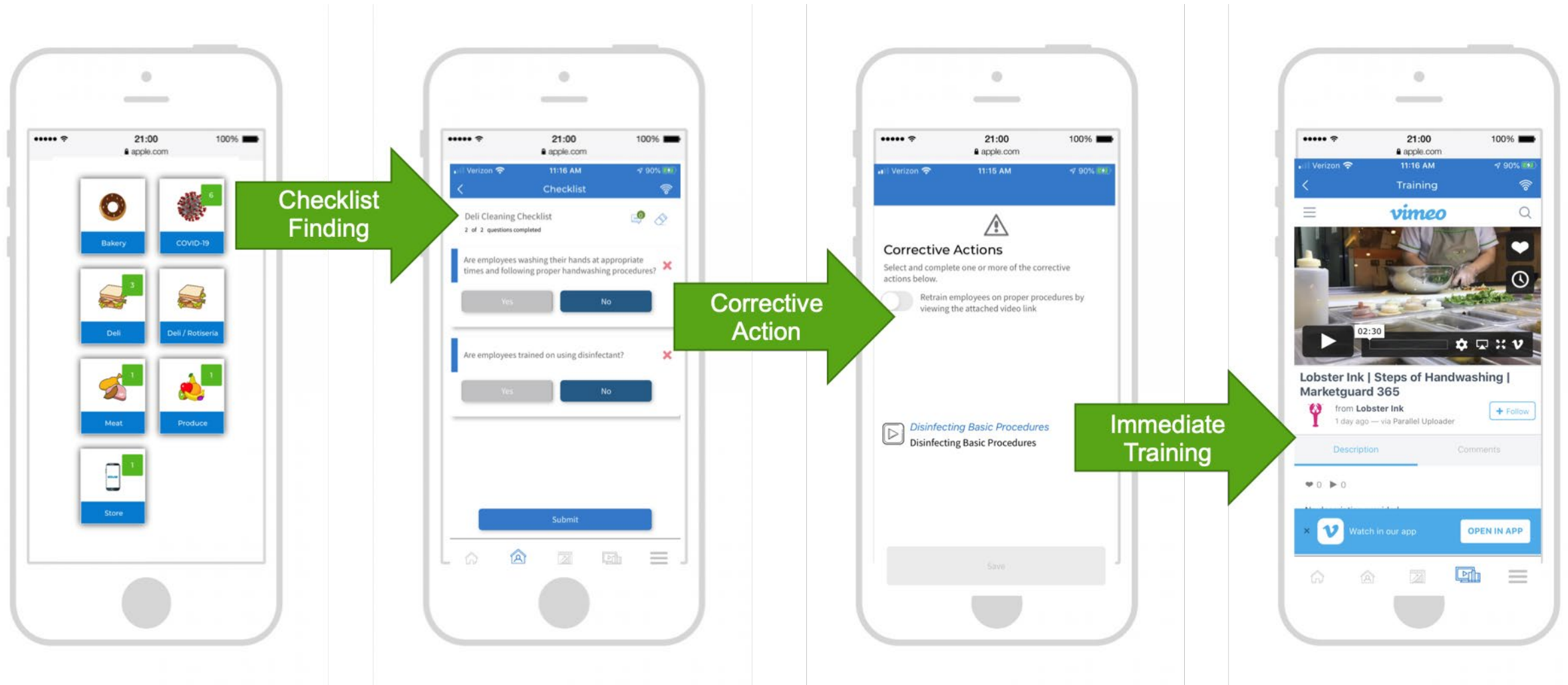
Average savings of 12 seconds per temping event

Average Time for Temping Individual Items Manually vs with MG365



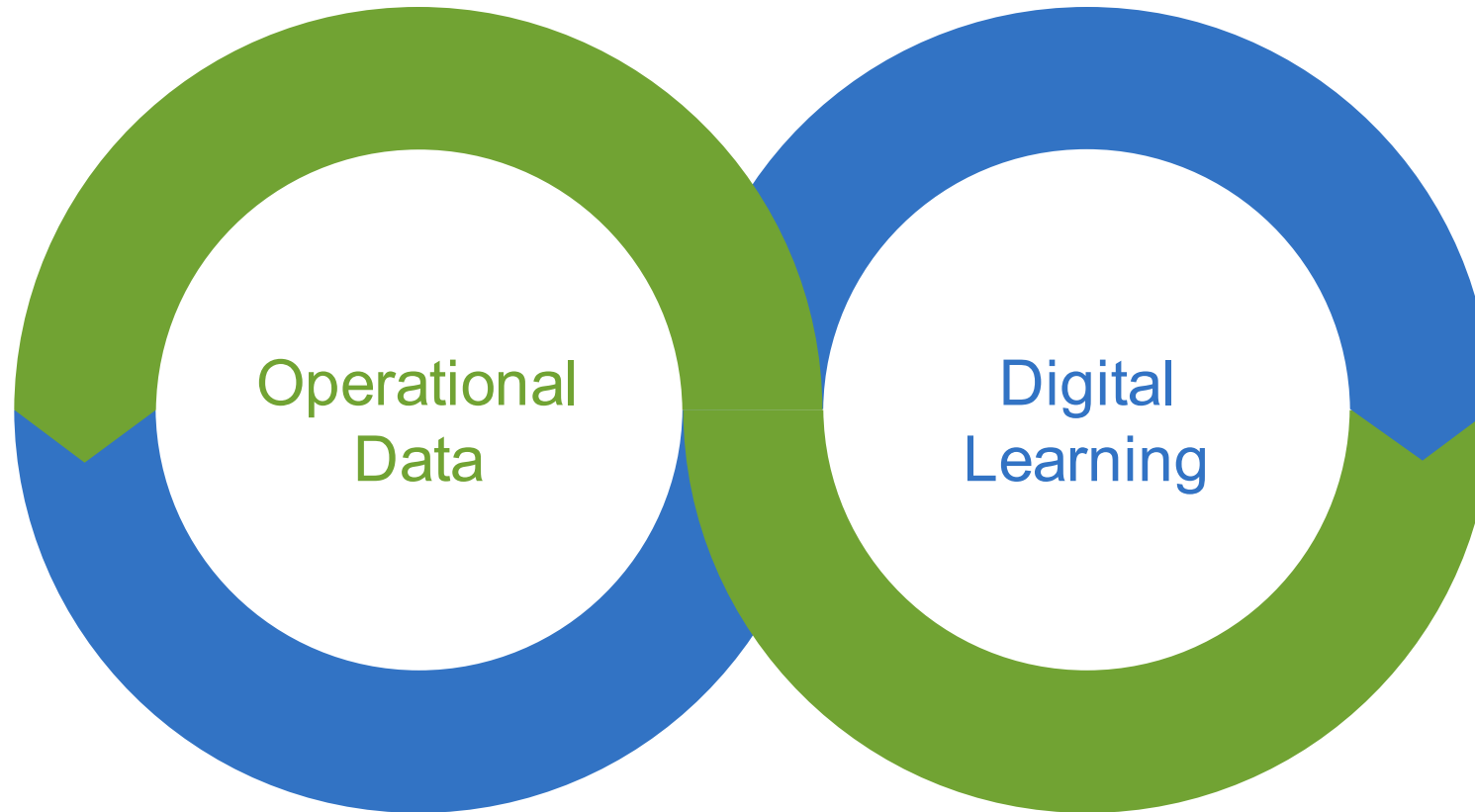
Study carried out in 6 real world Retail locations. Data collection included 5 replicates at each location of both hot holding and cold holding. Times for each location for hot and cold holding were averaged.

CORRECTIVE ACTIONS AND TRAINING



CLOSING THE CORRECTIVE ACTIONS LOOP

Continuous Improvement, *Accelerated*.



Violation Details

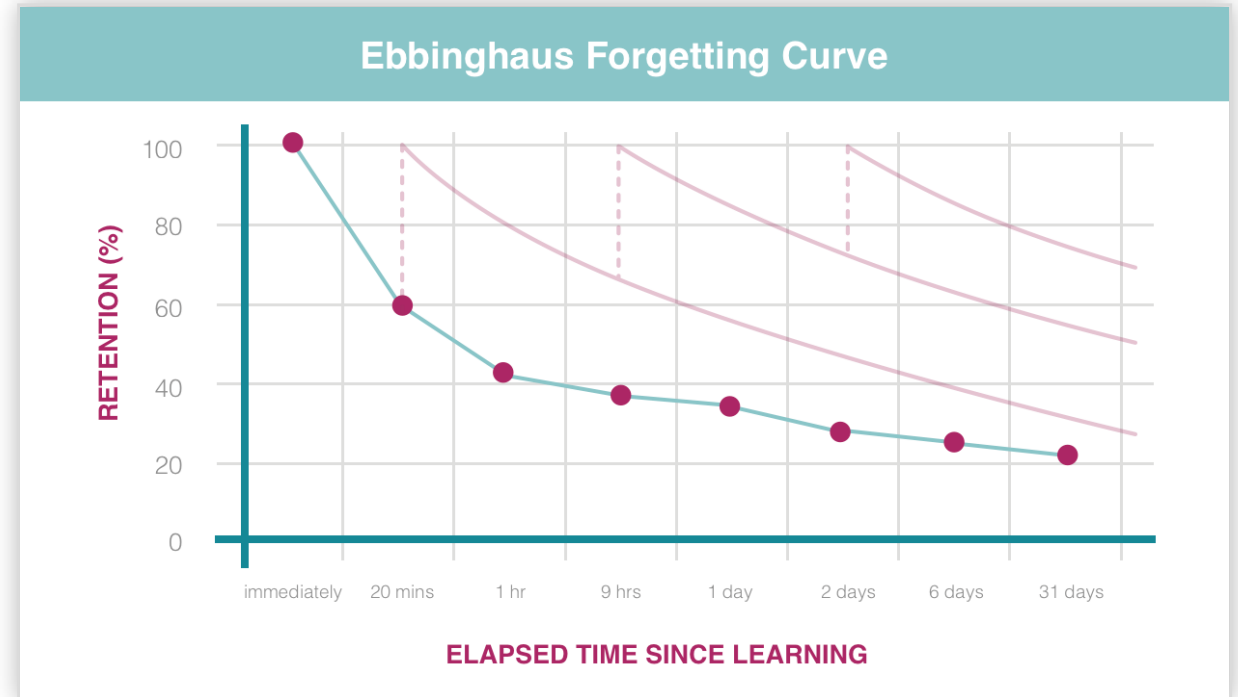
severity	Observed value	Unit of observations	description	Max of @search.score	Max of @search.score	LessonName
Critical	0.022	rate	Proper handwashing procedure - Improper handwashing technique	13.68		
Minor	0.116	rate	All non-food contact surfaces are clean - Other non-food contact surface not maintained clean (list in notes)	10.36		
Critical	0.003	rate	Food Contact Surfaces cleaned and sanitized - Clean-in-place equipment food contact surfaces unclean	5.89		5.89 Food Contact Cleaning and Sanitizing of Equipment and Surfaces
Minor	0.000	rate	All non-food contact surfaces are clean - Mop sink area not maintained clean	5.63		4.27 Non-Food Contact Cleaning
Minor	0.237	rate	All non-food contact surfaces are clean - Shelves not maintained clean	5.49		3.26 Food Contact Cleaning and Sanitizing Methods
Minor	0.004	rate	All non-food contact surfaces are clean - Dish machine not maintained clean	5.28		2.84 Cleaning and Sanitizing of Small Wares
Minor	0.121	rate	All non-food contact surfaces are clean - Dish sprayer/nozzle not maintained clean	4.95		2.67 Hard High-Touch Surfaces: Food Contact
Minor	0.049	rate	All non-food contact surfaces are clean - Auto-sham exterior not maintained clean	4.65		2.58 Hard High-Touch Surfaces: Non-Food Contact
Minor	0.018	rate	All non-food contact surfaces are clean - Auto-sham interior not maintained clean	4.64		2.41 Cleaning and Sanitizing Basics
Critical	0.003	rate	Food Contact Surfaces cleaned and sanitized - Crathcos not clean	4.60		2.32 Cleaning and Sanitizing Procedures
Critical	0.025	rate	Food Contact Surfaces cleaned and sanitized - Cambro(s) not clean	4.60		2.17 Cleaning and Disinfecting Surfaces During COVID-19
	0.123	rate	Food Contact Surfaces cleaned and sanitized - Knives not clean	4.52		1.99 Rules for Cleaning Surfaces
Critical	0.123	rate	Food Contact Surfaces cleaned and sanitized - Knives not clean	4.52		1.94 Disinfecting Basics
Minor	0.018	rate	All non-food contact surfaces are clean - Other cooler exterior not maintained clean	4.51		1.78 Find the High-Touch Surface
Critical	0.47	rate	TCS foods held in cold holding $\leq 40^{\circ}\text{F}$ - Any TCS food in cold holding is $> 40^{\circ}\text{F}$	4.49		1.46 Brass, Copper and Chrome
Minor	0.009	rate	All non-food contact surfaces are clean - Blast chiller exterior not maintained clean	4.45		1.44 Floors
Minor	0.058	rate	Floors maintained clean - Other floors not maintained clean	4.42		1.43 Carpets
	0	rate	Was the flooring and the walls clean?	4.42		1.43 Leather
Critical	0.069	rate	Food Contact Surfaces cleaned and sanitized - Tongs not clean	4.33		1.43 Stainless Steel and Vinyl
Critical	0.066	rate	Food Contact Surfaces cleaned and sanitized - Lids not clean	4.30		1.43 Walls and Wallpaper
Minor	0.018	rate	All non-food contact surfaces are clean - Hot holding wells not maintained clean	4.23		1.43 Wood
Minor	0.013	rate	All non-food contact surfaces are clean - Cold holding wells not maintained clean	4.23		1.43 Fabric
Critical	0.016	rate	Chemicals properly stored - Chemicals stored uncapped or uncovered	3.99		1.41 Dealing with Stains
	0	rate	Was the food cooked as requested and served at the correct temperature?	3.92		1.02 Preparing for Your Cleaning and Sanitizing Practical Assessment
Critical	0.013	rate	Food Contact Surfaces cleaned and sanitized - Rice cooker not clean	3.84		0.82 Cleaning, Sanitizing and Disinfecting Guidelines
Critical	0.003	rate	Food Contact Surfaces cleaned and sanitized - Immersion blender not clean	3.79		0.81 Spot the Cross-Contact
Minor	0.071	rate	Floors maintained clean - Service line floors not maintained clean	3.76		0.70 Understanding Cleaning and Sanitizing
Minor	0.036	rate	Floors maintained clean - Customer area floors not maintained clean	3.76		0.63 Overseeing Cleaning, Sanitizing and Disinfecting
Total				13.68		0.61 Food Allergens Overview
					5.89	0.58 Window Cleaning Equipment
						0.58 Food Storage Standards
						0.55 Food Storage Temperatures

Aligned Training Lesson

FOOD SAFETY IS KEY DURING ONBOARDING,

but what happens after the initial certification?

“ The theory behind most food safety training programs is that an increase in knowledge will result in improved behavior. But studies have shown that this is often not the case... ”



(Source: Journal of Food Science (vol 84, Iss. 6, 2019))

What is a “behavior-based” approach?



Reinforce, Assess & Correct

Micro-learning / course resources / practical assessments



Teach the ‘why’ behind the ‘how’

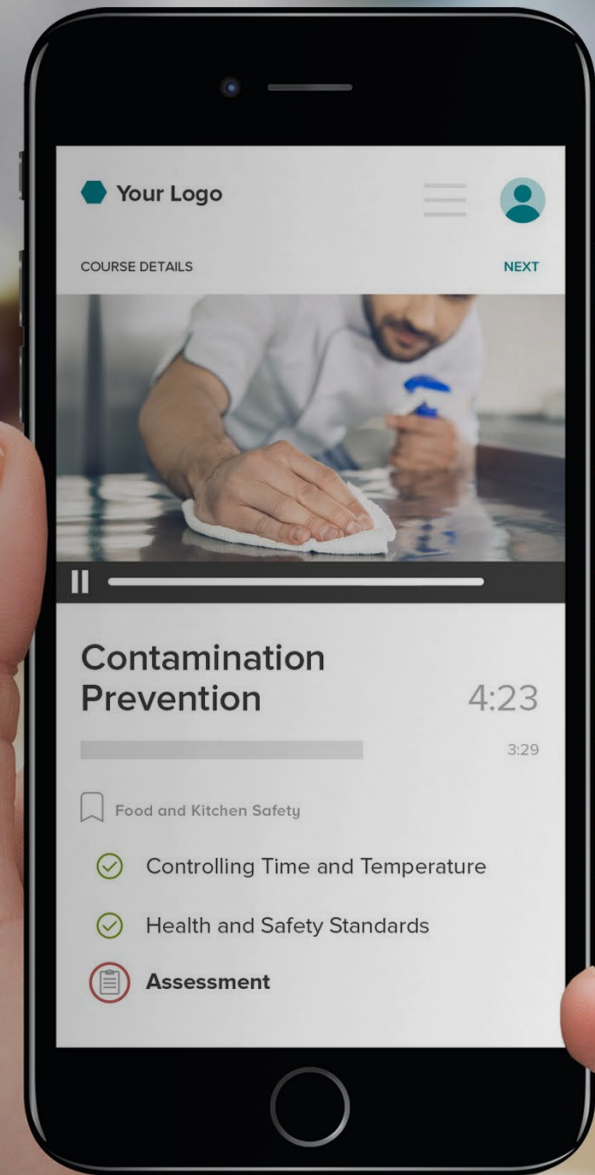
Job-role / experience / language / pace

+38%

Assessments + Corrective Actions

Improves food safety compliance rate

Source: “The Positive Impact of Behavioral Change on Food Safety”, Robert Meyer.



KEY TAKEAWAYS

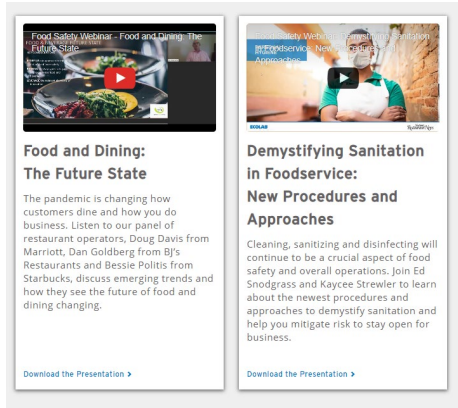
- Technology allows us to **change behavior** with the employee and at the location in a way traditional visits can't by providing more detailed data and delivering the **right training** to the **right person** at the **right time**.
- Leveraging digital tools to replace traditional paper logs increases **accuracy, completion rates and visibility** outside of the department. Data collected is a valuable resource for insight and advanced analytics development.
- Digital tools are an important aspect of maintaining a **strong food safety culture** within your organization.

Q&A



FOOD SAFETY AND PUBLIC HEALTH RESOURCES

FOOD SAFETY AND PUBLIC HEALTH MATTERS WEBINARS



Join us for our 2021 Webinar Series

Food Safety and Public Health Matters webinar series informs and educates food service professionals on Food Safety and Public Health topics.

FOOD SAFETY RESOURCE LIBRARY



Food Safety Articles and Tips



Food Safety Readiness Kits

➤ Access Food Safety Resources and more on [Ecolab.com](https://www.ecolab.com)

