CORVIUM

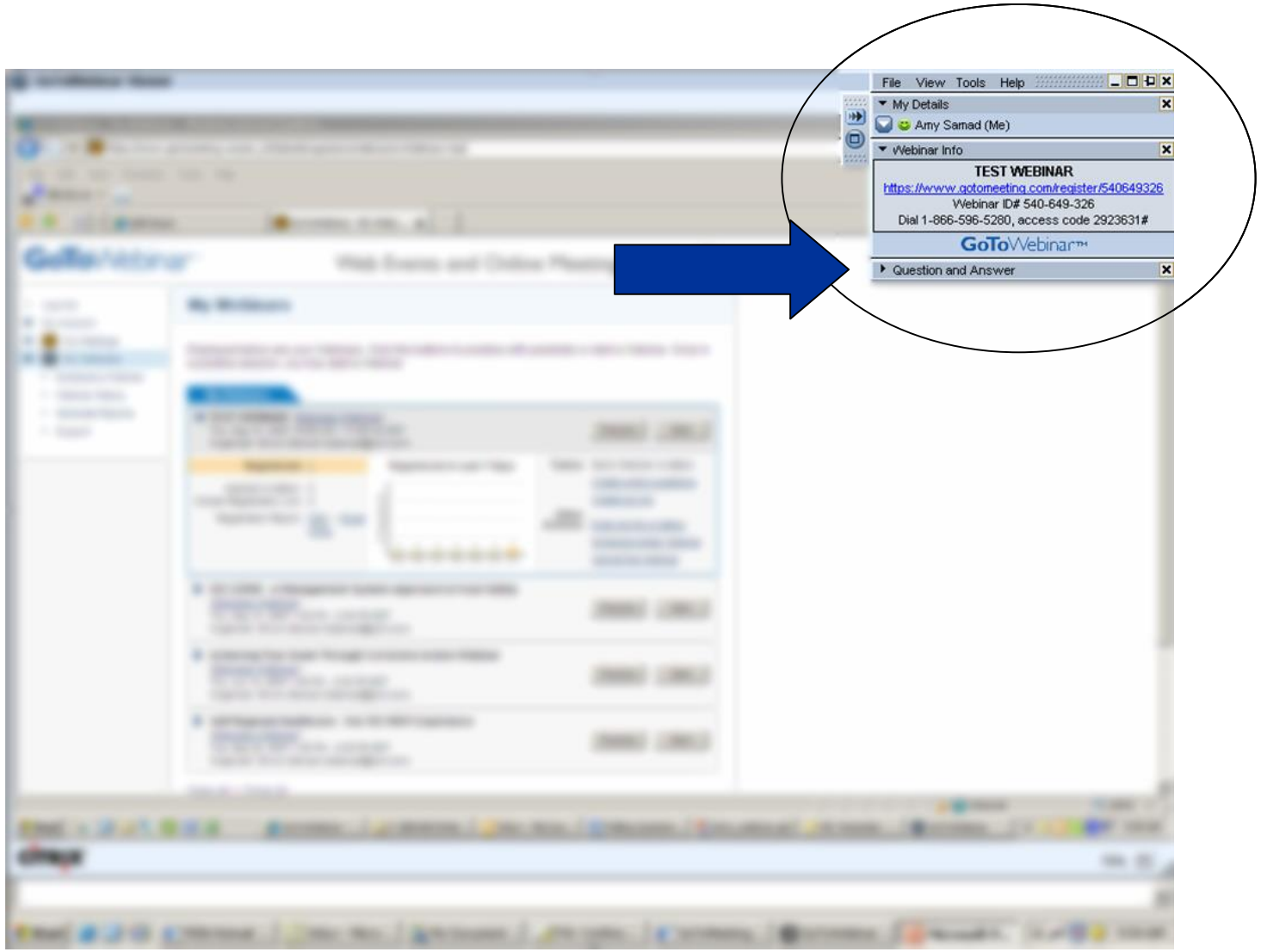
Reduce food risk. Improve food quality.

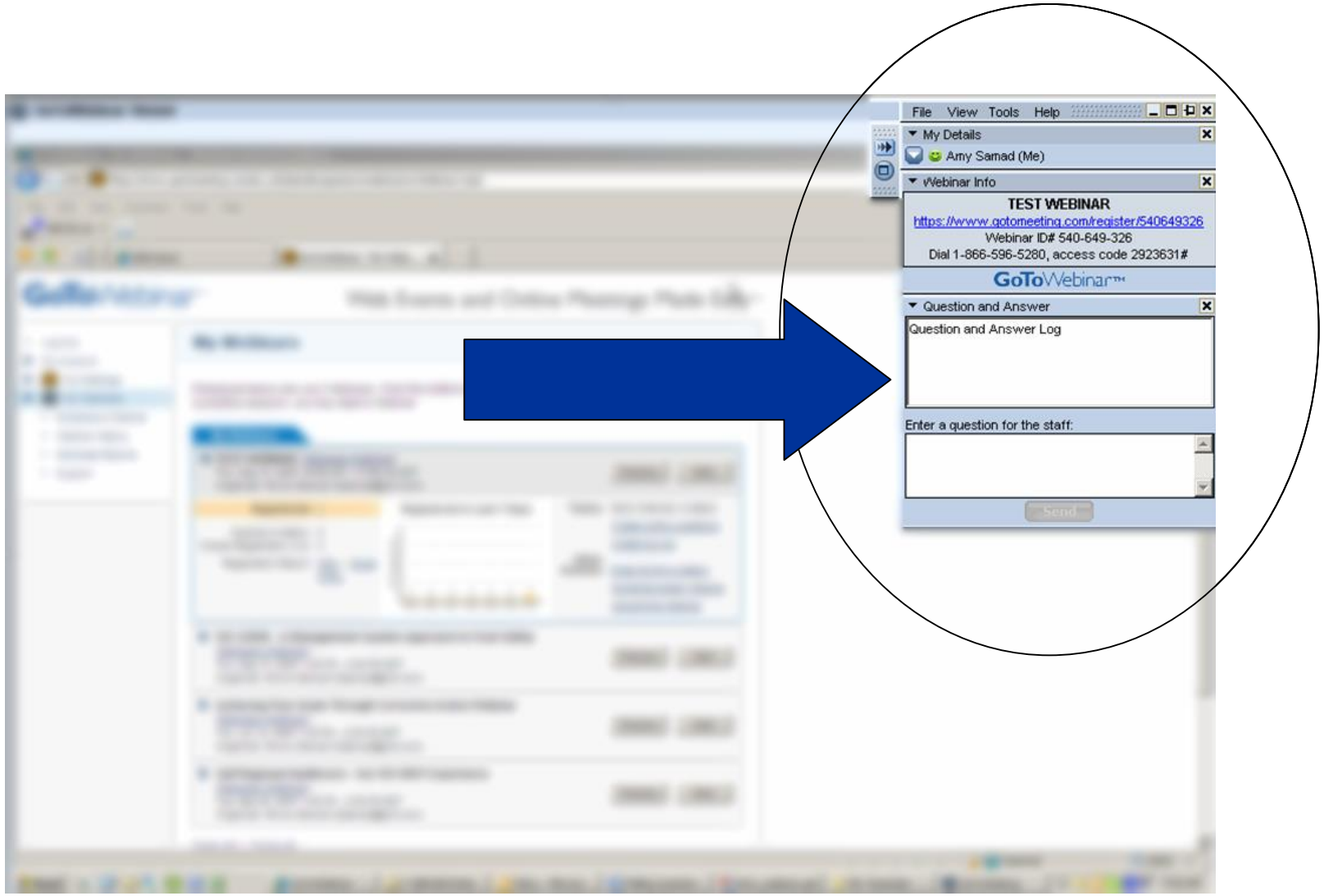
PJR FSI

Food Safety, Inc.

TAKE YOUR EMP TO ANOTHER LEVEL!

PJRFSI – Partner for Food Safety


File View Tools Help
My Details
Amy Samad (Me)
Webinar Info
TEST WEBINAR
https://www.gotomeeting.com/register/540649326
Webinar ID# 540-649-326
Dial 1-866-596-5280, access code 2923631#
GoToWebinar
Question and Answer


File View Tools Help
My Details
Amy Samad (Me)
Webinar Info
TEST WEBINAR
https://www.gotomeeting.com/register/540649326
Webinar ID# 540-649-326
Dial 1-866-596-5280, access code 2923631#
GoToWebinar
Question and Answer
Question and Answer Log
Enter a question for the staff:
Send

POLLING QUESTION # 1

PJRFSI – Partner for Food Safety

Paul Damaren

Senior Vice President of Food Safety &
Supply Chain, PJRFSI

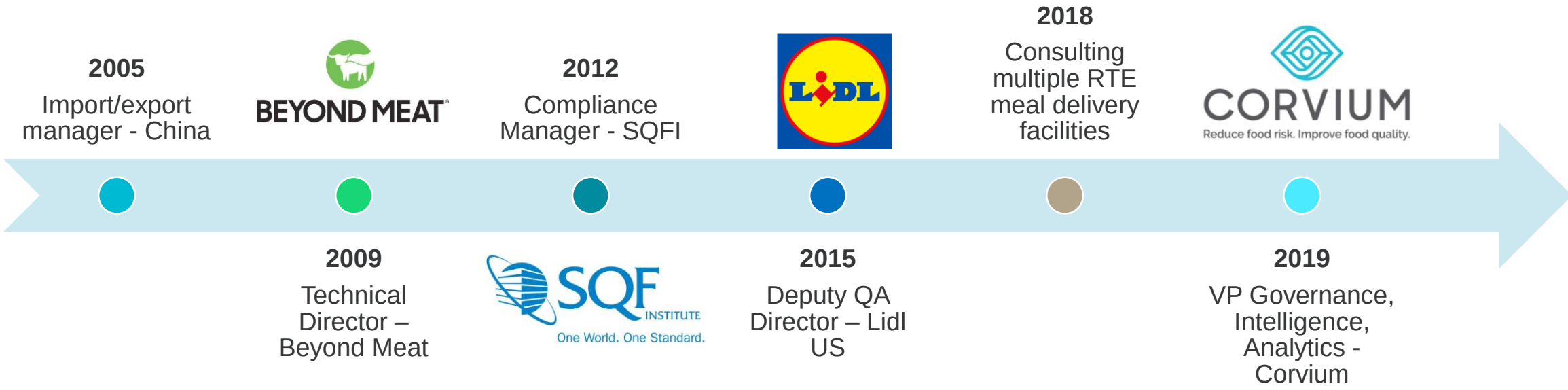
Take Your EMP to Another Level!

Melody Ge
VP of Governance, Intelligence, Analytics

04/06/2021

CORVIUM

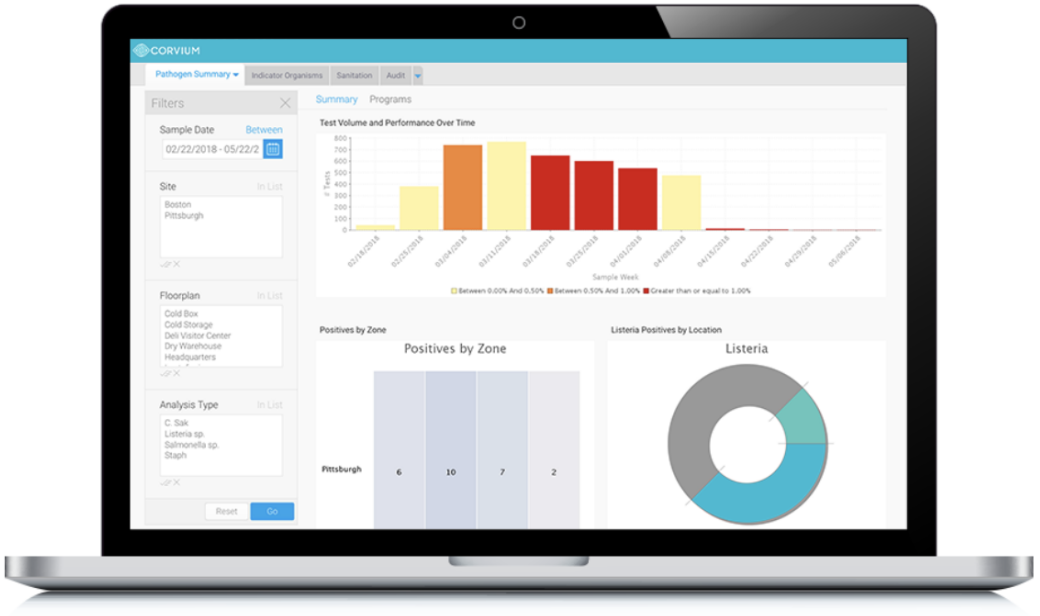
Who am I?



- Food Safety and Quality experiences in manufacturer, CPO, retailer
- Lean Six Sigma Black Belt, Data Science certified
- Registered SQF trainer, PCQI Lead Instructor
- Expertise in assisting businesses with their food safety management system development from scratch to comply with government and GFSI requirements

Who is CORVIUM?

Corvium's platform provides unified access to a full range of environmental applications, reporting and analytics.



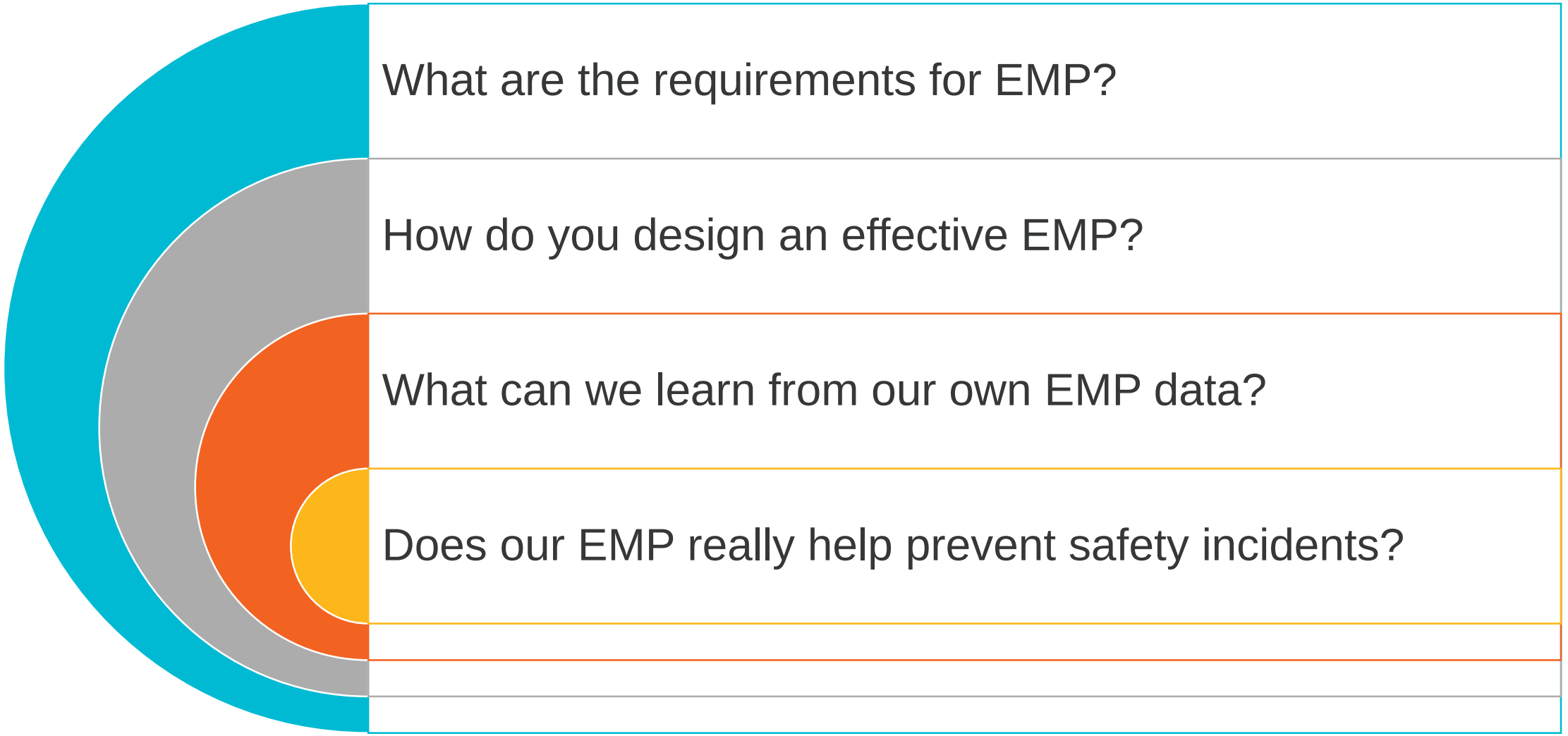
Corvium's fully integrated food risk intelligence solution is used by food safety professionals and executives to streamline and optimize product testing, environmental sampling, and sanitation workflows.

- **Environmental Monitoring:** Schedule, run and audit the environmental monitoring plan in one, easy to use, workflow system.
- **Product Testing:** From raw materials to finished products and COA's, Corvium's platform meets all product testing needs.
- **Sanitation:** Manage and monitor the sanitation workflow and verify effectiveness within one interface.
- **Compliance & Conformance:** Proactively identify compliance & conformance challenges so they can be resolved before they become issues that affect the business.
- **Reporting & Analytics:** Transform data into actionable information with reports that help focus on what is important now, and use analytics to see trends and issues before they cause problems.

www.corvium.com
info@corvium.com

POLLING QUESTION # 2

What will be covered?



Government Requirements (FDA)

PART 117 -- CURRENT GOOD MANUFACTURING PRACTICE, HAZARD ANALYSIS, AND RISK-BASED PREVENTIVE CONTROLS FOR HUMAN FOOD

Subpart C - Hazard Analysis and Risk-Based Preventive Controls

Sec. 117.165 Verification of implementation and effectiveness.

(a) *Verification activities.* You must verify that the preventive controls are consistently implemented and are effectively and significantly minimizing or preventing the hazards. To do so you must conduct activities that include the following, as appropriate to the facility, the food, and the nature of the preventive control and its role in the facility's food safety system:

(1) Calibration of process monitoring instruments and verification instruments (or checking them for accuracy);

(2) Product testing, for a pathogen (or appropriate indicator organism) or other hazard;

(3) Environmental monitoring, for an environmental pathogen or for an appropriate indicator organism, if contamination of a ready-to-eat food with an environmental pathogen is a hazard requiring a preventive control, by collecting and testing environmental samples; and

(3) *Sanitation controls.* Sanitation controls include procedures, practices, and processes to ensure that the facility is maintained in a sanitary condition adequate to significantly minimize or prevent hazards such as environmental pathogens, biological hazards due to employee handling, and food allergen hazards. Sanitation controls must include, as appropriate to the facility and the food, procedures, practices, and processes for the:

(i) Cleanliness of food-contact surfaces, including food-contact surfaces of utensils and equipment;

(ii) Prevention of allergen cross-contact and cross-contamination from insanitary objects and from personnel to food, food packaging material, and other food-contact surfaces and from raw product to processed product.

GFSI Requirements (SQF V.9 Requirements)

2.4.8 Environmental Monitoring

2.4.8.1 A risk-based environmental monitoring program shall be in place for all food manufacturing processes and immediate surrounding areas, which impact manufacturing processes.

The responsibility and methods for the environmental monitoring program shall be documented and implemented.

2.4.8.2 An environmental sampling and testing schedule shall be prepared. It shall at a minimum:

i. Detail the applicable pathogens or indicator organisms to test for in that industry;

ii. List the number of samples to be taken and the frequency of sampling;

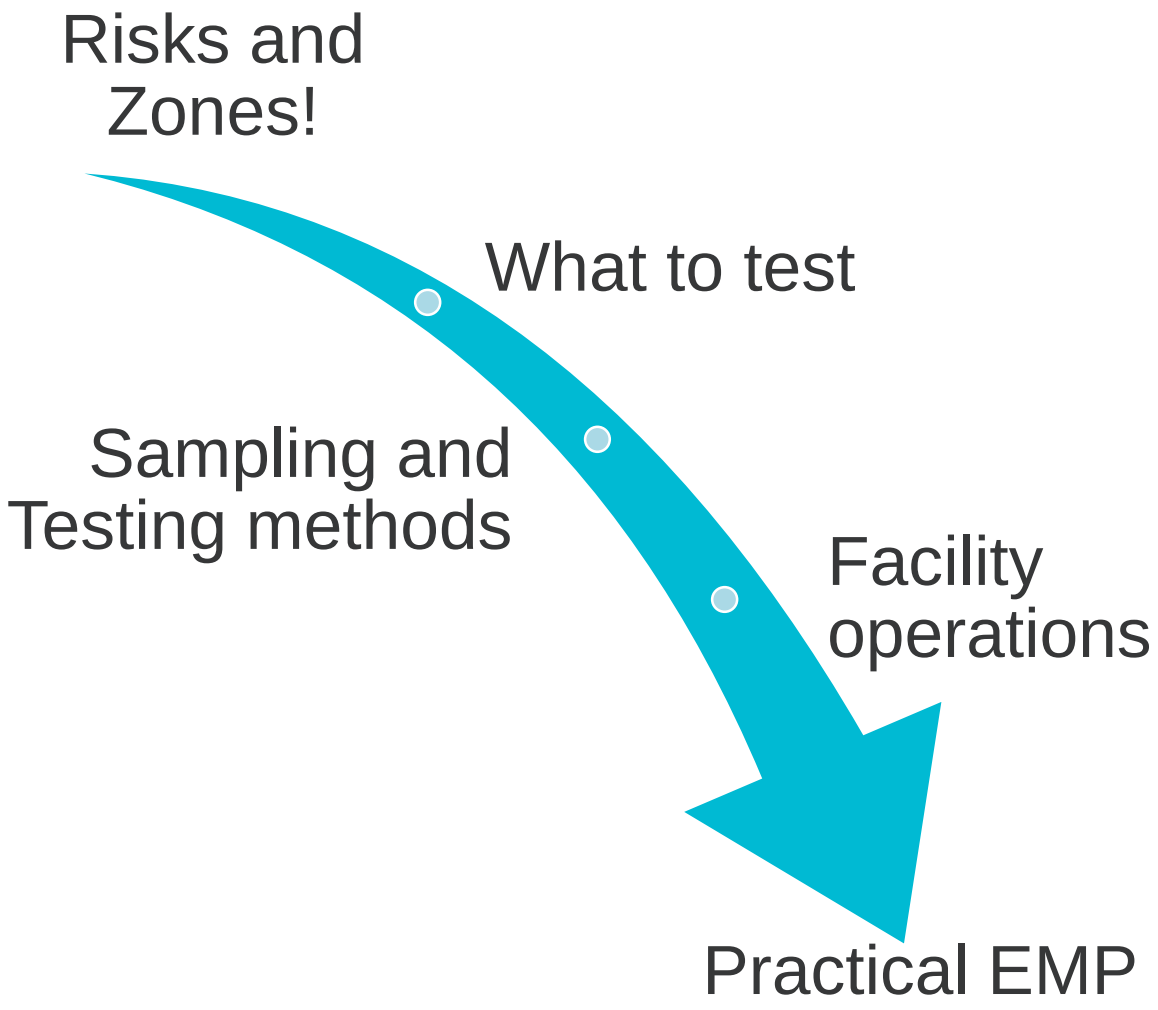
iii. Outline the locations in which samples are to be taken and the rotation of locations as needed; and

iv. Describe the methods to handle elevated or undesirable results.

2.4.8.3 Environmental testing results shall be monitored, tracked, and trended, and preventative actions (refer to 2.5.3.1) shall be implemented where unsatisfactory results or trends are observed.

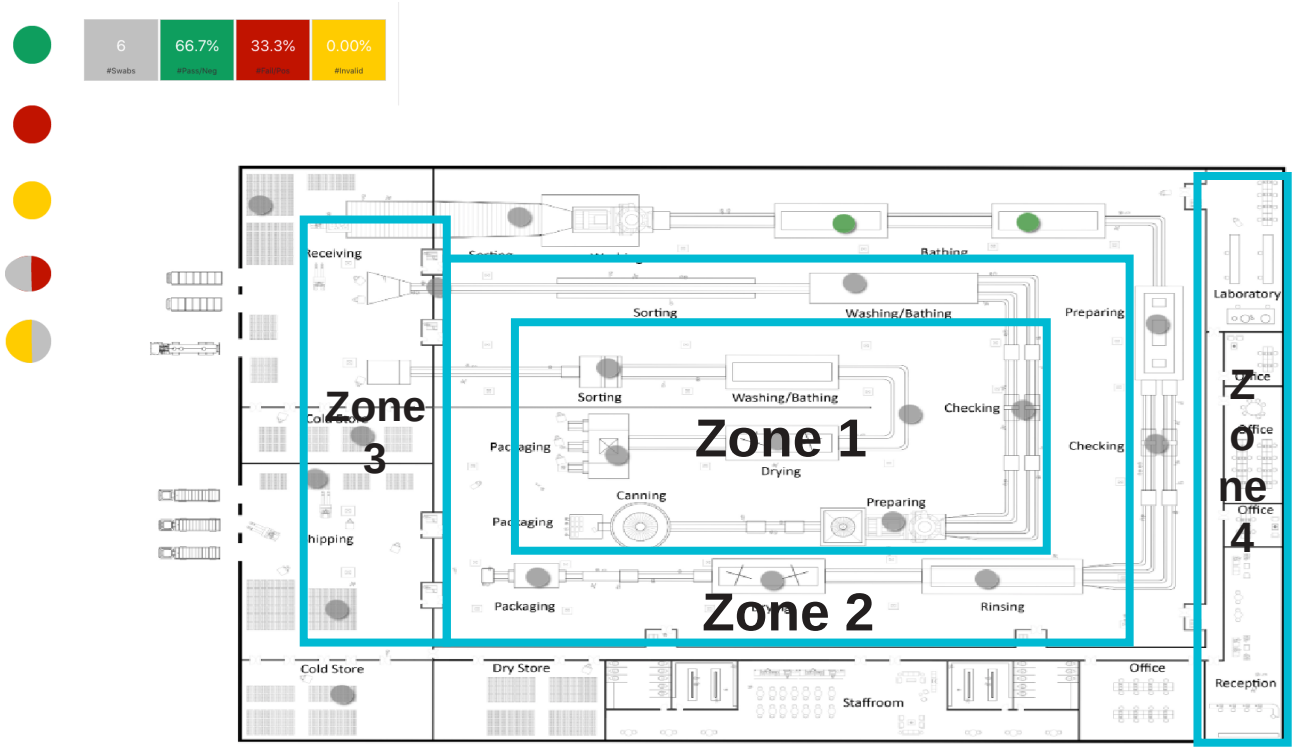
A Sustained EMP Design

- The “how to” is not specified in the requirements
  - It is based on the facility
- Start from mapping out the facility and risk assessment
  - Design it with hygienic zones
- A pre-set frequency of reviewing test results
  - Is the sampling frequency sufficient?
  - What are the test results for each sampling locations over time?
- A thorough review on CAs
  - How long does it take to complete one corrective action?
  - How does it impact your operation?



EMP Development

- Overall Risk Assessment
  - How environmental pathogens impact your facility and your product
- Zones
  - Correspond to Hygienic zones
- Risk Assessment
  - To determine testing types
  - To determine frequency
- Test methods
- Corrective Action Plan
  - When production is determined to be safe to go back to normal



Spend more time on EMP development!

Once EMP is implemented

Do exactly what the program says

Keep all records including exact sampling locations

Check balance on frequencies

Does it fit your operations?

Review test results and trends

Test results need to be digitalized first

Review sampling locations

Avoid blind spots

CA implementation is critical

It's okay to have a positive result on the records history

Review all the records!

Sampling methods/frequencies

Corrective action implementation duration

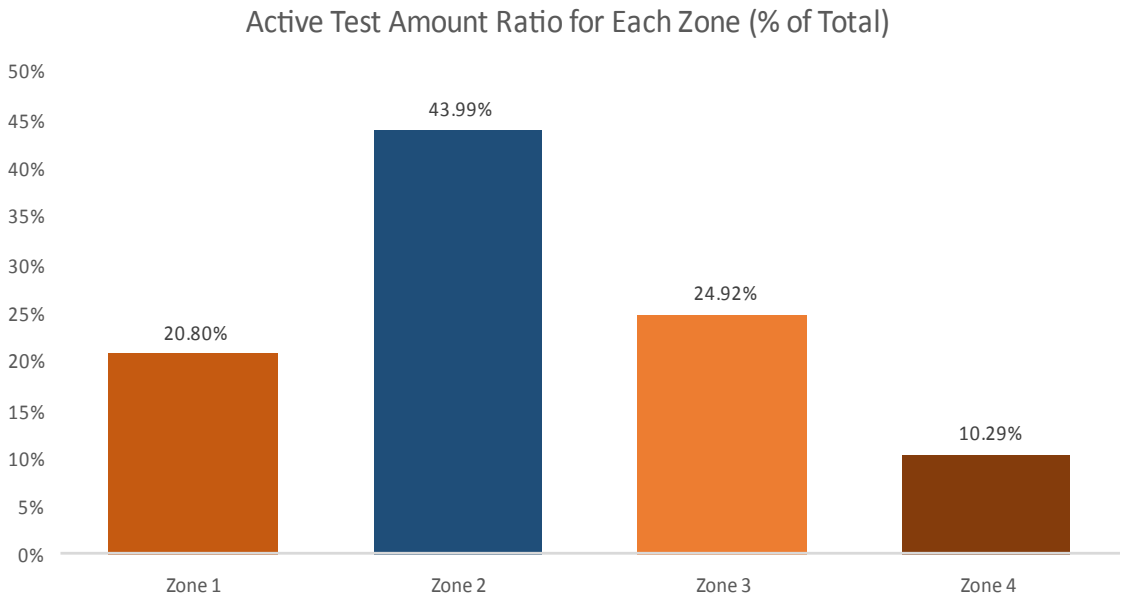
Test result trends

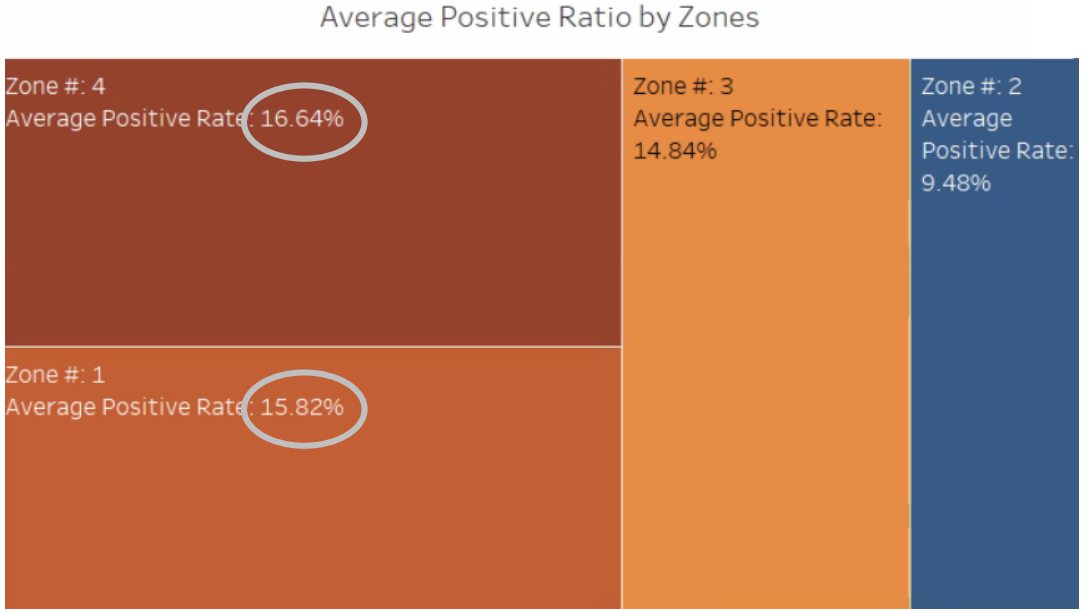
Cost/time/resources

POLLING QUESTION # 3

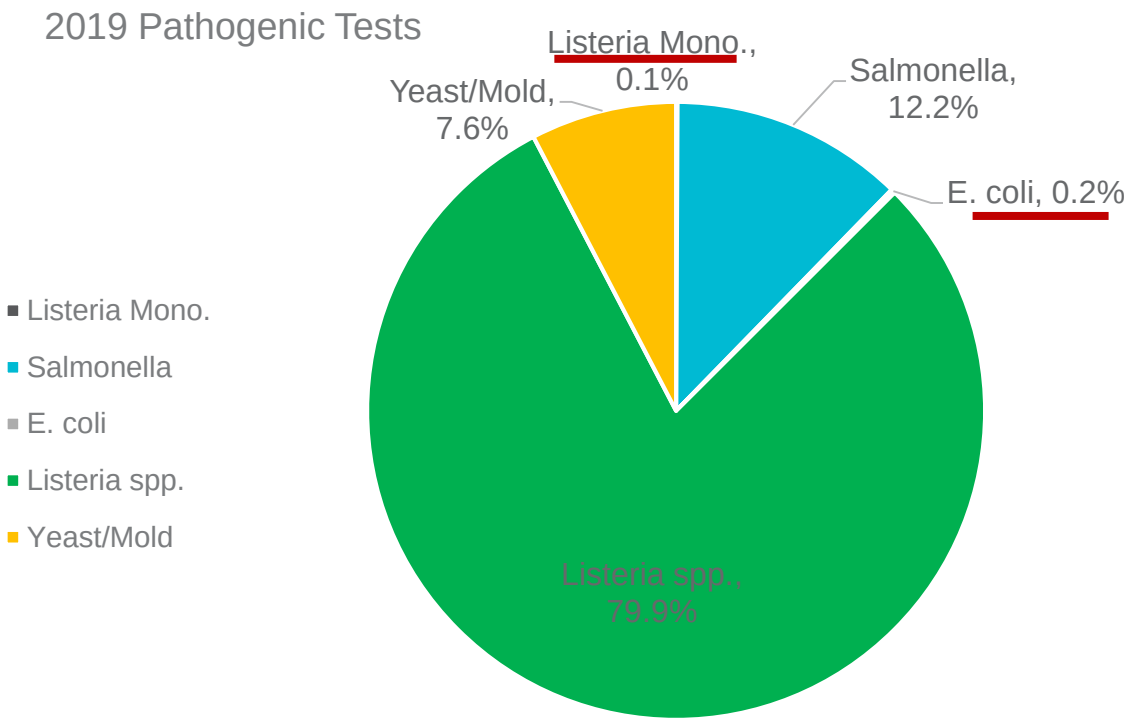
What can EMP data tell us?

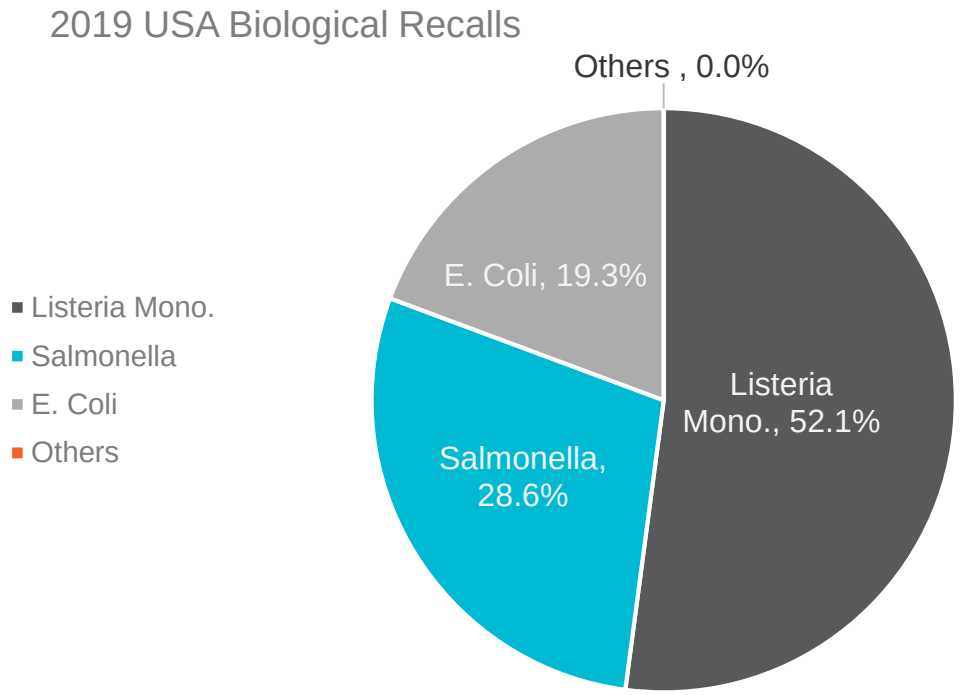
- Listeria Species are tested the most in Zone 2
- Zone 4 has the highest average positive ratio





Pathogenic Tests Vs. Recalls – 2019





What do these data tell you?

CORVIUM

Does your EMP really help prevent food safety incidents?

- How many tests have you conducted annually?
- How many random tests do you test?
- How many critical issues have you identified?
- What are the percentage of sampling locations among zones?
  - Are they risk based?
- How do your test result trends compare to public recall data?
- How do your test result trends compare to your peers in the industry?

The answers are different within each facility!

EMP can reduce operational cost!

- Sampling based on risks and test results
  - Let your own data tell you the story
- A valid and sustained EMP is worth 1,000+ tests
- Reduce delayed starts due to unplanned re-clean
- Maximize your production live time
- Continuously improve your sanitation controls
- Ultimately… save operational cost

UPCOMING WEBINARS

Date: Thursday April 8th, 2021 – 2pm est.

Webinar Title - Lessons from the Trenches – Past, Current, and Future of Food Safety

Webinar Description - 2020, 2021 and beyond, food safety trends continue to include improved process monitoring, new labeling guidelines, and supply chain traceability that may help satisfy the demands from an involved consumer base. Several high-profile and large-scale food recalls have dominated headlines in 2020. Join Denise Webster, Food Safety, Regulatory and Quality Consultant with Food Brand Pro as we discuss lessons learned and the future of Food Safety

Speakers: Denise Webster, Food Safety, Regulatory, and Quality Consultant supporting Fortune 500 food companies, retailers, manufacturers, and start-ups and Owner, Food Brand Protection, LLC

https://www.pjrfsi.com/webinars/

PJRFSI

You've got QUESTIONS we've got ANSWERS

Melody Ge
VP of Governance, Intelligence, Analytics
Corvium, Inc.

Email: melody.ge@corvium.com

LinkedIn: https://www.linkedin.com/in/melody-ge-54116717/

PJR FSI
Food Safety, Inc.