



The Volunteer State Food Protectors: Excellence, Readiness, and Collaboration

AFDOSS Annual Educational Conference

Outline

- Rapid Response Team
- *Cyclospora* update
- Tennessee Food Safety Centers of Excellence



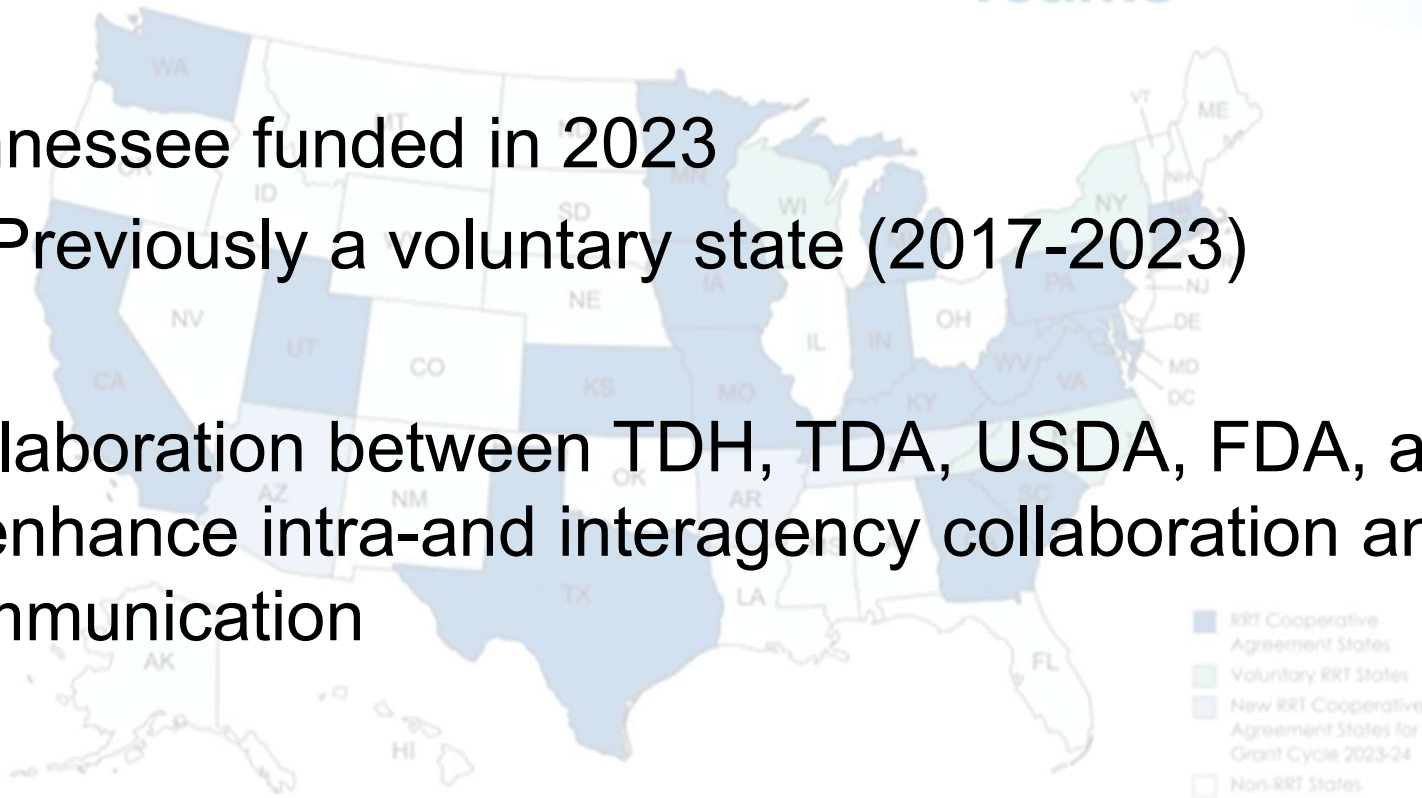
Tennessee RRT 2025-2026

Relationship Building Before, During, and After Foodborne Outbreaks

What is a Rapid Response Team?

- Multi-agency, multi-disciplinary teams that operate to
 - Respond to outbreaks
 - Reduce the time between outbreak notification and control measures
- Tennessee funded in 2023
 - Previously a voluntary state (2017-2023)
- Collaboration between TDH, TDA, USDA, FDA, and others to enhance intra-and interagency collaboration and communication

Rapid
Response
Teams



Tennessee RRT Basics

- Voluntary RRT 2017-2023
- Housed within Tennessee Department of Health Foodborne and Enteric Diseases (FED) Program in the Communicable and Environmental Diseases and Emergency Preparedness (CEDEP) Division
- Funding awarded in September 2023 and RRT Coordinator hired in June 2024



Claire Umstead
RRT Coordinator

TN RRT Goals

Improving outbreak response using



Collaboration



Training



Standardization



Review

Responsibilities - Communications

- Facilitate communications between partner agencies
 - Host calls with established cadence to discuss current programmatic and outbreak updates
 - Serve as connector between jurisdictions
- Provide training and exercise opportunities to workforce
 - Just-in-time trainings
 - Environmental health trainings
 - Outbreak investigation process trainings

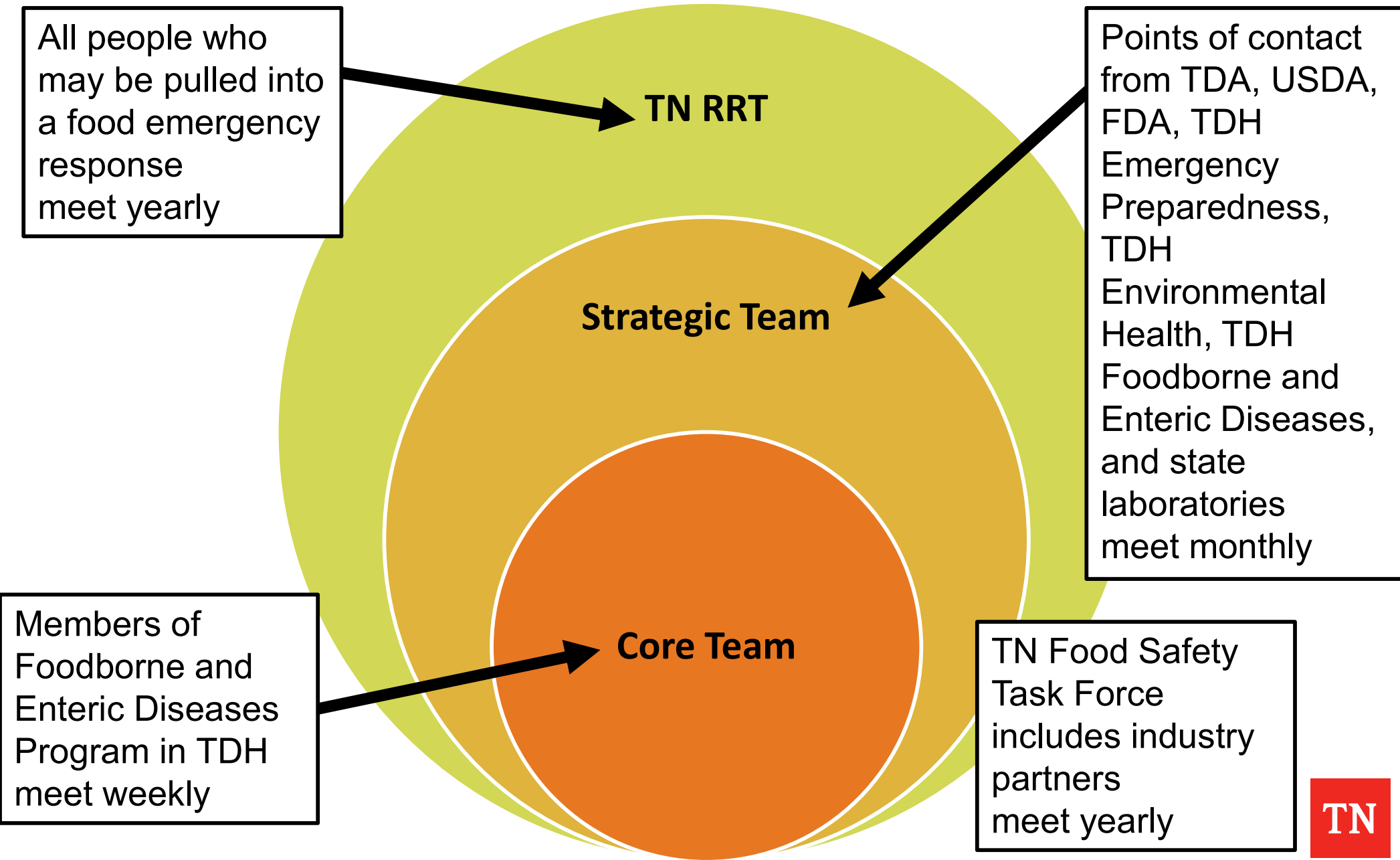
Responsibilities - Investigations

- Facilitate communication during investigation
- Assist with outbreak investigation
 - Epidemiology
 - Environmental Health
 - Laboratory Coordination
- Conduct Hotwash/After-Action Review to develop improvement plan for future outbreaks

Responsibilities - Documentation

- Capability Assessment Tool
 - Tracks food-related outbreaks in Tennessee each year
 - Tracks effectiveness of RRT
- Operational Plan
 - Includes standards of procedure for common investigation tasks
- After-Action Review Reports
 - Constantly evaluating performance and communication during outbreaks
 - Documentation to encourage following-through on improvement plan

Our Structure



By the Numbers--2025

- 6 core team members
- 4 state/federal agencies included
 - 12 separate programs included
- 19 high priority activations
- ~800 Complaints Triage



**Building Relationships
between TDH & TDA**

Food Regulatory Authority in Tennessee

TN Dept Health
Environmental
Health Program

- Restaurants

TN Dept
Agriculture

- Manufactured Foods (MFRPS)
- Retail (Grocery stores, gas stations)
- Dairy/Produce/Shellfish/etc.

TN Dept Health
Foodborne and
Enteric Diseases

- None

**RRT is
here!**

Food Investigational Duties in Tennessee

TN Dept Health Environmental Health Program

- Assist in EAs/Sampling at restaurants

TN Dept Agriculture

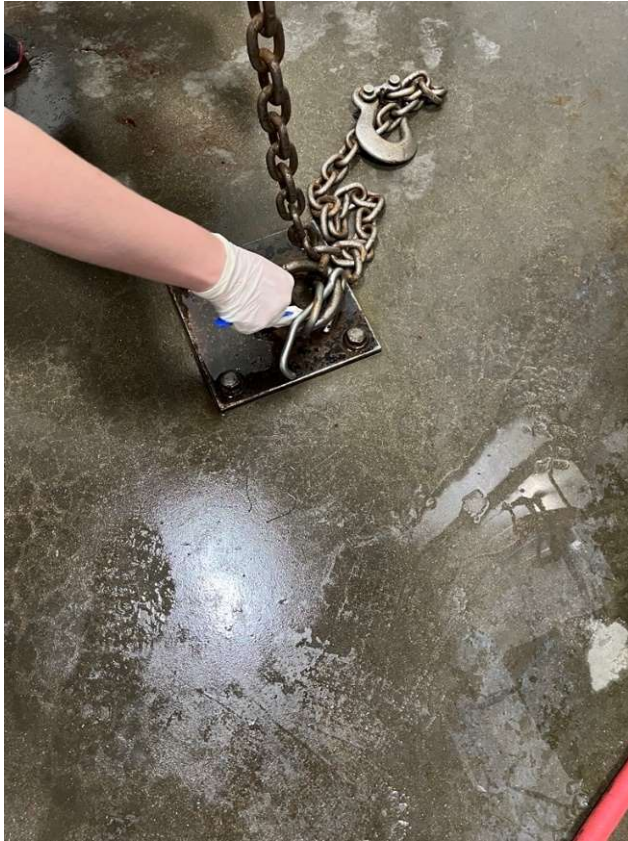
- Assist in EAs/Sampling at retail facilities
- Provide Subject Matter Expertise
- Monitor TDA complaint system

TN Dept Health Foodborne and Enteric Diseases

- Investigate all outbreaks (epidemiology, EH), regardless of jurisdiction
- Monitor complaint system
- Raw milk investigations
- Surveillance of foodborne pathogens

**RRT is
here!**

STEC Outbreak at Custom Meat Processor



Raw Milk on the Rise

- 4 Outbreaks from 2015-2023
- 3 Outbreaks in 2024 (*Campylobacter* and STEC)
- 4 Outbreaks in 2025 (*Campylobacter* and *Salmonella*)
 - 64 cases (50 confirmed, 14 probable)
 - 8 hospitalizations

PET MILK

HERD SHARE

Site Visit Consultations

- TDA has no regulatory authority over herd shares
- Dairy experts joined TDH staff to serve as consultants and draft recommendations for farmers



Success of Collaboration

- Improved communications on farm
 - Ability to “speak the language”
 - SME
- Better uptake of recommendations by dairy owners
- Collaboration on creation of resources

Requirements for the Distribution of Raw Milk through Herd Shares

Guidance document for farm owners and herd share members

- The retail sale of unpasteurized (raw) milk for human consumption is illegal in Tennessee.
- Consumers may legally access raw fluid milk by purchasing a share of a cow or herd (“herd share”).
- Raw fluid milk obtained through a herd share is for personal use only.
- Once the raw fluid milk is obtained from the herd share agreement, the consumer may use it as they like, but milk or products made from milk may not enter commerce.



What are the legal requirements for herd shares?

Farm owners must:

- Keep a list of all herd share members, including names, addresses, phone numbers, and email addresses.
- Retain these records for 3 years after the contract ends.
- Maintain a written contract with each member outlining ownership terms and rights.
- Include in the contract a warning that the milk has not been inspected by the Tennessee Department of Agriculture (TDA).

2020 Tennessee House Bill 1129
and Senate Bill 1123

What if a contamination event occurs?

In the event of contamination, farm owners must:

- Grant TDH access to the farm within 24 hours for investigation and testing.
- Stop all milk distribution until the investigation is complete, cause of contamination is determined, and issue is resolved to TDH's satisfaction.
- Notify all herd share members via email, text, or phone.
- Provide TDH with a list of all partial owners.

[Scan the QR code or click
HERE to be linked to
legal documentation:](#)



Consuming raw dairy may expose you to harmful germs that cause disease like *Salmonella*, *E. coli*, *Campylobacter*, and *Listeria*, posing the greatest risk to young children, the elderly, pregnant women, and people with weakened immune systems.





Tennessee's Food Safety Taskforce

TN Food Safety Task Force



Food Labeling in Tennessee

Food Safety Task Force



Samuel Bohn



Courtne...



Danny Ri...



FARROW...



Kevin Da...



DJ Irving



Shane M...



Verettia ...



Claire N. ...



Angela V...



Elyssa St...



DN



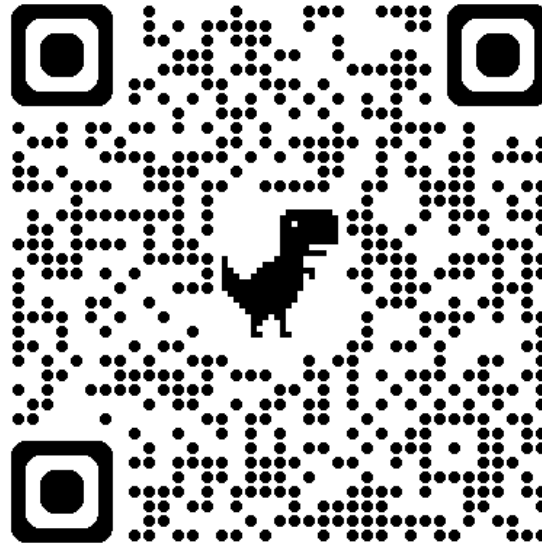
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Sam Bohn, Manufactured Foods Coordinator 11/05/2025

Join Our Task Force!

- In-person meeting 2/24/27 in Lebanon, Tennessee
- Join our distribution list
 - <https://redcap.link/TNFoodTaskForceParticipants>



Looking Forward



Establish formal agreements between TDH and TDA for raw milk investigations



Run exercise between agencies practicing communication



Continue developing relationships with industry through Food Safety Task Force



Pretty Poison

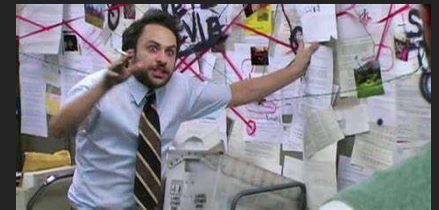
Metals Poisoning at Nashville
Bakery



The Complaint

Interview w/ Complainant

- Tres Leches cake picked up day of eating (2/2/25)
 - Refrigerated at bakery and refrigerated at home until consumption at 9pm that night
 - Only used whole milk per customer request
 - Gold and black icing and unknown filling type
- Symptoms
 - Only one with GI
 - Multiple had racing hearts and insomnia
- All but one said gold icing/edible paint had funny smell



Laboratory Coordination

- Emailed TDA Technical Services Laboratory
- Confirmed ability to test for metals
- Offered to test leftovers and any product we found in Bakery H that might be used in the gold icing
- Had TDA save leftovers in case we needed to do bacterial testing

Good afternoon,

We received a complaint last night for illness after eating a tres leches cake. After following up with the complainant today, they reported the icing on the cake to taste off, some of them reporting it tasted like non-edible paint. We've seen instances of bakeries use of luster dust: [Cake Decorating Luster Dust Associated with Toxic Metal Poisonings — Rhode Island and Missouri, 2018–2019 | MMWR](#) and are wondering if this may be the case. Does your laboratory do any testing for metals in food? We are thinking about sending a team of TDA and TDH staff out tomorrow to do an environmental assessment. Thanks!

Sincerely,

Claire



Environmental Assessment

- Assess how the cake is prepared
 - Confirm ingredients of cake and collect invoices/receipts
 - Obtain a sample of the edible paint for testing at TDA
 - Employee health
 - General food safety practices/culture
 - NEARS data collection
- ✓ Team of three people
 - ✓ EHS from TDH, Inspector from TDA, RRT Coordinator
- ✓ Language barrier challenges
- ✓ TDA performed full inspection while TDH performed EA

Environmental Assessment



Environmental Assessment

Decorative Metallics is a **NON-EDIBLE** powder that is intended for use on dummy tiers, wired flowers and other decorations that will be removed from the cake before eating.

Instructions

Add dry powder directly to the product you wish to add colour to, or apply to the surface of the decoration using a brush. Alternatively, you can take a small amount of Rejuvenator Spirit or Confectioners Glaze and mix with some Lustre Dust.

Not suitable for airbrushing.

For decoration use only.



9

Environmental Assessment





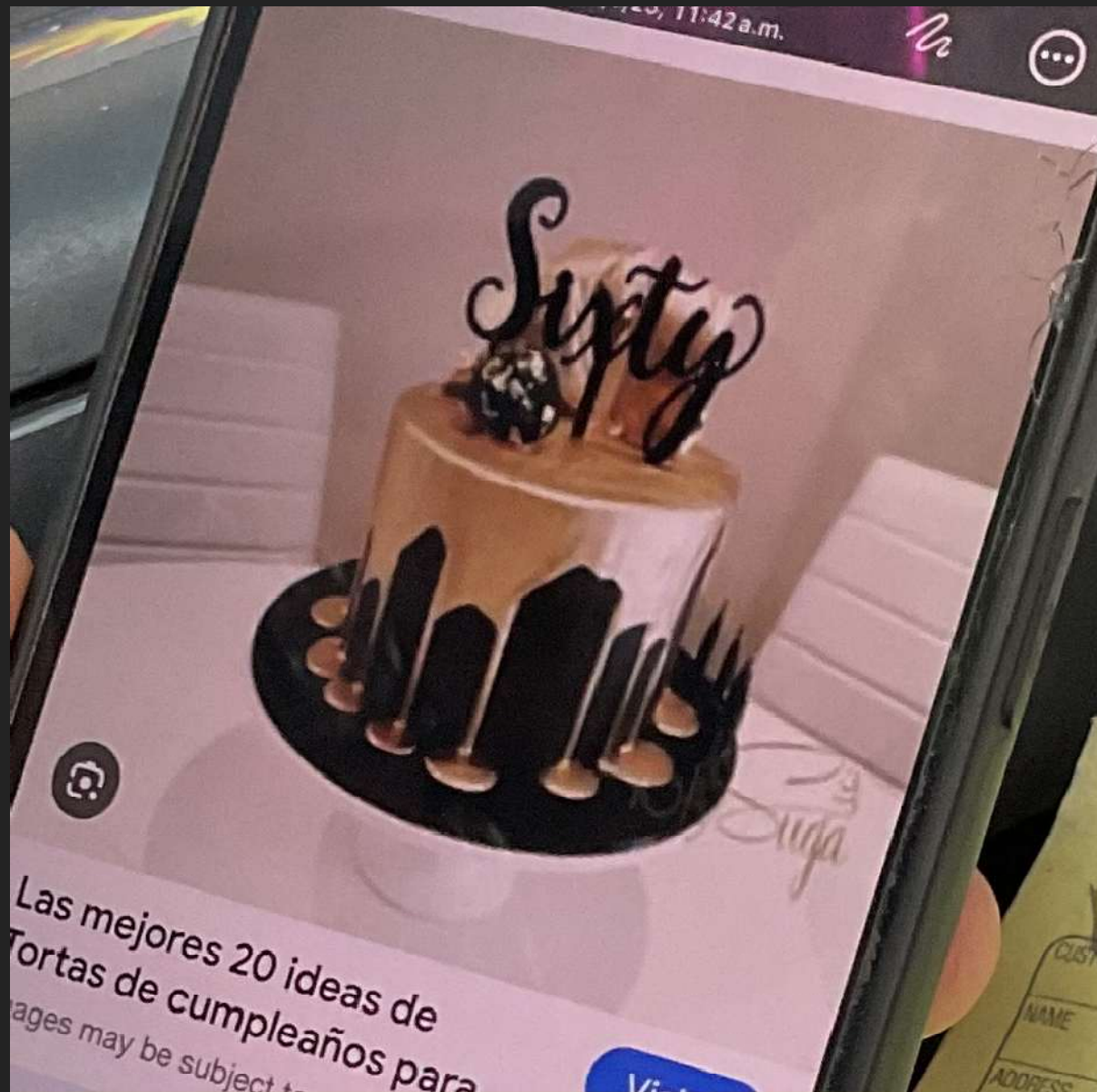
Environmental Assessment

Environmental Assessment



Environmental Assessment







n=8

Illness Characteristics



1



7



2



7



8



0

Lab Results

Sample ID	Description	Copper (%)	Zinc (%)
T250370007-1	Icing only	2.3	0.3
T250370007-1	Cake and Icing	0.8	0.1
T250370023-1	[REDACTED] gold powder	78.7	10.7
T250370029-1	[REDACTED] gold slurry	5.6	0.7
T250370028-1	[REDACTED] gold remnant	21.1	2.3

Sources::Samples	Analyte	Matrix	Detection Status	Result (ppm)	Uncertainty (ppm)	LOQ (ppm)	LOD (ppm)
2. Silver Decorative Metallics Non-Edible :: 1	Iron	Silver Decorative Metallics Bottle2	Detected	785.086		2	1

Case Follow-up

NOTE: The blurb below will be sent as a picture or PDF to people who consumed the product and reported any symptoms (currently totaling 9 people from our initial complaint and case finding efforts). While it is intended for patients to directly show their provider in order to ensure appropriate care is requested, we will also include a Spanish version so patients who need it can better understand what is being requested in their preferred language.

Blurb draft:

The TN Dept of Health and the Metro Nashville Public Health Department are contacting persons who may have been exposed to high levels of zinc and/or copper from cakes and baked goods containing icing or decorations that used an inedible metallic cake decorating product. We are working with the Tennessee Poison Center (TPC) and advising persons who ate this product and had symptoms to seek medical care. Providers should test blood zinc/copper levels, metabolic function (including liver and kidney function tests), complete blood count (CBC), and ceruloplasmin and assess for copper and zinc toxicity. Providers may call the TPC at 800-222-1222 and reference this investigation for further guidance on testing and treatment. For any other questions, please contact Mugdha Golwalkar at [REDACTED]

Sugar FreeKitGelVeganFood Coloring



Pharaoh's Gold
Luxury Cake Dust - 5 grams
Made in USA

Sponsored

EDIBLE 24 KARAT GOLD Luxury Luster Cake Dust, Edible Gold 5 grams for Cakes, Cupcakes,...

0.17 Ounce (Pack of 1)

4.6 ★★★★★ (2K)

400+ bought multiple times

\$9⁹⁹ (\$58.76/Ounce)

\$8.99 with Subscribe & Save discount

✓prime One-Day

FREE delivery **Tomorrow, Apr 1**

 [Small Business](#)



Add to cart

Overall Pick 1



Cake Lace
Decorative Metallics
Bright Gold
Non-Edible
56.7g

Cake Craft Group Cake Lace Decorative Metallics Luster Dust, 56.7 Grams Bright Gold

4.2 ★★★★★ (38)

100+ bought multiple times

\$14⁴⁹ (\$7.25/Ounce)

\$14.24 with Subscribe & Save discount

✓prime One-Day

FREE delivery **Tomorrow, Apr 1**



Add to cart

TopDetailsSimilarQuestionsReviews

before eating.

At a glance:

Provide your cakes with a glamorous vintage feel

Find better coverage and more control and accuracy than luster sprays

Easy use with flexible stencils

Perfect for cake figures, toppers and other non-edible cake decorations

Great for mixing with Rejuvenator Spirit or Confectioners Glaze to create a paint

Not suitable for applying directly to cake.

Do not use in an airbrush machine.

Storage:

Keep in a cool, well ventilated area. When not in use, keep containers sealed. Keep out of direct sunlight.

Caution: Do not ingest. For decoration use only. Use only in a well ventilated area. Keep out of reach of children.

Important information

Legal Disclaimer

Statements regarding dietary supplements have not been evaluated by the FDA and are not intended to diagnose, treat, cure, or prevent any disease or health condition.

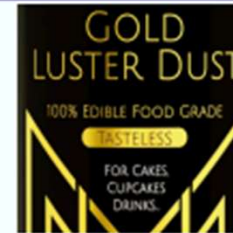
Selecting Edible Metallic Powders: What Every Baker Should Know

1

Check the Label

The following items indicate the decorative powder is safe to eat:

- "Edible" or "FDA Approved"
- Includes list of ingredients
- Expiration date on product



Know Where to Shop

Businesses that sell decorative powder that is safe to eat include:

- Baking and cake decorating suppliers
- Grocery stores

2

3

Beware

When purchasing from an online vendor, DO NOT purchase items that say:

- "Non-Edible" or "Not safe for human consumption"
- "For decoration use only"



If you think you or your customers may have ingested non-edible metallic powder, please call the Tennessee Poison Center toll-free at
1-800-222-1222

Acknowledgements

- Nashville Metro Public Health Department
- TDH Foodborne and Enteric Diseases Program
- Dr. Adam Travis at TDA Technical Services Laboratory
- Inspector Derek Lowe at TDA

CREDITS: This presentation template was created by **Slidesgo**, and includes icons by **Flaticon** and infographics & images by **Freepik**

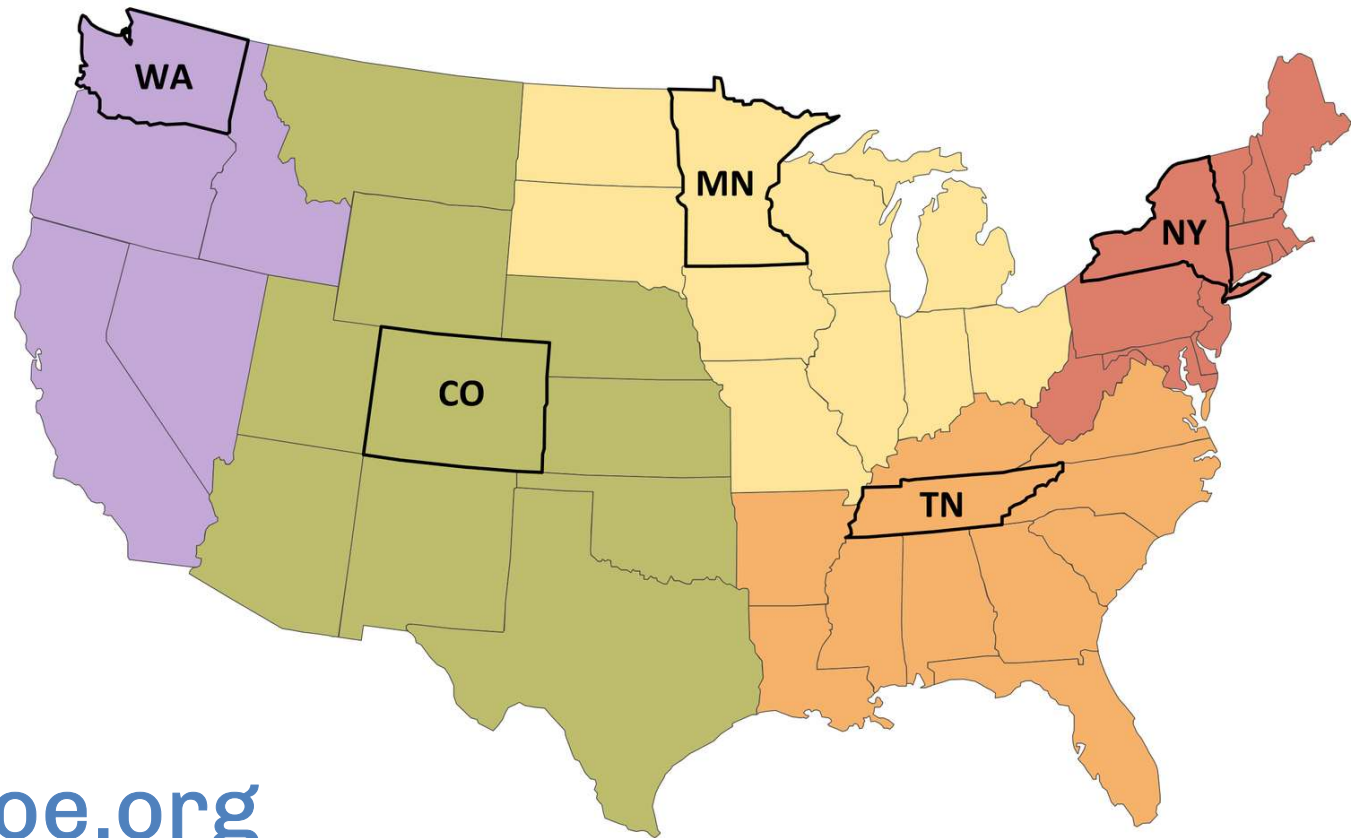


Environmental Health & Foodborne Outbreak Response

Training, Tools, and More

Who are the Food Safety CoEs?

- Established by FSMA
- CDC designated five centers
- Partnerships between state health departments and universities



Foodsafetycoe.org

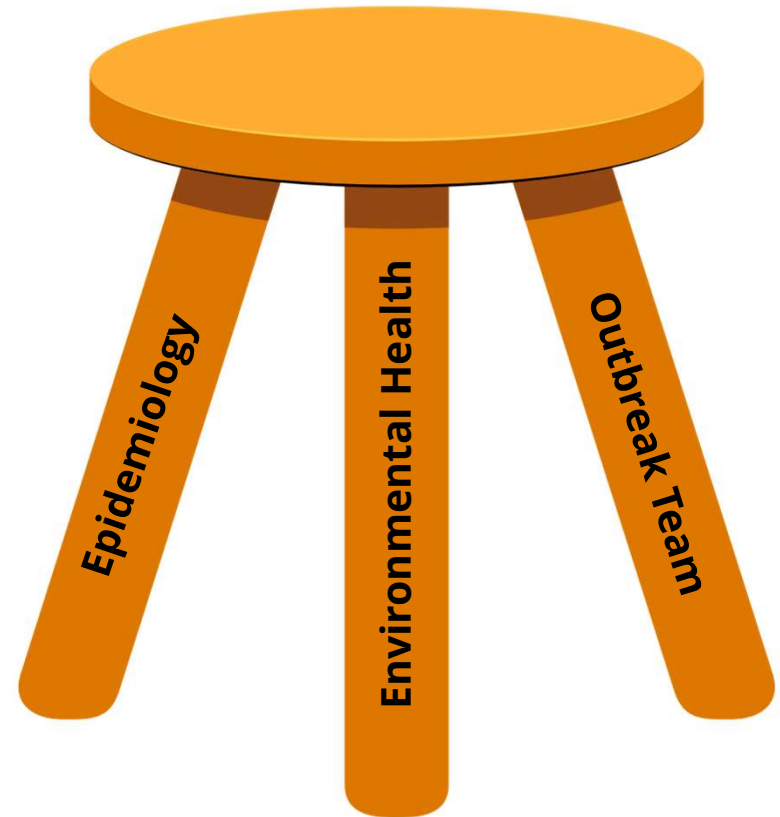
Food Safety CoE Activities



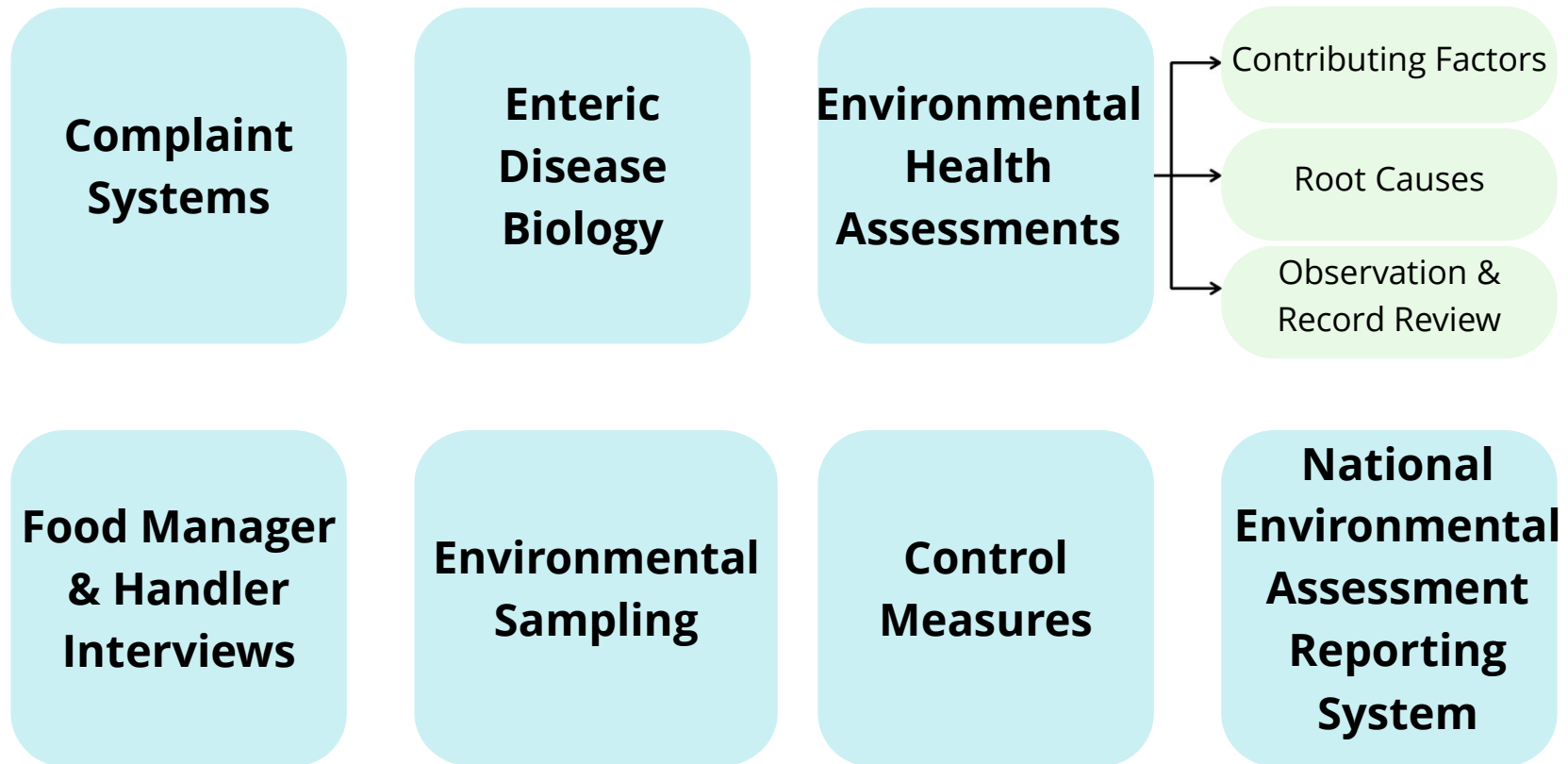
Who do we serve?

Primary target audiences:

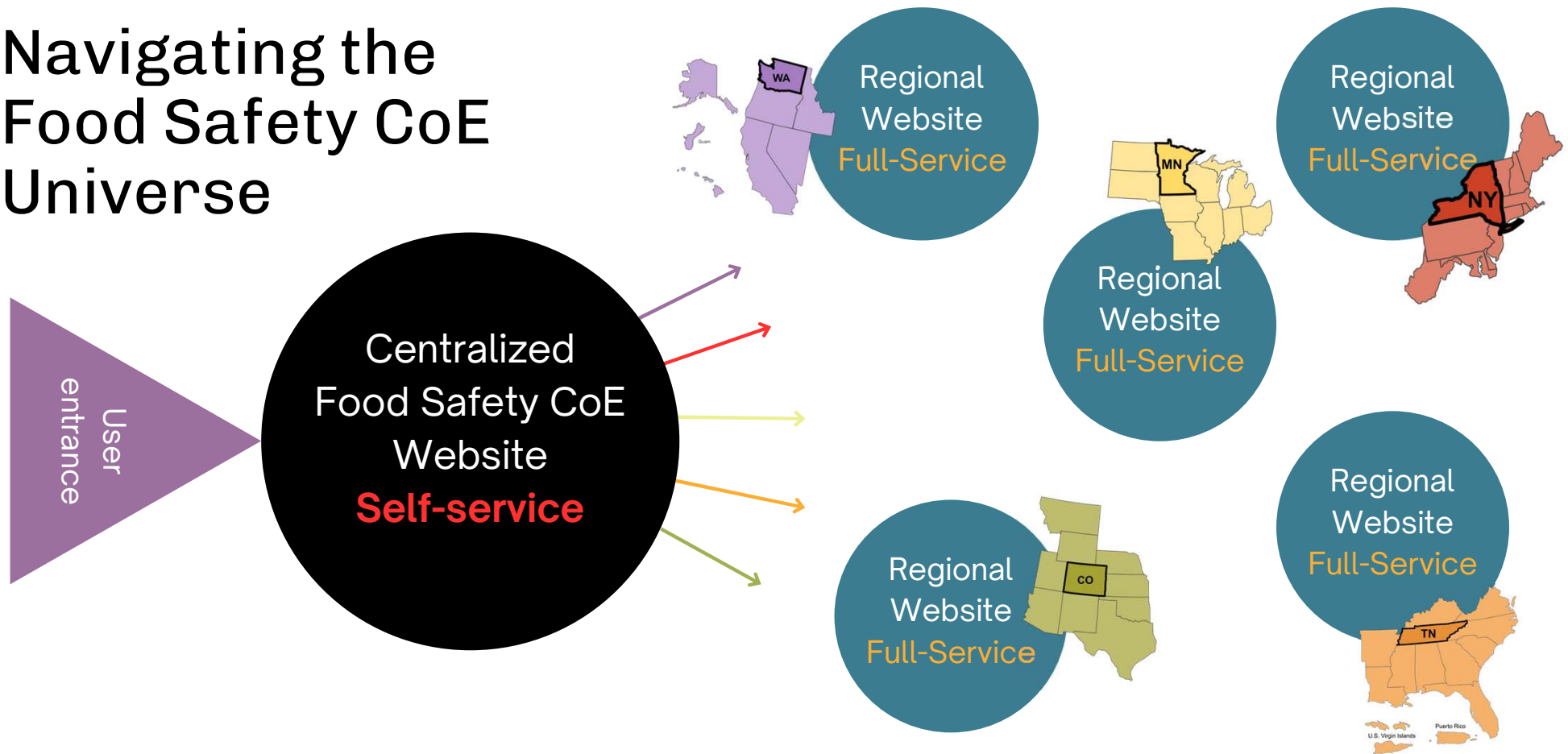
- **Epidemiology**
- **Environmental Health**
- **Outbreak Team**



Environmental Health & Foodborne Outbreak Response



Navigating the Food Safety CoE Universe





[About Us](#) [Products](#) [CoE Regions](#) [News & Events](#)

[FoodShield Login](#) [Contact Us](#)

Join our mailing list! Stay up to date on Food Safety CoE events, trainings, and tools for your team.

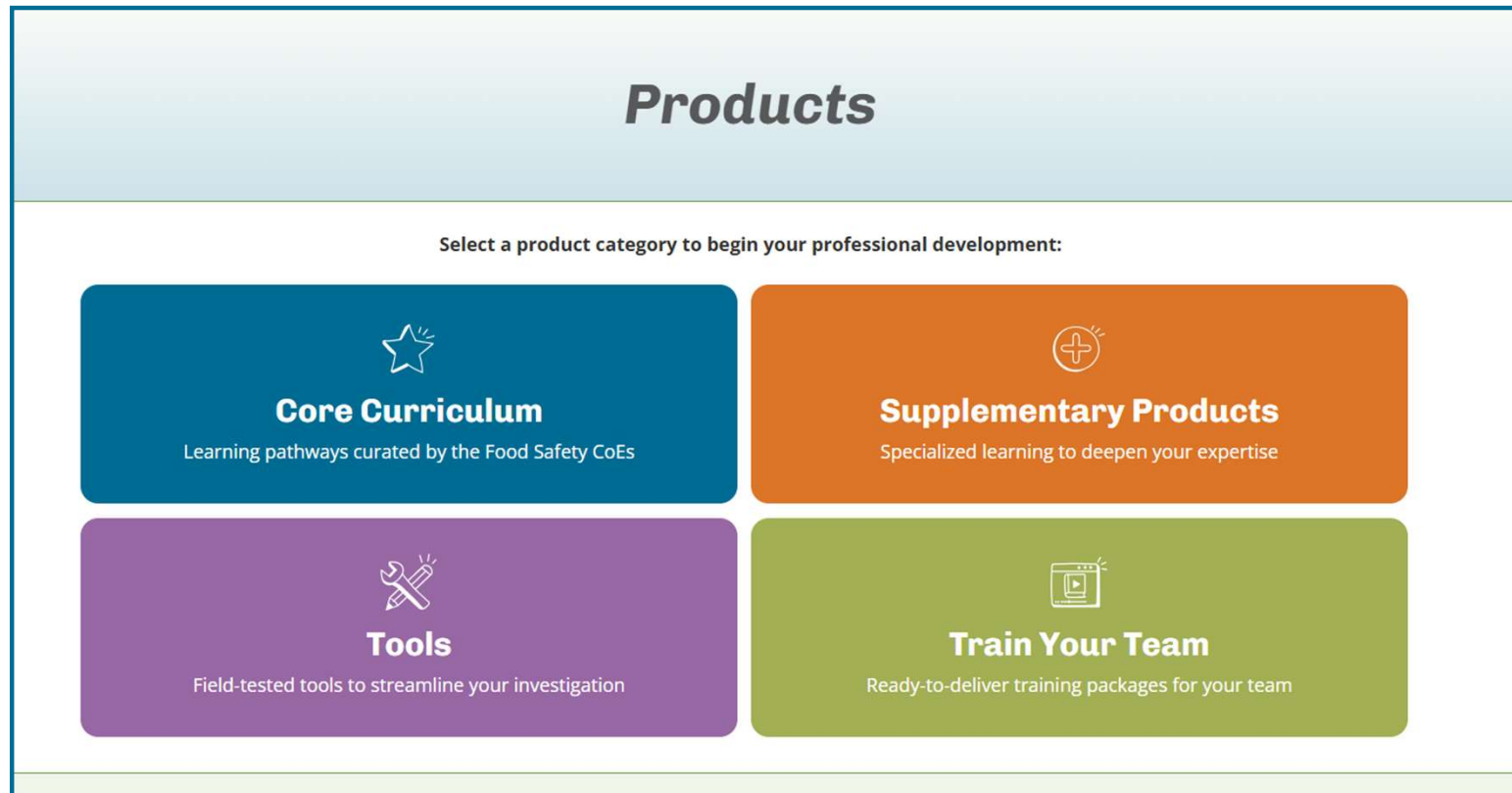
Our mission

Strengthen and empower the public health workforce to effectively prevent and respond to enteric disease outbreaks



Product Highlights

Four Types of Food Safety CoE Products



Environmental Health Core Curriculum (Tier 1 & 2)

Based on the Food Safety CoE Environmental Health Competencies



Pathogen Specific Surveillance

A video walking you through a timeline for identifying and reporting cases in foodborne outbreaks.



Environmental Assessment QuickTrain

An introduction on conducting environmental assessments during a foodborne outbreak investigation.



Interviewing Food Workers During Outbreak Investigations

Equips environmental health professionals with best practices for interviewing food workers and managers during a foodborne illness outbreak investigation.



Sampling 101: How to Find Pathogens in Food Facilities

An introduction to best practices for environmental sampling during outbreak investigations



Product Sampling 101 Quick Train

An introduction to food product sampling.



Hypothesis Generation During a Foodborne Outbreak Investigation

The fundamentals of hypothesis generation for foodborne outbreak investigations.



Environmental Assessment Training Series 101 (CDC)

Establish foundation of skills needed for conducting an environmental assessment in an isolated food service setting.



Legal Aspects of Public Health Food Safety

Learn how to navigate the legal waters of food safety.



Core Curriculum

Learning pathways curated by the Food Safety CoEs

Environmental Health Core Curriculum (Tier 1 & 2)

Pathogen
Specific
Surveillance

EA Quick Train

Interviewing
Food Workers
during OBs

Sampling 101:
Facility

Sampling 101:
Product

Hypothesis
Generation

EATS- CDC

Legal Aspects
Public Health
Food Safety



Core Curriculum

Learning pathways curated by the Food Safety CoEs

Tool: Environmental Health Pathogen Specific Checklists

Provide guidance for conducting an environmental assessment based on known or suspected pathogen.

Scombrototoxin

Vibrio

Norovirus

Campylobacter

Cryptosporidium

Single Hep A
Case

Bacterial
Intoxication

Salmonella



Tools

Field-tested tools to streamline your investigation



Supplement Product: [Investigating and Preventing Raw Milk Outbreaks an Expert Webinar](#)

Identify the health risks associated with raw milk consumption and its potential impact on consumer trust and dairy farm viability.

- Unique challenges in outbreak investigations
- Proper sample collection techniques, including “milk socks”
- Effective prevention strategies
- Q&A with experts from PA, ME, NY



Investigating and Preventing Raw Milk Outbreaks an Expert Webinar

Learn to investigate raw milk outbreaks, including source identification and sample collection. Discover prevention strategies for raw milk-related foodborne diseases from the New York Food Safety CoE.



Supplementary Products

Specialized learning to deepen your expertise



Train-Your-Team: Outbreak Root Cause Learning Lab

Table top exercise - Identify the contributing factors and root causes of foodborne illness outbreaks

3 different outbreak scenarios

- E. coli
- Campylobacter
- Norovirus

Mixed format - instructor led instruction/discussion, small group case study

Recommended pre-requisites and training materials



Outbreak Root Cause Learning Lab

Train your team to apply the "5 whys" methodology and use essential investigation tools to uncover outbreak root causes and prevent future occurrences.

Connect with the Food Safety CoEs

**Food Safety CoE
Website**

**Follow Us on
Social Media**

**Join the Food Safety
CoE Mailing List**



Thank you!



Claire Umstead, MPH

RRT Coordinator

Claire.N.Umstead@tn.gov

Katie Garman, MPH

Foodborne and Enteric Diseases
Program Director

Katie.Garman@tn.gov