



# Centered on *Food Safety*

Fall 2021 Newsletter

## HIGHLIGHTING PRODUCTS AND ACTIVITIES OF THE INTEGRATED FOOD SAFETY CENTERS OF EXCELLENCE

CDC has designated five Integrated Food Safety Centers of Excellence (CoEs) each comprising a state health department and affiliated university partners. The Centers are Colorado, Minnesota, New York, Tennessee and Washington. The Centers work together to identify model practices in foodborne disease surveillance and outbreak response and to serve as resources to assist other state and local public health professionals in implementing these practices.

### ON DEMAND Training in BioNumerics and SEDRIC

#### *APHL Announces New PulseNet BioNumerics Webinar*



PulseNet Central has announced a four-part BioNumerics virtual training series through the [APHL training portal](#). Part 1 provides an overview of the PulseNet network and BioNumerics v7.6 software. Parts 2, 3, and 4 will cover analyzing sequence data, database management, and cluster detection and reporting. To register, visit the APHL training portal and create an account or log in to the APHL Learning Portal with an existing account and enroll in the course by finding the PulseNet USA BioNumerics v7.6 Virtual Training Series in the course catalog. **These trainings are free and intended to educate PulseNet participants with beginner and entry-level experience with BioNumerics version 7.6.** APHL is approved for continuing education programs in the clinical laboratory sciences by the ASCLS P.A.C.E. Program. P.A.C.E. credits are awarded after **successfully completing** the course assessments and evaluations. **For more** information on this training series please email [PulseNet@cdc.edu](mailto:PulseNet@cdc.edu).

#### *SEDRIC 101 Training Webinars*

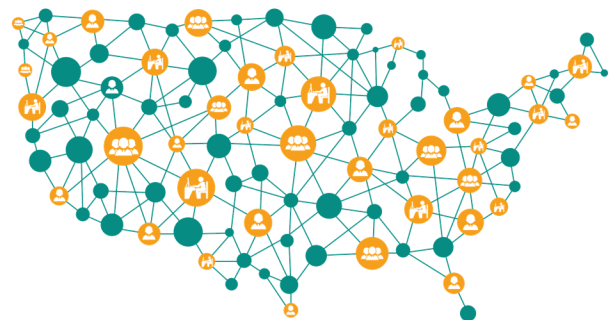
Want to learn, refresh, or expand your skills in using the awesome powers of SEDRIC? Look no further – recordings and documents from **the** SEDRIC101plus trainings from July 2021 are available! Big thanks and gratitude to Lyndsay Bottichio, Zach McCormic, and Michael Vasser from the SEDRIC team.

The 1.5-hour training sessions included:

- **Overview of SEDRIC and the advanced features**
- Case studies and examples
- 45min active training, followed by live Q&A
- The two training sessions are identical in covered content

Documents provided with the training:

- List of timestamps, content details, and Q&A
- Allele code threshold value table
- Bulk upload **CSV template**
- PulseNet meeting slides on allele codes and clusters (from 2/2/2021 and 8/26/2021)
- SEDRIC training documents



**Please contact [Soyeon Lippman](#) for the recordings and documents.**

## Minnesota CoE Publishes Paper on False Positive Vibrio Cases from Molecular CIDTs

The Minnesota Center of Excellence published a [paper](#) on the proportion of false-positive Vibrio cases tested by gastrointestinal multiplex PCR panels (GMPPs). From 2016 through 2018, only 47% of Vibrio cases that initially tested positive on a GMPP at a clinical lab were confirmed by culture. Two GMPPs were used in Minnesota, the Verigene Enteric Panel Test (EPT) and BioFire FilmArray Gastrointestinal Panel (GIP). The recovery rate of Vibrio species was significantly different between these platforms (Verigene EPT 63%, compared with FilmArray GIP 28%). Confirmed cases were more likely to report consuming food items typically associated with Vibrio infection or to have another likely source of infection (e.g., international travel or contact with an untreated body of fresh or salt water or marine life).

Subsequently, and unrelated to the paper, BioFire reported in a technical note (<https://www.online-ifu.com/ITIGI0239/25186/EN#remarkPopup>) the possibility of false-positive Vibrio results and attributed it to the presence of nucleic acid from non-viable naturally occurring Vibrio species in Cary Blair transport medium, as molecular CIDTs do not distinguish between nucleic acid from viable or non-viable organisms. However, the presence of Vibrio nucleic acid in Cary Blair media could impact any molecular CIDT, not only the BioFire FilmArray GIP.

These findings emphasize the need for improvements to the testing platform specificity, the importance of combining clinical and exposure information when diagnosing an infection, and the utility of maintaining the ability to culture Vibrio species to aid in accurate diagnoses.

## Colorado CoE's New Botulism Resource

Botulism is a rare but serious intoxication that causes neuroparalytic illness. Three forms of botulism can occur: foodborne, infant/intestinal, or wound botulism. While all types of botulism can be life-threatening and are considered medical emergencies, every case of foodborne botulism represents a public health emergency because the responsible food, whether homemade or commercial, may still be available for consumption and could make others ill.

Colorado typically identifies a few cases of foodborne botulism every 3-4 years, but between 2019-2020, nine cases were identified. This large increase in cases was concerning to Colorado epidemiologists who seldomly investigate this illness. The COVID-19 pandemic and resulting popularity of home canning and preservation heightened these concerns as home-canned vegetables are the most common cause of botulism outbreaks in the United States. Canning techniques and methods can be complex. For instance, recipes must be adjusted for higher altitudes. Furthermore, pandemic canning created a shortage of proper equipment, jars, fittings, and other supplies, some of which should not be re-used.

With many people new to home canning and preservation, the Colorado CoE was concerned about a possible nationwide increase in cases and partnered with the [Rocky Mountain Public Health Training Center](#) to host a free 5-part web series on various aspects of *Clostridium botulinum* to educate public health professionals. Webinar recordings are available [here](#). If you have any questions or suggestions for a future web series, please contact [Ingrid Hewitson](#).

## New York CoE Announces Updates to Foodborne Illness Investigation Training Tool

The New York Integrated Food Safety Center of Excellence (NY CoE) has **updated** a popular training tool! The NY CoE foodborne illness investigation case study exercise *Pining for a Common Source* has been revised to incorporate the use of whole genome sequencing for cluster detection to identify potential outbreaks. The case study focuses on a multistate Salmonella Enteritidis outbreak associated with exposure to pine nuts in which public health partnered with industry for response.

The multidisciplinary approach to outbreak investigation (epidemiology, laboratory and environmental health) is emphasized and the multijurisdictional response by local, state, and federal partners is incorporated. All case study training materials (Instructor manual, Student manual, PowerPoint slides, and Student evaluation form) can be accessed on the NY CoE website at: <https://nyfoodsafety.cals.cornell.edu/training/case-studies/>. The activity can be completed as a self-paced individual lesson or as a moderated small group exercise.

### FIND US ONLINE

CDC	<a href="http://www.cdc.gov/foodsafety/centers/">http://www.cdc.gov/foodsafety/centers/</a>
Colorado	<a href="http://www.cofoodsafety.org/">http://www.cofoodsafety.org/</a>
Minnesota	<a href="http://mnfoodsafetycoe.umn.edu/">http://mnfoodsafetycoe.umn.edu/</a>
New York	<a href="http://nyfoodsafety.cals.cornell.edu/">http://nyfoodsafety.cals.cornell.edu/</a>
Tennessee	<a href="http://foodsafety.utk.edu/">http://foodsafety.utk.edu/</a>
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