

B. Cereus. Are you for real?

Megan Casey; Matt Collins; Morgan Roddy

Indiana Department of Health

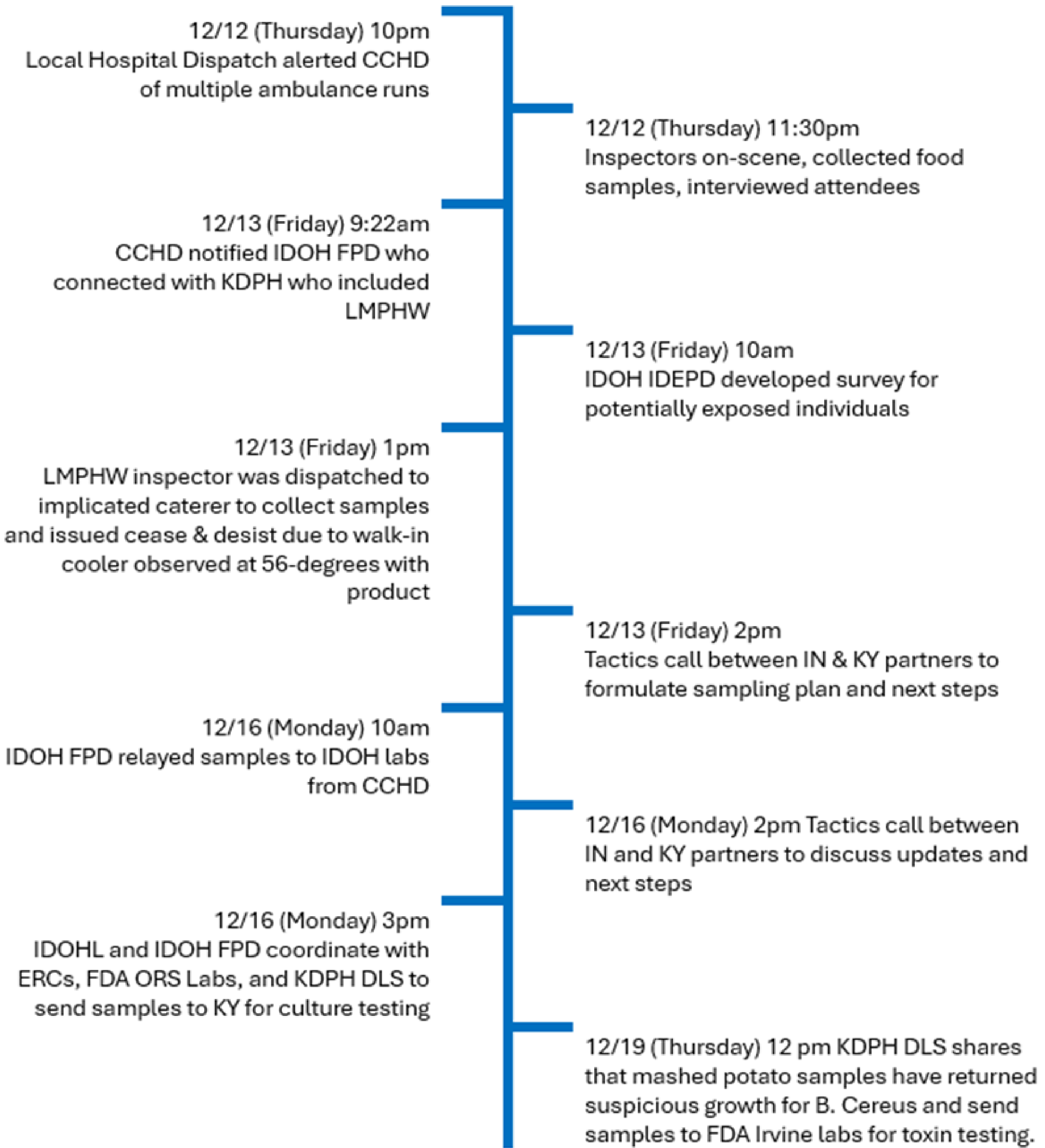


Indiana
Department
of
Health

Background / Introduction

Bacillus cereus is a common foodborne illness, but infection with this organism is not commonly reported because of its usually mild symptoms. This poster describes a multi-state outbreak between Indiana and Kentucky involving a catered event in Jeffersonville, IN and a caterer based in Louisville, KY.

Timeline of Events



Methods

Before and during our multi-jurisdictional coordination call, food sampling and an exposure REDCap survey were performed and used. Stool sample collection efforts only yielded one and it was after the patient stopped exhibiting symptoms. However, with enough epi data collected, we were able to zero in on probable vehicles for analyses.

Foods Eaten	Amount	Risk Ratio
Roasted Pork (Slow Cooked Cuban Style Pork)	19/47	1.29
Cuban Black Bean and Rice	16/40	1.00
Yuca con Mojo	14/40	1.66
Mashed Potatoes	14/36	1.41
Glazed Ham	13/36	1.57
Roasted Turkey	13/35	0.95
Green Beans	13/33	0.63
Sauces	13/33	1.29
Soda	14/38	0.41

Results

Mashed potato samples collected by partners in IN and KY were culture positive for *B. cereus* by Kentucky Department of Public Health Division of Laboratory Services; however *B. cereus* toxin was not detected in tested food samples sent to FDA labs in Irvine, CA for further analysis.

Louisville Metro Public Health and Wellness issued a Cease & Desist at establishment and ordered disposal of food along with a deep clean prior to reopening after reinspection 48hrs later.

1 stool sample was collected but not positive for toxins.

Conclusions

Quick response, excellent collaboration, and long-held relationships were paramount to a successful response with so many jurisdictions involved, especially between CCHD and their local EMS as well as LMPHW and the catering establishment.

Challenges with an enterotoxin outbreak investigation include knowing what labs can analyze and obtaining clinical samples as quickly as possible while individuals are still symptomatic, especially if there are language barriers.

Our investigation was a quality testing of our combined capacities, indicating a number of strengths and areas of improvement so that we will be better prepared for future similar responses while also taking proactive preventative steps through educating food establishments.



Acknowledgments

- Clark County Health Department
- Louisville Metro Public Health and Wellness
- Kentucky Department of Public Health: Food Safety Branch, Division of Epidemiology and Health Planning, and Division of Laboratory Services
- Indiana Department of Health: Food Protection Division, Infectious Disease Epidemiology and Prevention Division, and Laboratory
- FDA DET-DO and CIN-DO ERCs