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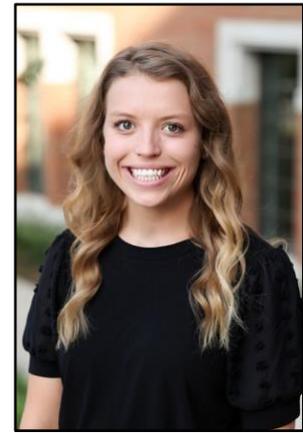
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Evaluation of the Foodborne Diseases Centers for Outbreak Response Enhancement (FoodCORE) Interview Team Response Success in Tennessee, 2018-2023



Introduction: The Tennessee Department of Health (TDH) has participated in the Foodborne Diseases Centers for Outbreak Response Enhancement (FoodCORE) project since 2010 and has implemented the Tennessee FoodCORE Interview Team (FIT) to assist staff with routine and outbreak case investigations. This study aims to ascertain the effects of COVID-19 on FIT responses, the effects of text messaging on successful response rates, and whether there are any general differences in interview success rates by age group, pathogen, or severity of illness.

Methods: The FIT data was obtained from REDCap for four FoodCORE pathogens from January 1, 2018, to May 31, 2023. Records with incomplete data were excluded. Data from this cohort of investigations was categorized into time categories that represented "Pre-COVID" (before March 5, 2020, and with routine texting), "During COVID" (March 5, 2020-January 31, 2022, without routine texting), and "Post-Peak COVID" (February 1, 2022-May 31, 2023, with reinstate routine texting). Chi-Squared and logistic regression were used to determine if differences in response success were statistically significant and relative risk was calculated to determine the magnitude of differences. Number of contact attempts was assessed to determine if continued attempts yield successful responses.

Results: In total, 7,797 FIT investigations were included in the analysis. Overall, 5931/7797 (76.1%) of cases were successfully contacted across all time periods. There was a significant difference in response success across the three time periods ($p < 0.0001$). Receiving a text message was significantly negatively associated with successful contact attempts in the "Pre-COVID" time period (RR: 0.52) and without significant differences in both the "During COVID" and "Post-Peak COVID" time periods, regardless of number of contact attempts. Statistically significant differences in response success also exist by age group, pathogen, and severity of illness.

Conclusions: Text messaging, case demographics, and the COVID-19 pandemic all had varying effects on successful interview attempts. Ongoing evaluation of variables that may influence interview success is critical in maintaining a robust outbreak response in Tennessee including developing FoodCORE best practices.