Factors Associated with Regulatory Action Involving Investigation of Illnesses Associated with Shiga Toxin-Producing *Escherichia coli* in Products Regulated by the Food Safety and Inspection Service

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Abstract

We described characteristics of the *Escherichia coli* O157 and *Escherichia coli* non-O157 illness investigations conducted by the United States Department of Agriculture's Food Safety and Inspection Service (FSIS) during the 5-year period from 2006 through 2010. We created a multivariable logistic regression model to determine characteristics of these investigations that were associated with FSIS regulatory action, which was defined as having occurred if a product recall occurred or if FSIS personnel performed an environmental health assessment (Food Safety Assessment) at the implicated establishment. During this period, FSIS took regulatory action in 38 of 88 (43%) investigations. Illness investigations in which FoodNet states were involved were more likely to result in regulatory action. Illness investigations in which state and local traceback, or FSIS traceback occurred were more likely to result in regulatory action. Reasons for lack of action included evidence of cross-contamination after the product left a regulated establishment, delayed notification, lack of epidemiological information, and insufficient product information.