



E62 Those in Their Current Role the Longest Are Less Likely to Report Hindrance in the Use of Joint Investigations Practices: Data From the 2013-2015 CDC/FBI Joint Criminal-Epidemiological Investigations Workshop Course Evaluations

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After attending this presentation, attendees will be able to identify the hindrances reported by the Centers for Disease Control and Prevention (CDC)/Federal Bureau of Investigation (FBI) Joint Criminal-Epidemiological Investigations Workshop participants and to understand their associations with the role of participant, number of years in role, and workshop location. As a result, attendees will better understand the barriers and perceptions that prevent successful collaboration between public health and law enforcement for the identification and response to biological threats.

This presentation will impact the forensic science community by illustrating that the longer an individual serves in a role, the less likely he/she is to report hindrance in the use of joint investigation practices. This presentation is relevant to law enforcement, epidemiologists, emergency preparedness managers, laboratorians, community health specialists, public health nurses and physicians, and others who contribute to the identification and/or response during a biological threat incident.

The CDC and the FBI conducted Joint Criminal-Epidemiological Investigations Workshops to develop relationships and promote inter-agency collaboration between public health, law enforcement, and other agencies prior to and during the response to incidents involving biological threats. To help the CDC and the FBI in allocating their training resources more efficiently and in identifying a target audience for future workshops, this study explored the association between the presence or absence of hindrance in applying joint investigations practices on the job with the number of years in reported roles, the role of the participant, and the workshop location.

Data were collected from the 2013-2015 workshop participants who completed course evaluations. Four variables were extracted: (1) number of years in the role; (2) the role of (law enforcement, public health, emergency responders, and other); (3) the hindrance in applying joint investigations practices (lack of opportunity, lack of management support, incomplete understanding, other, and no hindrance reported); and, (4) workshop location (13 locations). Descriptive statistics were calculated, and differences in the number of years in a role across different factors were evaluated by the Kruskal-Wallis test. Logistic regression analysis was performed to evaluate the association between presence or absence of hindrance and the number of years in the role, the role of participant, and the workshop location. Statistical analyses were performed using Statistical Analysis System (SAS) 9.3 and Statistical Package for the Social Sciences (SPSS) 21.

Of the 975 workshop participants, 72.61% completed course evaluations. Further data management and analysis indicated that for numbers of years in a role, the overall mean was 12.41 (Standard Deviation (SD) = 9.87), median was 10.00, and range was 1-44. More than half of the participants were in public health roles (53.67%). A little more than half of the participants reported a hindrance in applying joint investigations practices (51.83%). Kruskal-Wallis tests demonstrated that significant differences in the distribution of the number of years in a role were observed between roles ($p < 0.001$), presence/absence of hindrances in applying joint investigations



practices ($p=0.009$), and workshop locations ($p=0.004$). Logistic regression analysis showed that of the three predictors, number of years in a role is the only factor that is significantly associated with hindrance in applying joint investigations practices ($p=.016$), suggesting that for every year that the participant has stayed in the reported role, the participant is less likely to report a hindrance (Odds Ratio (OR)=0.976, 95% CI 0.958 0.995).

Findings in this study suggest that the longer the participant stays in his/her role, the less likely it is for him/her to report a hindrance regarding the application or use of joint investigations practices. This may be attributed to the knowledge from the real-world experience accumulated over time in a role and/or authority gained to independently perform duties associated with the role. Based on these findings, it is suggested that the workshop be targeted to those junior personnel with lower-level experience or fewer number of years in a particular role. Secondly, encourage more personnel from law enforcement and other government agencies involved in emergency preparedness and response are encouraged to attend the workshop. In this way, the targeted audience may be more likely to overcome barriers and perceptions that prevent collaboration between public health and law enforcement for the identification and response to biological threats.

Number of Years, Role, Hindrance