



Prehospital EMS Provider Perceptions of Errors and Safety

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Background: Developing and maintaining a culture of safety is a significant priority for the high-risk, time-sensitive field of EMS. Recognition and response to errors are important elements for fomenting a culture of safety. Our objective was to assess EMS providers' perceptions of their agency's patient safety and to compare reported practices regarding errors among those who rated their agency as "safe" or "unsafe." We hypothesized that individuals who provided a negative agency safety rating would report poorer practices with regards to errors and near miss events.

Methods: A cross-sectional survey of nationally-certified EMS providers was conducted. Demographic and agency characteristics were collected along with information focused on perceptions of practices regarding errors. Respondents were asked to rate their main EMS agency's overall safety using a 5-point scale ranging from "excellent" to "poor," dichotomized to "safe" (excellent/very good/good) or "unsafe" (fair/poor). Inclusion criteria consisted of currently practicing providers (EMT or higher) in non-military, non-tribal settings. Descriptive statistics were calculated and significance was evaluated using Chi-square tests.

Results: A total of 23,773 of the 35,588 respondents met inclusion criteria (response rate = 11%). The majority rated their agency as safe (86%, n = 20,488). Significantly more of those who rated their agency as safe reported that near miss events are documented most of the time or always compared to those at unsafe agencies (56% vs. 15%, $p < 0.01$). Similarly, 74% of respondents who provided safe agency ratings agreed that mistakes have led to positive changes compared to 20% of respondents who gave an unsafe agency rating ($p < 0.01$). Fewer respondents at perceived safe agencies agreed that it feels like individuals are punished when an event is reported compared to those at perceived unsafe agencies (28% vs. 65%, $p < 0.01$). Over half (57%) of respondents at perceived safe agencies demonstrated willingness to report mistakes observed compared to only 15% of respondents in perceived unsafe agencies ($p < 0.01$).

Conclusions: Respondents who rated their agency as unsafe reported poorer practices regarding errors. Even at perceived safe agencies, nearly half of respondents reported infrequent documentation of near miss events and a reluctance to report mistakes demonstrating the need for further efforts to promote a culture of safety in EMS.