

Appendix E1

Question-by-Question Explanation for NHTSA EMS Agency Survey

This attachment provides an overview of the EMS agency questionnaire items to be used in this study. The questions ask about the general makeup of an ambulance agency and the ambulance driver training that ambulance operators within each agency complete.

| Item # | Explanation |
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| 1 | This is a screening item. If the EMS agency contacted does not operate ground ambulances, the survey will end. |
| 2 | This question identifies the State where the agency operates. It will be used to characterize the sample and to look for differences in training across States. |
| 3 | This question yields a self-report assessment of the respondent's knowledge of ambulance operations at his or her agency. While the initial solicitation and introduction to the survey both clearly state that a person familiar with ambulance operations should complete the survey, it is possible that they survey could be completed by someone with a lower level of knowledge. Responses will be used to characterize the sample and look for differences in response patterns by category. Inputs from individuals with limited or no knowledge of their agency's ambulance operations may be dropped from analysis. |
| 4-5 | These questions help us understand the respondent's job role and experience in order to better characterize our sample. They will be useful for inferring the level of experience and perspective the respondents have regarding ambulance operations across the sample. |
| 6 | This question indicates the "type" (e.g., hospital, fire department, etc.) of EMS agency. It and will be useful for characterizing agencies in the sample, and investigating training differences across types of agencies. |
| 7 | This question indicates the tax status (e.g., for profit) of EMS agency. It will be useful for characterizing agencies in the sample, and investigating training differences across for profit, not-for-profit, and government agencies. |
| 8 | This question indicates the size of the community in which the agency operates. The size of area the agency responds to may influence the training content or delivery, or other such training requirements. It will be useful for characterizing agencies in the sample, and investigating training differences across community-served sizes. |
| 9 | This question indicates the percentage of volunteers in the agency. Volunteer ambulance operators may be trained differently than non-volunteers. It will be useful for characterizing agencies in the sample, and investigating training differences across percentages of volunteers. |
| 10 | Asking this question tells us the number of years the agency has been operating ambulances. Experience may play a role in providing and designing training. It will be useful for characterizing the sample, and investigating training differences across years of ambulance operation. |

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| 11 | This question indicates the services provided by the agency. Training approach and content may be tailored by services offered. It will be useful for characterizing agencies in the sample, and investigating training differences across services provided. |
| 12 | This question describes the type of calls the agency responds to which may impact training approach and content. It will be useful for characterizing agencies in the sample, and investigating training differences across most frequent call type(s). |
| 13 | This question indicates the number of each type of ambulance the agency operates. Training may be tailored to vehicle type(s) and the number of each operated by an agency. It will be useful for characterizing agencies in the sample, and investigating training differences across fleet makeups. |
| 14-15 | These questions cover whether the agency has a Fatigue Risk Management Plan (FRMP) as part of its education/training program, and what some of the features of that plan are if an FRMP is in place. They are important for characterizing how agencies are addressing sleep and fatigue issues that can be associated with motor vehicle crashes. |
| 16 | This question indicates the agency's driver licensing, certification, and endorsement requirements for ambulance operators. Requirements may determine the presence/absence of training, and/or training content. The information will be useful for characterizing agencies in the sample, and investigating training differences across licensing requirements. After State requirements have been confirmed with State office representatives, this item will also allow us to assess whether agency requirements are more stringent than State requirements and how this impacts training. |
| 17 | This question describes the frequency with which the agency reviews the driving records of its ambulance operators. The frequency of driving record checks has direct implications for safety and training content. Driver records showing similar violations and crash types could be used to structure training content. It will be useful for characterizing the sample, and for investigating differences in training across driving record checks. |
| 18 | This item indicates the types of driving offenses that are screened during the driving record check. It will be useful for characterizing the sample, and for investigating differences in training across driving record checks. |
| 19 | This item asks whether ambulance operators specifically complete emergency vehicle operator training. It is essential to the research investigation, and is a screening item for subsequent training content questions. This item also indicates whether the training is a requirement at the agency. |

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| 20 | This question yields an assessment of the respondent's knowledge of ambulance operator training at his or her agency. Knowledge of ambulance operator training is critical to the internal validity of this data collection. Respondents with limited or no knowledge of training may be dropped from analyses. |
| 21 | This question classify training according to its degree of structure and organization. Completing highly structured training is very different from unstructured or otherwise informal training. Knowing this will help to characterize the sample and the type of ambulance operator training being conducted across the U.S. |
| 22 | This item asks about the developer of the training program. Approach and content could vary greatly depending on who developed the program. It will be useful for characterizing the sample and the diversity of training programs used by agencies that are sampled. |
| 23 | This questions tells us the name of the training program the agency uses. It will be useful for determining how many different programs are being used across the country. |
| 24 | This question determines if the training program is based on any standards or best practices. Training programs are often derivatives of standards and best practice recommendations set by governing organizations (e.g., National Standard Curriculum-EVOC, 1995 Edition, U.S. Department of Transportation). It will be useful for determining the influence of relevant standards on training programs currently being used. |
| 25 | This question indicates whether training is specific to ambulances, ambulance type, or other emergency vehicles. This is directly relevant to characterizing training approach and content. Some training is specific to vehicle type, other training is broader in scope. This item will help characterize the focus of the training programs. |
| 26-28 | These questions asks about the physical location(s) where training is actually delivered and the total number of hours the training takes to complete, and the specific number of hours spent in each location. All of these factors help us characterize and understand the training program structure. |
| 29 | This question asks respondents to describe who is providing the training instruction (e.g., in-house, external, private, public, etc.). Training may differ notably based on who is conducting the instruction. |
| 30 | This question specifically asks about the qualification(s) of the training instructor. Specific instructor qualifications might be related to different training experiences or type of agency. This item will be useful for exploring differences in training instructors across the sample. |

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| 31 | This item captures information on specific training topics covered by the training. It will be used to investigate differences in training content across the sample. |
| 32-33 | These questions tell us whether ambulance operators must pass a test or evaluation before driving an ambulance. They indicate whether trainees are trained to a criterion, and who sets that criterion. |
| 34 | Many ambulance agencies utilize volunteers to perform ambulance operator functions (including driving). This question tells us whether volunteer ambulance operators are trained to the same standard as non-volunteers. It will be used to help understand which individuals receive training at agencies, the potential impact (% of agency trained) the training may have, and where more training may be needed. |
| 35 | It is unknown if and how agencies evaluate the impact of the training offered. Evaluation of training is necessary to determine value of the training. This question tells us if the agency has evaluated the effectiveness of its training program, and if so, how. |
| 36 | This question asks about the frequency of refresher training. Refresher training is often important for skill retention, and sometimes correction. Regardless of State requirements, operators at the agency may complete refresher training. Responses will be used to assess the relative frequency with which this occurs. |
| 37 | Revising a training program to remain current with updated knowledge, law, standards, recommendations and technology is important. This question indicates the length of time since the last revision to the training program was made. |
| 38 | Remedial training is often required when an individual demonstrates a need for such training. This question will be used to determine if agencies require remedial training after a crash. |
| 39 | This question asks whether agencies conduct check rides. Check rides are common tools used as part of operator training to determine an operator's readiness to perform on his/her own. The item will be used to determine how many agencies in the sample conduct them. |
| 40 | If the agency conducts check rides, they will be given an opportunity to indicate what training content is assessed/reviewed during a check ride. This question will be used to investigate common content assessed during check rides across agencies that conduct them. |

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| 41 | One goal of the current research project is to collect driver training materials used by ambulance agencies across the U.S. This question asks the agency if they have materials available that operators may reference, and if so, provides them with contact information and a link should they wish to share their materials with the study. |