

WHICH PROTOCOL FOR TRAFFIC ACCIDENTS: MEDICAL, FIRE, OR POLICE?

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INTRODUCTION

Traffic incidents (collisions and crashes) are among the most common call types handled by Emergency Communication Centers (ECCs). They are also among the most complex call types because they represent such a range of possible situations. These can range from “fender benders” with no injuries and little or no property damage—in which case a single law enforcement officer might be an appropriate response—to mass-casualty events involving trains, buses, or other large, multi-passenger vehicles.

ECCs that handle calls in multiple disciplines (medical, fire, and law enforcement) may have multiple protocols available for handling traffic accidents because the Medical Priority Dispatch System (MPDS), Fire Priority Dispatch System (FPDS), and Police Priority Dispatch System (PPDS) all contain traffic and transportation incident protocols. All three gather basic and necessary information about scene safety and the possible existence of injured victims, as well as some information about the need for specialized machinery. However, each of the three protocols is also targeted to the specific needs of that discipline.

The primary objective of this study was to determine which of the three traffic incident protocols multidiscipline agencies select to use (or use first) in handling these types of calls, as well as their reasons for their selections.

METHODS

This was a descriptive, prospective, uncontrolled study using a structured survey, developed on the Survey Monkey™ platform. Each respondent was asked to indicate which discipline’s protocol his or her agency selected (or “launched”), and whether the agency allowed personnel to select one of the protocols based on the specifics of the call, as presented in response to “Tell me exactly what happened.” Specifically, respondents reported their use of Protocol 29 (MPDS *Traffic/Transportation Incidents*), Protocol 77 (FPDS *Motor Vehicle Collision*), and/or Protocol 131 (PPDS *Traffic/Transportation Incident [Crash]*). Respondents were also asked to indicate their rationales for their selections and policies.

The survey was run from July 27, 2017 to August 24, 2017. STATA for Windows® software was used for data analysis. Qualitative analysis looked at the respondents’ descriptions of their rationales for selecting specific disciplines.

RESULTS: A total of 27 agency representatives were contacted, of whom 21 (77.7%) responded to the survey. A majority of the respondents were ECC managers (n=8), quality assurance managers (n=5), or training/shift supervisors (n=4). The most common multi-discipline setup was tri-users: those who use MPDS, FPDS, and PPDS (Table 1). The decision as to which discipline to launch was evenly split. However, of 12 agencies using all three disciplines, 11 chose to use P131 either alone or in combination. A majority (52.4%) allowed or accepted more than one protocol (Table 2). The most common basis for selection in a given call was agency policy (Table 3).

Measure		n (%) (N=21)
Current job position	Communication center manager*	8 (38.1)
	Quality assurance manager*	5 (23.8)
	Training/Shift supervisor*	4 (19.0)
	Division chief	1 (4.8)
	Other**	3 (14.3)
Current dispatch system used	ProQA software	16 (76.2)
	ProQA and Cardsets	5 (23.8)
Current protocol disciplines used	Medical, Fire, and Police	12 (57.1)
	Medical and Fire	8 (38.1)
	Fire and Police	1 (4.8)

*With/without regular calltaking activities. **Operation supervisor (no regular calltaking activities), Quality Improvement (QI) section chief (no calltaking activities, shift supervisor and QI (with regular calltaking activities)).

Table 1: Respondent and communication center characteristics

Measure		n (%) (N=21)
Basis for protocol selection	Agency policy only	12 (57.1)
	Case entry interrogation (CEI)	4 (19.1)
	Both agency policy and CEI	2 (9.5)
	Other*	3 (14.3)
Policy-selected protocol used consistently?	Yes	11 (52.4)
	No	10 (47.6)

*Agency policy in combination with emergency dispatcher decision, or based on caller-described problem during “tell me exactly what happened” questioning. P29 = MPDS *Traffic/Transportation Incidents* (Protocol #29), P77 = FPDS *Motor Vehicle Collision* (Protocol #77), P131 = PPDS *Traffic/Transportation Incidents (Crash)* (Protocol #131). **Depends on the caller’s response to the question “Tell me exactly what happened?” If hazards or entrapment then Fire P77, if injuries we send to EMS for interrogation. If no injuries, entrapment, or hazards then we use Police, P131.

Table 3: Basis for protocol selection

SELECTION RATIONALE: Respondents who selected the same protocol were relatively consistent in their rationale for selecting it. Respondents reported using Protocol 29 (MPDS) for calls in which callers reported injuries, and/or situations in which ECCs considered treatment to be more important than overall scene safety considerations. Protocol 77 (FPDS) was perceived as handling all traffic incidents well and as especially useful for special rescue operations. Protocol 131 (PPDS) was predominantly used when callers reported no injuries, and/or to address hazards on scene.*

Chief Complain Protocol	Reasons why used to process traffic accident calls*
Medical P29	<ul style="list-style-type: none"> For calls involving caller/patient injuries. Treatment is considered more important than scene safety.
Fire P77	<ul style="list-style-type: none"> Handles all issues. Addresses hazards, and/or injuries. For special rescues.
Police P131	<ul style="list-style-type: none"> Used for non-injuries. For hit-and-run where suspect information is available. Addresses hazards. Addresses all concerns.

P29 = Medical *Traffic/Transportation Incidents* (Protocol #29), P77 = Fire *Motor vehicle collision* (Protocol #77), P131 = Police *Traffic/Transportation Incidents (Crash)* (Protocol #131).

Table 2: Common agency rationales for protocol selection

Protocol selected	Discipline used by agency			Overall n (%)
	All three n (%)	EFD & EPD n (%)	EMD & EFD n (%)	
P29			3 (37.5)	3 (14.3)
P77	1 (8.3)		2 (25.0)	3 (14.3)
P131	3 (25.0)			3 (14.3)
P29/P77			3 (37.5)	3 (14.3)
P29/P131	3 (25.0)			3 (14.3)
P77/P131	3 (25.0)			3 (14.3)
P29/P77/P131	2 (16.7)			2 (9.5)
Depends		1 (100.0)		1 (4.8)
Overall	12	1	8	21

Table 2: Distribution of protocol selected by disciplines used in the agency

DISCUSSION

This study found no clear preference among multidiscipline ECCs for using one discipline over another to handle transportation incidents, largely because most agencies using multiple protocols saw each as handling different types of cases most effectively.

However, a clear preference did exist in agencies with access to the PPDS; in these agencies, almost all chose to use Protocol 131, the PPDS *Traffic/Transportation Incidents (Crash)* Protocol, either alone or in combination with other disciplines. Of the 12 agencies with all three disciplines, 11 used the PPDS at least sometimes, including 3 that used it exclusively. The most common reason for this was that Protocol 131 was seen as handling all issues well, with the exception of injuries. Also, because traffic incidents are often reported by third-party callers, often involve no injuries, and may require a police report to be filed, many can be handled through law enforcement response only.

Across all agencies, the issues driving protocol selection were the presence or absence of injuries, the need for specialized equipment, and the need for law enforcement response. The lack of consensus regarding the most appropriate protocol to use drove some respondents to request a “combined” or expanded protocol to handle all types of accidents. Further studies will evaluate the feasibility and effectiveness of such an approach.

CONCLUSION

Each discipline’s traffic incidents protocol seems to effectively address the needs of that discipline’s responders and agencies. Multiuser agencies, though, report that they use two or all three of the protocols to address diverse incident types. Rationales for selecting a protocol for a specific incident were similar across all the studied agencies.

CONTACT INFORMATION

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*Please see the full report in the March/April issue of the *Annals of Emergency Dispatch & Response*.