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Pursuit Driving

Emergency Driving and Pursuits

The Officer's Perspective

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Law enforcement officers put their lives on the line every day to protect citizens and to maintain the safety and security of this nation. They face dangers from suspects who resist their commands and from those who maliciously attack them. In addition, individuals who inadvertently become involved in automobile crashes with officers responding to an emergency also pose a risk. Therefore, any information that can assist police managers and trainers in

saving the lives of officers and promoting their welfare is welcome and worth considering.

Officers know about the danger of physical attacks and are trained to protect themselves. But, how aware are they of the hazards associated with emergency driving? Most knowledge about emergency response driving comes from limited anecdotal information and crash data reported by law enforcement agencies. The vast majority of departments do not require their officers to

complete a written report when they use emergency equipment or become involved in general emergency (code 3) responses. The only data available are maintained in computer-aided dispatch systems or on radio tapes that agencies rarely review unless a crash occurs and someone requests the information. Fortunately, more is known about pursuit driving because most departments mandate the completion of independent forms that their command staff then review.

Similarly, the Commission on Accreditation for Law Enforcement Agencies (CALEA) requires the collection and analysis of pursuit data for those agencies that seek accreditation or want to remain accredited. These combined official reports include important information about the officers involved, reason for the chase, and situational and outcome variables. Knowledge about pursuit driving comes from the analyses of these data conducted by agencies, outside researchers, and policy analysts.

To help the law enforcement community better understand the dangers associated with emergency driving, the authors present the results of surveys and interviews with officers during in-service training in Minnesota. They outline the issues of both emergency and

pursuit driving and make policy suggestions for agencies to consider.

THE ISSUES

An emergency response begins when a law enforcement officer activates the lights and siren while driving toward a call that is a real or perceived crisis. The officer's goal is to arrive at a specific location as safely and quickly as possible.

Officer Reactions

Regardless of the nature of the call or warning devices employed, officers must drive carefully and remain mindful of other traffic, both vehicular and pedestrian. However, they generally perceive most calls as critical and feel that every second counts to save a life or protect the public. During emergency responses, some

officers may understand the potential problems and drive quickly and safely without substantial risk to themselves or others. By contrast, some officers may undergo physiological changes from the fast driving and create risks. For example, they may experience an adrenaline "kick," causing them to focus almost solely on the need to get to a specific location quickly and may incur myopia and auditory lockout. In addition, being barraged by piercing sounds from the siren and blinding lights from the emergency equipment, especially at night, can cause them to experience a false sense of security. Such distractions can impact and often impair an officer's decision-making skills. Law enforcement organizations educate officers about these concerns and create policies



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and procedures that keep public safety firmly in mind. However, while some emergency driving regulations specifically require officers to stop or slow to a speed that allows them to stop when facing a red light or a stop sign should a civilian driver not see or hear them, others have rather vague wording that only instructs officers to be mindful of other traffic and to be careful.

Civilian Drivers

The problem is not normally the driving of the officers, who are trained professionals. Even when influenced by the need to assist a fellow officer or civilian in some real or perceived danger, a well-trained officer can handle the physical driving and does not often lose control of the vehicle. Unfortunately, the trained driver is not the only person on the roadway. Civilian drivers do not respond in a uniform manner, even though traffic laws often require them to pull to the right to allow an emergency vehicle to pass. When confronted with emergency vehicles, civilian drivers can prove unpredictable. Although they should know to yield, and many driver-training programs instruct them to do so, some drivers will stop and pull to the left and others to the right when an emergency vehicle is behind, in front, or approaching from the side. Emergency drivers are taught that their lights and

sirens are warning devices only and do not create an invincible shield around their vehicles. Law enforcement drivers also are instructed that other drivers on the roadway may not see their lights or hear their sirens and to drive accordingly and defensively. Years of experience or a tragedy may alert officers to the risks, but, until researchers can identify the factors that reduce crashes, drivers of emergency vehicles must maintain a controllable speed that allows them to react to unpredictable drivers.

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Risks Versus Benefits

What is not known is how many times emergency runs are truly worth the risks taken by officers and whether emergency runs provide an important difference to public safety that justifies the inherent risks. A subset of general emergency driving, or code 3 responses, pursuits also require fast driving but are different because at least one officer is chasing a suspect

in an attempt to apprehend that person. When a driver refuses to stop quickly, the ensuing pursuit becomes dangerous to the officer, the public, and the fleeing suspect. Added to the adrenalin rush and other influences of an emergency run is the officer's desire to apprehend the fleeing individual.

Pursuits create a problem for society in general and police specifically. As with emergency runs, no national data exists on the number of pursuits, crashes, or injuries that occur every year, nor is there any information on pursuit-related costs. While most agencies maintain these statistics, surveys of multiple departments are not common in the professional literature.¹

THE STUDY

Research conducted on the attitudes and opinions of fleeing suspects has indicated that such individuals are likely to slow down when police terminate the pursuit and they are safe from the show of authority.² But, because research on the collective opinions of officers concerning emergency responses and pursuits appeared lacking, the authors decided to collect this type of information to see what kind of insight the officers could provide.

Methodology

For 2 years, the lead instructor of the Law Enforcement In-Service Training in Emergency

Table 1

High-Risk Experiences

Number of officers	2,123	Code 3 runs	14,007,000
Combined years of service	25,936	Felony stops	5,833
Crashes on patrol	1,571	Faced a firearm	2,258

Vehicle Operations and Police Pursuits at the Minnesota Highway Safety and Research Center in St. Cloud surveyed all of the participants in the course.³ He collected data from 136 classes for a total of 2,123 officers and had all of the information entered into a computer. The strength of this approach rested in the total of almost 26,000 years of law enforcement experience that the officers possessed. The weakness was that a great deal of the information came from memory. It is important to recognize that any self-reported data may reflect errors of memory and maturation. However, when requesting information that is neither sensitive nor consequential, it is likely that respondents will provide honest answers. The officers were allowed sufficient time and instructed to remember and report their information concerning pursuits, crashes, intentional contact, and other relative issues as accurately as possible. Information concerning emergency runs (code 3 responses) was estimated

at 2 per day or 500 per year, which represented a reasonable average according to the participants. They were asked specifically about the criticality of the emergency runs and whether getting to the scene within 2 minutes of their actual arrival posed a serious tactical advantage in saving a life. They also were queried about their high-risk activities, such as how many times they had faced a firearm; the number of felony stops they had made; and information on pursuits, including crashes and other outcomes and the use of tire deflation devices and precision immobilization technique (PIT) maneuvers.

Findings

Tables 1 and 2 set forth the data collected from the 2,123 officers who had a combined total of 25,936 years of service, representing an average of 12 years. As a group, they had faced a situation involving the presence of a firearm 2,258 times, an average of 1.1 times per officer. They had made 5,833 felony stops, or an

average of 2.7 per officer. When on patrol, the officers had a total of 1,571 crashes, or .74 crashes per officer. They were involved in an estimated 14 million code 3 calls, representing an average of 6,598 calls per officer. Out of the 14 million emergency calls, 476 (.003 percent) resulted in a crash. Similarly, 1,747 of the emergency calls (.01 percent) made a difference by resulting in tactical advantage to save a life.

Among the group, 26,737 pursuits occurred, representing an average of 12.6 pursuits per officer. In 2,058 of them (7.7 percent), an officer was involved in a crash, while in 8,866 (33.2 percent), others were. Therefore, in the chases involving these officers, almost 41 percent resulted in a crash. Out of the 2,080 pursuits where spike strips were used (7.8 percent), someone was almost hit in 239 of them (11.5 percent). Officers used the PIT maneuver in 662 of the total pursuits (2.5 percent), and they decided to terminate the chase 1,269 times (4.7 percent).

Discussion

These data clearly show the inherent dangers of police work and the enormous risks officers face during their careers. The serious threat created by individuals who attack officers with weapons causes law enforcement to rank as one of the most dangerous professions.⁴ These inevitable risks must be managed and reduced, if at all possible. However, when physical force is used, officers are reacting to behavior displayed by subjects. Officers acting reasonably will use force necessary to control a suspect and no more. Similarly, officers will balance the type of offense committed and the risk to the public if the perpetrator is allowed to escape for the time being. This balancing act also is necessary in pursuit and emergency driving (code 3 responses).

The officers responding to the surveys were involved in more than 1,500 crashes during their careers. As with the dangers of physical attacks, the problems associated with vehicle crashes also threaten the well-being of law enforcement officers. Although the research did not cover the nature of the pursuits or the offenses for which the suspects were wanted, it did reveal that just over 40 percent resulted in a crash, with more than 2,000 involving an officer. These data support other research showing

that 4 out of 10 pursuits result in a crash.⁵

The sheer number of pursuits that result in crashes has prompted the law enforcement profession to find ways of reducing them. During the past decade or so, the use of spike strips and the PIT maneuver have become accepted ways to end pursuits in many departments. The officers surveyed used spike strips in almost 8 percent of their pursuits but reported that someone was almost hit in more than 11 percent of those events. While

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PIT maneuvers were not used as frequently (less than 3 percent of all pursuits), they also can be dangerous if the officer is not trained properly. Clearly, the PIT is safer at slower speeds, but a well-trained officer can perform the technique successfully at high speeds if the target vehicle does not over- or understeer to avoid the impact. In any case, the environment in which the maneuver is conducted will determine its safe parameters.

Moreover, agencies often employ helicopters to track fleeing vehicles, thereby eliminating the need for dangerous ground chases. Most recently, tagging and tracking devices have been developed that can identify and track vehicles. Although the technology is a hybrid of attaching a sending unit to a vehicle and tracking its location through cell phone and GPS equipment, its future appears promising.

Perhaps the most interesting finding of the study was that the officers made the decision to terminate (i.e., ending the effort to apprehend the fleeing suspect by turning off the emergency lights and sirens) only 1,269 times, or in 4.7 percent of the pursuits. This powerful statement signals to fleeing suspects that they are “safe” and no longer being chased. Although research has indicated that the majority of subjects are likely to slow down in a relatively short distance, others may not, and all will escape apprehension for the moment.⁶ Clearly, the critical question is when to terminate a pursuit. While policies suggesting or requiring a termination vary among agencies in Minnesota and throughout the country, the authors feel that if more pursuits were terminated, the number of crashes would be reduced as well. However, unusual incidents have occurred where officers have terminated the pursuit and the fleeing

suspect continued, only to crash into an innocent bystander.

Is attempting to apprehend someone worth the known and suspected risks? While the authors make no attempt to answer this question, they do realize that the law enforcement profession must learn more about pursuit driving so that its members can analyze their options to continue or terminate such events.

As far as emergency driving, or code 3 responses, the study found that "only" 476 resulted in a crash. While obviously a small proportion, the almost 500 crashes were significant to those involved, if not to society in general. It is likely

that there are more crashes per mile driven in emergency runs than in general driving. However, as code 3 responses represent a critical law enforcement function, it may be necessary to reconsider their number, justification, and speed levels. The study also indicated that only .01 percent of emergency calls made a critical difference. These data show that the dangers of emergency driving are not omnipresent and do not affect all officers or runs. Most code 3 responses are not at dangerous speeds, and only a small percentage of them result in crashes. However, it is surprising that the officers reported such a small number of

them as having made a critical difference in the outcome of the emergency situation.

Recommendations

Policing is a dangerous profession. Aggressive and reckless suspects, who make their own decisions, increase the dangers for officers. Some tactics, such as emergency and pursuit driving, also raise the risks for officers. The latter category, however, involves behaviors that can be changed to protect officers from injury and death, thus saving their families, their agencies, and the public from needless tragedies. With some modifications to existing approaches, law enforcement organizations can promote officer welfare without increasing the cost to society.

Perhaps one method is to certify officers after they have successfully conducted a number of emergency responses with field training officers and completed specialized training in driving and decision making. Another interesting approach would have officers time their code 3 runs and then return to drive the route at normal speed to determine the time difference. Some urban emergency responses may not save much time; however, rural ones are likely to make a bigger difference. The pursuits and emergency responses that generate the most risk to officers should

Table 2

Emergency Response and Pursuit Driving

Code 3 runs that made a difference	1,747
Code 3 crashes	476
Pursuits	26,737
Pursuit crashes	
Officer involved	2,058
Others involved	8,866
Pursuits terminated	1,269
Spike strips	
Placed	2,080
Someone almost hit	239
PIT employed	662

be eliminated except in the most extreme situations.

By way of another example, the number of pursuits, crashes, and deaths could be reduced if officers chased only violent felons. Of course, the primary problem with this approach is the threat that such action could pose to society. Also, in the case of emergency responses, officers should recognize that few are necessary to protect life and the ones that are should be undertaken at slower speeds and without endangering themselves or others at intersections and other high-risk areas. In addition, improved communication between officers and dispatchers can enable officers to make more informed decisions.

Finally, officers can follow some specific guidelines to help them survive one of the most vital functions of their profession. They should clear lanes at intersections one by one if any obstructions or sight-line problems occur. They should not use extreme speed. They must remember that the use of emergency equipment does not put them in a protective bubble and that citizen drivers are not predictable in how they respond to emergency vehicles. Although officers are responsible for the way they drive, citizens also must be educated and reminded to yield to emergency vehicles in a uniform manner.

CONCLUSION

Too many officers have died or been seriously injured while trying to apprehend suspects or responding to calls for help from the citizens they have sworn to protect. It is time for the law enforcement community to examine whether the hazards of pursuit and emergency driving are worth the risks to officers, citizens, and even those fleeing from justice.

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To help understand these dangers, the authors conducted research on officers' perceptions of emergency and pursuit driving. The officers who participated in the study provided their opinions based on many years of experience responding to emergency calls and pursuing fleeing suspects. Because emergency driving is a vital function of the law enforcement profession, such data can prove invaluable in helping save the lives of officers. Therefore, the

authors are continuing their research in the hope of finding additional information to improve officer safety. After all, if officers never arrive at the scene of an emergency, they cannot help anyone, including a fellow officer who may be in dire need of assistance. ♦

Endnotes

¹ G. Alpert, D. Kenney, R. Dunham, and W. Smith, *Police Pursuits: What We Know* (Washington, DC: Police Executive Research Forum, 2000).

² R. Dunham, G. Alpert, D. Kenney, and P. Cromwell, "High Speed Pursuit: The Offender's Perspective," *Criminal Justice and Behavior* 20 (1998): 30-45.

³ The lead instructor is David P. Schultz, one of the coauthors of this article.

⁴ Steven Brandl and Meghan Strohshine, "Toward an Understanding of the Physical Hazards of Police Work," *Police Quarterly* 6 (2003): 1-19. For in-depth analyses, see three FBI studies that comprise research on officer safety conducted over nearly a 20-year span. The researchers, Anthony J. Pinizzotto, Edward F. Davis, and Charles E. Miller III, interviewed surviving officers and the offenders who assaulted them, as well as those felons who killed officers, and presented their findings in *Killed in the Line of Duty: A Study of Selected Felonious Killings of Law Enforcement Officers* (1992); *In the Line of Fire: Violence Against Law Enforcement* (1997); and *Violent Encounters: A Study of Felonious Assaults on Our Nation's Law Enforcement Officers* (2006). All are available from the Uniform Crime Reporting Program Office at 888-827-6427.

⁵ Geoffrey Alpert and Roger Dunham, *Understanding Police Use of Force* (New York, NY: Cambridge University Press, 2004).

⁶ Dunham et al.