# An Exploratory Study of Foot Pursuits in the Richland County Sheriff's Department*

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* The author thanks Sheriff Lott for allowing this research to happen and the participating deputies for their patience in filling out a lengthy questionnaire.

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# Introduction

Police frequently pursue – either on foot or by motor vehicle – suspects who flee to avoid apprehension and punishment. Although a substantial body of research exists regarding suspect flight and police pursuits with motor vehicles, a search of the criminal justice literature failed to uncover a single study of police foot pursuits. Although the risk of death or injury associated with foot pursuits is not nearly as great as they are from high-speed motor vehicle pursuits, foot pursuits occur much more frequently than motor vehicle pursuits. Yet, despite their frequency the costs and benefits of foot pursuits are unknown and we have little or no knowledge about the nature, frequency, or outcomes of foot pursuits.

With the cooperation of the Richland County Sheriff Department (RCSD), this study was undertaken to help fill this gap in knowledge. Such a study is timely as some law enforcement agencies have developed foot pursuit policies or are contemplating doing so, but without the benefit of empirically-based information regarding foot pursuits.

In addition to obtaining information about deputies' experiences with foot pursuits, this study asked deputies their opinions about a variety of related topics, including training, decision making, written guidelines, and pursuit-related risks. This information may be useful for administrators who are contemplating the development of training or policies for foot pursuits.

Note that the questionnaire solicited information for three "time frames." In the first section, deputies were asked about their experiences with foot pursuits engaged in since they began working for the RCSD (through June 31, 2006), and includes estimates of the total number of foot pursuits; whether deputies were ever injured, etc. These are variously referred to as career-based, "lifetime," or "ever" estimates.

The second section solicited information on deputies' experiences with foot pursuits during the first six months of 2006. As recall is less of a concern for this time frame than for the career-based estimates, this section asked for additional details regarding foot pursuits. In section three the questionnaire asked deputies to provide information about their most recent foot pursuit that occurred during the first six months of 2006. The most detail was requested regarding these pursuits.

For the purposes of this research, a foot pursuit was defined as "anytime a law enforcement officer runs after a suspect who is trying to evade police, regardless of whether the pursuit lasted a few seconds or a few minutes." This includes deputies running after suspects who fled on foot, on a bicycle, skateboard, scooter, motorcycle, and so forth. It also includes any foot pursuit that occurred following a motor vehicle pursuit, such as when a suspect jumps out of his car, runs, and is then chased on foot by a deputy.

The study employed a web-based survey to obtain information about foot pursuits from deputies ranked lieutenant and below (though four captains also completed it). The results show that the survey was accessed 252 times by deputies from mid-August through October 31. Accessing the survey does not mean the survey was completed. In 33 cases, few or no questions were answered, probably because of technical issues or other factors (e.g., a respondent accessed the

survey but decided not to participate or to complete the survey at a later time). Another six surveys were partially completed, and all or most questions were answered in 213 surveys. Since there were about 370 deputies with the rank of lieutenant or below at the time of data collection, the study attained about a 60 percent response rate (59.2%), which is considered good by social science standards (Babbie, 2005).

Highlights of the findings are presented in the next section. Please refer to the report for additional details regarding the highlights.

## Summary of Major Findings

This section presents highlights of the findings. Note that some results are for pursuits that occurred any time since deputies began working for the RCSD (through June 31, 2006), some are in regard to pursuits that occurred during the fist six months of 2006, while others refer to deputies' most recent pursuits during the first six months of 2006. Please see the report for additional details.

### Frequency of Pursuits

- As of June 31, 2006, 214 deputies estimated engaging in 5,783 foot pursuits since they began working for the RCSD, for an average of 27 pursuits per deputy. However, deputies assigned to the Narcotics Unit and Drug Suppression Team reported substantially higher figures. On average, deputies reported engaging in 4.5 pursuits per year.

### Use of Force by and Against Deputies

- During the first six months of 2006, 63 percent of the deputies reported using only physical force (no weapon) to apprehend fleeing suspects in one or more foot pursuits, and 14 percent indicated suspects attacked them without a weapon in one or more pursuits.
- Expressed another way, deputies reported using physical force only (no weapon) to apprehend fleeing suspects in 57 of every 100 foot pursuits (57%), or about 1 in every 2. Deputies threatened the use of a weapon in 53 of every 100 pursuits (53%), or about 1 in every 2. Weapons were reportedly used to apprehend suspects in 14 of every 100 pursuits (14%), or 1 about in every 7.
- Deputies reported being attacked physically (no weapon) by suspects in 8 of every 100 pursuits (8%), or about 1 in every 13. Five deputies indicated being attacked with a weapon during one or more pursuits. The incidence of suspect *resistance* (excluding the initial flight) was substantially higher; about 1 in every 3 pursuits.

### Injuries and Work Time Lost

- One-third of the deputies reported being injured intentionally by suspects during one or more foot pursuits since they began working for the RCSD. Nearly half (45%) of the injuries were serious enough to require treatment by a medical doctor (42%) or one or more overnight stays in a hospital (3%).
- Forty-three percent of the deputies reported being injured accidentally during one or more foot pursuits since the time they began working for the RCSD. Thirty-five percent of these injuries were serious enough to require treatment by a medical doctor (30%) or one or more overnight stays in a hospital (5%).
- Among deputies injured intentionally, 16 reported missing 273 days of work during their tenure with the RCSD, for an average of 17 days per deputy. Eight injured deputies reported working in a reduced capacity for 358 days due to their injuries, for an average of 45 days each.
- Among deputies injured accidentally, 20 reported missing 496 days of work during their tenure with the RCSD, for an average of 25 days per deputy. Eighteen deputies reported

working in a reduced capacity for 575 days due to their injuries, for an average of 32 days each.

- Estimates of risk of injury during the first six months of 2006 are substantially lower than the "lifetime" risks reported above.

## Other Findings

Unless otherwise noted, the findings presented in this section are for deputies' most recent pursuit that occurred during the first six months of 2006.

- Most pursuits (83%) resulted in the apprehension of one or more suspects. In nearly two-thirds (61%), deputies reported the recovery of some type of contraband, such as illegal drugs or firearms.
- Most suspects were pursued for what was believed to be a felony (68%), with 12 percent of these being violent felonies. Twenty-nine percent of the pursuits were thought to involve a misdemeanor.
- About half (55%) of the pursuits involved suspects fleeing on foot only, while 41 percent involved suspects who fled both on foot and in a motor vehicle. Over one-third (36%) of the foot pursuits were initiated following a routine traffic stop.
- Most pursuits (61%) involved lone suspects, while 78 percent involved more than one deputy.
- Over a third (38%) of pursuits lasted under a minute, 27 percent lasted 1-2 minutes, and 35 percent lasted 3-5 minutes or longer.
- Nearly one-third of the deputies (31%) reported being *moderately* fatigued and seven percent reported being *very* fatigued at the point of contact with the suspect or when the pursuit was terminated. Deputies estimated that suspects were *moderately* to *extremely* fatigued in 80 percent of the pursuits.
- Foot pursuits most commonly involved chasing suspects through residential front/back yards (59%), on sidewalks/roadways (48%), or in wooded areas (41%). Very few involved deputies chasing suspects on only one type of terrain. Eight percent of the deputies reported chasing a suspect into some type of structure, such as home or commercial building.
- Thirty-five percent of the deputies indicated they experienced equipment problems during pursuits. Deputies most often reported problems with shoulder mics/cords and radios. The most common problem reported for shoulder mics/cords was entanglement, while radios most commonly fell off duty belts.

## Pursuit Decision Making

- Among seven factors listed, deputies ranked officer safety, danger to the community, and whether or not a suspect is armed as the three most important in deciding whether or not to pursue suspects.
- Most deputies (64%) agree that suspects should be pursued for even minor offenses, and most disagree (61%) that suspects should be pursued for felonies only.
- Most deputies (63%) agree that there should be written guidelines regarding foot pursuits, but the overwhelming majority (94%) feel that the decision whether to pursue or not should be left to deputies in the field.

## Perceptions of Risk

- Three-fourths (75%) of the deputies feel that foot pursuits are moderately or very risky in terms of sustaining intentional injuries, and seventy percent feel they are moderately or very risky in terms of sustaining accidental injuries.

## Opinions about Training

- The majority of deputies believe training for foot pursuits is important, both at the academy (81%) and at the RCSD (78%).
- Over half (about 56%) of the deputies feel there should be more training both at the academy and the RCSD, whereas about 40 percent feel the amount of training at both organizations is about right.
- Three-fourths of the deputies feel there should be more training on approach and search tactics for after losing sight of fleeing suspects.
- Sixty-four percent feel there should be more training on when and when not to pursue fleeing suspects.
- Substantially more than half (68%) feel there should be more training on unarmed takedown techniques.
- Fewer than half the deputies expressed interest in additional training on less-lethal weapons (45%), unarmed ground defense techniques (24%), ground shooting techniques (33%), and gun retention techniques (26%).

# Frequency of Foot Pursuits

The questionnaire sought to establish estimates of the number of foot pursuits deputies engaged in, both since they began working for the RCSD and during the first six months of 2006. Thus, we report "career-based" estimates of the number of pursuits and estimates for the first half of 2006 (January 1 – June 31, 2006).

## *Frequency of Pursuits Since Deputies Began Working for RCSD*

Deputies first were asked whether they began working for the RCSD before January 1, 2006, with 218 (96%) of the 228 respondents indicating they had, and 10 indicating they began their employment on January 1 or thereafter. Of those hired before the first of the year, 191 (88%) reported engaging in one or more foot pursuits during their career, and 27 (12%) indicated they had not.[1]

As of June 31, 2006, 214 of the responding deputies estimated engaging in 5,783 foot pursuits while working for the RCSD, for an average of 27 pursuits per deputy. Table 1 shows that about a quarter of the deputies engaged in 0 – 3 foot pursuits, another 25 percent engaged in 4 – 10 pursuits, 23 percent engaged in 11 – 26 pursuits, and 26 percent engaged in 27 – 408 foot pursuits.

Table 1. Number of Foot Pursuits While Employed by the RCSD

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 0 - 3 | 53 | 24.8 | 24.8 |
| | 2 4 - 10 | 56 | 26.2 | 50.9 |
| | 3 11 - 26 | 50 | 23.4 | 74.3 |
| | 4 27 - 408 | 55 | 25.7 | 100.0 |
| | Total | 214 | 100.0 | |
| Missing | System | 38 | | |
| Total | | 252 | | |

The number of pursuits engaged in varies substantially by unit assigned to at the time of the study. As can be seen in Table 2, deputies assigned to patrol accounted for most of the foot pursuits (1,919 or 33 percent of the total). However, 12 responding deputies from the Narcotics Unit reported the highest *average* number of pursuits per deputy (mean = 88). Note, though, that if the one narcotics deputy reporting the extreme value of 408 foot pursuits is removed, the

[1] The ten deputies hired after January 1 are excluded from the career-based calculations. Seven of these deputies reported engaging in no foot pursuits since January 1, one reported engaging in one foot pursuit, and two reported engaging in five each.

average for the Narcotics Unit drops to 59. The Drug Suppression Team reported an average of 72 pursuits, while the averages for members of the Major Crimes Unit (mean = 28) and Patrol (mean = 26) are lower and close to the overall mean of 27.

Table 2. Number of Foot Pursuits by Assignment

| Unit | # Reporting | # of Pursuits | Min - Max | Average | Median |
|---|---|---|---|---|---|
| Narcotics | 12 | 1,059 | 2 – 408 | 88 | 41 |
| Drug Suppression | 5 | 358 | 10 – 149 | 72 | 50 |
| Major Crimes | 28 | 635 | 0 – 120 | 23 | 13 |
| Patrol | 74 | 1,924 | 0 – 275 | 26 | 10 |

**Notes:** Statistics for other units are not presented here due to small numbers of respondents from those units. The number of pursuits reported by two members of the Drug Suppression Team are likely undercounts due to an inadvertent "cap" of 99 placed on the field in the survey that asked how many pursuits were engaged in prior to 2006. This error was detected early and fixed to allow deputies to report any value. This cap also impacted a deputy form the Warrants section, one from the Major Crimes Unit, and one from an "other" non-specified unit (each of these deputies also reported 99 pursuits). Thus, the actual number of total estimated pursuits is probably slightly higher than that reported here.

The number of pursuits engaged in by deputies also varies by length of employment. We calculated the average number of pursuits engaged in per year employed by dividing the number of pursuits by the number of years employed with the RCSD. This produced estimates ranging from a low of .11 pursuits per year (one deputy reported 1 pursuit in 9 years) to a high of 75 pursuits per year (one deputy reported 149 pursuits over two years).[2] On average, deputies reported engaging in just over four pursuits per year (4.48), while the median number was two pursuits per year (1.8).

## *Frequency of Pursuits during First Six-Months of 2006*

In addition to being asked how many pursuits deputies engaged in while working for the RCSD, they also were asked how many they were involved in during the first six months of 2006. Of the 224 respondents, 79 (35%) reported engaging in 425 foot pursuits during this period for an average of 1.9 pursuits per deputy (median = 0). Interestingly, the 79 deputies who engaged in one or more foot pursuits estimated that there were a total of 456 foot pursuits they *could have* engaged in but did not for safety or other reasons. Thus, in total the 79 deputies were presented with about 880 opportunities for foot pursuits and actually pursued suspects on foot in about half (48%).

As Table 3 shows, most of the 224 respondents (65%) reported engaging in zero pursuits and just over one-fifth (21%) reported in engaging in 1 – 3 pursuits. Those engaging in many pursuits over the six-month period tended to be assigned to specialized units. For example, the two deputies who each reported 50 pursuits are from the Narcotics and Drug Suppression units, while two other members of the Drug Suppression Team reported 25 and 20 pursuits. Although members of these units tend to engage in substantially more foot pursuits than members of other units, one patrol deputy reported pursuing 25 suspects.

[2] Twenty-two deputes (11%) reported zero pursuits.

If we were to assume the number of pursuits are constant over the year for this sample of deputies (and they probably are not), the annual number of foot pursuits for the sample would be about 850. Of course, the annual number department wide would be substantially higher than this figure. Furthermore, although deputies' estimates of the number of foot pursuits engaged in for the six-month period should be more reliable than their career-based estimates, using the six-month figures to estimate the annual number for 2006 may be affected by *seasonality*, i.e., the likelihood that more foot pursuits occur during the warmer months than during the colder months. Thus, actual annual figures for 2006 for this sample of deputies may be different (probably higher) than the annual figure reported above.

Table 3. Number of Foot Pursuits January 1 – June 31, 2006

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 0 | 145 | 64.7 | 64.7 |
| | 1 | 26 | 11.6 | 76.3 |
| | 2 | 13 | 5.8 | 82.1 |
| | 3 | 9 | 4.0 | 86.2 |
| | 4 | 5 | 2.2 | 88.4 |
| | 5 | 9 | 4.0 | 92.4 |
| | 6 | 1 | .4 | 92.9 |
| | 7 | 2 | .9 | 93.8 |
| | 8 | 2 | .9 | 94.6 |
| | 10 | 6 | 2.7 | 97.3 |
| | 15 | 1 | .4 | 97.8 |
| | 20 | 1 | .4 | 98.2 |
| | 25 | 2 | .9 | 99.1 |
| | 50 | 2 | .9 | 100.0 |
| | Total | 224 | 100.0 | |
| Missing | System | 28 | | |
| Total | | 252 | | |

# Use of Force by Suspects and Deputies

Previous research has demonstrated that compared to arrests not involving pursuits, arrests involving pursuits dramatically increase the likelihood that police will use of force (Kaminski, DiGiovanni, and Downs, 2004). Although in this study we do not make comparisons regarding how often force is used by or against deputies during *arrests* that did and did not involve foot pursuits, it can be concluded from this study that foot pursuits are associated with substantially higher levels of force when compared to the force used during police-suspect encounters generally (Adams, 1999).

## *Use of Force during First Six Months of 2006*

Information on use of force both by and against deputies was solicited for pursuits occurring during the first half of 2006, and for deputies' *most recent* pursuit during that time frame. For the period January 1 – June 31, 2006, deputies were asked whether or not one or more of the suspects they chased on foot attacked them without a weapon (physical force only). Sixty-eight of the 79 deputies (86%) indicated that no suspect attacked them, while 11 deputies (14%) indicated they were attacked without a weapon during at least one pursuit. Specifically, six deputies reported being attacked during one foot pursuit, two reported being attacked during two pursuits, one reported being attacked during three, one reported being attacked during five, and one reported being attacked during 15 foot pursuits. In all, 11 deputies indicated they were attacked physically by suspects during 33 foot pursuits. Since deputies estimated they engaged in 425 pursuits, assaults on deputies occurred in eight percent of the pursuits. Said another way, attacks on deputies occurred in 8 of every 100 foot pursuits, or 1 in 13.

Attacks with weapons were rarer, with 74 of 79 deputies (94%) indicating no such attacks during the six-month period. Four deputies indicated they were attacked with a weapon during one pursuit, and one deputy reported being attacked with a weapon during two pursuits.

Fifty of the 79 deputies (63%) indicated they used only physical force (no weapon) to apprehend fleeing suspects during 242 pursuits. Thus, deputies used physical force in 57 of every 100 foot pursuits (57%), or 1 in 2 ((242/425)*100). Fifty-six deputies (71%) reported threatening the use of a weapon during 227 foot pursuits (53 of every 100 or 1 in 2), and 27 deputies (34%) said they actually used a weapon during 59 pursuits (14 of every 100 or 1 in 7).

## *Use of Force during Most Recent Foot Pursuit*

Additional information about the characteristics of the use of force between deputies and suspects was sought in this study. To aid recall and simplify the analysis, deputies were asked to report on the use of force during their *most recent pursuit* that occurred during January – June of 2006.

Of 75 deputies, 27 (36%) reported that the suspect threatened or resisted the deputy during their most recent pursuit (excluding the suspect's initial flight as a form of resistance). As shown in Table 4, when asked what the highest level of physical resistance presented was, deputies indicated that suspects most often pulled away or tried to escape a second time (12 suspects or 44%). Another eight suspects (30%) resisted aggressively by striking deputies with their hands, fists, feet or by biting them. Another four (15%) stiffened up or refused to move, and one suspect

pushed, pulled, or slapped the deputies' hands away. In two pursuits, deputies reported that suspects used a weapon (a firearm) against them or a partner.

Note that the percentage of deputies reporting being attacked without a weapon during the six-month period (14%) is substantially lower than the 36 percent indicating suspects threatened or resisted during their most recent foot pursuit. However, if in Table 4 we only count the 9 pursuits during which suspects assaulted deputies (pushed/pulled/slapped hands away or punched/kicked/hit/bit), we obtain a value similar to that reported for the six-month period ((9 / 75) * 100 = 12%).

Table 4. Highest Level of Force Used by Suspects during Most Recent Pursuit

| | | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Refused to move, stiffened up | 4 | 14.8 | 14.8 |
| | 2 Pulled away, ran away again | 12 | 44.4 | 59.3 |
| | 3 Pushed, pulled, slapped hands away | 1 | 3.7 | 63.0 |
| | 4 Punched, kicked, hit, bit | 8 | 29.6 | 92.6 |
| | 6 Used weapon | 2 | 7.4 | 100.0 |
| | Total | 27 | 100.0 | |
| Missing | 88 NA | 193 | | |
| | System | 32 | | |
| | Total | 225 | | |
| Total | | 252 | | |

Table 5. Highest Level of Force Used by Deputies during Most Recent Pursuit

| | | Frequency | Valid Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Firm grip, holding, handcuffing | 7 | 20.0 | 20.0 |
| | 2 Push, shove, trip | 7 | 20.0 | 40.0 |
| | 3 Joint locks, PPCT, take down, wrestling, etc. | 7 | 20.0 | 60.0 |
| | 4 OC | 1 | 2.9 | 62.9 |
| | 5 Strikes with hands, fist, feet | 2 | 5.7 | 68.6 |
| | 8 Taser - dart | 8 | 22.9 | 91.4 |
| | 10 Dog - release | 2 | 5.7 | 97.1 |
| | 12 Firearm discharge | 1 | 2.9 | 100.0 |
| | Total | 35 | 100.0 | |
| Missing | 88 NA | 185 | | |
| | System | 32 | | |
| | Total | 217 | | |
| Total | | 252 | | |

Thirty-five of the 75 deputies (47%) indicated they used some type of force to apprehend fleeing suspects (excluding verbal commands). This estimate is lower than the 63 percent reported earlier regarding deputies use of physical force during the full six-month period. This may be due to a variety of factors, including differences in recall regarding all pursuits during the six-month period versus (presumably better) recall regarding the most recent pursuit and/or a chance factor, meaning that simply by chance the most recent pursuits happened not to involve force.

Table 4 displays the highest level of force used by deputies to apprehend and subdue fleeing suspects during their most recent pursuit. One deputy reported discharging their firearm, two released a K-9, eight (23%) discharged a Taser (dart mode), one use pepper spray (OC), and two used strikes with hands, fists or feet. Most deputies, however, used some type of "soft" hands-on tactic, such as holding, pushing, joint locks, PPCT, or take downs (60%).

Because foot pursuits involve suspects actively running away from deputies, there was an interest in determining whether or not deputies used some type of force against suspects while suspects were actively running away, and secondly, whether or not the tactic was successful in stopping the suspect. Fifteen of the 35 deputies who used force (43%) indicated they used some type of force against suspects while the suspects were actively running, with the vast majority reporting the tactic was successful (93%).

Deputies also were asked whether or not a suspect tried to take their firearm away during the pursuit, with three deputies indicating this was the case. Fortunately, deputies reported none of the suspects were successful. Although the survey didn't ask whether suspects attempted to take other weapons from deputies, it is important to consider attempts by suspects to take deputies' Tasers and OC canisters in future research, as these can be used to incapacitate officers, potentially making it easy to acquire a deputy's firearm.

Although based on relatively few incidents and thus caution must be used in generalizing the results, the data suggest that deputies can expect resistance or force to be used against them in about one of every three foot pursuits, while deputies can be expected to use force to apprehend suspects fleeing on foot in about one of every two pursuits. And while the level of the force used by and against deputies generally was on the low end of the use-of-force continuum, nearly 40 percent of the pursuits involved serious levels of force used against deputies by fleeing suspects, including strikes with fists or feet and use of weapons. Similarly, deputies used relatively high levels of force in 40 percent of the pursuits, including strikes with fists or feet, the use of Tasers, K-9s, OC, or firearms.

# Injuries

Deputies were asked about accidental injuries and injuries intentionally caused by suspects that occurred in the course of pursuing suspects on foot. Career-based estimates were obtained, as well as estimates for the first six months of 2006. Additional questions were asked regarding injuries received during deputies' most recent pursuits occurring within the six-month period.

## *Intentional Injuries*

Results regarding intentional injuries sustained since working for the RCSD are presented first, followed by estimates for the first six months of 2006. Information on injuries sustained during deputies' most recent pursuit during the six-month period is then presented. Information on accidental injuries is presented after that.

### Intentional Injuries Since Deputies Began Working for RCSD

Sixty-two of 187 responding deputies (33%) reported being injured intentionally by suspects during at least one foot pursuit since they began working for the RCSD. When asked what the most serious treatment ever received for an intentionally-caused injury, two deputies reported receiving injuries serious enough to require one or more overnight stays in a hospital (3.2%).

Table 6. Most Serious Treatment Received for Intentional Injury, Career-based Estimates

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 No treatment needed | 4 | 6.5 | 6.5 |
| | 2 Self-treatment only | 17 | 27.4 | 33.9 |
| | 3 Treated at the scene | 13 | 21.0 | 54.8 |
| | 4 Treated by medical doctor | 26 | 41.9 | 96.8 |
| | 5 1+ overnight stays at hospital | 2 | 3.2 | 100.0 |
| | Total | 62 | 100.0 | |
| Missing | 88 NA | 166 | | |
| | System | 24 | | |
| | Total | 190 | | |
| Total | | 252 | | |

One of these deputies reported spending two nights in a hospital, while the other reported spending one night in a hospital. Another 26 deputies (42%) indicated they were treated by a physician. Thirteen (21%) received less severe injuries and were treated at the scene, while 17 (27%) only required self-treatment. Four deputies (7%) indicated they received minor injuries that didn't require any treatment. Overall, nearly half of the deputies (45%) reported receiving injuries serious enough to require treatment by a physician.

Deputies who reported ever being injured intentionally during a foot pursuit were next asked whether any injury caused them to miss a day or more of work, and whether any injury caused them to work in a reduced capacity for a day or more. Fifty-eight of the 62 injured deputies responded to these questions. Of these, 18 (31%) indicated they missed a day or more of work do an intentionally-caused injury, and 11 (19%) reported they worked in a reduced capacity.

Two intentionally injured deputies reported being out of work a total of seven months, with one out for five months and two out for one month each. Two deputies missed seven weeks of work, with one out for two weeks and one our for four weeks. Twelve deputies reported being out of work a total of 21 days. Five missed 1 day of work, another five missed two days of work, and two others each reported missing 3 days of work.

Three deputies reported they worked in a *reduced capacity* for a total of 10 months. One deputy did so for six months, one for three months, and one for one month. Two deputies reported working in a reduced capacity for a total of seven weeks, with one doing so for four weeks and the other for three weeks. Three deputies worked in a reduced capacity for 9 days, with one doing so for 5 days and two for two days each. (One injured deputy didn't specify how long he or she worked in a reduced capacity.)

As displayed in Table 7, 16 deputies missed approximately 273 days of work due to intentional injuries sustained during their tenure with the RCSD, with an average of 17 days lost per deputy. Eight deputies worked in a reduced capacity for approximately 358 days, for an average of 45 days each.

Table 7. Intentional Injuries Causing Deputies to Miss Work and/or to Work in a Reduced Capacity, Career Estimates

| | Missed Work | | | Worked in Reduced Capacity | | |
|---|---|---|---|---|---|---|
| | Total Time | # Deputies | Mean | Total Time | # Deputies | Mean |
| Months | 7 | 2 | 3.50 | 10 | 3 | 3.33 |
| Weeks | 6 | 2 | 3.00 | 7 | 2 | 3.50 |
| Days | 21 | 12 | 1.75 | 9 | 3 | 3.00 |
| Sum (days) | 273 | 16 | 17.06 | 358 | 8 | 44.75 |

Notes: Some deputies may have both missed work and worked in a reduced capacity, while others may have only missed work or only worked in a reduced capacity. When calculating the total number of days, a 30-day month and 7-day week were assumed.

## Intentional Injuries during First Six Months of 2006

Of the 79 deputies involved in foot pursuits during the six-month period, eight (10%) reported being injured in one or more pursuits. Six were not injured seriously, with four being treated at the scene and two only requiring self treatment or no treatment. Two deputies received more serious injuries that required treatment by a medical doctor, but no overnight stay at a hospital. Of those injured, only one reported missing two days of work due to their injury, and no deputies reported having to work in a reduced capacity.

If we assume the risk of injury among deputies is constant throughout the year, the annual risk for pursuit-related accidental injuries among those sampled would be 20 per 100 deputies, which is substantially lower than the "lifetime" risk of 33 per 100 deputies reported above.

If deputies were involved in more than one foot pursuit during the six-month time frame, they also were asked to provide information about any intentional injuries received during their most recent foot pursuit. No deputies reported being intentionally injured during their most recent foot pursuit.

## *Accidental Injuries*

This section reports on accidental injuries deputies sustained during foot pursuits. As in the previous section, lifetime estimates and estimates for January 1 – June 31, 2006 are provided.

### Accidental Injuries Since Deputies Began Working for RCSD

Of 186 deputies "ever" engaging in a foot pursuit, 80 (43%) reported being injured accidentally during at least one pursuit since they began working for the RCSD. As displayed in Table 8, 34 (65%) of the injured self-treated, 16 (20%) were treated at the scene, and two didn't require any treatment. Thirty-five percent of the deputies, however, were injured more seriously, with 24 (30%) treated by a physician and four (5%) requiring one or more overnight stays at a hospital. Three of these deputies each reported spending two days at a hospital or medical facility, and one reported spending one day.

Table 8. Most Serious Treatment Received for Accidental Injury, Career-based Estimates

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 No treatment needed | 2 | 2.5 | 2.5 |
| | 2 Self-treatment only | 34 | 42.5 | 45.0 |
| | 3 Treated at the scene | 16 | 20.0 | 65.0 |
| | 4 Treated by medical doctor | 24 | 30.0 | 95.0 |
| | 5 1+ overnight stays at hospital | 4 | 5.0 | 100.0 |
| | Total | 80 | 100.0 | |
| Missing | 88 | 147 | | |
| | System | 25 | | |
| | Total | 172 | | |
| Total | | 252 | | |

Of the 80 injured deputies, 76 provided information on how injuries impacted their work. Nineteen deputies (25%) reported missing a day or more of work due to their injuries. Twelve deputies missed a total of 22 days, with one missing six days, six each missing two days, and four each missing one day of work. Three other deputies reported missing a total of 12 weeks of work, with one missing eight weeks and two each missing two weeks. Five deputies reported missing a total of 13 months of work, with one missing five months, one missing 3 months, two each missing two months, and one missing one month of work.

Eighteen (24%) of the 76 injured deputies reported having to work in a reduced capacity as a result of an accidental injury. Five deputies worked in a reduced capacity for a total of 14 months, with one doing so for five months, two each for three months, one for two months, and one for one month. Eight deputies worked in a reduced capacity for a total of 19 weeks, with one deputy doing so four weeks, two each for three weeks, four each for two weeks, and one working in a reduced capacity for one week. Five deputies worked in a reduced capacity for a total of 22 days, with one deputy working in a reduced capacity for 11 days, one for seven, one for two, and two deputies each doing so for one day.

As shown in Table 9, 20 deputies missed approximately 496 days of work due to accidental injuries sustained during their careers with the RCSD, with an average of 25 days lost per deputy. Eighteen deputies worked in a reduced capacity for 575 days during this time, for an average of 32 days per deputy.

A comparison of Table 9 to Table 7 indicates that although a substantial number of workdays are lost due to intentional injuries (N = 273), accidental injuries account for an even greater number of workdays lost (N = 496). If we combine the totals for each, about 65 percent of the days lost are due to accidental injuries. A similar pattern is observed for injuries causing deputies to work in a reduced capacity. Specifically, intentional injures caused deputies to work in a reduced capacity for 358 days, whereas accidental injuries caused deputies to work in a reduced capacity for 575 days, or 62 percent of the total.

Table 9. Accidental Injuries Causing Deputies to Miss Work and/or to Work in a Reduced Capacity, Career-based Estimates

| | Missed Work | | | Worked in Reduced Capacity | | |
|---|---|---|---|---|---|---|
| | Total Time | # Deputies | Mean | Total Time | # Deputies | Mean |
| Months | 13 | 5 | 2.60 | 14 | 5 | 2.80 |
| Weeks | 12 | 3 | 4.00 | 19 | 8 | 2.38 |
| Days | 22 | 12 | 1.83 | 22 | 5 | 4.40 |
| Sum (days) | 496 | 20 | 24.80 | 575 | 18 | 31.94 |

Notes: Some deputies may have both missed work and worked in a reduced capacity, while others may have only missed work or only worked in a reduced capacity. When calculating the total number of days, a 30-day month and 7-day week were assumed.

## Accidental Injuries during First Six Months of 2006

Of the 79 deputies involved in foot pursuits during the six-month period, 11 (14%) reported being injured accidentally in one or more pursuits. Eight self-treated their injuries, two were treated at the scene, and one received treatment by a medical doctor. Only one deputy reported missing a day of work due to an accidental injury during the six-month period (two days), and no deputies reported having to work in a reduce capacity during that time.

If we assume the risk of injury among deputies is constant over the year, the annual risk for pursuit-related accidental injuries among those sampled would be 28 per 100 deputies, which is substantially lower than the "lifetime" risk of 43 per 100 deputies reported earlier.

If deputies were involved in more than one foot pursuit during the six-month time frame, they were asked to provide information about any accidental injuries received during their most recent foot pursuit. Only one deputy reported being injured accidentally during their most recent pursuit. The injury was minor and didn't require treatment.

## Equipment Problems

Deputies were asked whether or not they ever experienced any equipment problems while running after a suspect during the six-month period and during their most recent pursuit. If they experienced a problem, they were then asked to indicate the nature of the problem experienced. Deputies also were queried about whether or not any equipment had to be repaired or replaced. Equipment covered in the survey includes firearm, Taser, OC, shoulder mic or cord, radio, ASP, handcuffs, cell phone, and an "other" category to cover equipment not listed in the survey. Problems covered in the survey include *fell off belt, dropped, accidental discharge, entanglement*, and *other* problem. Note that deputies' responses to these questions are not mutually exclusive, thus a deputy could have experienced one or more problems with more than one type of equipment during any given foot pursuit.

Of the 79 deputies who chased suspects during the six-month period, 28 (35%) reported experiencing one or more problems with one or more types of equipment. Table 10 shows that deputies most commonly had problems with their shoulder mic or cord (17) and radio (14). The most frequent problems with shoulder mics/cords was entanglement (6) and some "other" problem (6). Radios most typically fell off duty belts (11). Deputies reported their ASPs fell off their belts during four pursuits and that it was dropped in two; one deputy indicated their ASP became entangled.

Table 10. Problems with Equipment during First Six Months of 2006

| | | Type of Problem Reported | | | | |
|---|---|---|---|---|---|---|
| Type of Equipment | Number of Deputies | Fell Off Belt | Dropped | Accidental Discharge | Entanglement | Other |
| Shoulder mic/cord | 17 | 3 | 3 | | 6 | 6 |
| Radio | 14 | 11 | 2 | | | 3 |
| ASP | 7 | 4 | 2 | | 1 | |
| Taser | 4 | 1 | 1 | | | 2 |
| Cell Phone | 4 | 3 | 2 | | | |
| Firearm | 1 | | 1 | | | |
| Handcuffs | 3 | 2 | 1 | | | 1 |
| OC | 0 | | | | | |
| Other | 2 | 1 | | | | |

Four deputies indicated they experienced problems with Tasers, in one case dropping it, in another it falling off the deputy's duty belt; in two cases deputies experienced some other problem with Tasers. Handcuffs and cell phones most typically were dropped or fell of belts, and one deputy reported dropping their sidearm. No issues were reported with OC canisters, and no accidental discharges were reported.

Five deputies indicated equipment had to be repaired or replaced following foot a pursuit. One reported that his or her Taser needed repair, three deputies reported that their radios had to be

repaired or replaced (two said repair, one didn’t specify), and one deputy indicated that some other equipment needed repair.

# Characteristics of Foot Pursuits

This section presents information on various aspects of the deputies' most recent foot pursuit (N = 77), including characteristics of suspects, deputies, duration of foot pursuits, degree of deputy and suspect fatigue, method of suspect flight, how often suspects were apprehended, whether or not contraband recovered, and so forth. We begin with more general characteristics of pursuits, and then move on to specific aspects of foot pursuits. In some instances, estimates regarding pursuits occurring during deputies' careers and pursuits occurring during the first six months of 2006 are also provided in this section.

## *General Characteristics of Pursuits*

Sixteen of 45 deputies (36%) reported that their most recent foot pursuit was initiated following a routine traffic stop.[3] Seventy-six of the 77 deputies (99%) indicated their pursuits involved a male suspect. Eleven suspects (14%) were thought to be under the influence of alcohol, 14 (18%) were believed to be intoxicated on alcohol, and 20 (26%) were perceived to be under the influence of drugs. Five (6.5%) were thought to be both intoxicated on alcohol and under the influence of drugs. Four suspects (5.2%) were believed to be mentally ill, while in 14 pursuits (18%) deputies weren't sure whether or not the suspect was mentally ill. Five suspects (5%) were reportedly suffering from some kind of medical condition. One or more suspects were apprehended in the majority of pursuits (64 or 83%).

Forty seven of the pursuits (61%) involved a lone suspect and 17 (22%) involved a lone deputy. Few pursuits involved a lone deputy chasing more than one suspect (2 or 2.6%) whereas 32 pursuits (42%) involved more than one deputy chasing a lone suspect. Deputies reported that in 21 pursuits (27%) fleeing suspect appeared to have a preplanned escape route, with two (2.6%) having a preplanned trap designed to injure deputies.

## *Perceived Seriousness of Offense*

At the initiation of pursuits (Table 11), 43 (56%) involved perceived nonviolent felonies, nine (12%) were thought to involve violent felonies, 22 (29%) were thought to involve misdemeanors, and in 3 pursuits (4%) deputies were unsure of the seriousness of the offense.

Table 11. Most Serious Offense at Initiation of Pursuit

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Misdemeanor | 22 | 28.6 | 28.6 |
| | 2 Felony (nonviolent) | 43 | 55.8 | 84.4 |
| | 3 Violent Felony | 9 | 11.7 | 96.1 |
| | 4 Not Sure | 3 | 3.9 | 100.0 |
| | Total | 77 | 100.0 | |
| Missing | 88 | 145 | | |
| | System | 30 | | |
| | Total | 175 | | |
| Total | | 252 | | |

[3] This question suffered a high non-response rate. Specifically, 32 of the 77 deputies (42%) didn't answer the question and thus the results must be viewed with caution.

## *Body Armor and Uniform Worn*

At the time of the most recent pursuit, 72 of 76 deputes (95%) reported wearing body armor (3 deputies didn't respond to this question). Of the four not wearing body armor, two were narcotics officers in plain clothes and two were CID deputies. Sixty-two deputies (81%) indicated they were in their full deputy uniform at the time of the pursuit, seven (9%) were narcotics deputies in plain clothes, 5 (7%) wore a CID unit uniform, one wore a K-9 unit uniform, and two reported wearing some other uniform. Regarding footwear, 62 (81%) of the deputies indicated they were wearing standard issue boots at the time of the pursuit, seven (9%) wore tennis or running shoes, four (5%) wore dress shoes and another 4 wore some other footwear (personal duty boots, hiking-style boots).

## *Duration of Foot Pursuits and Deputy Fatigue*

Deputies were asked how long their most recent foot pursuit lasted. Table 11 shows that while over a third (38%) of foot pursuits lasted less than a minute, 27 percent lasted 1-2 minutes, and over a third (35%) lasted 3-5 minutes or longer. (Four deputies were not sure how long the pursuit lasted.)

Table 12. Duration of Most Recent Foot Pursuit

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 A few seconds | 7 | 9.9 | 9.9 |
| | 2 More than few seconds, but under a minute | 20 | 28.2 | 38.0 |
| | 3 1-2 minutes | 19 | 26.8 | 64.8 |
| | 4 3-5 minutes | 13 | 18.3 | 83.1 |
| | 5 6-10 minutes | 6 | 8.5 | 91.5 |
| | 6 Over 10 minutes | 6 | 8.5 | 100.0 |
| | Total | 71 | 100.0 | |
| Missing | 7 Not sure | 4 | | |
| | 88 NA | 145 | | |
| | System | 32 | | |
| | Total | 181 | | |
| Total | | 252 | | |

Given that a substantial percentage of foot pursuits lasted several minutes or longer, it is important to explore the degree of deputy fatigue at the point deputies come into contact with suspects (or terminate the pursuit). Most (63%) were only a little fatigued (43%) or not at all fatigued (20%), while 31 percent were moderately fatigued and five officers (7%) were very fatigued.

Table 13. Degree of Deputy Fatigue

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Not at all fatigued | 15 | 20.0 | 20.0 |
| | 2 A little fatigued | 32 | 42.7 | 62.7 |
| | 3 Moderately fatigued | 23 | 30.7 | 93.3 |
| | 4 Very fatigued | 5 | 6.7 | 100.0 |
| | Total | 75 | 100.0 | |
| Missing | 88 NA | 145 | | |
| | System | 32 | | |
| | Total | 177 | | |
| Total | | 252 | | |

Of the five deputies reporting that they were very fatigued, two reported their pursuits lasted 3-5 minutes, and one indicated the pursuit lasted 6-10 minutes. One reported the pursuit lasted a few seconds, and thus must be viewed with skepticism. The remaining deputy didn't report the length of his or her pursuit.

Table 14. Degree of Suspect Fatigue

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Not at all fatigued | 4 | 6.1 | 6.1 |
| | 2 A little fatigued | 9 | 13.6 | 19.7 |
| | 3 Moderately fatigued | 22 | 33.3 | 53.0 |
| | 4 Very fatigued | 21 | 31.8 | 84.8 |
| | 5 Extremely fatigued | 10 | 15.2 | 100.0 |
| | Total | 66 | 100.0 | |
| Missing | 6 Unknown | 9 | | |
| | 88 NA | 145 | | |
| | System | 32 | | |
| | Total | 186 | | |
| Total | | 252 | | |

Interestingly, deputies reported higher levels of fatigue among the pursued suspects. As shown in Table 12, at the point of apprehension 15 percent of suspects were extremely fatigued, nearly one-third (32%) was very fatigued, and one-third was moderately fatigued.

## *Method of Suspect Flight*

Deputies reported that during their careers the majority of pursuits (67%) involved suspects who fled on foot only (3,779 of 5,620). This implies that a third (33%) of the pursuits involved running after suspects who fled by multiple means, such as by car, motorcycle, bicycle, etc., in addition fleeing on foot. When asked directly, deputies reported that 2,368 pursuits (42%) involved suspects who first fled in a motor vehicle before fleeing on foot.

For foot pursuits occurring during the first half of 2006, deputies reported that 49 percent involved chasing suspects who fled on foot only (209 of 425). This value is 18 percent lower than the career-based estimate of 67 percent. Deputies reported that in 152 pursuits (38%), suspects first fled in a motor vehicle before fleeing on foot.

Of the 75 most recent foot pursuits occurring during the first six months of 2006, 41 (55%) involved suspects fleeing on foot only, 31 (41%) involved flight by both motor vehicle and on foot, and 3 (4%) involved flight on bicycle and foot.

In sum, the results overall suggest that between about 50 and 67 percent of foot pursuits involve suspects who flee on foot only, and that between 38 and 42 percent involve suspects who flee on foot and by motor vehicle.

## *Environmental Conditions*

Foot pursuits were nearly split evenly between night and day, with 40 (56%) occurring during the night and 31 (44%) occurring during the day. Fourteen deputies (20%) reported poor visibility at the time of the pursuit, 25 (35%) reported fair visibility, and 32 (45%) reported good visibility at the time of the pursuit.

When asked to describe the temperature at the time of the pursuit, 9 (13%) described it as being cool or cold, 33 (47%) described it as being warm, 24 (34%) described it as being hot, and 5 (7%) described it as being very hot.

Deputies also were asked to describe the type of terrain over which the pursuits occurred. Thirty-six deputies (48%) reported chasing suspects on sidewalks and/or roadways, 44 (59%) in residential back or front yards, 31 (41%) in wooded areas, 11 (15%), or in open fields or meadows, 10 (13%) in tall brush, and 6 (8%) inside a structure such as a home, or commercial building. Importantly, very few pursuits involved running after suspects on only one type of terrain. For instance, only two pursuits involved chasing suspects on sidewalks or roadways only, while 23 occurred across both front/backyards and sidewalks/roadways, and of these 11 included chasing suspects in wooded areas. The terrain was almost always reported as being dry (63 pursuits or 89%), with only 8 pursuits (11%) occurring on wet ground.

## *Number of Suspects Apprehended & Contraband Recovered*

As noted earlier, in 64 of the 77 pursuits (83%) deputies reported apprehending one or more suspects, while 13 (17%) of the suspects apparently evaded deputies. Forty-seven deputies (61%) reported recovering some type of contraband as a result of the pursuit (e.g., illegal drugs, firearms, stolen property, etc.).

Table 15 displays the type of contraband recovered. Of the 45 pursuits, 29 (64%) yielded drugs alone or drugs plus another type of contraband. Fifteen (33%) yielded illegal firearms or firearms plus some other contraband, and another 15 yielded stolen property or stolen property plus another type of contraband.

Table 15. Type of Contraband Recovered

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Drugs | 15 | 33.3 | 33.3 |
| | 2 Firearm(s) | 5 | 11.1 | 44.4 |
| | 3 Stolen property | 11 | 24.4 | 68.9 |
| | 4 Drugs + firearm(s) | 10 | 22.2 | 91.1 |
| | 5 Drugs + stolen property | 2 | 4.4 | 95.6 |
| | 7 Drugs + stolen property + firearm(s) | 2 | 4.4 | 100.0 |
| | Total | 45 | 100.0 | |
| Missing | 8 NA - None recovered | 32 | | |
| | 88 NA | 145 | | |
| | System | 30 | | |
| | Total | 207 | | |
| Total | | 252 | | |

# Deputy Opinions

This section reports on a variety of opinions deputies hold related to foot pursuits. This includes opinions about having written guidelines regarding foot pursuits, when deputies should or should not pursue suspects on foot, tactics during pursuits (e.g., whether two deputies should ever split up), perceived risks of injury during foot pursuits, training, and so forth. Note that deputies were asked their opinions regardless of whether they reported ever being involved in a foot pursuit (N = 209).

## *Pursuit Decision-making*

It was reported earlier that 79 deputies had about 880 opportunities to engage in foot pursuits during the first six months of 2006, but for one reason or another they did not pursue fleeing suspects in about half (52%). Reasons for not pursuing may be varied, and the survey sought to elicit from deputies their opinions about factors that may be related to pursuit decisions.

Deputies were asked to rank a variety of factors in terms of their importance for deciding whether or not to pursue an offender on foot. For each item listed below, they were to place a "1" next to the most important factor, a "2" to the next most important factor, and so on. These scores were summed for each item and the average calculated. A score of 1 would mean all deputies ranked that item as being most important, and a score of 7 would mean all deputies ranks that item as least important. Thus, scores closer to 1 indicate deputies felt the factor is important for deciding whether or not to pursue suspects on foot, whereas scores closer to 7 indicates deputies felt the factor is less important. The items, listed in Table 16, are ordered by importance.

Table 16. Pursuit-related Factors Ranked by Importance

| Factor | Mean Rank |
|---|---|
| Officer safety | 1.71 |
| Danger to the community | 2.33 |
| Suspect is armed | 2.66 |
| Seriousness of the crime | 3.44 |
| Ability to apprehend the suspect at a later time | 4.82 |
| Suspect has illegal drugs or other contraband | 5.09 |
| Suspect safety | 5.96 |

As can be seen, officer safety ranks highest among the list of factors and may be a reason in many decisions not to pursue fleeing suspects. Community safety also is a central concern, relative to the other factors listed. Presumably, deputies are more likely to pursue when there is a perceived danger to the community than when there is little or no danger to the community. Armed suspects was ranked third, and is probably related to the notion of community safety. Seriousness of the crime was ranked in importance next. Suspect safety, whether suspects had illegal drugs or other contraband, and ability to apprehend the suspect at a later time were deemed as being less important to deputies' pursuit decisions.

Additional pursuit-related questions were asked using a different format. When asked whether deputies should pursue suspects even for minor offenses, 133 (64%) agreed that they should, while 76 (36%) agreed that they should not. When asked whether suspects should be pursued for felonies only, only 81 (39%) agreed and 128 (61%) disagreed.

Table 17. Suspects Should be Pursued for Minor Offenses

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Agree strongly | 49 | 23.4 | 23.4 |
| | 2 Agree somewhat | 84 | 40.2 | 63.6 |
| | 3 Disagree somewhat | 44 | 21.1 | 84.7 |
| | 4 Disagree strongly | 32 | 15.3 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 18. Suspects Should Be Pursued For Felonies Only

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Agree strongly | 37 | 17.7 | 17.7 |
| | 2 Agree somewhat | 44 | 21.1 | 38.8 |
| | 3 Disagree somewhat | 58 | 27.8 | 66.5 |
| | 4 Disagree strongly | 70 | 33.5 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

More than half of the deputies (132 or 63%) agreed that there should be written guidelines indicating when deputies should and should not pursue fleeing suspects on foot (Table 19). Although there is substantial support for “guidelines” there is much less support for the idea that someone other than the deputy in the field should make the decision whether or not to pursue a fleeing suspect. As shown in Table 20, 196 of the 209 respondents (94%) agreed that the decision should be left to deputies in the field. Of the 13 respondents who disagreed, five were deputies, two were corporals, four were sergeants and two were lieutenants.

Table 19. There Should be Written Guidelines as to When to Pursue

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Agree strongly | 44 | 21.1 | 21.1 |
| | 2 Agree somewhat | 88 | 42.1 | 63.2 |
| | 3 Disagree somewhat | 39 | 18.7 | 81.8 |
| | 4 Disagree strongly | 38 | 18.2 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 20. Decision to pursue should be left to deputies in the field

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Agree strongly | 140 | 67.0 | 67.0 |
| | 2 Agree somewhat | 56 | 26.8 | 93.8 |
| | 3 Disagree somewhat | 11 | 5.3 | 99.0 |
| | 4 Disagree strongly | 2 | 1.0 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

As a policy or a guideline, it is sometimes advised that two deputies pursuing a fleeing suspect on foot generally should not split up during the pursuit. The majority of deputies agreed two deputies should not split up when asked this question (146 or 70%), with one-third agreeing strongly. Of those who disagreed strongly, 11 were deputies and three were corporals. Among those who disagreed somewhat, 20 were deputies, 18 were corporals, six were sergeants, two were lieutenants, and three were captains.

Table 21. Two Deputies Should Not Split Up

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Agree strongly | 69 | 33.0 | 33.0 |
| | 2 Agree somewhat | 77 | 36.8 | 69.9 |
| | 3 Disagree somewhat | 49 | 23.4 | 93.3 |
| | 4 Disagree strongly | 14 | 6.7 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

## *Perceptions of Risk*

The survey asked deputies how risky they thought foot pursuits are in terms of intentional and accidental injuries. These results are presented in Tables 22 and 23. As can be seen, there appears to be little difference in perceptions of risk of injury due to assaults and accidents during foot pursuits. Between 25 and 30 percent believe foot pursuits are a little risky, about 68 percent think they are moderately risky, and between 30 and 33 percent believe they are very risky. That there were only small differences in perceived risk is interesting as the earlier section on injuries suggests deputies are somewhat more likely to be injured accidentally than intentionally.

Tables 22. Perceptions of Risk of Intentional Injuries

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Not at all risky | 2 | 1.0 | 1.0 |
| | 2 A little risky | 50 | 23.9 | 24.9 |
| | 3 Moderately risky | 89 | 42.6 | 67.5 |
| | 4 Very risky | 68 | 32.5 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Tables 23. Perceptions of Risk of Accidental Injuries

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Not at all risky | 2 | 1.0 | 1.0 |
| | 2 A little risky | 60 | 28.7 | 29.7 |
| | 3 Moderately risky | 84 | 40.2 | 69.9 |
| | 4 Very risky | 63 | 30.1 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

## *Importance of Training*

This section describes deputies' responses to questions that asked them their opinions about the importance of training for foot pursuits, both at the Academy and in the RCSD. There are some general questions regarding training, as well as several more specified questions.

Generally, deputies think training for foot pursuits is important. Of the 209 responding deputies, 170 (81%) thought the provision of training at the Academy is important, and 163 (78%) thought training at the RCSD is important.

Table 24. Importance of Foot Pursuit Training at the Academy

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Not at all important | 6 | 2.9 | 2.9 |
| | 2 Somewhat important | 33 | 15.8 | 18.7 |
| | 3 Important | 87 | 41.6 | 60.3 |
| | 4 Very important | 83 | 39.7 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 25. Importance of Foot Pursuit Training at the RCSD

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Not at all important | 6 | 2.9 | 2.9 |
| | 2 Somewhat important | 40 | 19.1 | 22.0 |
| | 3 Important | 82 | 39.2 | 61.2 |
| | 4 Very important | 81 | 38.8 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

When asked whether there should be more or less training, over half of the deputies (about 56%) indicated there should be more, both at the Academy and the RCSD. About 40 percent thought the amount of training was about right in both organizations.

Table 26. More or Less Training at the Academy?

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 119 | 56.9 | 56.9 |
| | 2 Less | 5 | 2.4 | 59.3 |
| | 3 About Right | 85 | 40.7 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 27. More or Less Training at the RCSD?

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 117 | 56.0 | 56.0 |
| | 2 Less | 10 | 4.8 | 60.8 |
| | 3 About Right | 82 | 39.2 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

The following questions asked whether there should be more or less RCSD training on a variety of topics or whether the amount of training is about right. The tables are self explanatory, but there was most interest in training on approach and search tactics after losing sight of a fleeing suspect, with 75 percent of the deputies indicating they would like more training of this type. More than half of the deputies (64%) felt there should be more training about when to and when not to pursue suspects. Nearly 60 percent (58%) of the deputies thought there should be more training in unarmed techniques for taking down running suspects at the point of contact. Fewer than half of the deputies felt there should be more training on the use of less-lethal weapons for taking down a running suspect (45%), unarmed ground defense techniques (24%), ground shooting techniques (33%), and gun retention (26%).

Table 28. Approach and Search Tactics after Losing Sight of Suspect

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 156 | 74.6 | 74.6 |
| | 2 Less | 3 | 1.4 | 76.1 |
| | 3 About Right | 50 | 23.9 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 29. Decisions about When to Pursue Suspects

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 133 | 63.6 | 63.6 |
| | 2 Less | 7 | 3.3 | 67.0 |
| | 3 About Right | 69 | 33.0 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 30. Unarmed Takedown Techniques

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 121 | 57.9 | 57.9 |
| | 2 Less | 7 | 3.3 | 61.2 |
| | 3 About Right | 81 | 38.8 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 31. Less-lethal Weapons

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 94 | 45.0 | 45.0 |
| | 2 Less | 5 | 2.4 | 47.4 |
| | 3 About Right | 110 | 52.6 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 32. Unarmed Ground Defense

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 50 | 23.9 | 23.9 |
| | 2 Less | 19 | 9.1 | 33.0 |
| | 3 About Right | 140 | 67.0 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 33. Ground Shooting Techniques

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 68 | 32.5 | 32.5 |
| | 2 Less | 12 | 5.7 | 38.3 |
| | 3 About Right | 129 | 61.7 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

Table 34. Gun Retention Techniques

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 More | 55 | 26.3 | 26.3 |
| | 2 Less | 6 | 2.9 | 29.2 |
| | 3 About Right | 148 | 70.8 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

## Respondent Characteristics

This section provides information on the demographic characteristics of the deputies who filled out the survey, such as age, gender, length of service, etc. Some comparisons are made with the demographics of the Department at the time the survey was administered. Information on how often deputies exercise and self-reported fitness levels are also reported here.

Of the 209 respondents, 172 (82%) were male, and 37 were female (18%). This is very close to the Department distribution for Captain and below, which was 81 percent male and 19 percent female. Respondent age ranged from 23 to 63, with an average age of 38 years, and length of service ranged from less than a year (8 respondents) to 34 years, with an average of eight years of service.

The numbers of survey respondents per region were very close to the numbers reported by the RCSD, with the only large difference being for Region 5. The Department reported 48 sworn for this region at the rank of lieutenant and below, while only 18 respondents indicated they were from Region 5. Thus, this region is underrepresented in the survey. Thirty-one respondents indicated they were not assigned to a specific region.[4]

Table 35. Region

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Region 1 | 32 | 15.5 | 15.5 |
| | 2 Region 2 | 36 | 17.4 | 32.9 |
| | 3 Region 3 | 28 | 13.5 | 46.4 |
| | 4 Region 4 | 36 | 17.4 | 63.8 |
| | 5 Region 5 | 18 | 8.7 | 72.5 |
| | 6 Region 6 | 26 | 12.6 | 85.0 |
| | 7 NA - Not assigned to specific region | 31 | 15.0 | 100.0 |
| | Total | 207 | 100.0 | |
| Missing | System | 45 | | |
| Total | | 252 | | |

[4] During the administration of the survey it was noticed that there was no check box for "NA – Not assigned to specific region." This was brought to the researcher's attention and the error was immediately corrected. Some respondents reportedly got to the region question and were unable to select the appropriate option and quit the survey, while some others may have selected one of the regions when in reality they weren't assigned to a specific region. In any case, those not assigned to a region may be underrepresented in the survey.

Table 36 shows the reported rank of the respondents. Comparisons with the RCSD show some discrepancies among ranks above deputy, but the percentages for the rank of deputy in the survey and the RCSD are very similar at 49 percent and 45 percent, respectively.

Table 36. Respondent Rank

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Deputy | 103 | 49.3 | 49.3 |
| | 2 Corporal | 55 | 26.3 | 75.6 |
| | 3 Sergeant | 29 | 13.9 | 89.5 |
| | 4 Lieutenant | 18 | 8.6 | 98.1 |
| | 5 Captain | 4 | 1.9 | 100.0 |
| | Total | 209 | 100.0 | |
| Missing | System | 43 | | |
| Total | | 252 | | |

## *Exercise and Fitness*

Regarding exercise and fitness, 167 deputies (80%) reported that they exercise on a regular basis. Those who reported exercising regularly were asked how many days a week they exercise on average. Most (44%) reported they exercise three times per week, while 42 percent indicated they exercise four or more days per week. Respondents also were asked what types of exercise they engage in (strengthening, aerobics, or flexibility/stretching). Of 165 deputies who responded to this question, one-third indicated they engage in only one of the types of exercise, 40 percent engage in two, and 27 percent engage in all three types of exercise.

Table 37. Number of Days per Week Respondents Exercise

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 2 | 24 | 14.5 | 14.5 |
| | 3 | 72 | 43.6 | 58.2 |
| | 4 | 38 | 23.0 | 81.2 |
| | 5 | 21 | 12.7 | 93.9 |
| | 6 | 8 | 4.8 | 98.8 |
| | 7 | 2 | 1.2 | 100.0 |
| | Total | 165 | 100.0 | |
| Missing | 88 | 42 | | |
| | System | 45 | | |
| | Total | 87 | | |
| Total | | 252 | | |

Finally, respondents were asked to rate their level of fitness. Relatively few rated it as being poor or below average (7%), a little over half (53%) rated it as average, and 41 percent rated their fitness level as being above average or excellent.

Table 38. Self-reported Fitness Level

| | | Frequency | Percent | Cumulative Percent |
|---|---|---|---|---|
| Valid | 1 Poor | 2 | 1.0 | 1.0 |
| | 2 Below average | 12 | 5.8 | 6.8 |
| | 3 Average | 109 | 52.7 | 59.4 |
| | 4 Above average | 70 | 33.8 | 93.2 |
| | 5 Excellent | 14 | 6.8 | 100.0 |
| | Total | 207 | 100.0 | |
| Missing | System | 45 | | |
| Total | | 252 | | |

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