This product is part of the RAND Corporation monograph series. RAND monographs present major research findings that address the challenges facing the public and private sectors. All RAND monographs undergo rigorous peer review to ensure high standards for research quality and objectivity.
Evaluation of the New York City Police Department Firearm Training and Firearm-Discharge Review Process

Bernard D. Rostker, Lawrence M. Hanser, William M. Hix, Carl Jensen, Andrew R. Morral, Greg Ridgeway, Terry L. Schell
The research described in this monograph was conducted under the auspices of the RAND Center on Quality Policing within the Safety and Justice Program of RAND Infrastructure, Safety, and Environment (ISE).

Library of Congress Cataloging-in-Publication Data

Evaluation of the New York City Police Department firearm training and firearm-discharge review process / Bernard D. Rostker ... [et. al.].
p. cm.
Includes bibliographical references.
HV8148.N52E83 2008
363.2’3—dc22
2008010909

The RAND Corporation is a nonprofit research organization providing objective analysis and effective solutions that address the challenges facing the public and private sectors around the world. RAND’s publications do not necessarily reflect the opinions of its research clients and sponsors.

RAND® is a registered trademark.

© Copyright 2008 RAND Corporation

All rights reserved. No part of this book may be reproduced in any form by any electronic or mechanical means (including photocopying, recording, or information storage and retrieval) without permission in writing from RAND.

Published 2008 by the RAND Corporation
1776 Main Street, P.O. Box 2138, Santa Monica, CA 90407-2138
1200 South Hayes Street, Arlington, VA 22202-5050
4570 Fifth Avenue, Suite 600, Pittsburgh, PA 15213-2665

RAND URL: http://www.rand.org

To order RAND documents or to obtain additional information, contact
Distribution Services: Telephone: (310) 451-7002;
Fax: (310) 451-6915; Email: order@rand.org
Executive Summary

Introduction

The discharging of a firearm by a member of the New York City Police Department (NYPD) is a significant event. Every time an NYPD officer’s weapon is fired, except when it is fired (or discharged) at a firing range, the officer makes a report and the department undertakes an investigation to determine the circumstances surrounding the incident. In January 2007, New York City Police Commissioner Raymond W. Kelly wanted to make sure that his department was doing everything necessary to minimize the unnecessary discharge of firearms. He asked the RAND Corporation to examine the quality and completeness of the NYPD’s firearm-training program and identify potential improvements in the design and delivery of the curriculum, the technology used, the frequency and duration of training sessions, the tactics and procedures on which the training is based, and the police department’s firearm-discharge review process.

Starting in February 2007, an interdisciplinary team from RAND met with NYPD officials to observe training and to collect data for future analysis. During the spring and summer of 2007, the team met numerous times with the senior uniformed and civilian staff at headquarters, at the academy, at the range, and (with officers) at precincts. Over the subsequent nine months, RAND researchers talked with NYPD plainclothes and uniformed members, collected and reviewed policy documents, and examined the relevant general literature on policing, the use of force, and reflexive and contagious shooting. In addition, the team analyzed firearm-discharge cases; NYPD personnel data; and stop, question, and frisk report data, as well as data derived from the automated, online booking system. The RAND team also collected information from a number of other police departments and sponsored a daylong discussion of the issue with a panel of independent national experts. The panel discussions were helpful in checking preliminary findings and identifying areas for further investigation.

While the subject of this study is firearm discharge and a good deal of the general police literature on this subject is in the context of the training in, and use of, the weapon, the link between firearm training and the subsequent use of deadly force is not clear and has led some researchers to question the role that firearm training plays in
subsequent uses of deadly force. Moreover, as sociologist Albert J. Reiss Jr. pointed out, “To understand how one might avert or preclude the use of deadly force in situations in which it might be a likely alternative, we need to understand how the organization of police departments and of police work regulate and restrict the use of deadly force and alternatives to its use” (Reiss, 1980, p. 133). Accordingly, the RAND team observed the in-service training that recruits and members of the service (MOSs) receive on the use-of-force continuum, a continuum that ranges from “verbal persuasion” to the use of “deadly force” (NYPD Police Academy, 2007a, p. 7); how to deal with uncooperative suspects; and how to control situations to minimize the use of firearms.

During the study, we became acutely aware that we were reviewing only cases in which officers discharged their weapons. We recognize that different officers will approach similar situations in different ways and that there is no single test to determine the correctness of an officer’s decision to use deadly force. The legal standard set by the U.S. Supreme Court in the case of Graham v Connor is “reasonableness” (490 U.S. 386, 109 S. Ct. 1865, May 15, 1989). Certainly, in the future, a great deal may be learned from cases in which an officers could deescalate the situation and did not have to revert to deadly force. However, such an inquiry was beyond the scope of this study.

Background

NYPD officers are taught that the use of a firearm “should be a last resort. [The officer] should shoot someone only when there are no other available ways of protecting [him or herself] or someone else against imminent death or serious injury” (NYPD Police Academy, 2007a, p. 20). Nationally, as it is in New York City, the use of any force is rare. The U.S. Department of Justice (DOJ) estimates that, in 2005, police used or threatened to use some force against a citizen in 1.6 percent of police-citizen contacts (Durose, Smith, and Langan, 2007, p. 1). Recent data for the NYPD shows the same general pattern as that reported by DOJ. In New York City, an analysis of the more than half a million stop, question, and frisk reports filed in 2006 shows that police pointed their weapons at suspects in about 0.5 percent of filed reports (Ridgeway, 2007).

The law provides that police officers can use force to take control of someone who refuses to cooperate, but there are legal and practical limits. The U.S. Supreme Court case of Tennessee v Garner reversed the long-standing practices based on English common law and set new standards for the use of deadly force (471 U.S. 1, 105 S. Ct. 1694, March 27, 1985). The case of Graham v Connor makes it clear that the legal test by which the use of force, including deadly force, should be judged is reasonableness (490 U.S. 386, 1989). For NYPD officers, however, department guidelines for the use of deadly physical force are more stringent than the standards set by the Graham
case or even the legal restriction established by Article 35 of the New York Penal Law (NYPL).

The Firearms and Tactics Section of the NYPD Police Academy produces an annual report on firearm discharges from the previous year. With a uniformed force of approximately 37,000 officers, it is unlikely, statistically, that an officer will ever discharge his or her weapon during his or her entire career on the police force. During 2006, 156 officers were involved in a firearm-discharge incident. Moreover, fewer than half of these incidents involved an officer shooting at a human being. The majority of discharges are accidental or involve officers shooting at dogs. After eliminating two-sided gunfights, there were 47 incidents in which an officer discharged his or her weapon without being fired on. Unfortunately, firearm-discharge statistics are not collected nationally, so comparisons with national averages or other departments are difficult. Moreover, while the Commission on Accreditation for Law Enforcement Agencies (CALEA) publishes standards, they are very general and do not prescribe specific procedures to follow. However, we did identify one department, the Metropolitan Police Department of Washington, D.C. (MPDC), that reports statistics that use categories that are comparable with those that the NYPD uses (MPDC, 2006). In 2005, the NYPD was almost 10 times larger than the MPDC. Comparing the per-officer discharge rate of the two departments, the police in Washington “intentionally discharged firearms at people” 3.7 times more than did police officers in New York City.

While not part of the NYPD, the New York City Civilian Complaint Review Board (CCRB) also looks at police-firearm-discharge cases that are brought to its attention as excessive-force complaints against New York City police officers. Between 2002 and 2006, the NYPD reported 612 firearm-discharge incidents, of which 455 might have brought the public into contact with officers discharging their weapons, e.g., officers involved in gunfights, shooting at suspects who did not return fire, or shooting at a dog. In the same period, but not necessarily from these incidents, there were 101 complaints about gunfire. In the same period, 87 cases were resolved; only three of these cases “substantiated that there was sufficient credible evidence to believe that the subject officer committed the act charged in the allegation and committed

---

1 The NYPD reports separately gunfights, which are defined as any incidents in which the subjects and officers fired their weapons at each other, and other shooting incidents involving subjects as those in which an officer fired his or her weapon in defense of self or others against subjects who did not return fire.

2 A comprehensive review of all police departments was beyond the scope of this study. We did review the departments highlighted by the Police Assessment Resource Center (PARC) (2003a, pp. 163–166), and only the MPDC had comparable data. We made the numerical comparison by dividing the per-capita firearm-discharge rate by the number of sworn officers for each department.

3 We treated as categorically equivalent those data reported by the MPDC for intentionally discharged firearms at people and the data reported by the NYPD for gunfights and other shootings involving subjects. We made the comparison by dividing the per-capita firearm-discharge rate by the number of sworn officers for each department.
misconduct” (CCRB, 2007, p. 9). Of the 84 other cases, 73 were either unsubstantiated or unfounded or the officers were exonerated. The officers involved in the remaining 11 cases had left the NYPD, and their cases were closed.

Training

The NYPD Police Academy trains approximately 4,000 recruits each year in two classes of about 2,000 recruits each. The academy has five sections that conduct different aspects of training: Recruit Training, Firearms and Tactics, Specialized Training, Leadership Development, and Executive Development. Recruit training is divided into two terms that together encompass 23 weeks: Knowledge and Fitness and Skills and Abilities.

The Patrol Services, Housing, and Transit bureaus are responsible for in-service training, including the Field Training Program for new probationary police officers after they graduate from the police academy. In-service training occurs through a number of different vehicles. The most structured forms of regular in-service training are borough-based (or “IN-TAC”) training, precinct-level training, and semiannual firearm-requalification training.

Method

We reviewed the relevant literature on police-officer training; collected and reviewed training materials, including lesson plans, tests, and other evaluation forms; and observed both basic and complex skill training over several periods and in multiple venues. We also visited and observed similar training in other large police departments.

We used the Gagné et al. (2005) theory of instructional design and the Council for Adult and Experiential Learning (CAEL) principles of effectiveness for adult learners (see CAEL, 2000) as a frame of reference for evaluating training.

Findings

The training that underlies an officer’s decision to intentionally discharge a weapon is the training received in the use-of-force continuum (i.e., how to deal with uncooperative suspects and how to control situations to minimize the use of firearms). Training in the use-of-force continuum is embedded in and cuts across the training that officers get in a number of classes, including ground tactics, gun retention, management of street encounters, encounters with emotionally disturbed persons, car stops, and domestic incidents.

Recruit Training. Overall, the training we observed in basic policing skills (ground tactics, firearm retention, and baton lessons) was done in accord with the Gagné et al. (2005) and CAEL (2000) principles. These are the basic skills that police officers need when “going hands-on” with a suspect. Consistent with Gagné’s principles of instruc-
tional design and CAEL’s principles of effectiveness for adult learners, the instructors carefully demonstrated each of the basic techniques and allowed the trainees multiple practices of those techniques under close supervision before adding increasing complexity to the techniques. Training included going hands-on with their fellow students, thus providing realistic practice and confidence in these skills.

Instructors observed and corrected student performance on the spot, with a formal evaluation at the end of a block of several related lessons. If a recruit fails any single category or technique, he or she receives remedial training from an instructor and is retested on all the categories and techniques, not just the one that was scored as unacceptable.

The nine weeks of recruit training devoted to hands-on skills and abilities is done largely in scenario-based, role-playing workshops or with simulators, such as with the Meggitt Defense Systems FATS Caswell or Simunition training systems. Typically, this training involves two to four students working with one or more instructors for a short period while the rest of the class watches. The students who are working with the instructors prepare for the simulated event. The simulation is run, and then the instructors provide a critique of the simulation. Once complete, another set of students steps up for their turn. In this way, each student in the class generally gets no more than one chance at each simulation. Unlike the basic policing-skills training, the limits on the number of students that can participate in one simulation at a time or on the number of simulators available in these workshops means that recruits do not have an opportunity to practice what they have just been taught. In addition, students are not graded nor called on to demonstrate that they have mastered the techniques being taught. Moreover, while some training records that we observed were marked “retrained,” this meant that the instructor had told the student what he or she had done wrong and what the correct procedure was, not that the student had to demonstrate that he or she had learned the correct behavior. Given the logistics of these workshops and the size of the recruit class, retraining does not mean that the student was given the opportunity to try the simulation again. As a result, it is not possible for the department to know whether the students mastered the information taught in the classroom, whether they are able to apply it in the scenarios or on the job, or whether the two hours of classroom time was effective in achieving the training performance objectives. The failure to ensure that students have internalized the right way to approach situations by providing sufficient opportunities to practice what they have been taught may create an inappropriate response on the street and is a shortcoming in the NYPD recruit-training program.

There is a national consensus that the key to improving police-recruit training is to move from traditional classroom to more hands-on instruction by increasing the quality, number, and use of scenario-based training events. There needs to be sufficient flexibility in the training schedule to allow students the opportunity to repeat training if necessary until they can demonstrate that they have mastered the skills being taught.
Practically, such improvements mean that students would perform multiple scenarios and simulations and receive a full grading of their performance on all of them. Shifting from very large recruit classes that start twice a year to more-frequent, smaller classes that start every two weeks would allow the existing inventory of simulators to be more efficiently used over the entire year and provide better opportunities for students to practice and be graded on their performances using simulators.

**In-Service Training.** In-service training is particularly important to reinforce the comprehensive training that officers received as recruits, to correct bad habits developed on the job, and to keep up with the dynamically changing law-enforcement environment. Unfortunately, officers are generally not tested on the information imparted to see whether the training was absorbed.

NYPD officers are required to requalify on their firearms twice a year. While the requalification course meets the standards required by New York and is consistent with national norms, shooting at paper targets on a known-distance range does not demonstrate that the officer has mastered his or her firearm and is ready for a shooting confrontation on the streets. While the NYPD has several advanced ranges that better prepare officers for confrontations that may involve firearms, the size of the department and logistical considerations prevent them from being used as part of the semiannual requalification program for the vast majority of officers.

The goal of all training should be to prepare recruits, as well as seasoned officers, for life as a police officer on the streets, in the subways, and in the housing developments of New York. Recruits should be required to pass proficiency standards in real-life and scenario-based tests of complex decisionmaking before they graduate from the police academy. Seasoned officers should be required to demonstrate their continued proficiency on the most demanding real-life scenarios, just as, for example, seasoned airline pilots are required to do.

**Recommendations**

To facilitate training effectiveness, we recommend that the NYPD take the following actions:

- Develop standards of performance for all basic policing skills and evaluate recruits accordingly, not passing them until they have demonstrated they have mastered the skill at an appropriate level.
- Upgrade computer simulations to incorporate the latest use-of-force scenarios now available from simulator vendors.
- Expose recruits to scenario-based training and role-playing workshops throughout training.
- Design scenario-based training to increase the department’s confidence that recruits have learned basic principles.
- Have recruits practice on a wide set of scenarios.
Focus debriefings primarily on the big principles, not the potential nuances that exist in every situation.

Develop detailed evaluation guides and assess training-outcome data to determine whether the training was successful.

Require recruits to pass proficiency standards in real-life and scenario-based tests of complex decisionmaking before graduating them from the police academy.

Collect detailed training records from the various recruit-training activities and store them in one location.

Substantially increase the availability of simulators, including scenarios using Simunition systems, to allow recruits to practice and then demonstrate that they have mastered the requisite skills, particularly those associated with the use of force.

Take the lead: Partner with one or more virtual-simulation companies to determine whether technological advances can be used to create simulators for judgment in potential use-of-force scenarios that might operate on stand-alone laptop computers without an instructor’s or operator’s intervention. This might start with the issuing of a request for qualification (RFQ) to determine the interest and qualifications of potential collaborating firms.

Undertake a full cost-benefit analysis of resequencing recruit training. Given the importance of scenario-based training and the high cost of equipment (such as simulators), the analysis should include all tangible and intangible costs and benefits. A rolling induction of recruits with classes starting every two weeks instead of having large, semiannual recruit classes should allow for a much higher utilization of simulators, spreading their use over the entire year and giving recruits more opportunities to practice and be graded on their performance using simulators.

Investigate alternatives to the current semiannual firearm-requalification paradigm to provide enhanced firearm instruction that would focus on the officer’s proficiency rather than just the score on a static target.

Firearms Discharge Review Board Investigation and Reporting

In 1972, the NYPD, in response to what was perceived at the time as a “relatively high number of firearms incidents involving police officers,” produced a new set of “enhanced” shooting guidelines (NYPD, 2004, p. 7). The new guidelines substantially limited the situations in which officers were allowed to use deadly force and established the Firearms Discharge Review Board (FDRB) to investigate each discharge and to determine whether the discharge was consistent with the new policy. If the discharge were “out of policy,” even if it met the legal requirements of the NYPL, the officer would be subject to departmental discipline. The department reported that these
changes “almost immediately improved firearms discipline and reduced the number of shootings” (NYPD, 2004, p. 7).

Findings
Our assessment of the firearm-discharge review process is based on (1) interviews with departmental officials who participate in and manage the FDRB’s process, (2) observation of both borough-level and department-level FDRB deliberations, (3) a detailed review of all cases presented to the full FDRB during the years 2004–2006, (4) the opinions of an outside panel of national experts in officer-firearm discharges, and (5) a limited review of the processes and reports of other police departments. Based on the review of national best practices, the NYPD has a number of exemplary features, including substantial and appropriate command attention at the scene of the incident, which varies with the seriousness of the incident, and a process that generally results in reasoned disciplinary action where appropriate.

The stated purpose of the process is to “assess the propriety of firearms discharges and gauge the need for adjustments in weapons training for officers” (NYPD, 2004, p. 7). As a result, typically, findings and recommendations in final reports center on whether the discharge was intentional or accidental and whether it violated department policy.

Alternatively, the investigation might follow a broader path suggested in the NYPD Police Academy Student’s Guide (NYPD Police Academy, 2007a). Officers are taught that, if they are involved in a shooting, they will be judged not only on the propriety of the discharge but also on the tactics they used prior to the shooting, including whether they unnecessarily placed themselves in a position that gave them no choice but to fire their weapons (NYPD Police Academy, 2007a, p. 20). A more complete assessment of firearm-discharge cases might also identify the needs for improved tactics and different equipment. We identified 25 cases in which, in our judgment and after giving full consideration of the threats facing the officers involved, if a less lethal standoff weapon were available, the officer might reasonably have used it instead of his or her firearm, with a possible reduction in the number of shootings and associated casualties.

We also found that reports do not always adhere to the formats specified in NYPD regulations. Neither the patrol guide (NYPD, 2005) nor the investigation manual (NYPD, 2004) specifies a detailed format for the final report. The largest part of a final report is generally a summary of interviews with the officers who discharged their firearms. In general, final reports are long on facts and relatively short on analysis. Final reports frequently lack a synthesis of the information presented and seldom discuss conflicting information or attempt to reconcile evidence presented in the initial report with information presented in the final report.
Recommendations
To improve the firearm-discharge review process, we recommend that the NYPD do the following:

• Expand the focus of the firearm-discharge investigation to include a review of the tactics used.
• Build a formal lessons-learned process into the FDRB report.
• Adhere to the formats that are part of the Firearm Discharges Investigation Manual, specifically ¶4A, which requires an explicit statement on the availability of less-lethal equipment and a description (not an evaluation) of the tactics used before the discharge (NYPD, 2004).
• Change the final report format to require a summary statement that contains the author’s best judgment of how the incident unfolded, noting uncertainties and conflicts and rendering his or her judgment about what occurred.

Analysis of Factors Associated with NYPD Officers Discharging Their Firearms
We recommend in Chapter Four that a more integrated assessment of all firearm discharges might provide further insights into patterns and common characteristics that do not become clear until all cases are assessed together. We conducted an integrated analysis that incorporated data from cases that the FDRB adjudicated during the period 2004–2006. We compared the characteristics of officers who discharged their firearms with those of officers who were at or near the scene of those shooting incidents and did not discharge their weapons. To be clear, proximity to the incident is merely a means of selecting a comparison group of officers who might be expected to possess characteristics similar to those who shot. There is no presumption that they necessarily had the same opportunity to shoot. If the officers who discharged their weapons were a simple, random selection from this larger population, we would expect to find no characteristics that differentiated the two groups.

Findings
In fact, characteristics did differentiate the groups besides the obvious one of the discharge of the officer’s weapon. We found that, although the likelihood that an officer is involved in a shooting in any given year is small, officers who discharged their weapons were more likely to have had negative marks on their job records. An officer with an average of 3.1 negative marks (Central Personnel Index [CPI] points) per year of service in his or her record was three times more likely to discharge his or her weapon than other officers from the population of similar officers. In other words, on average, and after statistically accounting for other demographic differences, officers in the matched
population of nonshooters had significantly fewer negative marks in their files. To put this observation in perspective, our analysis of the 2006 data showed that 16 officers of the total of 2,611 officers, or 0.6 percent, with CPI scores greater than 3.1 were involved in shootings.

Readers should note that establishing statistical correlation (or association, as it is sometimes called) is not the same as establishing a causal link. With the data available to us, we cannot say what it is about officers with higher CPI scores that puts them at risk for being involved in a shooting.

Recommendations
The fact that officers with certain characteristics were more likely to discharge their weapons than were other officers is not in itself an indication that a given discharge was inappropriate or that the officers involved were indiscriminate in their use of deadly force. Since the analysis found differences that cannot be explained as random and since it is NYPD policy to use the minimum force necessary in every situation, the analysis suggests that the NYPD might pay particular attention to shootings involving officers with an annual CPI-point average in excess of 3.1 to make sure that the officers did everything appropriate before discharging their firearms. While the NYPD already monitors those officers exceeding a career total of 20 CPI points, this analysis suggests that the close monitoring of officers with an excessive accumulation rate of CPI points may also be warranted.

Need for an Improved Less-Than-Lethal Standoff Weapon
Analysis of the NYPD firearm-discharge cases and the experience of other police departments suggests that, if the NYPD employed a more robust, less lethal standoff weapon, it might not only prevent some incidents from escalating to deadly force but also reduce injuries to officers and citizens alike, as it has with other departments.

When physical force is not appropriate and drawing a firearm is problematic, the use of a less lethal weapon may provide an appropriate alternative. Members of RAND’s expert panel that supported this study reviewed a number of firearm-discharge cases and saw several opportunities in which they thought the situation might have ended differently if the officers involved had used less-than-lethal force.

Findings
The only less lethal weapon to which patrol officers in New York City routinely have access is oleoresin capsicum (OC), or pepper, spray. Nationally and in New York City, OC spray is relatively rarely used. In the NYPD, supervisory personnel and special operations units have access to a conducted-energy device (CED), specifically a TASER®
device. While departments that use CEDs report reductions in injuries to officers and citizens alike and in the use of deadly force, TASER-device use is still controversial.

While police departments generally have had very favorable experiences using CEDs, the American Civil Liberties Union (ACLU) and Amnesty International USA (AIUSA) have called for a moratorium in the use of CEDs. Concerns appear to fall into three areas: (1) CEDs seem to be used too frequently; (2) police officers do not have proper guidance or supervision and abuse CEDs, and (3) probably the most disturbing concern, CEDs contribute to the deaths of suspects who have been stunned. A number of objective, third-party organizations, however, have reviewed the evidence and found little support for this concern.

**Recommendations**

We recommend that the NYPD implement a pilot program in which patrol officers in selected precincts are trained and equipped with a CED in addition to the standard-issue OC spray. The purpose of the study would be to determine what impact CED use might have on the way in which NYPD officers apply force. Before CEDs are issued, use-of-force information should be collected to establish an analytic baseline against which performance can be measured in the subject precinct and in a statistically matched precinct. Officers in both precincts would be trained in the proper reporting of use-of-force information. The pilot should run for between six and 12 months.

**Need for Other Innovative Technologies**

We also explored two technologies that could assist the NYPD in appropriate and acceptable applications of force: laser sights and gun-mounted flashlights.

**Findings**

Law-enforcement agencies have used laser-sighting systems since the 1990s. PropONENTS claim that they help officers maintain awareness of muzzle direction and do not degrade peripheral vision when aiming a weapon. Others claim that they can alert a suspect to an officer’s location and that multiple laser sightings can create confusion when more than one officer is present; they worry that officers will overly rely on the sights, allowing traditional shooting skills to degrade.

Several members of RAND’s panel of independent experts who reviewed cases suggested that the outcomes of those cases might have been different if officers had been equipped with flashlights mounted on their weapons, because a gun-mounted flashlight would allow the officer to keep the nongun hand free. While there was some concern that the mounted light would give away the location of the officer’s firearm, the panel’s consensus was that the tactical advantage that the handgun-mounted light provides more than offsets this concern.
Recommendations
We recommend that the NYPD do the following:

- Conduct a test using laser sights with plainclothes officers; if this initial test proves positive, initiate a pilot study with uniformed personnel to evaluate whether the use of laser sights increases shooting accuracy, reduces injuries to officers and third parties, reduces average number of shots fired, and contributes to the deescalation of confrontations between officers and suspects.
- Initiate a pilot study to determine whether handgun-mounted flashlights reduce improper, unnecessary, or unjustified officer-involved shootings in conditions of low light, injuries to officers and third parties, and the average number of shots fired in conditions of low light.

Reflexive Shooting
The NYPD categorizes contagious shootings as intentional reflexive discharges and, together with accidental reflexive discharges, they make up the broader category of reflexive firearm discharge.

Findings
Data on intentional reflexive discharge or contagious shooting are not readily available, neither within the NYPD nor across departments. The firearm-discharge reports make no determination about whether the discharge is an intentional reflexive discharge. As a result, it is not possible to determine the extent of reflexive shootings and whether the phenomenon is increasing or decreasing over time.

The general psychological research demonstrates that questioning people about the basis for a decision results in information that is highly unreliable. More specifically, police officers are sometimes surprised that their weapons discharge, claiming that they never had a finger on the trigger. They sometimes do not accurately report how many rounds they discharged or how many times they reloaded their weapons.

Recommendations
We recommend that the NYPD do the following:

- Modify training to include reflexive-shooting scenarios in which a stimulus or the sounds of guns going off are included, to sensitize officers to cues that may not be reliable and to teach them that such cues may generate unwanted responses.
- Have officers practice with the correct decisionmaking process to reduce the use of inappropriate decisionmaking shortcuts.
Ensure that all officers involved in a shooting undergo the mandatory one-day refresher course at the range.

**Final Word**

In the landmark essay *The Functions of the Police in Modern Society*, Egon Bittner (1970) laid out the central role that the use of force plays in policing in the United States. According to Bittner, a police officer is an agent of the state who is granted special powers to apply coercive force under special circumstances. The force applied may be as trivial as pushing or as consequential as using deadly force. However, whatever force is used, it is expected to be reasonable for the situation at hand. Both the training that NYPD officers receive and the FDRB process are designed to ensure that officers adhere to department policies. Hopefully, the observations, findings, and recommendations from this study will enhance the department’s efforts in this regard.