Solving cold cases can be elusive, even when police departments have the resources to devote to cold case units. A recent study and report seeks to characterize factors in cold case investigations that improve the chances of solving the crime.

Researched and written by the RAND® Corporation with funding from the Office of Justice Programs’ National Institute of Justice (NIJ), Cold-Case Investigations, An Analysis of Current Practices and Factors Associated with Successful Outcomes, examines case and investigative attributes contributing to effective cold-case investigations.

The study’s objectives were to assess current practices in cold-case investigations and determine which are most effective, and identify the type of cases most likely to be solved. The information can be used to guide agencies on resource allocation, agency organization and case prioritization for optimizing clearance rates.

RAND conducted a national survey of law enforcement agencies on cold case investigation practices, then chose four agencies with cold case units (District of Columbia, Baltimore, Dallas and Denver). Researchers examined those agencies’ cold case files for characteristics and investigative practices associated with solving cases.

“I think the study has the potential to help NIJ inform the field about cold case investigations, and the recommendations and conclusions in the report may help practitioners,” says Brett Chapman, an NIJ social science analyst and project monitor. “If you expect to get something out of a cold case investigation, you have to put something into it — tracking, accountability, level of funding for cold case units and cost-benefit analyses are some of the important factors involved.”

The Survey

Of the 5,000 surveys mailed, 1,051 were returned, for a response rate of 20 percent, according to the report. Findings include:

- Ten percent of agencies have investigators dedicated to cold cases, and 7 percent have formal cold case units. Only 14 percent of responding agencies have a protocol for initiating cold-case investigations.
- About one in five cases cleared, but clearing a case does not always result in an arrest. About one in 20 cold-case investigations with a known perpetrator resulted in arrest; one in 100 resulted in conviction.
- Level of funding and access to investigative databases are associated with higher case clearance rates. Most cold case work (56 percent) is funded through grants or supplemental funds rather than directly from agency budgets.
- Most cold case investigations involve homicides. Other types of cases include sex offenses, missing persons, burglaries and robberies.

Case Site Analysis

In the four cities selected for analysis, the researchers examined solved and unsolved cases assigned to cold case squads. Findings include:

- The basis for opening a case, age of the case, characteristics of the victim and crime and progress made during the initial investigation all affected investigative outcome. According to the report, cases were less likely to be cleared if the cold-case investigation was initiated by family pressure or the passage of time. Location of the body, age and gender of the victim and whether the victim was a known drug user were also factors. A case was more likely to be solved if it was more recent and did not involve a drug user. Actions of cold-case investigators (developing a new theory of the crime and suspect lineups) also affected case clearance.
- Clearing a cold case does not automatically lead to an arrest for a variety of reasons, including missing or uncooperative witnesses, a dead or incarcerated
suspect, or DNA results implicating multiple suspects or otherwise inconclusive.

In sexual assault cases in which a DNA match to a suspect had been made, about one-third were dropped due to problems with victim cooperation, credibility or availability of suspects. However, 90 percent of prosecuted cases resulted in convictions and lengthy prison terms.

Cooperation between prosecutors and investigators at the onset of a cold case investigation, instead of waiting until there are results, can result in successful case outcomes. Prosecutors can advise on the most compelling type of evidence and whether the case is likely to produce a conviction.

Conclusions and Recommendations

The researchers identified three distinct types of cold case investigations, each with different processes, benefits and costs. In the classic cold-case investigation, the detective reopens a case due to family or media inquiries or a procedure review of cases unsolved for a specified length of time. These cases are likely to be the most expensive and least successful.

The second case type, which is based on availability of forensic tests due to advances in DNA technology, is relatively inexpensive, and federal funds are available for DNA testing. According to the report, the rate of success from indiscriminate DNA testing of large numbers of cases is likely below 50 percent.

The third type of case, which are those opened due to a confession or a plea deal, are the most inexpensive and successful.

The report notes cold case investigation should emphasize convictions, not just clearance rates. If conviction is the goal, it is logical for investigators to work closely with prosecutors to identify cases that, if solved, would likely be prosecutable. Researchers also did not find evidence that cold-case units were tracking conviction rates or other basic information on the value of cold-case investigations. Agencies had information on the number of cold cases worked, the number cleared by arrest and the number of exceptional clearances (a suspect is identified but prosecution is impossible), but generally did not have information on convictions, sentences, or time spent on cold cases relative to the number of clearances obtained.

To gauge return on investment and help agencies decide what portion of resources should be diverted to cold cases, the report recommends that a cost-effective analysis be conducted of investigator time spent on cold cases versus new cases. The data collected from several selected agencies could be used to develop models that relate the average amount of time spent on active and cold-case investigations to clearances and arrests.

The report also recommends that researchers assess the conviction rate for cold cases and determine whether involvement of prosecutors in investigations leads to a higher rate of convictions. The research could include reasons prosecutors did not file cases or why cases were dismissed.

To view a copy of the report, visit http://www.rand.org/pubs/technical_reports/TR948.html. For information on the project, contact Brett Chapman of NIJ at (202) 514-2187 or brett.chapman@usdoj.gov.