



# Crisis Intervention Training

## The Effects of Mandatory Training on Use of Force, Arrests and Holds for Mental Health

May 3, 2013

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# Introduction

## This Report

In January of 2011, the Portland Police Bureau (PPB) Training Division began working with students in Portland State University's (PSU) Public Administration Program to design a program evaluation for PPB's Crisis Intervention Training Program. Their proposal for an evaluation was completed in March 2011 and had an estimated cost of \$90,666 (Bauman, Bikman, Lee, Podoloff, Trubachik, & Weyrauch, 2011).

In the midst of ongoing budget issues, the Bureau could not afford the proposed evaluation. However, the Training Division felt the need to examine the effects of Crisis Intervention Training on officers so approached the PPB's Strategic Services Division (SSD) and asked it to conduct an evaluation. The SSD lacked the resources to conduct a full evaluation of the program but agreed to help analyze the effects of mandatory Crisis Intervention Training, which occurred in 2007 and 2008, across a number of quantifiable dimensions.

The SSD quickly determined that even this modified evaluation would prove problematic. The training was implemented along with a range of changes to policy and practices as the result of a tragic death. The numerous changes included redefining what force consisted of and how it was measured. This redefinition caused nearly insurmountable methodological issues and greatly reduced the ability of the Bureau to analyze the effects of the many changes it made.

This report represents the best attempt of the SSD to overcome these limitations and provide a meaningful evaluation of Crisis Intervention Training.

This evaluation consists of five separate parts. The introduction contains background information on the history of police interactions with persons with a mental illness, a literature review around

policing involving persons with mental illness and Crisis Intervention Teams, and concludes with a description of the methodology used to inform the training analysis. Part I begins with a description of the methodology used to conduct this evaluation and continues with a quantitative analysis of the impact of CIT on use of force by a cohort of officers trained between June and December of 2012. Because the Bureau altered its descriptions and reporting requirements around use of force, this was the only group with consistently available force reporting before and after training.

Part II is a quantitative analysis of the impact of Crisis Intervention Training on the use of mental health custody holds (for individuals believed to be danger to themselves or others). This analysis also uses the cohort of officers trained between June and December 2012. Part III is a quantitative analysis of the impact of Crisis Intervention Training on arrests. This analysis also uses the cohort of officers trained between June and December of 2007.

Part IV of this document concludes with recommendations around the lessons learned in this evaluation.

## Executive Summary

This report examines pre/post (180 days prior to Crisis Intervention Training compared with 180 days after Crisis Intervention Training) use of force cases, arrests cases and offenses coded as mental health involved (primarily police holds for mental health) among officers (N = 140) who received mandatory Crisis Intervention Training between June and December of 2008. The evaluation found the following:

- There was a decrease in the number of cases involving force for this group both at an aggregate level (i.e. all force cases) and as a rate (force cases per 1,000 calls) when controlling for the number of calls each

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officer was primary clearing unit for.

- There was an increase in the number of cases coded as a mental health involvement (primarily police holds for mental health) both at an aggregate level (i.e. all force cases) and as a rate (force cases per 1,000 calls) when controlling for the number of calls each officer was primary clearing unit for.
- There was a decrease in the number of cases with a charged offense (i.e. arrests) for this group both at and aggregate level (i.e. all cases with at least one charge) and as a rate (force cases per 1,000 calls) when controlling for the number of calls each officers was primary clearing unit for.

This evaluation was unable to determine if a causal relationship existed between mandatory Crisis Intervention Training and the positive outcomes which followed. Despite this limitation, the observed changes were consistent with the goals of the training and provide evidence supporting the value of mandatory Crisis Intervention Training for operational police officers.

### Background

Institutionalization as a means of treating and controlling persons with a mental illness has decreased dramatically over the last 50 years. While community based options and improvements in the use of less restrictive treatments are improving the lives of thousands of people living with a mental illness, for large numbers of individuals these treatment options are failing or not available. Increasingly, this sub-group of under-treated individuals with mental illness is coming into contact with the criminal justice system.

Police officers (and corrections staff) are the new custodians of individuals whose mental health needs are going unmet. Tragically, there are instances where persons with a mental illness or in a mental health crisis are seriously injured or killed in interactions with

law enforcement. The City of Portland, OR, experienced this tragedy first hand.

In 2006, James Chasse, a man diagnosed with schizophrenia, died after an altercation with Portland police officers. Just days after eluding police and mental health workers who had been sent to check on his well being, Mr. Chasse was pursued by police for urinating in public. The officers were unaware of his mental health condition. The foot chase ended when officers pushed Mr. Chasse to the ground and fought with him. Mr. Chasse suffered fatal injuries during the struggle. As with many such tragedies, the situation resulted in calls for reform and improved training of police officers in how to interact with people in a mental health crisis.

The effects of these events extend beyond the individual who is injured or killed. They cause pain to the family and friends of those involved. These events damage the legitimacy of police in the eyes of the public. In an effort to better meet the needs of persons with mental illnesses and help restore legitimacy in the community, the Portland Police Bureau convened a task force charged with helping the Bureau improve its response to persons with a mental illness. As a result of this working group, the Police Bureau trained all operational (street officers and sergeants) personnel in crisis intervention.

A response of this nature is not uncommon after a tragic incident such as the death of Mr. Chasse. The police often modify training and tactics, or even adopt entirely new responses. One popular response is the introduction of Crisis Intervention Training or a Crisis Intervention Team, both commonly referred to as "CIT". While CIT researchers have found beneficial effects in areas such as police officer knowledge regarding mental illness or increased success in diverting persons with a mental illness

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from jail to more appropriate treatment, research into CIT's efficacy in reducing police use of force is lacking. Also lacking, is a quantitative analysis of the effects of this training absent the implementation of support systems such as a police-friendly mental health reception center or the use of specialized intervention teams whose members volunteer to respond to these types of calls.

What are the consequences of implementing Crisis Intervention Training as a possible solution for problems, such as police use of force against persons with a mental illness, when the training's efficacy has not yet been demonstrated in the field? In addition, only select Crisis Intervention Training (or Team) models have demonstrated positive outcomes yet a plethora of different models exist, many of which lack fidelity to those programs which have been evaluated. Implementing ineffective measures to address important issues, such as police interactions with persons in mental health crisis, can lead to a false sense of confidence in the community or an agency's ability to solve or mitigate these issues. The failure of these ineffective measures may result in tragedy. Even if a tragedy is avoided the failure of these measures can erode police legitimacy.

### Statement of need

Legal changes have impacted the rate at which police come into contact with psychiatrically diagnosed individuals. Laws such as the Civil Rights of Institutionalized Persons Act and legal decisions such as *Olmstead v. L.C.* (discussed in greater detail below) have altered how states treat persons with mental illness. While beneficial overall these changes may be impacting the rate at which law enforcement contact persons with a mental illness.

De-institutionalization has resulted in the

decreased use of state psychiatric hospitals for persons with mental illness. Between 1955 and 2005 there was a 95% reduction (from 340 beds per 100k to 17 beds per 100k) in the number of public psychiatric hospital beds available nationally (Torrey, Entsminger, Geller, Stanley, & Jaffe, 2008). While this trend began in the 1950s it has accelerated in the last two decades. In 1980, the Civil Rights of Institutionalized Persons Act (Civil Rights of Institutionalized Persons Act, 1980) commonly known as "CRIPA" was passed to protect the civil rights of individuals confined to state and locally-run (public as opposed to private or federal) nursing homes, mental health facilities, and institutions for people with a variety of disabilities, including persons with a mental illness. This act empowered the United States Attorney General to investigate public institutional facilities, e.g. prisons, psychiatric hospitals, rest homes, to protect the civil rights their residents.

The impact of CRIPA was strengthened by *Olmstead v. L.C.*, ("the *Olmstead Decision*") (*Olmstead v. L.C.*, 1999). This ruling required states to treat individuals in the least restrictive setting possible. This ruling has since been used in conjunction with CRIPA to require states to develop community based alternatives to institutionalization. These legal requirements have directly impacted how Oregon treats psychiatrically diagnosed individuals. One impact has been a reduction in the use of civil commitments. In the 20 years between 1983 and 2003, the number of involuntary holds placed on individuals deemed to be "a danger to themselves or others" more than doubled from 3996 to 8315 at the same time the number of actual commitments fell from 1165 to 785. The rate of civil commitment fell from 45 per 100,000 citizens to 22 per 100,000 citizens (Bloom, 2006). In Multnomah County alone, the number of Involuntary Commitment Program (ICP) investigations grew from

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2,823 in fiscal year 1994 to 4,226 in fiscal year 2011 (a nearly 50% increase) (Stewart, Gerritsen, Covelli, & Henning, 2011). Between 2005 and 2011, the number of commitments fell from 304 in 2005 to 254 in 2011 (from 8% of holds investigated to 6% of holds investigated) (Stewart, Gerritsen, Covelli, & Henning, 2011).

It would appear that demand for public agencies to intervene with persons in a mental health crisis (in the form of involuntary holds) has grown substantially. Other research supports this conclusion. While de-institutionalization has had many positive impacts, there has also been a growing recognition that, for many persons with mental illness, de-institutionalization has simply resulted in a transfer from a psychiatric hospital to a jail or prison (Fuller, 1997). Police agencies are increasingly responding to calls involving persons in a mental health crisis or with a diagnosed mental health condition. In 1996, a survey of 174 large police departments (in cities of over 100,000) estimated that 7% of all police contacts involved interactions with persons with a mental illness (Williams, Steadman, Borum, Veysey, & Morrissey, 1999).

Given the ramifications of the Olmstead Decision, which further decreased the use of institutionalization, it is likely the number of contacts involving persons with mental illness has grown. Many law enforcement officers support this assertion. For instance, a survey of law enforcement (police officers and sheriff's deputies) in 2011, found that over 75% of the respondents answered affirmatively to the question, "has there been an increase in the number of mentally ill detainees/prisoners requiring more direct supervision over the length of your career?" (Biasotti, 2011). This does not mean the benefits of CRIPA and Olmstead Decision do not exceed the costs. It is important to recognize that prior to these changes persons with a mental illness were often

deprived of basic rights which the rest of society takes for granted. It appears that an unfortunate side effect of decreasing the use of institutionalization may be increased contacts between the criminal justice system and persons with a mental illness.

### Law enforcement responses

Many localities have responded to the increased interactions with persons with mental illness by providing training to recruit police officers on how to more effectively interact with this population. Hails & Borum (2003) surveyed agencies to determine the amount of time spent training to help improve their responses to persons with a mental illness. They found that agencies spent from 0 to 41 hours, with a median of 6.5 hours and a mean of 9.16 hours.

Nationally law enforcement agencies have developed various responses to address the increase in contact involving persons with mental illness and the criminal justice system. The Crisis Intervention Team model is one such response. Memphis, Tennessee, pioneered this concept, which involves officers volunteering to be part of a specially trained team that responds to incidents involving persons with a mental illness.

A second intervention embeds police officers with partners who are mental health professionals. In this model, the police retain trained mental health professionals to assist them in interacting with persons in a mental health crisis and often respond together as a unit.

A third model involves a community-based mental health response. In this model, the mental health responders are separate from police. They may request police assistance but are not based in the police department (Borum, Dean, Steadman, & Morrissey, 1998). Borum, et al., (1998) found that officers in a department with a Crisis Intervention Team rated their program as being more

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effective than officers in departments with the police-based mental health professionals or community-based mental health response. This may explain some of the popularity of the Crisis Intervention Team model.

### **Crisis intervention teams**

Despite growing interest in the use of Crisis Intervention Teams and Crisis Intervention Training to address police handling of persons with mental illness, there is still a lack of research in this area (Compton, Bahora, Watson, & Oliva, 2008). Furthermore, the research that does exist frequently suffers from methodological limitations. A number of studies addressing police interactions with persons with mental illness have employed a survey design to test the availability and/or impacts of Crisis Intervention Training on police officers. These studies provide evidence that Crisis Intervention Training can: reduce stigma and improve attitudes by officers toward persons with schizophrenia (Compton, Esterberg, McGee, Kotwicki, & Oliva, 2006), align officers' understanding of the causation of schizophrenia more closely with that of professional mental health workers (Demir, Broussard, Goulding, & Compton, 2009), help persons with a mental illness in crisis receive treatment (Teller, Muntez, Gil, & Ritter, 2006) and assess the types of responses available to better serve persons with mental illness (Williams, Steadman, Borum, Veysey, & Morrissey, 1999) and may reduce the number of discretionary arrests of persons with mental illness (Franz & Borum, 2010). Recent studies have found that CIT officers may benefit from ongoing training and seasoned officers may retain more knowledge (Compton & Chien, 2008).

Finally, Crisis Intervention Teams are generally volunteer. However, research on this issue has provided evidence that officers who self-select for Crisis Intervention Training do not have greater baseline

empathy or psychological mindedness than other officers. There is a lack of empirical research on the benefits of universal training versus self-selected teams (Compton, Broussard, Hankerson-Dyson, Krishan, & Stewart-Hutto, 2011). This is particularly relevant for the training being examined because it was mandatory for all personnel working in patrol assignments (i.e. officer and sergeants responding to 9-1-1 calls).

Overall, it appears that CIT programs improve the knowledge and attitudes of police officers on issues involving persons with mental illness and reduce the unnecessary arrest of persons with mental illness. However, these programs are often introduced after a tragic incident involving police use of force against a person with mental illness (Hails & Borum, 2003). Given the timing, it is reasonable to assume that one goal of introducing these programs is to reduce the use of force by police against persons with mental illness.

### **Person with a mental illness and use of force by police**

Does the implementation of a CIT program reduce the use of force by police? Studies examining Crisis Intervention Teams and the use of force have had inconsistent findings. In a study using vignettes to gauge officers force preferences in containing a schizophrenic subject, it was found that officers opted for less force over the course of the encounter and perceived force as being a less effective option (Compton, Demir Neubert, Broussard, McGriff, Morgan, & Oliva, 2011). This would support the utility for CIT-type programs in reducing police use of force against persons with mental illness. However, other studies have had contradictory findings. A study examining the effects of the implementation of a CIT program on the number of SWAT call-outs, in Atlanta, GA (Compton, Berivan, Oliva, & Boyce, 2009), found that the number of CIT

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trained officers had no significant correlation with the number of these call-outs.

Another study examined how CIT officers in a given police district impacted use of force after controlling for a broad range of variables (Moribito, Kerr, Watson, Draine, Ottati, & Angel, 2012). Matching two pilot districts with a high saturation of CIT officers against two districts with a low saturation of CIT officers, the study used regression analysis to analyze how officers in the high saturation CIT districts used force compared with the low saturation districts. This study used an officer's self-reported interaction with the last person with mental illness they contacted to determine the nature of the officer's force and the person with mental illness's resistance.

The study found that an interaction effect between CIT and suspect demeanor, as well as district characteristics and subject resistance, impacted the likelihood of the use of force (which for this study included verbal commands). There was evidence that the factors influencing the use of force against persons with mental illness resembled those generally associated with use of force. This is consistent with other studies examining the general (not specific to CIT) use of force by police against persons with mental illness (Kaminski, DiGiovanni, & Downs, 2004; Johnson, 2011).

The study did not find that CIT impacted use of force at an individual level but that positive system level effects may exist. The authors suggest that factors outside the control of the individual officer may be the most influential in determining outcomes of contact between police and persons with mental illness. The potential importance of system level influences on police use of force is consistent with other findings related to CIT programs, such as the importance of a police-friendly crisis reception and triage center (Steadman, Stainbrook, Griffin,

Draine, Dupont, & Horey, 2001).

These findings are essential to an understanding of the effects of Crisis Intervention Training or Teams on police use of force. There is evidence that suggests the implementation of Crisis Intervention Teams absent supporting structures, such as a specialized psychiatric center for police, will not effect use of force by police against persons with a mental illness. There is very little knowledge about how providing only Crisis Intervention Training, without a voluntary team or support structures, impacts police use of force against persons with a mental illness.

Related studies on crisis negotiation have also introduced questions on the effectiveness of communication with individuals intent on "suicide by cop." Mohandie & Meloy, 2010, conducted a study of 84 hostage, barricaded or "jumper" incidents that resulted in an officer-involved shooting. They found that, while a primary assumption of most negotiation strategies is that additional time will de-escalate the situation, this may not be the case in situations in which the individual does not have the will to live.

In these situations, the subject may regard the negotiator instrumentally (as a possible tool for suicide). Under these conditions, the passage of time and additional communication may not aid in building the kind of rapport necessary to defuse the situation peacefully. This is important in regard to persons with mental illness, as nearly half of the sample in this study (n=84) had probable or definite mental health history.

General studies of police use of force find that the degree of hostility and aggressive or threatening behavior on the part of the suspect is the strongest predictor of police use of force (Hickman, Piquero, & Garner, 2008) and that force is generally commensurate with resistance (Gallo,

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Collyer, & Gallagher, 2008). Macro level studies have found a significant relationship between predatory crime and police use of deadly force (MacDonald, Kaminski, Alpert, & Tennenbaum, 2001).

A review of the findings on police use of force supports the hypothesis that force is generally commensurate to resistance, and that a suspect's mental impairment does not independently impact police use of force, and that police use force to overcome hostility, aggression and perceived threat. Studies of CIT yield mixed results on their impact in reducing use of force or crisis situations requiring deployment of a SWAT unit. Additionally, studies of crisis negotiation find that there may be situations in which a person's mental state impedes effective communication. If this assessment is accurate, it is plausible that the introduction of Crisis Intervention Training, absent larger systemic support, may have minimal or no impact on police use of force against persons with a mental illness.

### **Portland Police Bureau response**

The Portland Police Bureau was an early adopter of the "Memphis Model" version of CIT. Implemented in 1994, the development process included visits to Memphis to meet with trainers and the program coordinator. The PPB eventually used a modified version of the Memphis curriculum (Portland Police Bureau, 2012). In July 1995, the first 60 trained CIT officers graduated. By 2006, the number of CIT officers in Portland had grown to 260. This represented over 1/4th of the sworn police personnel in the city.

By 1998, a cooperative effort between various private and public entities resulted in the creation of the Crisis Triage Center (CTC). This center, consistent with the Memphis vision of CIT, was a police-friendly, 24-hour-a-day, seven-day-a-week facility designed to assist persons in crisis.

The existence of such a facility is often associated with the success of a CIT program (Steadman, Stainbrook, Griffin, Draine, Dupont, & Horey, 2001). The center was functional until July of 2001 when it was closed as part of a redesign of community services for persons with mental illness. While services in other areas were expanded the closure of this facility forced officers to rely on emergency rooms for the individuals on whom they placed holds.

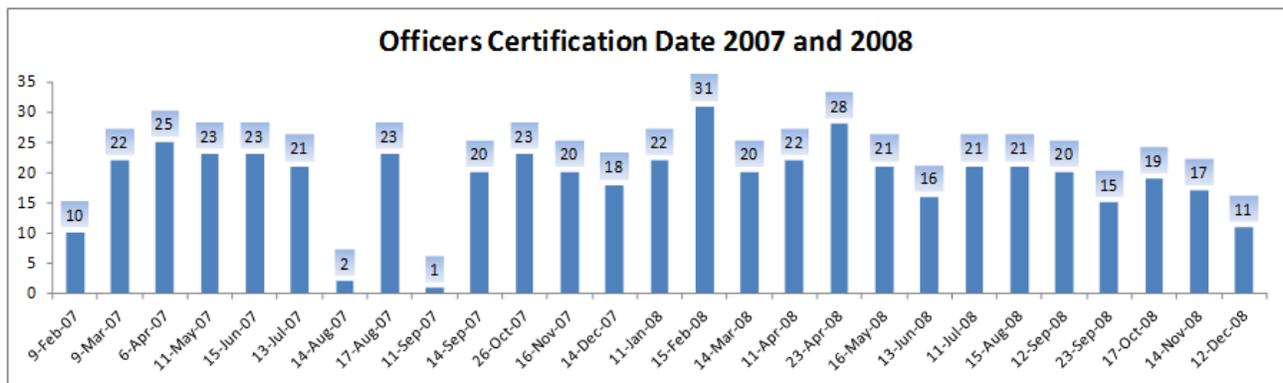
In 2006, members of Mayor Tom Potter's "Public Safety and Mental Health" forum recommended mandatory Crisis Intervention Training to all operational (street officers and sergeants) personnel (Portland Police Bureau, 2012). Mayor Potter directed the chief to implement this training as quickly as possible. The training began in February of 2007 and was completed by December of 2008. Currently, all Portland police officers received training comparable to what specialized Crisis Intervention Teams in other cities receive.

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This training was implemented along with a number of other changes to policy and practice. Of particular importance were changes to the use of force reporting and definitions, which ultimately impacted the ability of the SSD to evaluate the effects of this training. Rapid organization-wide change in response to a crisis is not uncommon. However, evaluating the effects of multiple systemic changes which occur simultaneously is very difficult.

Figure 1 displays the certification dates and the number of officers trained between 2007 and 2008<sup>1</sup>:

**Figure 1**



<sup>1</sup> PPB trainers have identified that the two officers certified on August 14, 2007 and the one officer certified on September 11, 2007 are most likely errors. Officers were trained in large groups and it is unlikely such a small number would be certified. These numbers remain in the graph because the proper dates could not be identified. This also highlights some of the issues regarding the data for this evaluation. Like many sources of secondary data there may be issues with quality control which the authors are unaware of.

# Part I

## Methodology

This evaluation uses use of force, arrest, mental health coded case and call data from a cohort of 140 Portland police officers who received mandatory Crisis Intervention Training and were certified in such training between June 13, 2008 and December 12, 2008. The data is secondary in nature and collected from a time period of 180 days prior to training certification until 180 days after training certification for each individual. This encompasses the period between December 16, 2007 and June 10, 2009. Policy changes to use of force occurred in early November, 2007. The use of the June 13th certification group allowed a 180-day pre-certification evaluation while still providing a substantial (over 5 weeks) time period between the introduction of the new policy and the collection of force data. This time period should allow for officers to become adapted to the new reporting requirements and ensure consistent reporting standards across this study's time frame.

Because many individuals change assignments and/or receive promotions, a second analysis was done with a sample of 80 officers who took more than 100 calls both before and after receiving the training. This analysis helps control both for officers who were promoted or changed assignment before or after training as well as recruits who might not have taken many calls prior to training.

## Limitations

The subset of officers and times in this study were chosen because of policy changes in use of force that occurred in November of 2007. These changes generally tightened force use (reduced the flexibility of officers on when use of force was within policy for certain types of force) and substantially modified the reporting requirements<sup>2</sup>. These modifications make comparisons prior to November 2007 impossible. This is one limitation of the current evaluation.

A second limitation is that of history effects. Force usage by the Portland Police Bureau appears to have declined consistently since 2006. Changes to report requirements, policy and training (such as CIT) may be impacting this. This evaluation does not control for these other potential causes of declining force usage. Changes in reporting requirements and definitions of what constitutes force further confuse the issue.

These limitations aside, this report uses the entire population of individuals trained during the study period and examines their force, arrests and identification of mental health situations while controlling for the number of radio calls the officers were dispatched to. The study period was chosen because the definitions and policies around force remained constant during the period.

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<sup>2</sup> Among other changes the new policy limited Taser use in certain situations, removed reporting requirements for some types of control holds (holds which did not cause injury such as a wrist lock on a non-resistant subject) and expanded reporting requirements to include reporting when a firearm was pointed at a person.

# Part I: Methodology

## Research Participants

The participants for this research are Portland police officers. These officers were working in the Operations Branch, which is the section of the Portland Police Bureau assigned to work patrol and most likely to respond to calls from persons in a mental health crisis. These officers had not been part of earlier crisis intervention training.

## Sample

This census consists of 140 officers trained in CIT between June 13th, 2008 and December 12th, 2008. This is the population of officers, working in operations, who had not received training prior to June 13, 2008. This group may not be representative of the population of the Police Bureau as a whole. The fact that they were among the last to receive training (officers had some flexibility in scheduling their training dates) may make this group different from other officers who arranged to be trained earlier. The possibility of selection bias exists. This potential selection bias may limit the generalizability of this evaluation. Descriptive statistics will be reported at the aggregate level for this group.

Additional analysis is conducted on a subset ( $N = 80$ ) of officers who took 100 or more calls both prior to and after the training. This subset would average about one call or more per day and was chosen to capture officers who were working in patrol, taking police calls consistently both prior to and after the training. Some officers in the original cohort took either very few or no calls either prior to or after training. This is most likely an artifact of being assigned to a position not directly taking police calls. CIT is designed to benefit officers engaged in regular and repeated interactions with the public as opposed to officers on desk assignments or who otherwise do not interact with persons in crisis.

## Measures

This evaluation examines cases that have been coded as involving the use of force, as a custodial case (generally arrest but includes some criminal citations) or mental health involved case (generally but not exclusively, a Peace Officer Custody Hold which assess for danger to self or others as a result of mental health issues) by each officer for 180 days (approximately six months) before and 180 days after their training. Radio call data (this includes dispatched police calls or calls where officers in the field engage in self-initiated activity such as contacting a suspicious person) is used to control for the amount of contact with the public. This is important because this training did not occur in vacuum but was the result of a tragic incident involving an in-custody death. It is possible that officers chose to de-police (engage in less activity) as a result of the incident. Call data is used to control for this possibility and to ensure the changes are not due to other unidentified factors that reduced the amount of contact officers had with the public.

Use of Force policy requires officers to report when they use pepper spray on a person, strike a person with hands, feet or object, use a control hold that causes injury, use a Taser or Less-Lethal Shotgun (beanbag gun) or point a firearm at a person. These reports were linked to the officers who received training to calculate force cases before and after training. They are reported as force cases, however, it is important to remember that one case can involve more than one officer (for instance, several officers struggling with a single suspect). In these instances, each involved officer is counted as being involved in a use of force case. Lethal force (such as shooting a person) is covered through a criminal investigation and is reported separately (there was only one incident of lethal force during the study period).

## Part I: Methodology

Officers are also required to report custody cases (“arrest”) via a written report. Unlike force, normally only the primary officer is listed on custody reports. One goal of Crisis Intervention Training is to help officers identify alternatives to arrest where appropriate. One of the crisis intervention trainers relayed a story of an officer who contacted her after the training to describe an incident in which a mentally ill person was smearing feces on a statue. The officer relayed that, prior to training, he would have simply arrested the person. After training, he re-thought that option and instead found an alternative for the person. This measure attempts to determine if such anecdotal stories are supported by the data surrounding the use of custodies.

The mental health involvement code is generally used for holds involving people who present as a danger to themselves or others. These holds may be police holds or holds on which police assist community mental health representatives. Measures of mental health and police involvement are very limited in Portland Police Bureau data systems. Because of concerns around civil rights, the Portland Police Bureau collects very limited data on individuals mental health status. The data that is collected appears to measure the number of incidents in which police identify a person as a danger to themselves or others. Advanced training may not be necessary to identify such a blunt measure, e.g. danger to self or others, and Crisis Intervention Training focuses on more subtle aspects of the interactions between public safety and mental health. Unfortunately, this is the best direct measure

available at the time of this analysis to gauge the impact of CIT on officer’s performance in the field. What could not be captured were informal efforts taken by police to assist persons in crisis. For example, this measure would not capture how a police officer responds to a call of a persons standing outside a coffee shop who is talking ot herself but does not pose a threat to herself or someone else. A call like the one described above are where CIT may have it’s greatest impact but this evaluation lacks the subilty to evaluate changes in how officers respond to such a call. Given the focus of Crisis Intervention Training, the inability to capture more refined data around police contacts with persons with a mental illness limits the utility of this study.

The change scores of aggregate force cases, custody cases and mental health involved cases from before training to after training as well as a rate of such cases per 1,000 calls are the dependent variables for this analysis. Scores are calculated as follows:

*Cases (Use of force, Custody or Mental Health) after training – Cases (Use of force, Custody or Mental Health) before training*

Thus, a person who used force in 3 cases<sup>3</sup> before training and had two cases involving force after training would have a change score of -1. This would indicate the officer had one less force case in the 180 days following training than the 180 days prior to training.

The rate per 1000 calls is calculated as follows:

$$\text{Rate} = \frac{\text{Force, custody or mental health involved cases}}{\text{Calls}} \times 1,000$$

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<sup>3</sup> For force and custody cases it is important to note that we are using case as opposed to incident level data. One incident may contain several cases. By way of example one force incident may involve arresting and/or using force against two suspects. This would count as two separate cases for purposes of this analysis.

## Part I: Methodology

An additional consideration is the use of both raw change scores and a measure controlling for the volume of calls. These dual measures were chosen to help control for history effects. The implementation of this program was a result of the tragic death of a person with a mental illness at the hands of police. Controlling for activity in light of call volume (and including both dispatched calls and calls initiated by officers) helps mitigate against potential reductions in force and arrest cases driven by officers intentionally reducing exposure.

Finally, this analysis will be conducted both on the entire cohort of officers trained in the 180 days (N = 140) as well the sample (n = 80) of officers who responded to 100 or more calls both before and after training. Some officers trained were newly hired and had not taken calls prior to training and others were promoted and did not take calls after training. Also, by excluding individuals who did not take calls, we are able to employ our rate score (which requires a number in the denominator).

### Expected outcomes (Hypotheses)

Based on conversations with the trainers of this program, the following outcomes for the training are as follows:

- Officers will have fewer custodial cases (arrests) both as an aggregate and as a rate (custody case/calls) after training.
- Officers will be involved in more cases coded as “mental health involved” cases (primarily holds for mental health) both as an aggregate and as a rate (mental health

involved cases/calls) after training.

- The program’s trainers (and the author of this evaluation) doubted that Crisis Intervention Training (absent supporting mental health institutions which are normally implemented in conjunction with CIT) would reduce force usage by officers<sup>4</sup>. However, the training was implemented as a response to a tragic incident involving use of force by the police and it appears that the intention of the training was that force would decrease. Therefore, this evaluation assumes that training would decrease police use of force both as an aggregate and as rate (use of force cases/calls) after training.

These measures would be consistent with the training’s ideal outcomes to reduce force via improved communication skills, resolved custodial situations involving persons with a mental illness informally or through the use of community mental health services, if possible, and to better identify and assist persons in crisis through access to emergency mental health services.

### Use of force and crisis intervention training

This portion of the evaluation tests the effect of Crisis Intervention Training on officers’ use of force. Much of the existing literature focuses on Crisis Intervention Teams as opposed to the training itself (see Compton, Bahora, Watson, & Oliva, 2008 for a comprehensive review). Compton, et al. (2008) comment on the expansion of Crisis Intervention Teams to other localities with inconsistent fidelity to the

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<sup>4</sup> This is not meant as an indictment against CIT or a lack of confidence in the value of the training. However, researching into the effects of CIT on force is ambiguous. In addition there was doubt as to whether any changes would be measureable given the rarity of police use of force.

## Part I: Methodology

original model developed in the late 1980's in Memphis, Tennessee (sometimes referred to as "the Memphis Model." The authors stress that while many jurisdictions adopt some form of "Crisis Intervention Team," it is often unknown how closely these jurisdictions follow the "Memphis Model." The Portland Police Bureau's current model for Crisis Intervention Training is an example of this. The Bureau's training is similar but there is not a specialized reception center and the training is universal as opposed to being for a volunteer team<sup>5</sup>. Compton et al., (2008) also discuss the lack of research into how the specific pieces of a Crisis Intervention program impact its outcomes.

Additionally, there is increased interest, in but still little knowledge of, how CIT programs impact police use of force (Compton, Berivan, Oliva, & Boyce, 2009; Moribito, Kerr, Watson, Draine, Ottati, & Angel, 2012; Compton, Demir Neubert, Broussard, McGrif, Morgan, & Oliva, 2011). Law enforcement agencies across the U.S. have allocated considerable resources to these programs despite the lack of empirical work on such training's impact on police use of force.

### Use of force analysis

Force is rarely used by Portland police officers. In fact, over one-third of the officers studied did not use force either before or after Crisis Intervention Training. While the Bureau strives to use the least force possible to resolve potentially dangerous situations, the relative lack of force incidents (less than 5% of arrests, even if the pointing of a firearm is included) made statistical analysis difficult. Figure 2 displays the number of force cases on

the X-axis and the count of officers who had those cases on the Y-axis (56 officers had zero force cases during the period studied, while one officer had 20 force incidents).

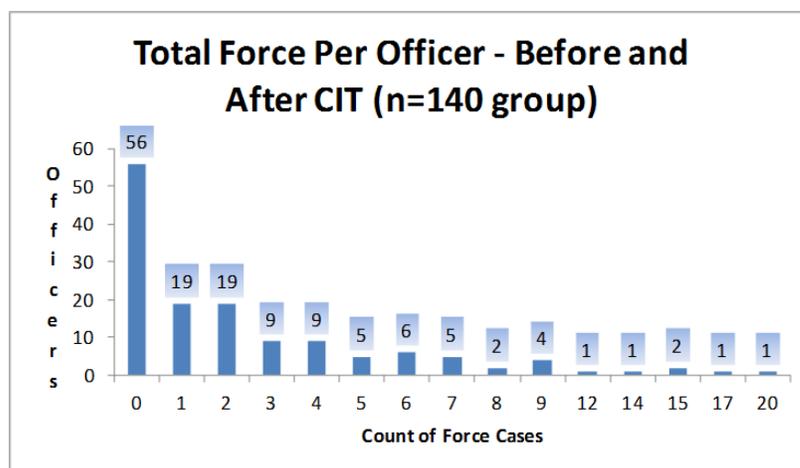


Figure 2

The force incidents per officer, both in aggregate and as a ratio of force to arrest, declined for officers after the training. It is important to reiterate that other factors may be responsible for this drop. Additionally, statistical analyses were conducted to determine if the reductions in force were statistically significant. These tests indicated that the drop in force was only marginally significant<sup>6</sup>.

The authors of this evaluation analyzed report narratives for information concerning mental health status in cases where force was not used in an attempt to establish a base

<sup>5</sup> The PPB is currently creating an additional tier of training and implementing a volunteer. While the PPB lacks the specialized reception center, officers will have access to universal CIT, three officer/mental health clinician teams for follow-up and Project Respond (community based mental health workers).

<sup>6</sup> A two-tailed pair-samples t-test of the count of force cases before and after training for officers was marginally significant,  $t(139) = 1.68, p = .094$ . However, this sample was not representative of the Bureau, this measure does not control for factors exogenous to CIT, such as a Bureau-wide reduction in use of force and we know that force decreased bureau wide during this period (making statistical significance irrelevant). It is only reported here to provide context around the amount of change.

## Part I: Methodology

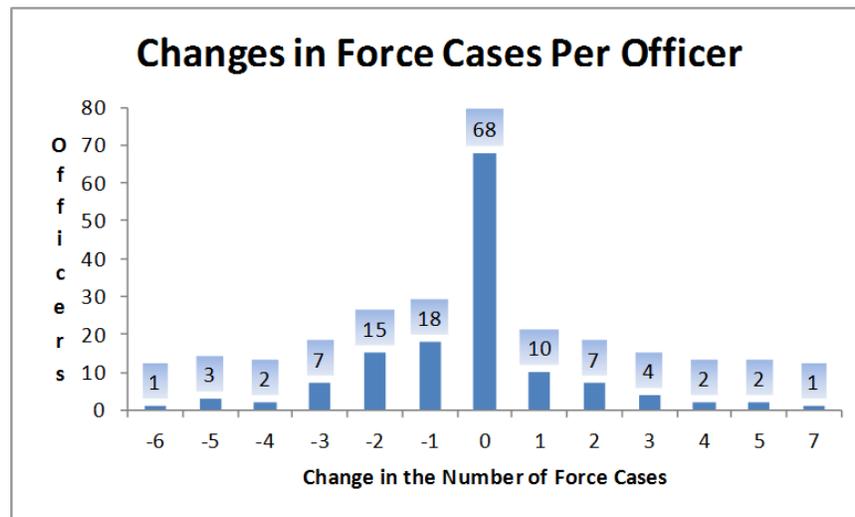
rate for contact between police and persons with mental illness. While use of force reports specifically ask about mental health status, other reports do not contain this information making it difficult to establish a base rate of contact between police and persons with a mental illness or having a mental health crisis. The police are unable to obtain access to mental health records in non-emergent situations due to privacy concerns. This highlights the importance of developing improved records of accounting for police interactions with persons in crisis.

As a result, this analysis could not determine the amount of force police use when interacting with persons with a mental illness or having a mental health crisis relative to their overall contacts with these persons. This knowledge is essential if one hopes to evaluate the success of a program aimed

at improving police response to persons with a mental illness. It would appear that the volume of contact between police and persons with a mental illness is variable over time (due to changes in Federal Law and public policy) and place (due to the differences in the use of institutionalization and factors such as homelessness, which can increase police contact with persons with a mental illness). Without solid measures to estimate the base rate of contacts, any analysis is impossible and will fall victim to base rate neglect. This report assumes that the volume of contacts (the base rate) between police and persons with a mental illness was stable across the course of the analysis<sup>7</sup>.

Figure 3 displays the changes in force cases per officer from before training to after training for the entire cohort studied (n=140). It is important to note that 56 officers did not use force at any point during the period studied (see figure 2).

Figure 3



This figure includes 56 officers who did not use force at any point during the study period. Figure 4 displays changes in force usage for those officers who used force at least one time (either before or after training) during the study (n = 84). After removing officers who did not use any force during the study period, there were 12 officers whose force was the same before and after training.

<sup>7</sup> This assumption is not grounded in empirical evidence and is a limitation for the study.

## Part I: Methodology

Figure 4

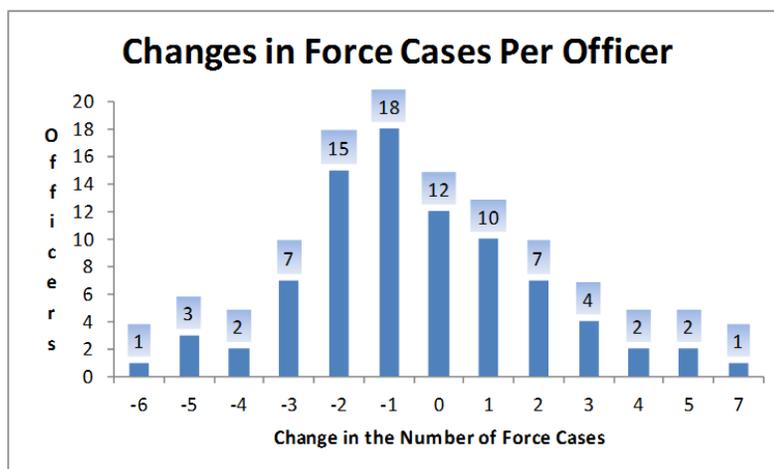


Figure 4 displays that reductions in force were spread across a large number of officers. In fact, post-training, 68 officers had no change in force (including 56 who never used force during the study and 12 whose force use was identical before and after training), 46 officers saw reductions in the use of force and 22 officers increased the number of times they used force.

Table 1 displays the total force and calls for officer before and after CIT training:

Table 1

Description	Count
Number of Officers Trained	140
Total Force Cases Before Training	199
Total Force Case After Training	162
Total Calls Before Training	33,889
Total Calls After Training	38,288
Force per 1000 Calls Before Training	5.87
Force per 1000 Calls After Training	4.23

Table 1 demonstrates that, when controlling for the number of calls officers responded to, the number of cases involving force dropped by nearly 28% in the 180 days following CIT certification. While it may not be possible to attribute changes in force to CIT, the reduction in force after controlling

for calls is substantial. It is also important to note that officers became certified in this training over a six month period, so the entire study period covered nearly one and half years (i.e. the dates from which force numbers are collected range from December 2007 to June 2009, depending on the date each individual officer became certified).

Using calls to create a rate of force per 1,000 calls resulted in the exclusion of 11 cases in which officers responded to no calls either before or after training. This left a sample of 129 officers. Table 2 provides descriptive statistics for this group:

Table 2

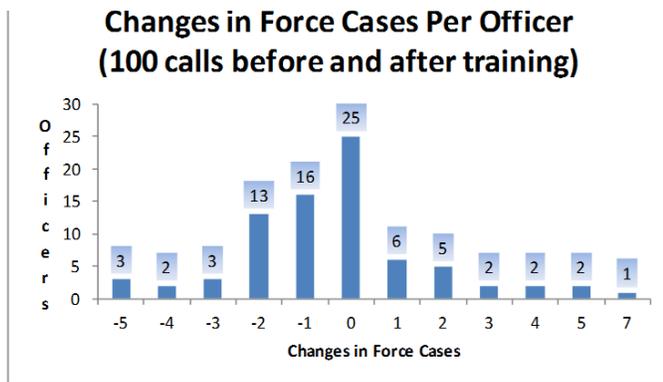
Description	MS	D
Force per 1000 Calls Before Training	8.49	16.99
Force per 1000 Calls After Training	6.55	15.57

As mentioned above, a smaller subset of officers – those who responded to 100 or more calls before and after the training – was analyzed. This group's data reflects officers' consistent involvement in an average of approximately one call per work day for the 180 days preceding and following training. This should provide a better measure of the impact of CIT on officers regularly responding to calls.

# Part I: Methodology

Figure 5 displays the changes in force for the 180 days following training compared with the 180 days preceding training for the officers who responded to 100 calls or more both prior to and after training (n = 80):

**Figure 5**



The reduction in force for this sample of officers (those who took 100 calls or more before and after training) was driven by a large number of officers seeing minor reductions in force. Twenty-nine officers saw the number of force cases reduced by one or two cases after training while only 11 officers saw force cases increase by one or two cases.

Figure 5 displays the reduction in force for officers following Crisis Intervention Training. Table 3 provides information on the total calls, force and force rates per 1000 calls for this cohort.

Table 3 demonstrates both the aggregate drop in force and the drop in force per 1000 calls. Total force dropped over 17% following training and force; controlling for the number of calls, it fell by over 21 percent<sup>8</sup>. However, it is

important to remember that, while these percentages are impressive, they represent only 27 fewer case out of over 32,000 calls.

**Table 3**

Description	Count
Number of Officers	80
Total Force Cases Before Training	157
Total Force Case After Training	130
Total Calls Before Training	31,046
Total Calls After Training	32,629
Force per 1000 Calls Before Training	5.20
Force per 1000 Calls After Training	4.31

## Conclusion Part I

Force dropped in conjunction with the implementation of Crisis Intervention Training. This drop was generally not statistically significant, and, given the limits of this analysis, it is not possible to attribute any drop in force to the implementation of CIT. This analysis was hindered by policy changes that limited available data, the very low rate of force usage, and the lack of a true experimental design in the selection of officers who received training.

The fact that changes were implemented in a rapid fashion is not uncommon when a tragic incident inspires community calls for reform. Empirically, it would appear that

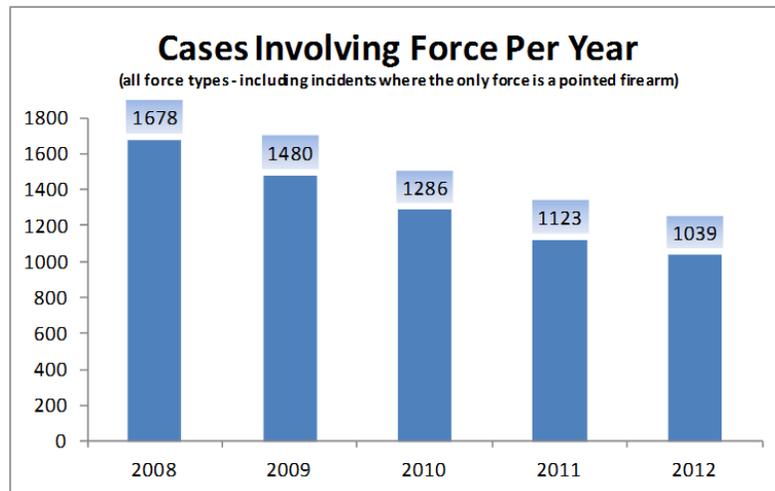
<sup>8</sup> Statistical analysis of rate of force per 1000 calls before and after training was not significant at the p < .05 level. However, because we are able to determine that force fell bureau wide during this period statistical significance is not relevant.

## Part I: Methodology

those reforms were successful overall, which is heartening. However, an unfortunate side effect of this process is that the rapid implementation of so many changes makes evaluation of the effects of specific elements more difficult.

The number of general cases involving force has been decreasing since at least 2008<sup>9</sup>. CIT was not implemented in a vacuum but occurred in conjunction with a number of changes to both policy and reporting requirements. These changes (or other unidentified factors) have led to a remarkable reduction in force. Figure 6 displays this change by year between 2008 and 2012:

**Figure 6**



**Figure 7**

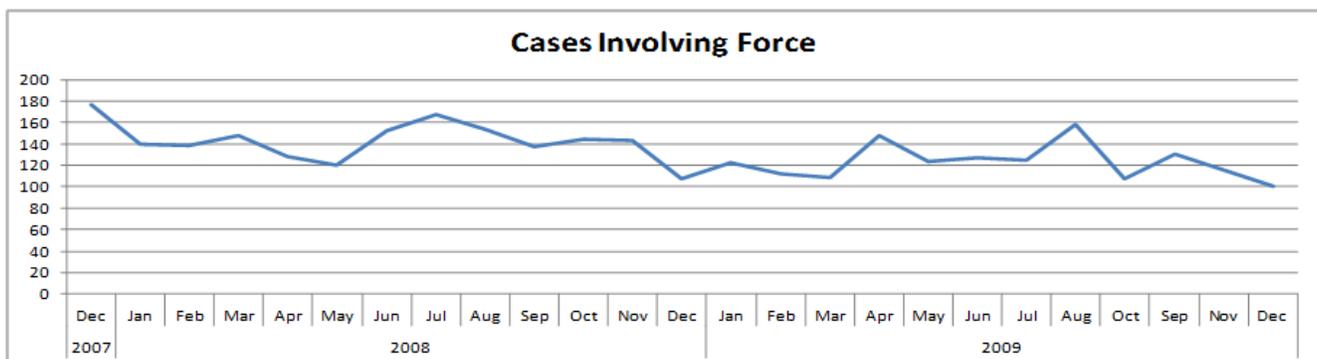


Figure 7 displays the number of force cases between December 2007 and December 2009. December 2007 represents the first full month under the new force policy (which was introduced in November 2007), and the graph allows for an examination of two full years of force cases by month.

The trend in force is downward, however, given the incremental introduction of trained officers there is no clear breakpoint to examine changes for all officers before or after Crisis Intervention Training. Furthermore, changes in policy and reporting may not take effect immediately but may take time to spread throughout the organization. Despite these limitations, the direction of

force usage following CIT was consistent with the goals of training and for practical purposes the effect was noticeable.

Given the limitations listed above, it would be inappropriate to advocate Crisis Intervention Training as demonstrably impacting force usage. Despite this limitation agencies wishing to provide such training may consider the possible benefits to force usage. It would also be

<sup>9</sup> Force appears to have fallen between 2006 and 2007, but changes to the force policy implemented in November of 2007 make comparison prior to this period difficult.

## Part I: Methodology

worthwhile to examine the effects of such training using more experimentally based approaches. The fact that this training was mandated and that those selected for analysis were the last officers to be trained (many of whom delayed training by choice and may have been more resistant to the training) is also worth noting.

One possible strategy to address the limitations of this study would be to match officers who received training with similarly situated officers who had already been trained and analyze the difference before and after for the matched pairs. While potentially useful, such an analysis is complicated by the frequent moves of officers both between assignments and ranks. While the analysis

itself would not be overly complicated, assembling the data for such an analysis would require a substantial investment in terms of person hours spent collecting and organizing such data. However, if the resources for this data collection were available, future studies may benefit from such an approach.

Part II will examine the intersection of Crisis Intervention Training and mental health holds.

# Part II

## Mental health-involved cases and crisis intervention training

This portion of the evaluation tests the effect of Crisis Intervention Training on seasoned officers' documentation of mental health involved cases. Evidence suggests that CIT can increase officers' awareness and recognition of issues surrounding mental health (see Compton, et al., 2008). Other studies have documented an increase in the rate at which "mentally disturbed persons" were transported to psychiatric emergency services (Teller, Muntez, Gil, & Ritter, 2006) by Crisis Intervention Team members who have received this training. It is important to note that the Teller et al. (2006), study involves a volunteer core of trained individuals (both medical and police personnel in this case).

Despite the fact that PPB's training was mandated, it is possible that increased knowledge about and recognition of mental health-related issues would increase officers' ability to identify and document issues surrounding mental health and/or decrease the use of arrests for criminal charges. If this were the case, we might expect an increase in the number of mental health holds and cases coded as having mental health involvement. Conversations with Mary Otto and Dr. Liesbeth Gerritsen, PPB training analysts who spearheaded the PPB training efforts, indicate that such an outcome would be consistent with the goals of the Crisis Intervention Training.

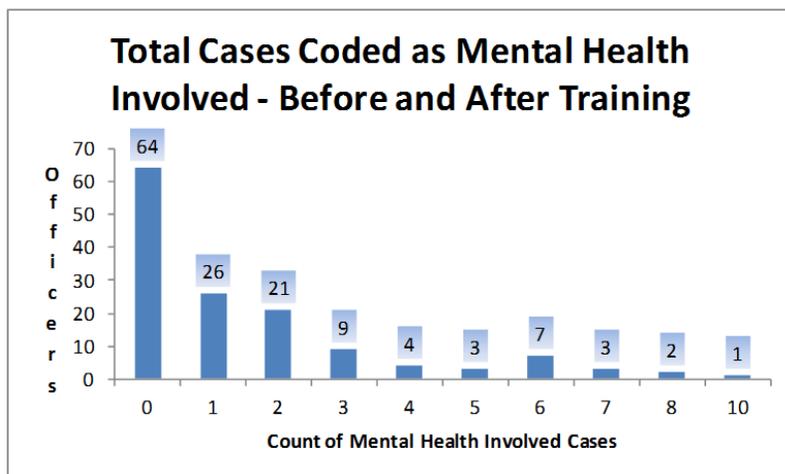
### Mental health-involved cases analysis

Having cases coded as being mental health involved is even less common than a force event. This may be due to stringent requirements around what can be coded as mental health involved, which limits the majority of the cases to only those incidents where a person is suicidal or an obvious danger to others. A 2009 analysis of 1,033 cases

coded as mental health involved revealed that 972 of involvements were associated with 824 unique individuals, but that 61 of the offenses were also associated with businesses or other locations (Stewart, 2010). While the vast majority of these cases are associated with a police officer or director's hold for mental health due to a person being a danger to themselves or others, some small number may be associated with behavioral issues not rising to the level required for a hold. Expanding this category or creating a second, less stringent, coding requirement for mental health is a necessary first step if we wish to improve the quality of future analysis.

Despite the limitations of the data, there is still value in evaluating the impact of CIT on how frequently cases are coded as mental health involved. The training should improve officers' recognition of when mental health is a component of a crisis situation and resulted in increased use of this code. Figure 8 displays the total number of cases coded as mental health involved conducted by all officers (n = 140) in the training cohort:

Figure 8



## Part II: Mental health-involved cases and crisis intervention training

Figure 8 illustrates that nearly half of the 140 officers in this group were not involved in cases coded as mental health involved. Is the lack of cases involving mental health the result of how officers perceive and document mental health involvement or is it that they are not being dispatched to cases where the situation would warrant this code? There are legal requirements associated with documenting mental health data that limit information sharing between law enforcement and mental health providers<sup>10</sup>, especially in non-emergent situations. If it can be accomplished legally, a less stringent code to indicate mental health issues, coupled with increased emphasis on reporting issues of mental health, could improve future analysis.

Figure 9 displays changes in the number of mental health-involved cases before and after training for the entire cohort of officers (n =140):

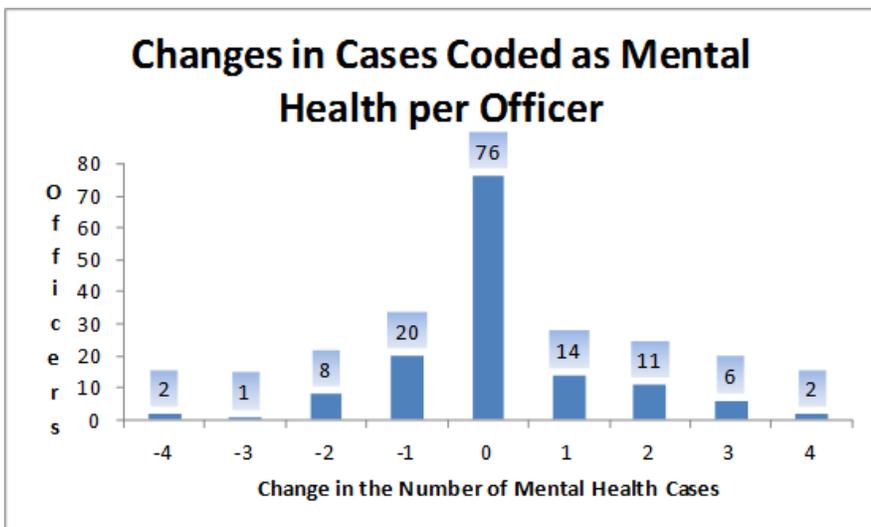


Figure 9

Figure 10 examines officers who had at least one case coded as mental health and compares changes from before and after training (n = 76):

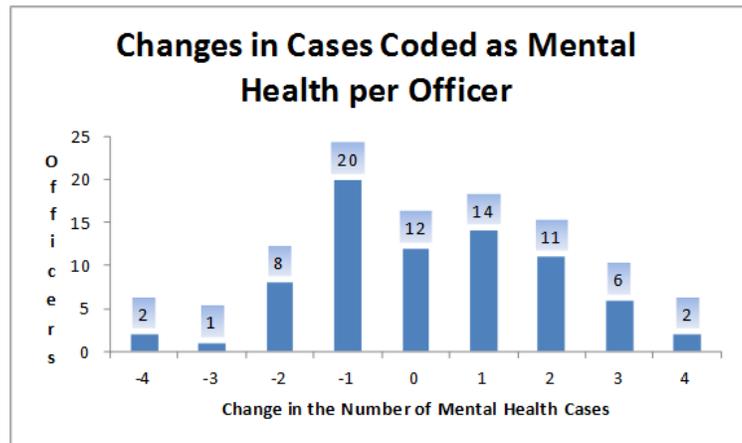


Figure 10

Figure 9 indicates that the use of mental health coding per officer was largely unchanged.

<sup>10</sup> This is not due to a lack of effort by either party but is in place to protect the civil rights of individuals with a mental illness.

## Part II: Mental health-involved cases and crisis intervention training

Table 4 examines displays changes in calls and mental health coded cases for all officers during the study period:

**Table 4**

Description	Count
Number of Officers Trained	140
Total Mental Health Cases Before Training	100
Total Mental Health Case After Training	115
Total Calls Before Training	33,889
Total Calls After Training	38,288
Mental Health Cases per 1000 calls Before	2.95
Mental Health Cases per 1000 calls After	3.00

Table 5 examines cases with a mental health code for officers taking more than 100 calls both before and after training:

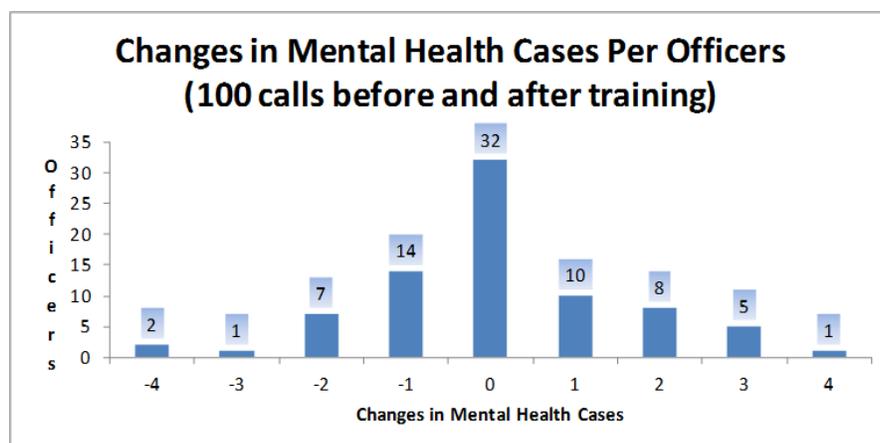
**Table 5**

Description	Count
Number of Officers	80
Total Mental Health Cases Before Training	90
Total Mental Health Case After Training	96
Total Calls Before Training	31,046
Total Calls After Training	32,629
Mental Health Cases per 1000 calls Before	2.90
Mental Health Cases per 1000 calls After	2.94

There was an increase (15 cases) in the total number of cases coded as mental health-involved. However, after controlling for the volume of calls, the rate at which holds were employed remained nearly unchanged.

Figure 11 examines changes in the use of holds for officers who responded to more than 100 calls before and after training (n = 80):

**Figure 11**



## Part II: Mental health-involved cases and crisis intervention training

Examining only officers who took 100 calls before and after training did not reveal significant differences before or after training. The rate at which calls were coded as mental health-involved remained nearly unchanged.

### Conclusion Part II

The number of cases coded as mental health-involved slightly increased in conjunction with the implementation of the CIT program. From a practical standpoint, the magnitude of the change represented just 15 cases out of over 70,000 calls. This is a very small increase and from a practical standpoint would represent no change.

Overall, trends in mental health coding for the Bureau as whole are more ambiguous than force trends (which show a clear downward trend in force). Coding for PPB cases with a mental health involvement has remained relatively flat, but the number of suicide and attempted suicide calls officers respond to has been increased at a dramatic rate. Similarly, involuntary commitment investigations have been increasing since at least 2005.

Despite the small magnitude, the changes seen in mental health coded cases moved in the anticipated direction. The positive improvements persisted even when the data was examined in several different ways (aggregate, change scores and rates) and the

officers were broken into several sub-groups (looking at all officers trained as well as a sub-group that took 100 calls before and after training).

Analysis of this data may have been hindered by the stringent coding requirements for the mental health involvement code. The bulk of such codes involved individuals who are a danger to themselves or others and were placed on a mental health hold. It could be that officers are capable of determining who is danger to themselves or others with or without CIT.

If the benefits of CIT are more subtle it may be possible to detect these differences in the use of incarceration. Officers may utilize more informal approaches to solving criminal acts caused by mental health issues as the result of CIT. If this is the case, we would expect to see a decreased usage of arrests after training.

# Part III

## Arrests and crisis intervention training

Reducing the unnecessary arrest of persons with a mental illnesses is a primary goal of Crisis Intervention Teams (Borum & Franz, 2010). Such teams have been found to be a promising approach to address the the over-representation of persons with mental illness in the criminal justice system (McGuire & Bond, 2011). However, these approaches generally involve both a specialized, voluntary team (as opposed the PPB's approach of mandatory universal training) and a police appropriate psychiatric crisis triage center (Steadman, Stainbrook, Griffin, Draine, Dupont, & Horey, 2001). During the period examined by this study, the PPB lacked both a specialized response team and an appropriate police-friendly psychiatric crisis triage center.

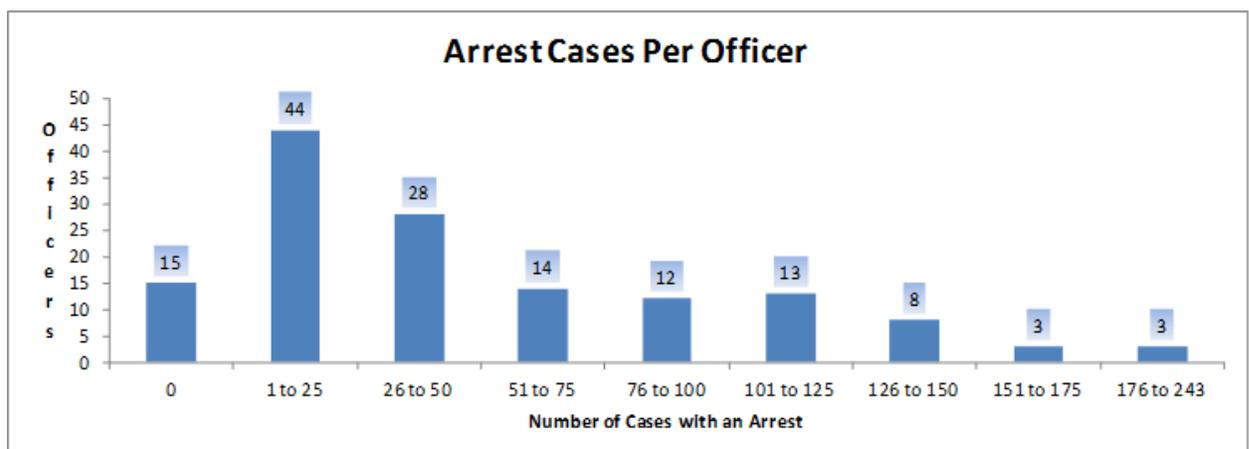
### Arrest analysis

Unlike force or mental health cases, the use of arrests by PPB officers is a common event. During the study period, PPB officers had 7,004 cases involving an arrest or charged subject as opposed to 361 cases involving force and 215 cases coded as having a mental health involvement. Figure 12 looks at arrest cases per officer during the study period (n = 140):

Arrests also differ from force and mental health cases in that it is much more common for officers to have made an arrest during the study period than not have. The above figure can be somewhat misleading as arrests cover a wide array of activities. For instance, arrests can range from something as minor as shoplift or drinking in public to more serious crimes such as arrests for robbery or even murder.

The type of arrests different officers make are independent of one another. Some officers may work in districts with large numbers of street drinkers or big box retail stores with private security who apprehend and call the police to take custody of shoplifters. Other officers may work in districts that have high levels of gang violence. This results in officers' tending to make the same types of arrests over time. The fact that that arrests vary greatly both qualitatively and quantitatively makes comparisons difficult (an officer with 243 arrests is not necessarily doing more work than an officer with 51 arrests, nor is she necessarily exposed to more risk or more likely to use force).

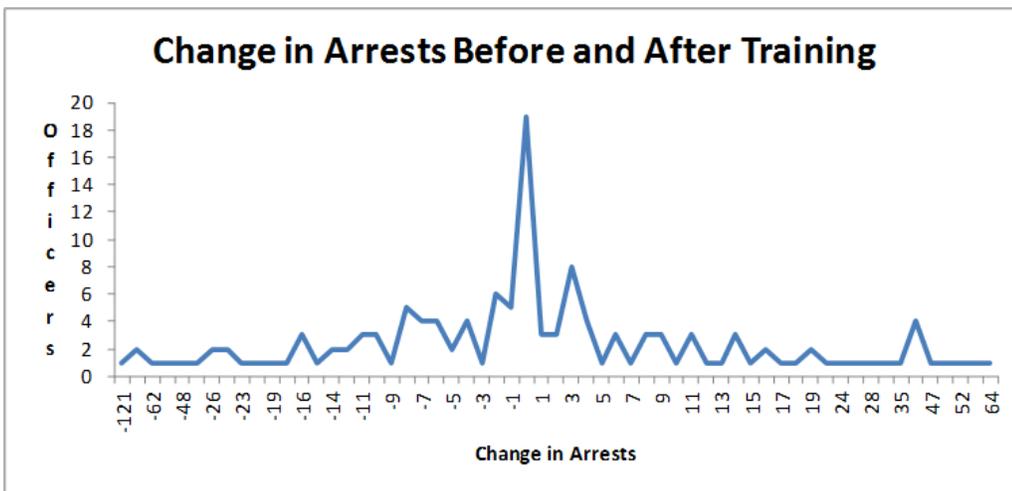
Figure 12



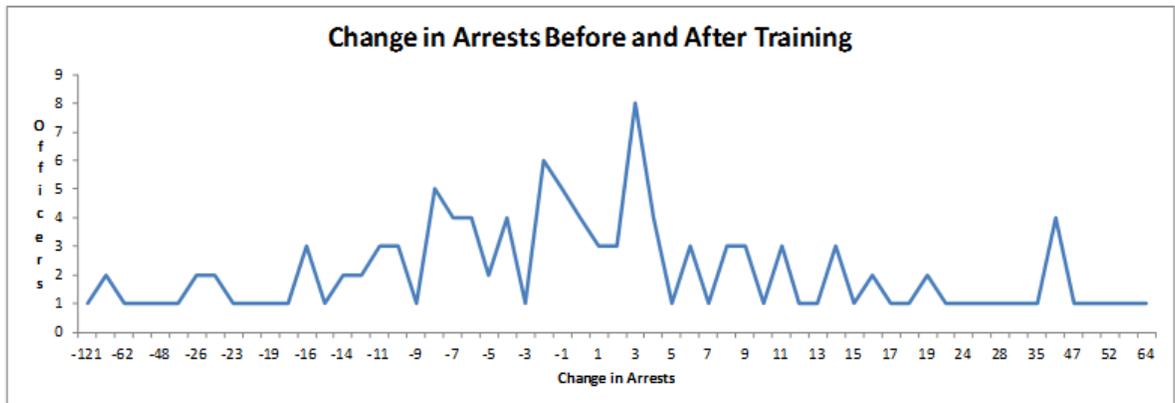
## Part III: Arrests and crisis intervention training

While differences in the total numbers of arrests by each officer differ, they generally make about the same number of arrests over time<sup>13</sup>. Figure 13 examines changes in arrests (n = 140):

Figure 13



The large spike in the middle of this graph is a result of the 15 officers who made no arrests during the entire study period and therefore exhibited no



change in arrest patterns. Analysis of this group indicates that it consisted of a large number of sergeants. These are front line supervisors who generally will not make arrests. Figure 14 examines changes in arrest patterns with the 15 officers who made no arrests removed.

Figure 14

<sup>13</sup> Arrests before training and after training had a correlation of .68 for the entire data set and .64 for those officers who took 100 calls both before and after training.

## Part III: Arrests and crisis intervention training

There was a slight drop in the total number of arrest cases (66 arrests) after training. However, officers took 4,399 more calls. After controlling for the number of calls, the rate at which officers utilized arrest dropped approximately 13%. Again, this drop was not significant and there are several limitations to this data set. Table 6 examines the total numbers of arrests in comparison to calls for all officers who received training:

**Table 6**

<b>Description</b>	<b>Count</b>
Number of Officers Trained	140
Total Arrest Cases Before Training	3,535
Total Arrest Case After Training	3,469
Total Calls Before Training	33,889
Total Calls After Training	38,288
Arrest Cases per 1000 calls Before	104.31
Arrest Cases per 1000 calls After	90.60

For officers taking more than 100 calls before and after training, the differences in arrests before and after CIT were more noticeable. Table 7 displays these differences:

**Table 7**

<b>Description</b>	<b>Count</b>
Number of Officers Trained	80
Total Arrest Cases Before Training	3,271
Total Arrest Case After Training	2,839
Total Calls Before Training	31,046
Total Calls After Training	32,629
Arrest Cases per 1000 calls Before	105.36
Arrest Cases per 1000 calls After	87.01

Repeating the caveats about possible selection bias, the questionable nature of the data, and the inability to control for changes in arrest patterns across the PPB, the change in the rate of arrest at an officer level was substantial<sup>12</sup>. In a practical sense, this group of officers decreased their use of arrests relative to calls by approximately 17% after training.

Close examination of the data reveals that five officers had substantial drops in the number of arrests<sup>13</sup>. A follow up analysis examined the drop in arrests after removing the five officers who experienced the largest decrease in arrests and the five officers who experienced the largest increases in arrests. Table 8 displays changes in arrests for this group of officers:

**Table 8**

<b>Description</b>	<b>Count</b>
Number of Officers Trained	70
Total Arrest Cases Before Training	2,502
Total Arrest Case After Training	2,291
Total Calls Before Training	27,566
Total Calls After Training	28,690
Arrest Cases per 1000 calls Before	87.21
Arrest Cases per 1000 calls After	79.85

<sup>12</sup> A two-tailed pair-samples t-test of the rate of arrest cases before and after training for officers with more than 100 calls before and after training was significant,  $t(79) = 2.60$ ,  $p = .011$ . A two-tailed pair-samples t-test of the count of arrest cases before and after training for officers with more than 100 calls before and after training was marginally significant,  $t(79) = 1.86$ ,  $p = .067$ .

<sup>13</sup> The officers accounted for a decrease in 402 total arrests.

## Part III: Arrests and crisis intervention training

After removing the potential outliers, both the aggregate number of arrests and the rate of arrests per 1,000 calls decreased by over 8%. This supports the concept that officers utilized arrests less after training than before. However, as noted in the other aforementioned conclusions, we cannot attribute this directly to Crisis Intervention Training.

### Conclusion Part III

The use of arrests both in aggregate and relative to calls for all officers and those officers taking more than 100 calls before and after CIT dropped. In many cases, this drop was sufficiently large to be meaningful in terms of jail diversion. This is consistent with research into the effects of Crisis Intervention Teams and the fact that a drop in arrests occurred in Portland without a specialized team and without a specialized reception center should encourage academic researchers to further explore the possibility that Crisis Intervention Training can reduce

the use of arrest even in the absence of other resources. For police and jail administrators, this finding may encourage them to adopt similar training programs, if only for this benefit.

Unfortunately, these programs are generally adopted in response to a tragic event and implemented without sufficient controls to be evaluated after their implementation. Agencies considering the adoption of Crisis Intervention Training should consider partnering with researchers so that the potential benefits of such training can be accurately measured.

# Part IV

## Overall Conclusions

Unfortunately for the research, the implementation of PPB's Crisis Intervention Training was conducted in conjunction with a large number of related changes to policy and practice. Given the large number of possible causes for changes in the selected measures, this report is not able to state that the implementation of CIT was causally related to these changes.

Some conclusions can be generally stated from this evaluation, however. First, Crisis Intervention Training was implemented as a part of a package of changes to policy and practice which appear to have drastically reduced the number of cases involving force by PPB officers. This should be viewed as a success. Second, it would not be overstating the available evidence to state that Crisis Intervention Training is a promising practice and that, in an age of increased interactions between police and persons in crisis or with a mental illness, police agencies may benefit from mandatory Crisis Intervention Training for all officers.

Finally, this report does not measure a number of potential benefits from Crisis Intervention Training. For individual officers, these benefits may include improved understanding of mental health systems and illnesses and increased confidence in their ability to interact with persons with a mental illness. Police agencies may benefit from an explicit recognition that officers' ability to interact with persons in crisis or with a mental illness is a core competency, equal to appropriately applying the law or having proficiency with a firearm. It is possible that the legal realities created by CRIPA and *Olmstead v. L.C.* have made additional mental health training for police officers and additional public safety resources dedicated to mental health an essential component to policing in the 21st Century.

## Recommendations

Given the limited available resources, the Strategic Services Division was unable to demonstrate the efficacy of PPB's Crisis Intervention Training. Analysis of the data using both rates and aggregates as well as using distinct sub-groups demonstrated actual drops in force and arrest cases and an increase in cases identified as having a mental health involvement. However, the available data is not sufficiently refined to allow for these changes to be attributed solely to Crisis Intervention Training.

PPB's Crisis Intervention Training was adopted as part of a comprehensive set of reforms which decreased force generally. It was also implemented at a time when officer responses to suicide calls were trending upward and community resources for individuals with mental health needs were decreasing. All of these factors confound any attempts to analyze the impact of this training program.

The Strategic Services Division would make the following recommendations as a result of this analysis:

- Improve the ability of the police to document and record contacts with persons with a mental illness or having a mental health crisis;
  - In particular, the creation of code specific to the Bureau's records management system would allow for a more refined analysis of both the volume and type of contacts the Bureau has with persons with a mental illness.
- Include evaluation processes when establishing new programs;
  - This is not as easy as it sounds and requires real sacrifice. For instance,

## Part IV: Overall conclusions

to effectively evaluate the Crisis Intervention Training would have required delaying either the training itself or policy changes that created barriers to training evaluation. As the Bureau embarks on a series of new programs designed to improve its ability to interact with persons with mental illness, it will be necessary to make choices between rapid implementation of a large number of programs and policies or establishing a thoughtful process whereby change is introduced incrementally to aid in more effectively evaluating each piece of the change.

- Definitions need to remain consistent or additional resources must be allotted for evaluation;
  - In November of 2007 (roughly halfway through the Crisis Intervention Training program), the PPB changed both force reporting and the definition of what constituted police use of force. This complicated the evaluation process enormously. If methodologically sound evaluation is a priority, it may require two of the following three options to be put in place:
    - A significant increase in the PPB's investment in analysis.
    - Delaying policy changes that will impede analysis (such as redefining force, which makes before and after comparisons impossible).
    - Use of randomized control trials to test each program prior to deployment (which without increased resources would delay program deployments).
  - Retain mandatory training of all PPB officers in Crisis Intervention Training, even if an additional tier of CIT officers is created.
  - Develop a method for the ongoing evaluation of the CIT training currently provided with the goal of providing feedback for continual improvement.

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