INTERACTING WITH PEOPLE EXPERIENCING A MENTAL HEALTH CRISIS

TRAINING OUTCOME EVALUATION

FINAL REPORT

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EXECUTIVE SUMMARY

Background

In 2004, the State of Vermont enacted Act 80 which appropriated funds to the Vermont Attorney General to establish a training program for law enforcement officers to assist them in their interactions with persons exhibiting symptoms of mental illness. Pursuant to Act 80, the Act 80 Advisory Group was created and charged with designing and implementing the training program. The six-hour course which was eventually developed by the Advisory Group was entitled *Interacting with People Experiencing A Mental Health Crisis*. The goal of the Advisory Group for the training was to train every law enforcement officer in Vermont. The course was first taught in May of 2006. Currently the Vermont Criminal Justice Training Council (VCJTC) has responsibility to plan, present, and administer the trainings with the advice of the Advisory Group. The Act 80 Training is part of the VCJTC's standard Basic Training and in-service course offerings and has been expanded to eight hours.

The Evaluation

The 2014 annual Act 80 report included a recommendation for the Advisory Group to explore methods to evaluate and determine the effectiveness of the current training program. The goals of this evaluation were to gather and analyze data to: 1) identify specific components of the training curriculum that are effective and identify areas where improvements may be required; and 2) create a statistical report describing the nature and circumstances surrounding police contacts with persons who are experiencing mental health issues.

Methodology

Based on a review of the Act 80 Training Program, the Crime Research Group (CRG) developed a survey for distribution to police officers via an online platform (*Survey Monkey).* The survey contained four sections: 1) officer use of Act 80 training principles; 2) officer assessment of the *Interacting with People Experiencing a Mental Health Crisis* training program and local mental health systems; 3) specific feedback for Act 80 Training; and 4) demographic information about the respondents. Rather than surveying all police officers statewide, CRG surveyed officers from a sample of five representative law enforcement agencies. The link to the survey was emailed to 171 officers by their Chief or Station Commander. A total of 122 (71%) useable surveys providing information on 366 cases involving people with mental health issues was returned to CRG.

The second phase of the project focused on an analysis of law enforcement incident data from each of the sample sites to determine: 1) the frequency of contacts between officers and persons experiencing mental health issues; 2) the nature of the contacts between officers and persons experiencing mental health issues; 3) the demographic characteristics of persons experiencing mental health issues; and 4) the outcome of those events.

Findings

1. On average officers respond to calls involving people with mental health issues six to seven times a month, though 30% of officers report handling more than 10 calls a month. This level of response is comparable to levels reported by law enforcement agencies nationwide. Based on national data, CRG estimated that seven to 10 percent of all police interactions in Vermont involve people who are experiencing mental health issues.[1] Over 95% of officers had contact with each of the three types of cases presented in the survey – psychotic/delusional, suicidal, and developmental or cognitive issues.

2. Police officers regularly use a variety of the techniques taught in the Act 80 class to help them resolve cases. On average more than 60% of the techniques taught in the class were utilized by officers in each type of case. However, typically law enforcement officers did **not** report using friends, family, or Peer Support Services to help resolve cases.

3. Except in cases involving subjects exhibiting development or cognitive symptoms, police involve mental health professionals in their calls involving persons experiencing mental health issues 75% - 80% of the time.[2] Developmental Services workers or other clinical professionals are involved in 38% of cases involving a person exhibiting developmental or cognitive problems.

4. The manner in which cases involving people experiencing mental health issues are resolved depends on the nature of the presenting problem. In suicide cases, more than 85% of subjects are evaluated and 62% are hospitalized. In cases involving delusional behavior 70% of subjects undergo a mental health evaluation and 40% are hospitalized. In contrast, only 36% of persons who showed developmental or cognitive problems were evaluated and of those only 12% were hospitalized[3]. At the other end of the continuum police took no action in 52% of cases where people were experiencing developmental or cognitive issues, 13% of cases where subjects were experiencing delusions, and 5.5% of cases where the person was engaging in or threatening self-destructive behavior.

5. No force was used to resolve matters in 70% of cases where people were experiencing delusions, approximately 70% of cases where the person was engaging in or threating self-destructive behavior, and 80% of cases where the subject was experiencing developmental or cognitive

[1] Cloud, David and Davis, Chelsea. (2015). *First Do No Harm: Advancing Public Health in Policing Practices*. New York, NY: Vera Institute of Justice.

[2] The high frequency with which police participating in the survey involved mental health professionals in their mental health calls may be due to the fact that they have active mental health crisis teams working in their jurisdictions. It is important to note, however, that police in other jurisdictions do not necessarily feel that they have the same level of access to mental health crisis teams and therefore the percentage of mental health calls where mental health professionals are involved is likely to be lower in other jurisdictions.

[3] It's important to note that the Vermont mental health commitment statute specifically excludes people with an intellectual disability. There is no comparable commitment procedure for people with an intellectual disability unless they have committed a sex offense and are eligible under ACT 248. Therefore the subjects with an intellectual disability who were hospitalized (12%) were likely to be dual-diagnosis clients who also presented with a major mental illness.

problems. When force was used it typically involved verbal commands or force involved with handcuffing the subject. However, of the 326 cases reviewed, pepper spray, Conducted Electrical Weapons (e.g., Tasers™), or firearms were used in 25 of the cases (7.6%).

6. Vermont law authorizes officers to take individuals experiencing a mental health crisis into temporary custody if the individual is a person in need of treatment and a police officer intends to obtain a Warrant for Emergency Examination (WEE). Only 32% of the officers who responded to the survey had ever applied for a WEE. Approximately two-thirds of officers in the survey did **not** know to be true two rather critical aspects of the WEE process: 1) the officer needs to personally observe the subject's behavior to establish probable cause; and 2) the warrant cannot be used unless certification by a physician is not readily available. In reference to the personal observation requirement, there apparently is a discrepancy between the law (18 V.S.A. §7505) and the Department of Mental Health's (DMH) practices regarding the WEE. While the statute requires that a WEE must be based on the **officer's personal observation**, DMH is accepting WEEs based on **a reliable report by someone who personally observed the proposed patient's behavior**.[4] The discrepancy between the statute and the WEE form is taught in the ACT 80 training. This discrepancy may explain in part why some officers answered this question incorrectly.

7. In order to measure the extent to which officers recognize symptoms of mental illness as indicators that a person would benefit from an emergency intervention from a mental health crisis team, officers were asked to identify scenarios where the subject would benefit from an emergency intervention from a mental health crisis team. The majority of police correctly identified serious symptoms (cutting, delusions, teenage chronic trouble, and domestic trauma) as being cases where the subject might benefit from an emergency intervention from a mental health crisis team.

8. Officers develop techniques for handling mental health crisis cases by utilizing a variety of different sources of information. The most influential factors were the officer's total law enforcement experience, the officer's departmental policies, and the overall culture of their department. The instruction from Field Training Officers and the Act 80 Training were reported to be the least influential. With that said, it is important to note that nearly 40% of officers reported that the Act 80 Training was Very Influential or Influential in helping them learn how to handle mental health calls – it's just that training is not as influential as experience. CRG also found that the officers' assessment of the training's influence tends to diminish over time – the more recent graduates reported the training to be more influential than those who had received the training several years ago.

9. On average officers were "Neutral" on the subject of how adequately the Act 80 Training prepared them to handle cases involving people experiencing a mental health crisis. Though 43% of officers Strongly Agreed or Agreed that the Act 80 Training adequately prepared them, 41% were neutral

[4] The application form for the Warrant for Emergency Examination form (Rev. 5/2015) indicates under the Reason for Application Section, "*State the facts you have gathered, from either (1) your own personal observations, or (2)* ***a reliable report to you by someone who personally observed the proposed patient's behavior****, that lead you to believe that the proposed patient is a person in need of treatment and presents an immediate risk of serious injury to himself or herself or others if not restrained."*

about the adequacy of the training, and 17% Disagreed or Strongly Disagreed that the training was adequate. Suggestions made by officers for improving the content and delivery of the training are included in the report. There are several themes in the suggestions offered by officers: 1) most officers (75%) are interested at some level in receiving more mental health training; 2) officers want to hear from people who are living with mental illnesses; 3) officers want the training to be interactive; 4) officers want to learn how to collaborate better with mental health workers; and 5) officers are interested in learning about topics such as Schizophrenia, Bipolar Disorder, PTSD, Multiple Personality Disorder, and Traumatic Brain Injury.

There are challenges involved with interpreting these results for two reasons: 1) the Act 80 training has evolved over the years; and 2) officers took the training at different times. As such it is not surprising that most of the suggestions made by officers are now currently in place – either in the Act 80 Training or Team Two Training[5]. The Act 80 Training was conceived as baseline training that would be the foundation on which more advanced training could be built. The Team Two Training was designed as a more advanced course for officers who had previously completed the Act 80 Training. The combination of the Act 80 Training and the Team Two training appears to complement each other and in so doing provide the training that officers are requesting.

10. Police gave "Neutral" ratings for their local mental health system's responsiveness, cooperation, and effectiveness. Only about 15% of officers gave negative ratings for cooperation and effectiveness. Only 7% thought the mental health system in their area was hostile to police referrals.

11. An item of particular interest to the Act 80 Group involves whether officers perceive a conflict between standard police "command and control" techniques and the approach taught in the Act 80 Training which emphasizes effective communication skills and learning to deescalate interactions with people in crisis. On average officers were Neutral on this point. However, approximately 36% of officers Strongly Agreed or Agreed that there was a conflict.

12. Pursuant to that part of the report that focused on quantitative analysis of law enforcement incident data, CRG was able to extract a sufficient number of relevant data fields from both the Vermont Incident-Based Reporting System (VIBRS) and Valcour (the two computer-aided dispatch and records management systems used by police in Vermont) to be able to conduct a robust analysis of police encounters with people experiencing mental health issues. There were, however, some problems with the extraction process. The most troubling issues involved not being able to extract: 1) information regarding the level of force used to resolve a case; and 2) the nature of a person's involvement with a case from the VIBRS system. CRG recommends that VIBRS consider automating their level of force reporting form, possibly integrating it with the Vermont Justice Information Sharing System (VJISS), and developing a strategy such that researchers can electronically access "involvement data" via remote extraction applications.

[5] Team Two training is a program for law enforcement officers and mental health crisis workers. The course provides an overview of relevant mental health statutes, a refresher on Act 80 Training, and helps law enforcement and mental health crisis workers build the relationships necessary for working together in a crisis.

13. The completeness of data varied by field and between systems. Though the level of completeness for administrative, time, and address data was excellent in both the VIBRS and Valcour systems, the flagging of cases which involved people experiencing mental health issues was so incomplete that it precluded including a quantitative analysis of the other data for this report. Data completeness was excellent for information regarding the nature of the call, case dispositions, and demographic information for subjects associated with the call. Information related to the circumstances of the cases was uneven. Significant issues involved: 1) missing information regarding suspected alcohol or drug use; 2) the lack of information regarding the level of force which was used to resolve a case; and 3) the inability to correctly match demographic information with the correct subject when the case involved multiple subjects.

    Typically a commitment to data quality is associated with the value of the data. We at CRG hope that law enforcement agencies see this report, which is devoid of quantitative analysis, as an example of the repercussions that missing data has for data-driven policing. The funding was available, the technology was successfully deployed, but no substantive findings could be reported due to data quality issues – clearly a missed opportunity for people experiencing mental health problems, law enforcement, mental health workers, and other stakeholders.

14. All of the data collected for this project lend themselves to a variety of reporting strategies designed to facilitate data-driven approaches to better understand the nature of police interaction with people who are experiencing mental health crises. CRG recommends that law enforcement and mental health agencies consider using appropriate incident analysis techniques including Heat Charts, Hotspot Maps, Incident Maps, and Repeat Incident Reports to graphically display the distribution of incidents involving people experiencing mental health problems in their community, county, and statewide. CRG also recommends that stakeholders utilize administrative data, case circumstance data, disposition information, and demographic data to provide evidence-based analysis to support Act 80 and Team Two training curriculum, resource allocation, and the continuing development and advancement of effective strategies to assist people experiencing mental health problems while keeping the police and the public safe.

Major Conclusions and Recommendations

1. This evaluation suggests that the Act 80 training, as a basic mental health curriculum for law enforcement, is satisfactorily viewed by police and has positively influenced the way they handle cases involving people who are experiencing mental health issues. As such, the Act 80 training should continue to be taught because it has promoted effective law enforcement strategies and is a foundation for the also important Team Two training. With that said CRG recommends consideration of the following strategies to further develop both training courses:

    1.1 The Act 80 Group consider reviewing the Act 80 curriculum to determine whether materials can be revised or eliminated in order to provide more dynamic training that involves mental health concepts and best practices in scenario-based exercises. If the VCJTC is to revise the training in this direction, additional resources will probably be required for the VCJTC to meet that goal.

1.2 Increase funding for Team Two Training such that training can be increased from eight to 10 or more sessions annually. This will expedite delivering advanced mental health training to as many officers as possible.

1.3 Team Two Training needs to consider creative training schedules to facilitate attendance by police. Perhaps evening training sessions (2:00 P.M. to 10:00 P.M.) or night training (4:00 PM to Midnight) could be offered to facilitate attendance.

1.4 Police Departments need to have additional financial resources to assist them to increase the number of officers they send to both the Act 80 and Team Two Trainings.

2. The police agencies included in this study routinely involved mental health professionals in their calls involving persons experiencing mental health issues. Police appear satisfied with the responsiveness, cooperation, and effectiveness of their local mental health systems.

3. Police officers appear to use a continuum of options to resolve cases involving people experiencing mental health issues.

4. Force was used by police in less than 30% of cases involving people experiencing mental health issues. When force was used it typically involved verbal commands or force involved with handcuffing the subject. Pepper spray, Conducted Electrical Weapons (e.g., Tasers™), and firearms were used in 7.6% of the cases reviewed for this report.

5. In order for evidence-based mental health planning and training to occur, law enforcement agencies statewide need to begin a statewide initiative to increase the commitment to data quality. At a minimum, law enforcement agencies need to develop data entry protocols which direct officers to properly flag cases which involve persons who are experiencing a mental health crisis. Further, law enforcement agencies statewide will need to improve their efforts to enter all relevant codes describing the circumstances of cases. CRG recommends that the Act 80 Advisory Group consider adding a short unit in the Act 80 Training which explains to officers: 1) the value of evidence-based planning and research; 2) the need to correctly flag incidents involving people experiencing mental health issues; and 3) the importance of entering all relevant circumstance codes when completing their reports.

INTRODUCTION

Background

In 2004, the State of Vermont enacted Act 80 which appropriated funds to the Vermont Attorney General to establish a training program for law enforcement officers to assist them in their interactions with persons exhibiting symptoms of mental illness. Pursuant to Act 80 the Act 80 Advisory Group (hereafter, Advisory Group) was created and charged with designing and implementing the training program. The Advisory Group consists of representatives from the Attorney General's Office, the Vermont Criminal Justice Training Council (VCJTC), the Vermont Coalition for Disability Rights, and the Vermont Department of Mental Health. The Advisory Group is a multi-disciplinary unit that includes state employees, law enforcement officers, non-profit organizations, mental health professionals, advocates, and members of the public. The six-hour course which was eventually developed by the Advisory Group was entitled *Interacting with People Experiencing a Mental Health Crisis* (hereafter, Act 80 Training). The goal of the Advisory Group for the training was to train every law enforcement officer in Vermont. The course was first taught in May of 2006. Currently the VCJTC has the responsibility to plan, present, and administer the trainings with the advice of the Advisory Group. The Act 80 Training is now part of the VCJTC's standard Basic Training and in-service course offerings and has been expanded to eight hours.

The purpose of the Act 80 Training is to present police officers/recruits with a basic overview of psychiatric illnesses, developmental disabilities, and communication techniques for interacting with people in crisis. Recognition of symptoms and clear communication with subjects and resources are highlighted. In addition to background information related to mental illness the course focuses on:

- The signs and symptoms that may signify psychiatric illness.
- Situations that would benefit from intervention by mental health services.
- Risk factors related to suicide.
- Signs/symptoms that someone is a trauma survivor.
- Medication.
- Important factors for communicating effectively with people with cognitive disabilities.
- Responses to emergencies involving various developmental disabilities.
- The Warrant for Emergency Examination.
- Techniques for communicating with people in crisis (TACT).
- Considerations for the safe and compassionate transport of individuals in crisis and an understanding of how they must be treated with dignity.
- Working with local Crisis Teams.

The Evaluation

The 2014 annual Act 80 report included a recommendation for the Advisory Group to explore methods to evaluate and determine the effectiveness of the current training program. In the fall of 2014, the Attorney General's Office requested that the Crime Research Group (CRG) develop a proposal to evaluate the Act 80 Training. In January, 2015 CRG submitted a proposal to the Attorney General and

the Advisory Group which was eventually funded. CRG began work on the evaluation project in May, 2015.

The goals of the evaluation were to gather and analyze data: 1) to identify specific components of the training curriculum that are effective and identify areas where improvements may be required; and 2) to create a statistical report describing the nature and circumstances surrounding police contacts with persons who are experiencing mental health issues.

The objectives of the evaluation were to: 1) focus on the role of the individual police officer during an encounter with a person experiencing a mental health crisis, and evaluate the officer's application of the classroom training to resolve the incident/encounter; and 2) collect incident-based data from police records management systems to validly describe the nature and circumstances surrounding police contacts with persons who are experiencing mental health issues.

METHODOLOGY

Law Enforcement Survey

Overview: Based on a review of the Act 80 Training Program, CRG developed a survey for distribution to police officers via an online platform (*Survey Monkey).* The survey contained four sections: 1) officer use of Act 80 training principles; 2) officer assessment of the *Interacting with People Experiencing a Mental Health Crisis* training program (Act 80 Training) and local mental health systems; 3) specific feedback for Act 80 Training; and 4) demographic information about the respondents.[6] Three drafts of the survey were reviewed and edited by a Subcommittee of the Act 80 Advisory Group (hereafter, Subcommittee). Much of the content for the sections dealing with officer feedback regarding the Act 80 Training and local mental health systems was suggested by the Subcommittee. The survey was pretested by police officers, police supervisors, and subject matter experts. Pre-testers determined that the average survey completion time was 15 to 20 minutes. Two preliminary drafts of the report were reviewed by the Subcommittee and the final draft was reviewed by the Subcommittee and participating law enforcement agencies prior to release of the final report.

The Sample: Rather than surveying all police officers statewide, CRG surveyed officers from a sample of five representative law enforcement agencies. It was expected that using five sample sites rather than attempting to conduct a statewide survey would result in a greater degree of communication with the department/station heads regarding the importance of the study, facilitate the distribution of surveys to officers, and enhance CRG's ability to follow-up on surveys which were not completed. All of these factors were intended to increase the likelihood of a high level of survey completion rate with good quality data.

A combination of factors were considered in choosing the sample sites. Principally, CRG wanted to select a sample of law enforcement agencies where there would be a high probability that surveys would be sent to officers who had completed the mental health training and who had had some

[6] Researchers interested in a copy of the survey may contact the authors at info@crgvt.org.

experience interacting with people having mental health issues. CRG also wanted to ensure that there would be some variation between agencies in regards to the type of law enforcement agency, the level of mental health services in their jurisdiction, the rural/urban continuum in the state, and the geographical dispersion of agencies throughout the state. CRG did not include small law enforcement agencies in the study since the ratio of administrative costs to the number of surveys completed was too high to be cost effective. Sheriff Departments were excluded because most Sheriff Departments in Vermont are not routinely involved with law enforcement patrol duties.

Based on the aforementioned criteria the following sample sites were selected:

- Brattleboro Police Department
- Burlington Police Department
- Montpelier Police Department
- Vermont State Police, St. Johnsbury Station
- Vermont State Police, Rutland Station

Table 1 below indicates how the sample sites scored on the various factors taken into consideration during sample selection.

The link to the survey was emailed to 171 officers by their Chief or Station Commander. As an incentive to complete the survey, municipal officers could enter a lottery within their respective agency to receive a $100 cash gift card[7]. Two follow-up emails were sent by Chiefs and Station Commanders in an attempt to increase total response levels. A total of 134 surveys (78%) were submitted to CRG. Of the 134 surveys returned to CRG, 28 (20%) were only partially completed. Of those 28 partial completes, 12 were disqualified because no substantive questions were answered thus reducing the total useable surveys to 122 or 71% of the total number of surveys sent. Over 360 mental health related cases were reviewed as part of the study. Since all officers did not answer all questions the number of respondents who answered each question is listed on each table and figure.

Subject Protections: The survey was reviewed by the CRG Institutional Review Board and judged to be in be compliance with federal guidelines for the protection of human subjects. In order to ensure the anonymity of subjects, surveys contained no identification numbers and no personal identifying information was requested[8]. Officers were informed that participation in the survey was voluntary, they may refuse to answer any questions that they preferred not to answer, and they could end the survey at any time. Analysis of the data suggests that officers exercised these options when they responded to the survey and thus we can assume they clearly understood these protections. Officers were authorized to complete the surveys during normal duty hours.

[7] The Vermont State Police did not authorize state troopers to participate in the lottery. Sixty-two percent of municipal officers elected to participate in the lottery.

[8] Officers who chose to enter the lottery at their agency were asked to provide the last four digits of their Social Security Number.

Table 1: Factors Considered in Choosing Sample Sites

	Proposed Sample Site	Approximate Population Served	Total Officers (Officers per 1,000 inhabitants)	Approximate % of Trained Officers	Community Characteristics
Geographic locations of sample sites 	Burlington Police Department	42,616	91 (2.1)	92%	Burlington's university and college campuses, downtown retail shops, restaurants, bars and clubs, the waterfront, and various entertainment venues all serve to attract a wide variety of people to the city. Its resident, student, and transient population is served by a host of mental health care providers within the city limits.
	Montpelier Police Department	7,863	16 (2.0)	78%	The center of state government, Montpelier's workweek population swells with state employees and visitors during the day. This temporary but significant population shift is unique to Montpelier, in as much as it is not a seasonal occurrence. The result is a bustling downtown where interactions with persons experiencing mental health issues is likely to be higher than other jurisdictions of the same size.
	Brattleboro Police Department	12,000	24 (2.0)	89%	A dynamic arts community located in the southernmost part of Vermont, Brattleboro is also home to the Brattleboro Retreat and two graduate schools. Its close proximity to the borders of Massachusetts and New Hampshire makes Brattleboro a day trip destination for non-residents.
	VSP St. Johnsbury Station	31,709	19 (0.6)	95% (VSP total)	Located in the rural 'Northeast Kingdom' area of Vermont, the St. Johnsbury station provides law enforcement coverage to 20 small towns. There are fewer mental health services in this area than in other areas of the state.
	VSP Rutland Station	35,900	27 (0.8)	95% (VSP total)	Serving the residents and visitors of Rutland County, the Rutland station serves 24 towns. The station serves a mix of rural jurisdictions in central Vermont where mental health services are well developed.

Analysis of Law Enforcement Incident Data:

The second phase of the project focused on an analysis of law enforcement incident data from each of the sample sites to determine:

- The frequency of contacts between officers and persons experiencing mental health issues.
- The nature of the contacts between officers and persons experiencing mental health issues.
- The demographic characteristics of persons experiencing mental health issues.
- The outcome of those events.

This segment of the project was meant to be more exploratory than substantive. The primary focus of this section of the analysis was to determine the extent to which quantitative data extracted from police incident data can be used to create a statewide statistical report describing the nature and circumstances surrounding police contacts with persons who are experiencing mental health issues. The substantive results of this analysis are meant to be *illustrative* of the type of analysis which can be undertaken using law enforcement incident data and are not intended to be representative of police mental health contacts statewide.

To answer the research questions presented above, CRG utilized existing codes within law enforcement databases to identify cases which involve people experiencing mental health problems. The sample agencies use two different Computer Aided Dispatch / Records Management Systems – The Vermont Incident-Based Reporting System (VIBRS) and Valcour. For VIBRS, CRG partnered with the Vermont Department of Public Safety to extract data from incident reports that have an offense code of "MENT" which denotes an encounter with a person experiencing mental health issues. Crystal Reports was the extraction application utilized for VIBRS. For Valcour, the application developer, CrossWind, extracted data from incidents where the "Mental Health" box was checked on the incident report. Using these approaches, CRG was able to extract data and should have been able to conduct analysis on the following types of case information:

- The total number of mental health related incidents in a given time period;
- The circumstances of the contact, such as type of location, time/day, suspicion of drug or alcohol use, offenses associated with the case, and injury;
- The age, sex, race of the subject experiencing mental health issues; and
- The outcome of the case (e.g., case closed, criminal charges filed, referred to mental health).

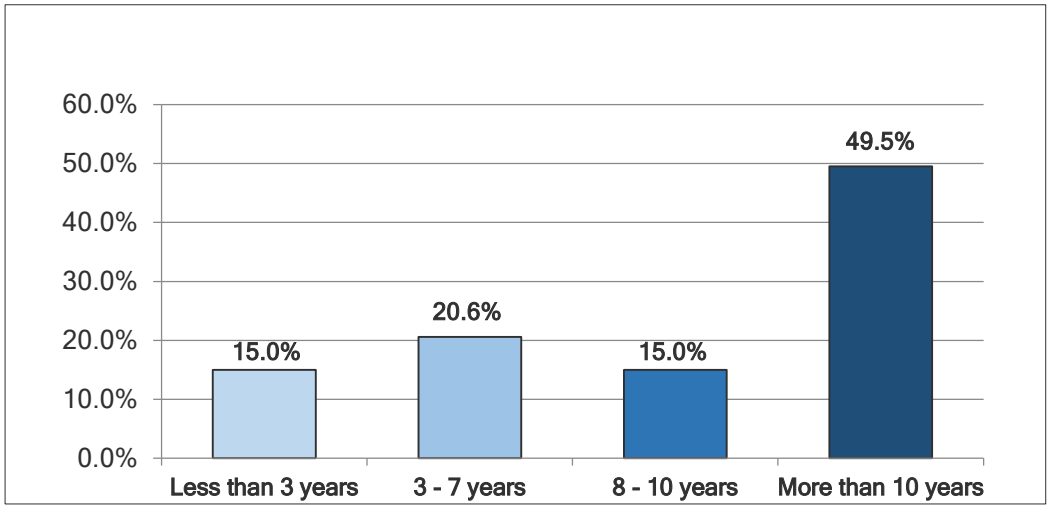
FINDINGS

Law Enforcement Survey

Background of Officers Participating in the Study

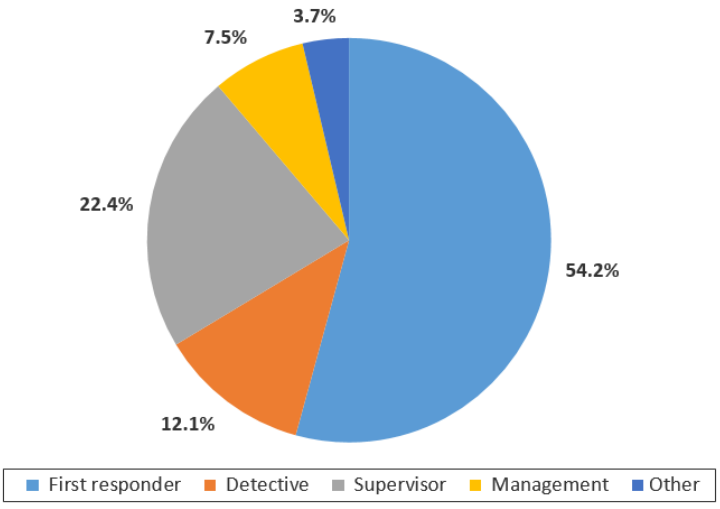
Nearly 50% of the officers who participated in the survey have more than 10 years of law enforcement experience. As Figure 1 below indicates, the other half of the officers were relatively equally distributed between those with less than three years of experience, three to seven years of experience and eight to ten years of experience.

Figure 1
Years of Law Enforcement Experience
(n=107)



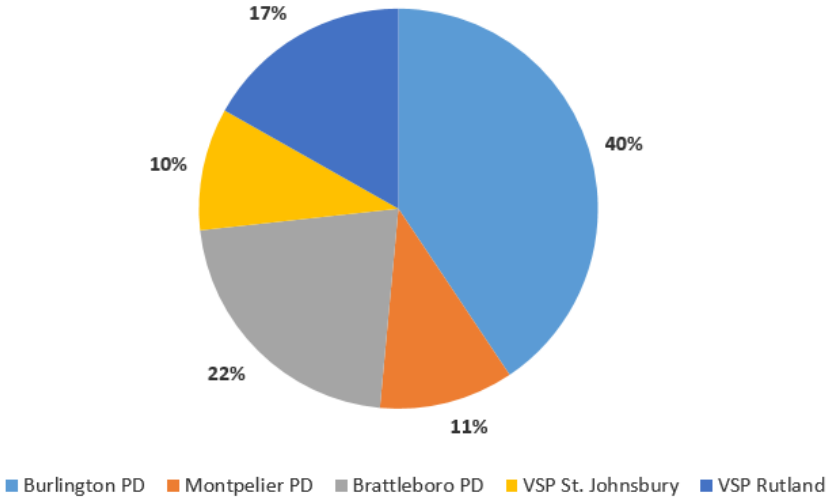
Slightly more than 50% of the officers responding to the survey were First Responders (patrol officers). Nearly 25% supervised uniformed officers and the remaining participants were distributed between detectives and agency managers. We were fortunate that so many supervisory personnel were willing to participate in the study. Figure 2 below displays the details regarding the job description of officers who participated in the survey.

Figure 2
Job Description
(n=107)



Approximately 75% of respondents were from municipal police departments and 25% from the Vermont State Police. The largest percentage of respondents were employed by the Burlington Police Department (40%). Figure 3 below displays the distribution of the sample by police agency.

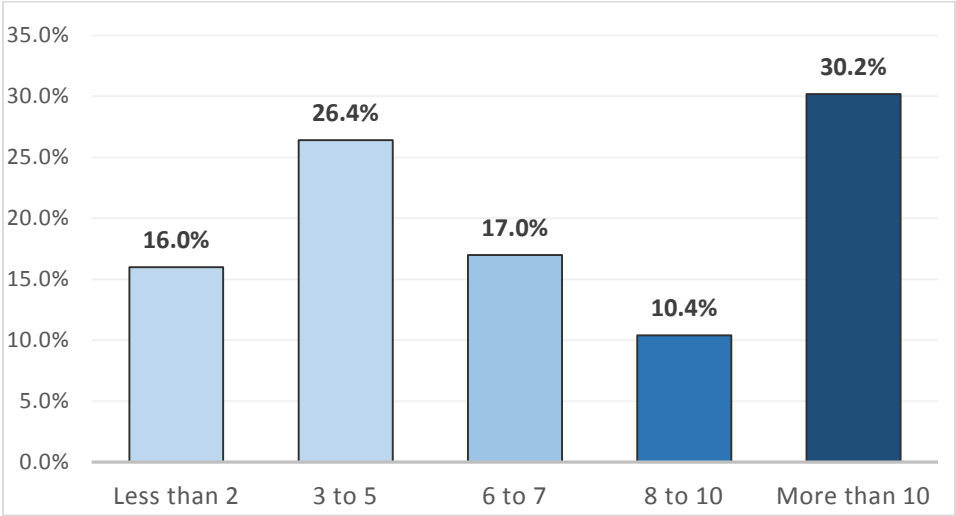
Figure 3
Law Enforcement Agencies Participating in the Survey
(n=101)



On average, the survey participants respond to calls where a person is experiencing mental health issues from six to seven times per month. However, 30% of the officers respond to more than 10 calls involving people experiencing mental health issues per month. This level of response is comparable to levels reported by law enforcement agencies nationwide. Based on national data, we can estimate that seven to 10 percent of all police interactions in Vermont involve people who are experiencing mental health issues.[9] Figure 4 below displays the distribution of monthly mental health calls responded to by police on a per officer basis.

[9] Cloud, David and Davis, Chelsea. (2015). *First Do No Harm: Advancing Public Health in Policing Practices*. New York, NY: Vera Institute of Justice.

Figure 4
Number of Mental Health Calls Per Officer Per Month
(n=106)



Nearly 90% of officers reported that there was a mental health crisis response team located in their jurisdiction[10]. When asked, approximately 80% of officers were able to provide a name or agency contact for their mental health crisis team.

Approximately 95% of the officers participating in the survey had attended Act 80 Training in the past. Nearly 80% took the Act 80 Training as an in-service training course. Approximately 20% of the survey attended the Team Two Training.[11]

Officer Use of Act 80 Training Principles

In order to gauge the extent to which officers utilize techniques to resolve cases which are recommended in the Act 80 training, the first section of the survey asked officers to remember the last time they encountered a person exhibiting psychotic/delusional behavior, who was suicidal, or exhibited behaviors associated with developmental or cognitive issues and report which techniques they used to resolve the incident[12]. Officers could choose from a list of possible techniques – some of which were

[10] The five agencies participating in the survey have active mental health crisis teams working in their jurisdictions. It is important to note, however, that police in other jurisdictions do not necessarily feel that they have the same level of access to mental health crisis teams.
[11] Team Two training is a program for law enforcement officers and mental health crisis workers. The course provides an overview of relevant mental health statutes, a refresher on Act 80 Training, and helps law enforcement and mental health crisis workers build the relationships necessary for working together in a crisis.
[12] Rather than asking officers to respond to predetermined scenarios this approach was used in order to obtain information about what officers ***do***, rather than when they ***might do*** to resolve mental health cases.

recommended in the Act 80 Training and some were not. Officers could also list additional techniques via an "other" option.[13] When additional techniques or categories were identified from the "other" option they were included in the tables and figures and designated by an "*". In the event that the officer had **not** encountered one or more of these cases they were asked to report what techniques they would use if they encountered such a case in the future. Officers were also asked to report on the outcome of the case and the level of force required to resolve the case.

A major focus of the Act 80 Training is on using effective communication skills and learning to de-escalate interactions with people in crisis. Police officers are taught to communicate with *TACT,* an acronym for being mindful of the following factors – **T**one (calm and non-confrontational demeanor), **A**tmosphere (keep the scene calm/controlled), **C**ommunication (active and reflective listening), and **T**ime (take the time to do it right). Given the importance of TACT, the techniques for resolving cases listed in the survey were all based on TACT training materials.

When analyzing the results for the cases where people were experiencing a mental health crisis there are five things that are important: 1) which techniques consistent with the Act 80 Training are applied by officers; 2) which techniques not recommended by the Act 80 Training are applied by officers; 3) the type of case outcome; 4) the level of force required to resolve the case; and 5) what factors influence the way officers handle mental health related calls.

Psychotic or Delusional Behavior Cases

Nearly all officers (96%) responded that they had encountered a person exhibiting psychotic or delusional behavior in the past. Approximately 90% of the officers reported that they Strongly Agreed or Agreed that the answers they provided in this section were typical of the way they handled these types of incidents.

1. **Techniques Consistent with Act 80 Training:** Every one of the techniques recommended in the Act 80 training was utilized to some extent by officers when resolving cases involving a person exhibiting psychotic or delusional behavior. On average officers reported that they used eight of the thirteen techniques (61%) addressed in the Act 80 training. Of particular interest is the extent to which officers approach subjects using TACT techniques and the frequency with which police involved mental health professionals (76%)[14]. However, in these cases officers tended **not** to be concerned about the scene nor did they tend to involve family, friends, emergency medical services, or Peer Support Service to help resolve the situation. Worthy of note is that only 55% of officers inquired about medication.

[13] There was a surprisingly high number of "other" responses throughout the survey. It was not unusual for 6% to 17% of respondents to contribute "other" information when given the opportunity to do so. This is an indication of how diligent officers were in thoughtfully completing the surveys.

[14]Unfortunately, there were no survey questions which measured whether mental health professionals were involved before, during, or after the police made contact with the subject.

2. Techniques NOT Consistent with Act 80 Training: It is encouraging that officers avoided projecting a command presence, and arguing about the reality of delusions – two techniques which they were trained to avoid.

Table 2 below presents the complete list of techniques that police applied during their last encounter with a person exhibiting psychotic or delusional behavior. Techniques that are not consistent with Act 80 Training are shaded in gray. Techniques that were derived from the "other" category are labeled with an "*".

Table 2
Percentage of Officers Who Utilized the Following Techniques to Resolve a Psychotic/Delusional Case

Answer Options	Response Percent	Response Count
I maintained my personal safety & the safety of others.	92.9%	105
I remained patient and took my time with the person.	85.8%	97
Two officers responded to the call.	84.1%	95
I explained why I was there and was reassuring when appropriate.	77.9%	88
I involved a mental health professional.	76.1%	86
I engaged in active and reflective listening.	73.5%	83
One officer was the primary communicator.	73.5%	83
I used commands only if necessary.	61.9%	70
I communicated the plan of action to the person.	61.1%	69
I inquired about the person's medication and consumption.	55.8%	63
I kept the scene calm and controlled by removing the audience and minimizing noise distractions.	38.9%	44
I involved the subject's family and/or friends to help resolve the situation.	25.7%	29
Given the unpredictable nature of these calls, I projected a "command presence" to take control of the situation immediately.	23.0%	26
I worked hard to help the person see that they were hallucinating or being delusional	12.4%	14
I involved someone from Peer Support Services.	7.1%	8
I involved Emergency Medical Services*	3.5%	4
Other (please specify)	1.8%	2
Total Responses		966
Total Respondents: 113		

Five officers reported that they had not dealt with a case where a person was experiencing psychotic/delusional behavior and therefore were asked to report what techniques they would use if they encountered such a case in the future. Though the results of the two groups of officers were similar in terms of using TACT techniques, the group that had **not** encountered a case where the person was exhibiting psychotic/delusional behavior tended to avoid selecting any of the techniques not recommended by their training with the exception of not involving family and friends.

Table 3 below presents the complete list of techniques to which police who had not experienced a person exhibiting psychotic/delusional behaviors were asked to respond. Techniques that are not consistent with Act 80 Training are shaded in gray.

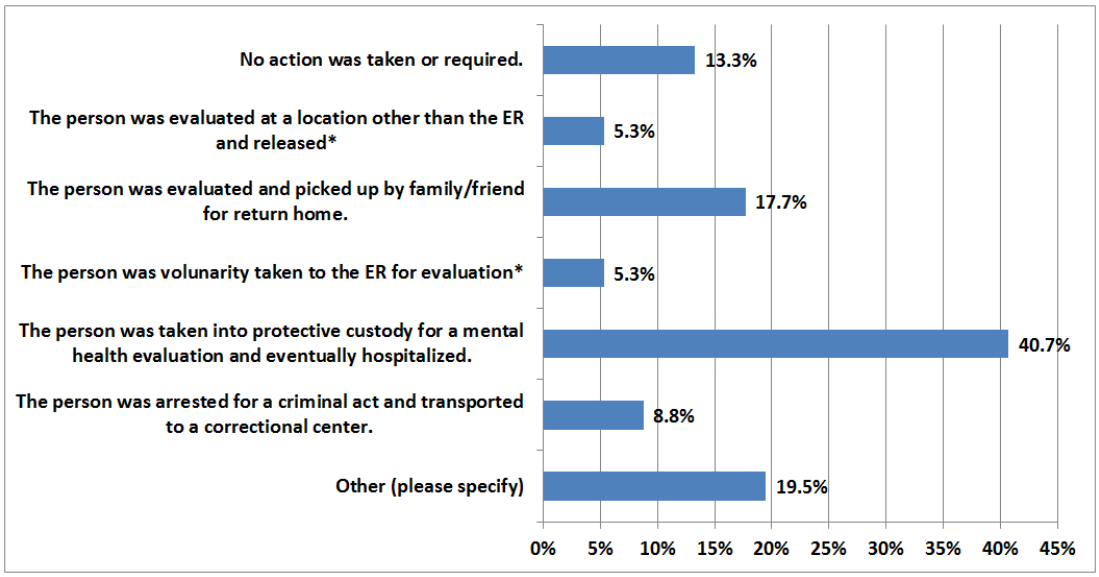
Table 3

Percentage of Officers Who Would Utilize the Following Techniques to Resolve a Psychotic/Delusional Case in the Future

Answer Options	Response Percent	Response Count
I would maintain my personal safety & safety of others.	100.0%	5
I would inquire about medication and consumption.	100.0%	5
I will employ active and reflective listening techniques.	100.0%	5
I would keep the scene calm and controlled by removing the audience and minimizing noise distractions.	100.0%	5
I would explain why I was there and would reassure the person when appropriate.	80.0%	4
I would not Involve family and friends so as to keep the scene calm.	40.0%	2
In order to focus the person on the moment I would avoid discussion about their delusional thoughts.	20.0%	1
Typically, it's better to have one officer respond to these calls.	0.0%	0
I would frequently remind the person that if they failed to cooperate, they would be arrested.	0.0%	0
It is important to rush through these types of calls because the subjects are often unpredictable and volatile.	0.0%	0
I would put my hand on the person's shoulder to reassure the person.	0.0%	0
Other (please specify)	0.0%	0
Total Responses		27
Total Respondents: 5		

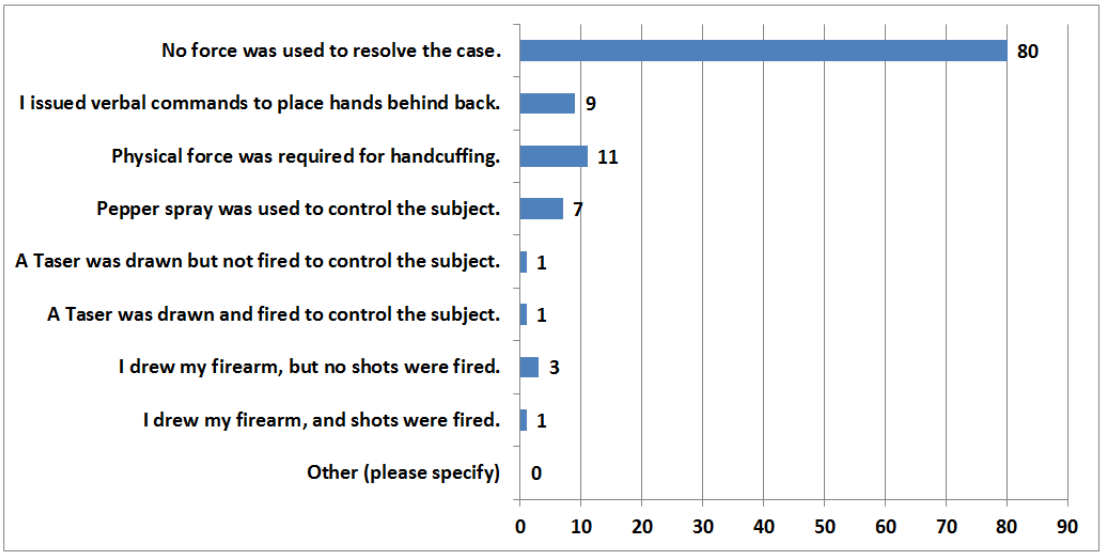
3. **Case Outcome:** In cases where subjects exhibited psychotic or delusional behavior, approximately 70% of the subjects received a mental health evaluation -- 40% of the subjects were taken into protective custody for a mental health evaluation and eventually hospitalized and 30% of the subjects were voluntarily evaluated and released. Approximately 8% of the time the subject was arrested for a criminal act and transported to a correctional center. In 13% of the cases no action was required or taken. Detailed findings regarding case outcomes are presented in Figure 5 below. Case outcomes labeled with an "*" were recoded from the "other" outcomes provided by officers.

Figure 5
Case Outcomes for Subjects Exhibiting Psychotic or Delusional Behavior
(n=113)



4. **Levels of Force:** In approximately 70% of the cases no force was required to resolve the case. Verbal commands or physical force was used to handcuff the subject in 17% of the cases. Pepper spray was used in 6% of the cases. Conducted Electrical Weapons (e.g., Tasers™) or firearms were drawn in less than 4% of cases. Shots were fired in only one case. Figure 6 below presents the details of the level of force which was required to resolve cases where the subject was exhibiting psychotic or delusional behavior. Note that in Figure 6 the unit of measure is **cases** and not percentages.

Figure 6
Levels of Force Used to Resolve Cases Involving Subjects Exhibiting Psychotic or Delusional Behavior
(n=113)



Suicidal Subjects

Nearly all officers (99%) responded that they had encountered a person who was suicidal or had attempted suicide in the past. Approximately 93% of the officers reported that they Strongly Agreed or Agreed that the answers they provided in this section were typical of the way they handled these types of incidents. One officer responded to the alternate question for officers who had not experienced this type of case in the past. That officer's responses were similar to the officers who had encountered a suicide case in the past.

1. **Techniques Consistent with Act 80 Training:** Once again every one of the techniques recommended in the Act 80 training was utilized to some extent by officers when resolving cases involving a person who is suicidal. On average officers reported that they used eight of the thirteen techniques (61%) recommended in the Act 80 training. Similar to the psychotic/delusional cases officers frequently reported that they used the basic TACT techniques. Mental health professionals were involved in more than 80% of the cases[15]. In these cases officers tended **not** to indicate that they removed the means to commit suicide, involved the subject's family or friends, guided the person to an action plan, or involved someone from Peer Support Services.

2. **Techniques NOT Consistent with Act 80 Training:** As with psychotic/delusional cases it is encouraging that officers avoided projecting a command presence, a technique which they were trained to avoid.

[15] Unfortunately, there were no survey questions which measured whether mental health professionals were involved before, during, or after the police made contact with the subject.

Table 4 below presents the complete list of techniques that police applied during their last encounter with a person who was suicidal. Techniques that are **not** consistent with Act 80 Training are shaded in gray.

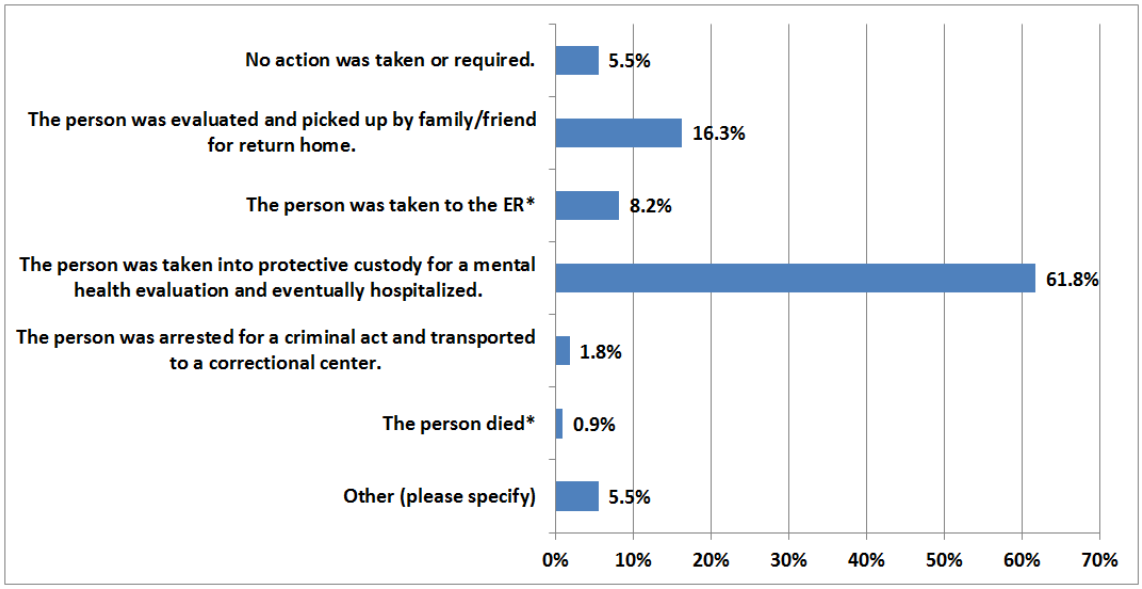
Table 4

Percentage of Officers Who Utilized the Following Techniques to Resolve a Suicide Case

Answer Options	Response Percent	Response Count
Two officers responded	93.8%	105
I maintained my personal safety & safety of others.	89.3%	100
I involved a mental health professional.	82.1%	92
I used active and reflective listening.	78.6%	88
One officer was the primary communicator.	75.9%	85
I determined the person's intent, plan, and method to commit suicide.	73.2%	82
I inquired about medication and consumption.	66.1%	74
I removed the means to commit suicide.	45.5%	51
I focused on the person's feelings.	45.5%	51
I involved the subject's family and friends to help resolve the situation.	42.0%	47
I guided the person to an action plan.	37.5%	42
Given the unpredictable nature of these calls, I projected a "command presence" to take control of the situation immediately.	36.6%	41
I helped the person build realistic hope.	34.8%	39
I involved someone from Peer Support Services.	12.5%	14
Other (please specify)	0.9%	1
Total Responses		912
Total Respondents: 112		

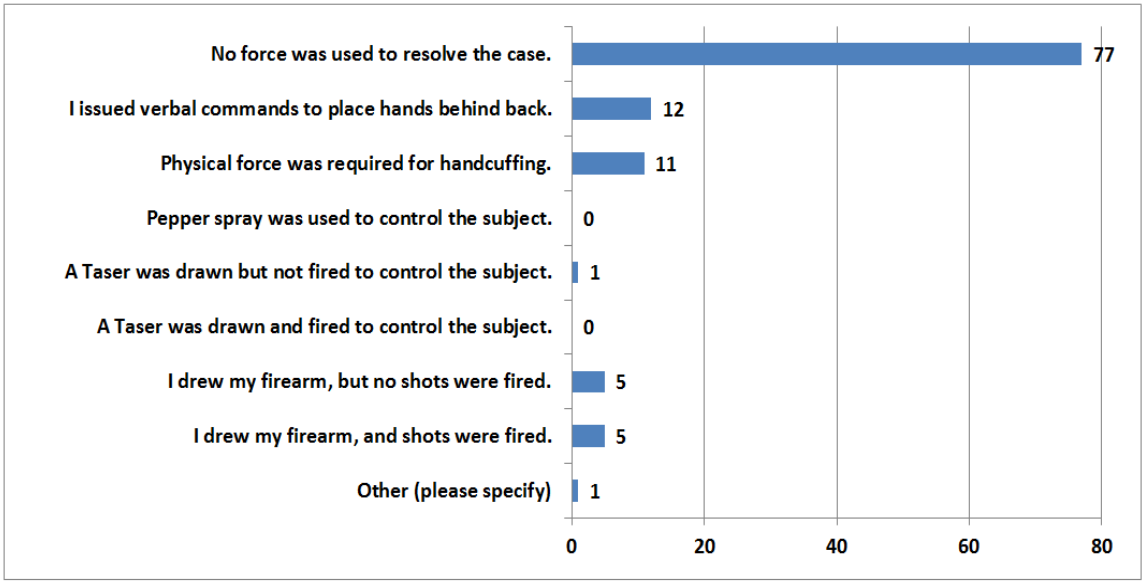
3. **Case Outcome:** In cases where the subject was suicidal nearly 85% were evaluated. The most frequent outcome was for subjects to be taken into protective custody for a mental health evaluation and eventually hospitalized (62%). In approximately 25% of cases the subject was evaluated and released, including the four cases that were taken to the Emergency Room. No action was taken in 5% of the cases. Unfortunately one person died. Detailed findings regarding case outcomes are presented in Figure 7 below. Case outcomes labeled with an "*" were recoded from the "other" outcomes provided by officers.

Figure 7
Case Outcome Case Outcomes for Subjects Who Were Suicidal
(n=110)



4. Levels of Force: In approximately 70% of the incidents no force was required to resolve the case. Verbal commands or physical force was used to handcuff the subject in approximately 20% of the cases. In 4% of the cases firearms were drawn and in 4% of the cases (n=5) shots were fired. Conducted Electrical Weapons (e.g., Tasers™) and pepper spray were used in 1% of cases. Figure 8 below presents the details of the level of force which was required to resolve cases where the subject was suicidal. Note that in Figure 8 the unit of measure is **cases** and not percentages.

Figure 8
Levels of Force Used to Resolve Cases Involving Suicidal Subjects
(n=112)



Developmental or Cognitive Issues Cases

Nearly all officers (94%) responded that they had encountered a person who appeared to be experiencing developmental or cognitive issues. Approximately 93% of the officers reported that they Strongly Agreed or Agreed that the answers they provided in this section were typical of the way they handled these types of incidents. Twelve officers responded to the alternate question for officers who had not experienced this type of case in the past.

1. **Techniques Consistent with Act 80 Training:** All of the techniques covered in the Act 80 Training were utilized by officers responding to cases involving a person experiencing developmental or cognitive issues. On average officers reported that they used five of the eight techniques (62%) recommended in the Act 80 training. As with the two previous case types, officers frequently reported that they used the basic TACT techniques. Developmental Services workers or other clinical professionals were involved much less frequently (38%) than in other case types[16]. In these cases officers tended not to indicate that they used open-ended questions with subjects or had the subject repeat directions given by the officer. Two of the "other" responses referred to using the services of a translator to assist in the resolution of the case.

2. **Techniques NOT Consistent with Act 80 Training:** As with the previous types of cases, officers avoided projecting a command presence.

[16] Unfortunately, there were no survey questions which measured whether mental health professionals were involved before, during, or after the police made contact with the subject.

Table 5 below presents the complete list of techniques that police applied during their last encounter with a person who was exhibiting developmental or cognitive issues. Techniques that are not consistent with Act 80 Training are shaded in gray.

Table 5
Percentage of Officers Who Utilized the Following Techniques to Resolve Cases Involving a Person Experiencing Developmental or Cognitive Issues

Answer Options	Response Percent	Response Count
I spoke plainly and used simple language.	98.0%	99
I was patient if the person had difficulty answering questions.	84.2%	85
I treated the person as an adult and was sensitive to their needs.	79.2%	80
I gave only one direction or asked one question at a time.	72.3%	73
I determined if the person was intoxicated or under the influence of drugs.	67.3%	68
I asked open-ended questions, such as, "Please tell me what you have to do tomorrow?" vs. "Do you understand?"	38.6%	39
I involved a Developmental Services worker or other appropriate clinical professional.	37.6%	38
Given the unpredictable nature of these calls, I projected a "command presence" to take control of the situation immediately.	31.7%	32
When I gave directions I had the person repeat the directions in their own words.	13.9%	14
Other (please specify)	3.0%	3
Total Responses		**531**
Total Respondents: 101		

Twelve officers reported that they had not dealt with a person experiencing developmental or cognitive issues and therefore were asked to report on what techniques they would use if they encountered such a case in the future. Though the results of the two groups of officers were similar in terms of using TACT techniques, the group that had not encountered a person experiencing developmental or cognitive issues tended to check a number of techniques not recommended by their training. In particular officers were prepared to call an inappropriate help line for assistance and to incorrectly refer the subject to a community health center. The officers who had not been involved with cases involving subjects experiencing a developmental or cognitive issue were as likely to use a "commanding voice" as were experienced officers but were less patient with the subject than were officers who had some experiences with these cases.

Table 6 below presents the complete list of techniques to which police who had not experienced a case where a person was experiencing developmental or cognitive issues were asked to respond. Techniques that are not consistent with Act 80 Training are shaded in gray.

Table 6

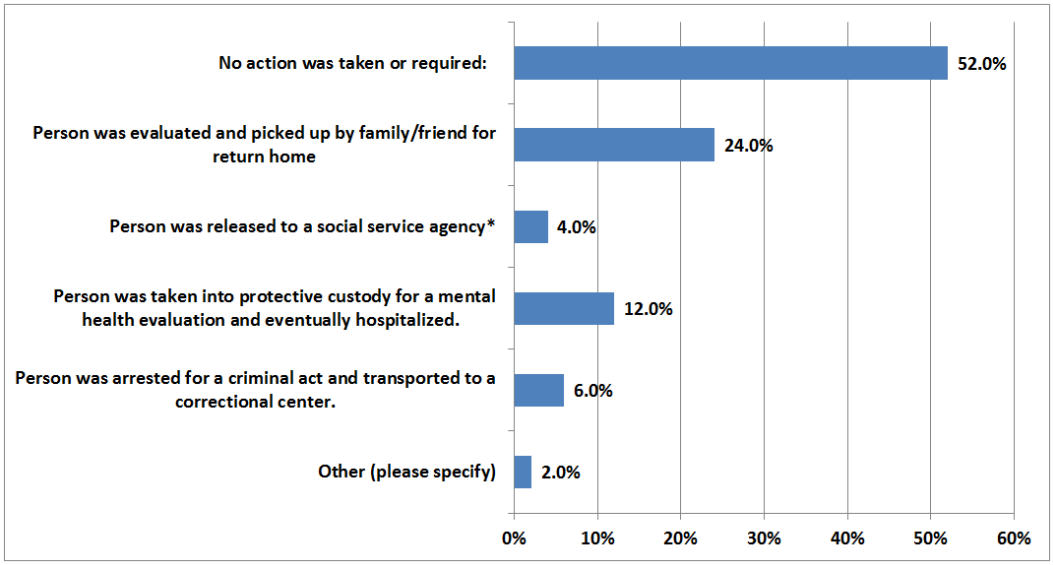
Percentage of Officers Who Would Utilize the Following Techniques in the Future to Resolve a Case Involving a Person Experiencing Development or Cognitive Issues

Answer Options	Response Percent	Response Count
Speak plainly and use simple language.	91.7%	11
Determine if the person is intoxicated or under the influence of drugs.	75.0%	9
Treat adults as adults while being sensitive to their needs.	75.0%	9
Frequently check the person's understanding of your directions by asking "Do you understand?"	75.0%	9
Give only one direction or ask only one question at a time.	66.7%	8
If the person does not understand the questions I am asking, then try to resolve the case as soon as possible	41.7%	5
Use a commanding voice since persons with a developmental or cognitive disorder respond well to a firmness.	25.0%	3
Set up a referral to the community health center.	25.0%	3
Involve an appropriate mental health professional*	25.0%	3
Contact 2-1-1 for assistance.	16.7%	2
Other (please specify)	0.0%	0
Total Responses		62
Total Respondents: 12		

3. Case Outcome: In cases where subjects exhibited developmental or cognitive issues, 36% received a mental health evaluation -- 12% of the subjects were taken into protective custody[17] for a mental health evaluation and eventually hospitalized and 24% of the subjects were voluntarily evaluated and released. The percentage of subjects receiving an evaluation is substantially less than the other two types of cases addressed in the survey. In 4% of cases (n= 4) the subject was released to a social service agency. Approximately 6% of the time the subject was arrested for a criminal act and transported to a correctional center. In 52% of the cases no action was required or taken – a much higher percentage than was the case in the other types of calls. Detailed findings regarding case outcomes are presented in Figure 9 below. Case outcomes labeled with an "*" were recoded from the "other" outcomes provided by officers.

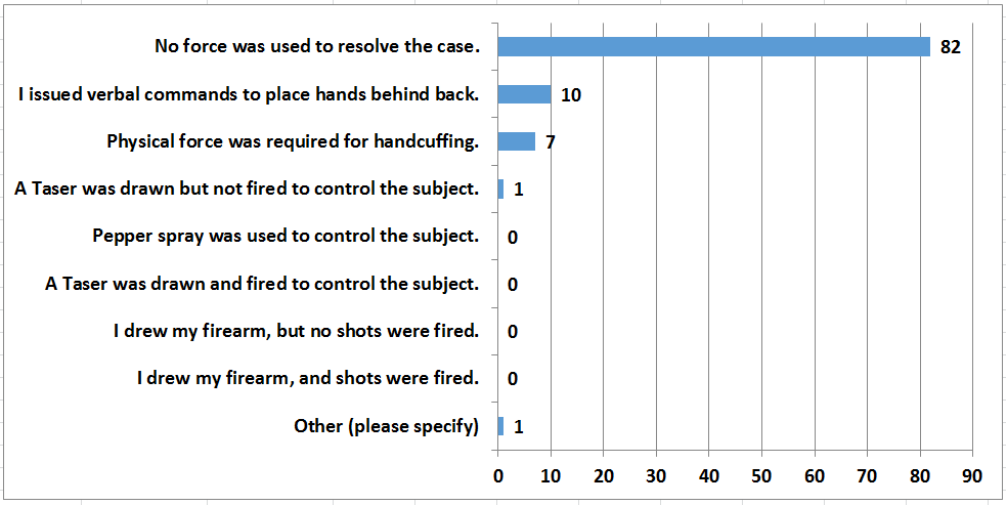
[17] It's important to note that the Vermont mental health commitment statute specifically excludes people with an intellectual disability. There is no comparable commitment procedure for people with an intellectual disability unless they have committed a sex offense and are eligible under ACT 248. Therefore the subjects with an intellectual disability who were hospitalized (12%) were likely to be dual-diagnosis clients who also presented with a major mental illness.

Figure 9
Case Outcome for People Exhibiting Developmental or Cognitive Issues
(n=100)



4. Levels of Force: In approximately 80% of the cases no force was required to resolve the case. Verbal commands or physical force was used to handcuff the subject in approximately 17% of the cases. A Conducted Electrical Weapon (e.g., Taser™) was drawn but not fired in one case. Neither pepper spray nor firearms were used in any of the cases. Figure 10 below presents the details of the level of force which was required to resolve cases where the subject was exhibiting development or cognitive issues. Note that in Figure 10 the unit of measure is **cases** and not percentages.

Figure 10
Levels of Force Used to Resolve Cases Involving Subjects Exhibiting Developmental or Cognitive Issues
(n=101)



Warrant for Emergency Examination

Vermont law authorizes officers to take individuals experiencing a mental health crisis into temporary custody if the individual is a person in need of treatment and a police officer has completed an Application for Emergency Examination (AEE) or the officer intends to obtain a Warrant for Emergency Examination (WEE). Both the AEE and the process to obtain a WEE are addressed in the Act 80 training.

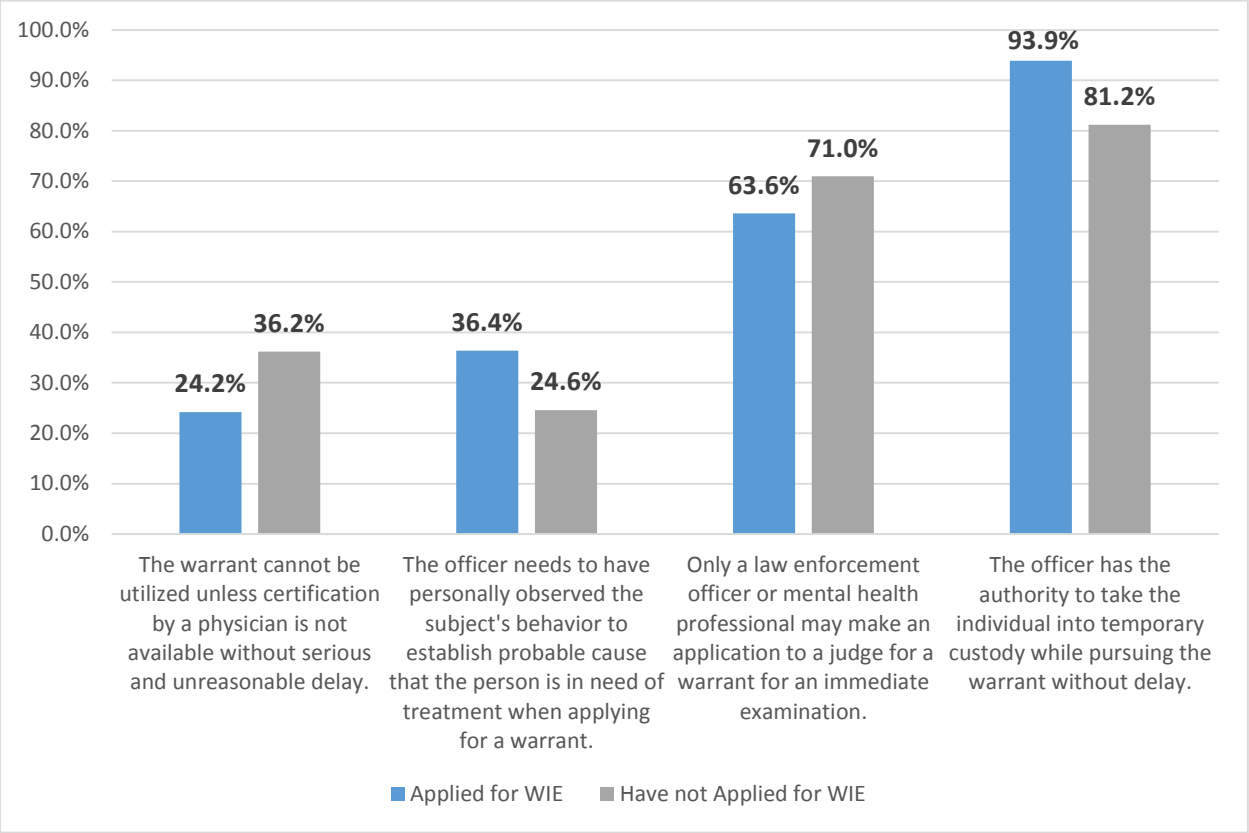
In order to measure officer knowledge regarding the WEE process, officers were presented with four statements about the WEE process and asked to identify all of the statements which were true. Of the 109 officers who responded to this section, only 32% had applied for a WEE. Though all of the statements about WEE on the survey were true, the majority of officers only identified two of the four statements as being true.

Most officers who had applied for a WEE, as well those that hadn't, recognized that an officer has the authority to take the subject into temporary custody while pursuing the warrant. Slightly fewer officers knew that only a law enforcement officer or a mental health professional can apply for a WEE. However, two rather critical aspects of the WEE were **not** readily identified by both officers who had applied and those that hadn't as being true: 1) the officer needs to personally observe the subject's behavior to establish probable cause; and 2) the warrant cannot be used unless certification by a physician is not readily available. In reference to the personal observation requirement, there apparently is a discrepancy between the law and the Department of Mental Health's (DMH) practices regarding the WEE. While the statute (18 V.S.A. §7505) requires that a WEE must be based on the **officer's personal observation**, DMH is accepting WEEs based on the report of a **reliable eyewitness' personal observation**.[18] The discrepancy between the statute and the WEE form is taught in the ACT 80 training. This discrepancy may explain in part why some officers answered this question incorrectly.

Figure 11 below presents a side-by-side comparison of responses from officers who have applied for a WEE (blue) and officers who have not (gray). Percentages in the graphic refer to the number of officers who correctly identified statements about the WEE process. Had officers been completely informed about the WEE process all of the bars would be at 100%.

[18]The application form for the Warrant for Emergency Examination form (Rev. 5/2015) indicates under the Reason for Application Section, *"State the facts you have gathered, from either (1) your own personal observations, or (2)* ***a reliable report to you by someone who personally observed the proposed patient's behavior****, that lead you to believe that the proposed patient is a person in need of treatment and presents an immediate risk of serious injury to himself or herself or others if not restrained."*

Figure 11
The Percentage of Officers Correctly Identifying Various Requirements for the Warrant for Emergency Examination Process
(n=109)



Recognizing Behaviors That Would Benefit from a Mental Health Intervention

The Act 80 training provides officers with a variety of symptomologies to assist them to identify cases which would benefit from an emergency mental health intervention from a mental health crisis team. In order to measure the extent to which officers recognize these symptoms as indicators that a person may need emergency intervention, 11 one-line scenarios were presented to officers. Officers were asked to identify the situations that would benefit from emergency interventions from mental health crisis teams. Most of the scenarios present symptoms which at some level could be interpreted as indicators of a behavior which might warrant assistance from a mental health professional. However, in this question the focus was on cases which would benefit from an *emergency intervention* from a mental health crisis team.

Nearly 97% of officers identified a teenager with cuts on her forearm as being in need of an emergency mental health intervention from a mental health crisis team. Approximately 90% identified a male having a debate with himself on the street as being appropriate for an emergency intervention. Approximately 70% of officers were concerned about a student who was being continually suspended from school and a woman who has been the victim of domestic violence for many years. Very few officers suggested that two patrons having a heated argument are appropriate candidates for a referral. The other remaining six scenarios which ranged from a "cat lady" to drunk hitchhikers were less likely to be identified by officers as being in need of an emergency intervention.

Table 7 below presents the entire list of scenarios and the percentage of officers who recognized the presenting symptoms as indicators that a person may need an emergency mental health intervention from a mental health crisis team.

Table 7
The Percentage of Officers Who Identified Subjects as a Person That Would Benefit From an Emergency Mental Health Intervention from a Mental Health Crisis Team

Answer Options	Response Percent	Response Count
A teenager who has multiple cuts on her forearm.	96.3%	104
A male is reportedly having a debate with himself on the street.	87.0%	94
A teenager is continually being suspended from school for fighting and sexual harassment.	66.7%	72
A woman who has been assaulted for several years by her husband.	66.7%	72
An elderly woman has shoplifted 10 cans of cat food and says she did it to feed the "twenty or so" cats back at her home.	50.0%	54
On a hot July afternoon, you encounter a young male walking down the road wearing a winter parka.	49.1%	53
An adult has peed his pants on the street.	34.3%	37
Continually being called to the same house because an adult male refuses to turn down the loud music and stop using foul language.	24.1%	26
A hitchhiker on the interstate onramp is found to be intoxicated and abusive towards drivers who do not offer a ride.	17.6%	19
A person in a minor motor vehicle crash jumps out of the car and is hyperventilating.	13.9%	15
Two patrons are having a heated argument that is fast becoming disorderly. Neither person is intoxicated but they both have been drinking; one admits to smoking marijuana.	5.6%	6
Total Responses		552
Total Respondents: 108		

Factors that influence the Way Officers Handle Mental Health Related Calls

Now that we have an understanding of how officers tend to respond to people experiencing mental health issues, it is important to try and determine the extent to which the ACT 80 training influenced

officer behavior. With that goal in mind officers were asked to rank how different factors influenced the way they presently handle mental health calls.

The survey responses suggest that officers develop techniques for resolving cases where people are experiencing a mental health crisis by utilizing a variety of different sources of information. The most influential factor was the officer's total law enforcement experience which received an average score of 4.47 on the five-point scale. The officer's departmental policies (average = 4.05) and the overall culture of their department (average = 3.94) were the next most influential factors. The instruction from Field Training Officers (average = 3.52) and the Act 80 Training (Average = 3.06) were reported to be the least influential. It is important to note that despite the low average score, the Act 80 training was still reported as being Very Influential or Influential by approximately 40% of officers. In addition to the factors listed in the survey, three officers mentioned that working with mental health crisis teams had been informative for them.

Figure 11 below displays the average scores on a five-point scale as to which factors influence how officers handle calls involving people who are experiencing mental health issues. Figure 12 below displays the detailed distribution of rating responses.

Figure 11
Average Ratings for Which Factors Influence How Officers Handle Mental Health Calls
(n=109)

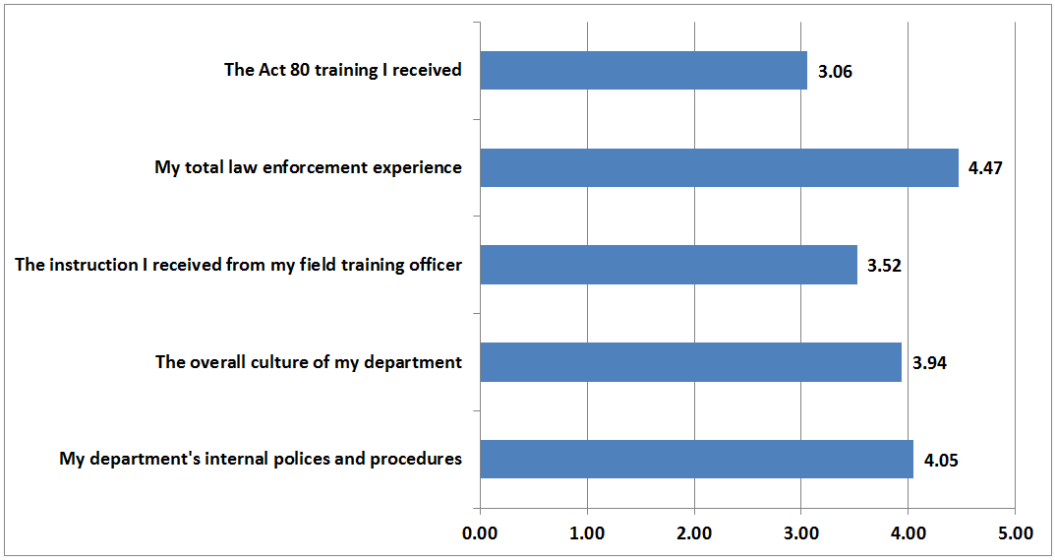
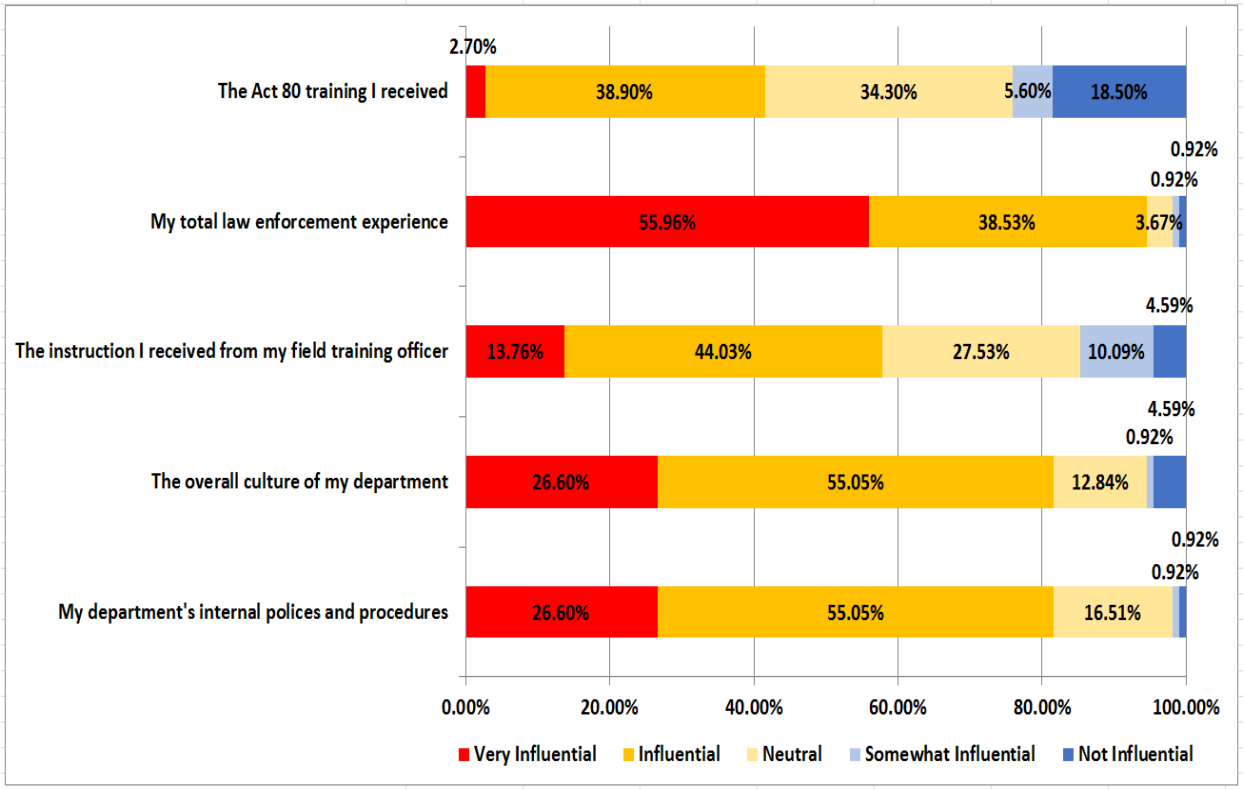


Figure 12
Factors Which Influence How Officers Handle Mental Health Calls
(n=109)



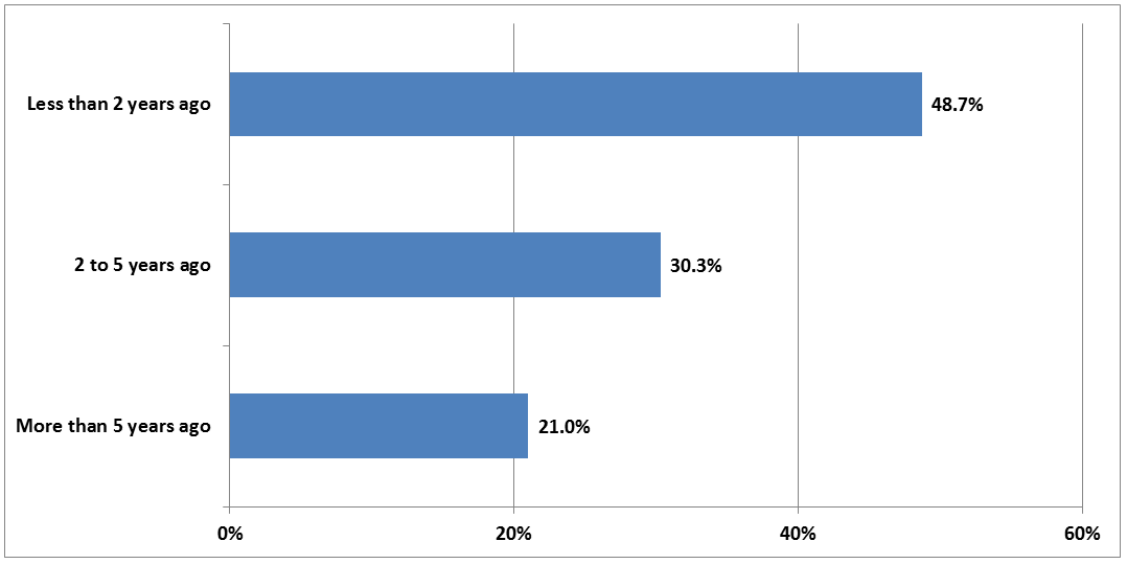
In reference to the Act 80 Training, it appears that the officer's assessment of the training's influence tends to erode over time. For example, 86% of officers who had completed the Act 80 Training less than two years ago rated the training as Very Influential or Influential. However only 46% of officers who had taken the training from two to five years ago and 36% of officers who had taken the course more than five years ago reported the training as Very Influential or Influential.

Officer Assessment of the *Interacting with People Experiencing a Mental Health Crisis* Training Program and Local Mental Health Systems

This section of the survey sought officer opinions regarding the adequacy of the Act 80 Training and the mental health system in their area. All but eight officers attended the Act 80 training at some point in the past. The responses of non-attenders were deleted from the item which sought an opinion on the adequacy of the Act 80 Training.

Approximately 50% of officers completed an Act 80 Training class within the last two years. Nearly 30% of officers completed the course two to five years ago and 21% completed the training more than five years ago. Figure 13 presents detailed information regarding when officers completed the training.

Figure 13
How Recently Did Officers Complete the Act 80 Training



Act 80 Training: Officers were asked to respond to the statement, *In my personal opinion the Act 80 training I received adequately prepared me to handle mental health crisis situations effectively.* The average rating for the Act 80 training on a 5.0 scale was a 3.34 – slightly above "Neutral". Though 43% of officers Strongly Agreed or Agreed that the Act 80 training adequately prepared them, 41% were Neutral about the adequacy of the training, and 17% Disagreed or Strongly Disagreed that the training was adequate.

Responsiveness of Mental Health System: When asked about whether the mental health system responds promptly to requests for assistance from police, the average rating was 3.53 – once again in the "Neutral" range. Nearly 60% of officers Strongly Agreed or Agreed that the mental health system responded promptly. Approximately 25% were Neutral and 17% Disagreed or Strongly Disagreed that the system responded promptly.

Mental Health System vs. Police: When asked to respond to the statement that the mental health system in their area was hostile to police referrals, 68% of officers Disagreed or Strongly Disagreed. Only 7% of officers Agreed or Strongly Agreed that their local mental health system was hostile to their referrals. The average rating on this issue was 2.2 which is consistent with the high percentage of officers who Disagreed with the statement thus generating low scores for this item (Strongly Disagree = 1). Reversing the scoring would result in an average score of 3.78 – the highest mean of all the items in this section.

Effectiveness of the Mental Health System: When asked as to whether their local mental health system provided effective interventions for individuals, the average rating was 3.30 – a "Neutral" response. Nearly 48% of officers Strongly Agreed or Agreed that the mental health system provided effective interventions. Approximately 37% were Neutral and 15% Disagreed or Strongly Disagreed that the system provided effective interventions for individuals.

Figure 14 below displays the average scores on a five-point scale for ratings of Act 80 Training and local mental health systems. Figure 15 below displays the detailed distribution of rating responses.

Figure 14
Average Ratings of Act 80 Training and Local Mental Health System
(n=109)

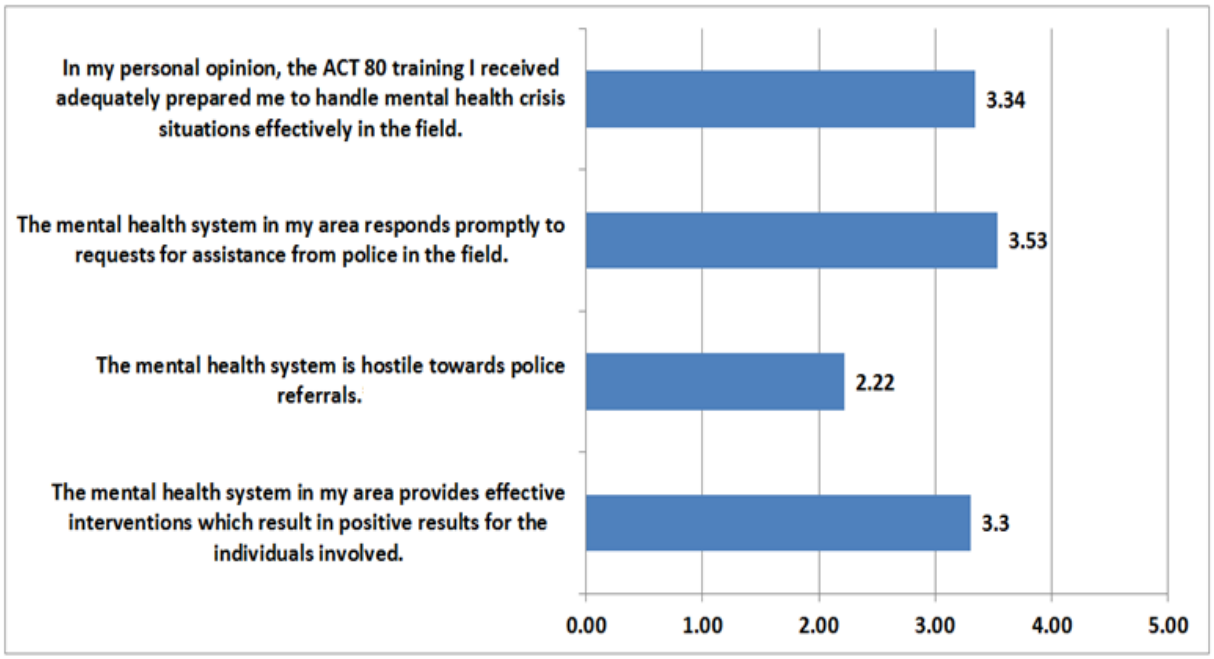
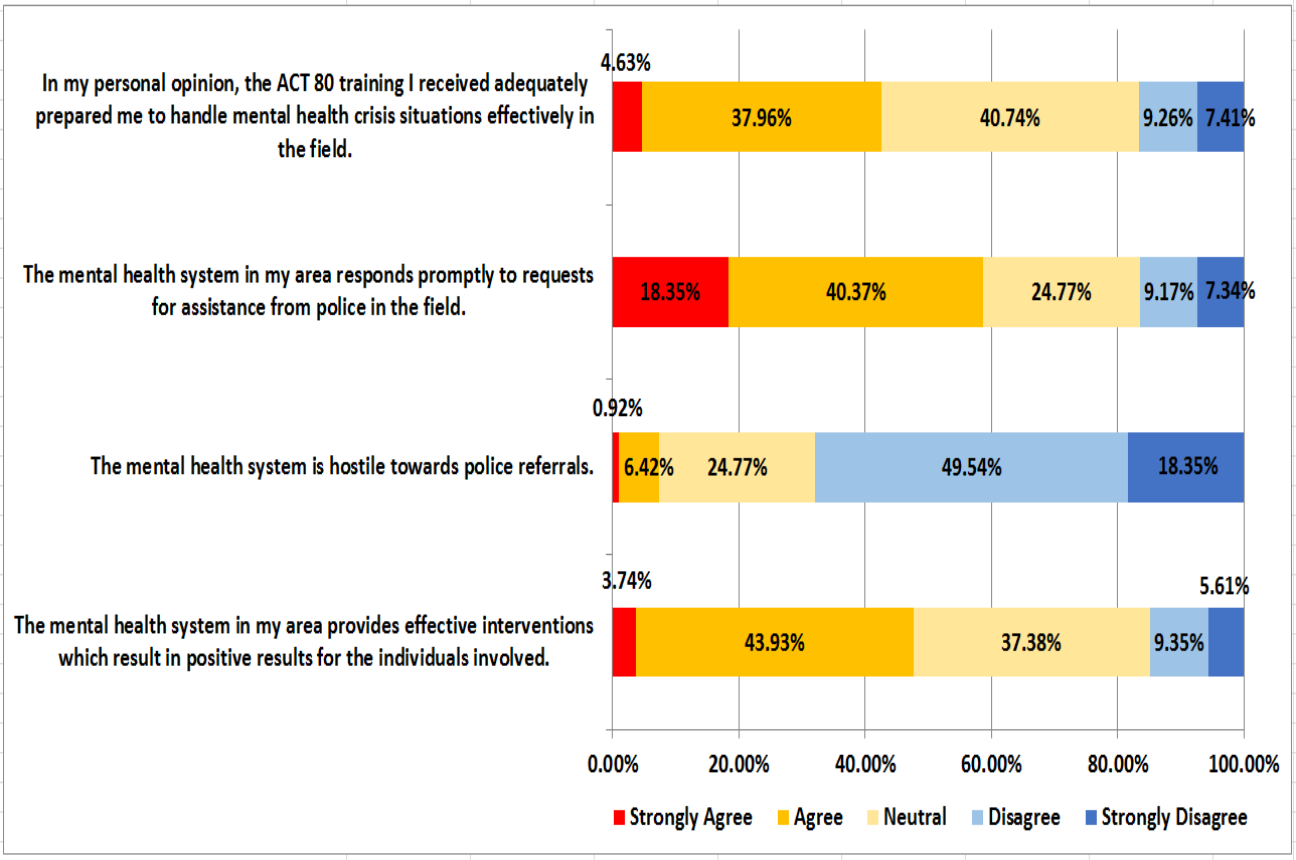


Figure 15
Ratings of Act 80 Training and Local Mental Health System
(n=109)



Specific Feedback for Act 80 Training

In this section officers were asked to provide the Advisory Group with specific comments and suggestions regarding the Act 80 training. The responses from the eight subjects who did not attend Act 80 Training were deleted from the analysis of questions which required attendance at the training to validly comment on the question.

Figure 16 below displays the average scores on a five-point scale for ratings of Act 80 Training and future Act 80 Training options. Figure 17 displays the detailed distribution of rating responses. On average officers tended to be neutral about the majority of questions regarding the various aspects of the Act 80 training. Officers did feel comfortable asking questions and joining in discussions (Average = 3.34) and they disagreed that the legal presentations during the training were a waste of time (Reversed Scoring Average = 3.27).

The notion of attending an Act 80 refresher course received an average rating of 3.15. The suggestions for future training that received the most support was additional training on how to collaborate with mental health crisis teams – approximately 48% of officers supported that notion.

An item of particular interest to the Act 80 Group involves whether officers perceive a conflict between standard police "command and control" techniques and the Act 80 TACT approach. The average rating for that item was 3.21 suggesting that the police do **not** strongly perceive a conflict between the two approaches. However, as Figure 17 below suggests, 36% of officers Strongly Agreed or Agreed that there was a conflict.

Figure 16
Average Ratings for Act 80 Training and Future Training Options
(n=108)

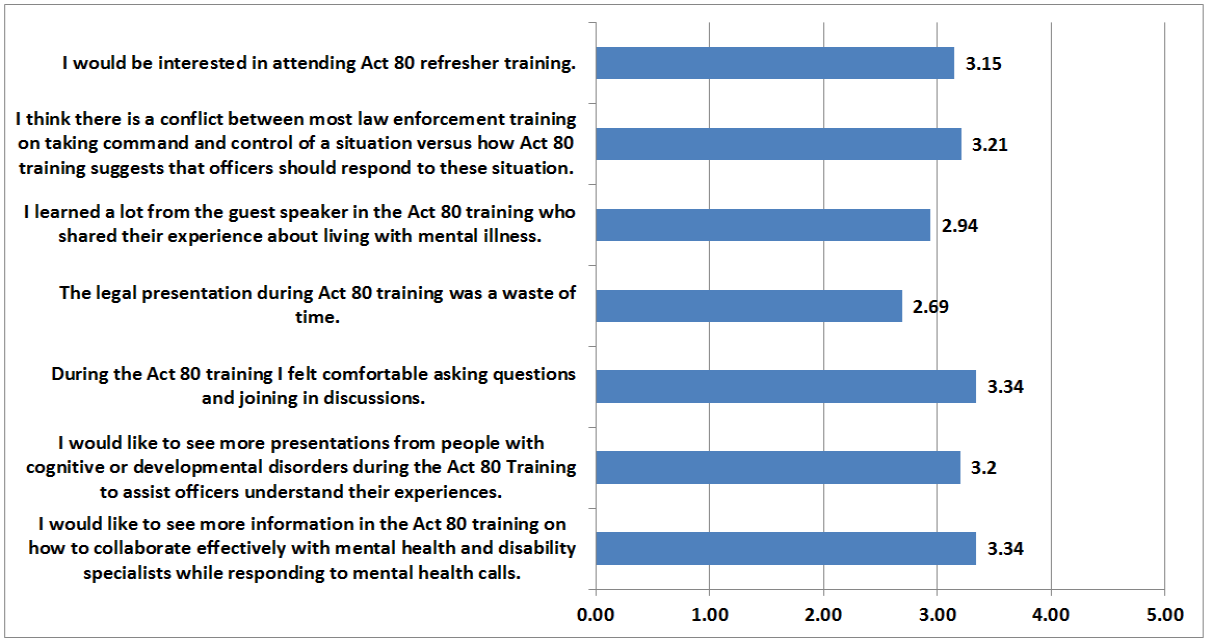
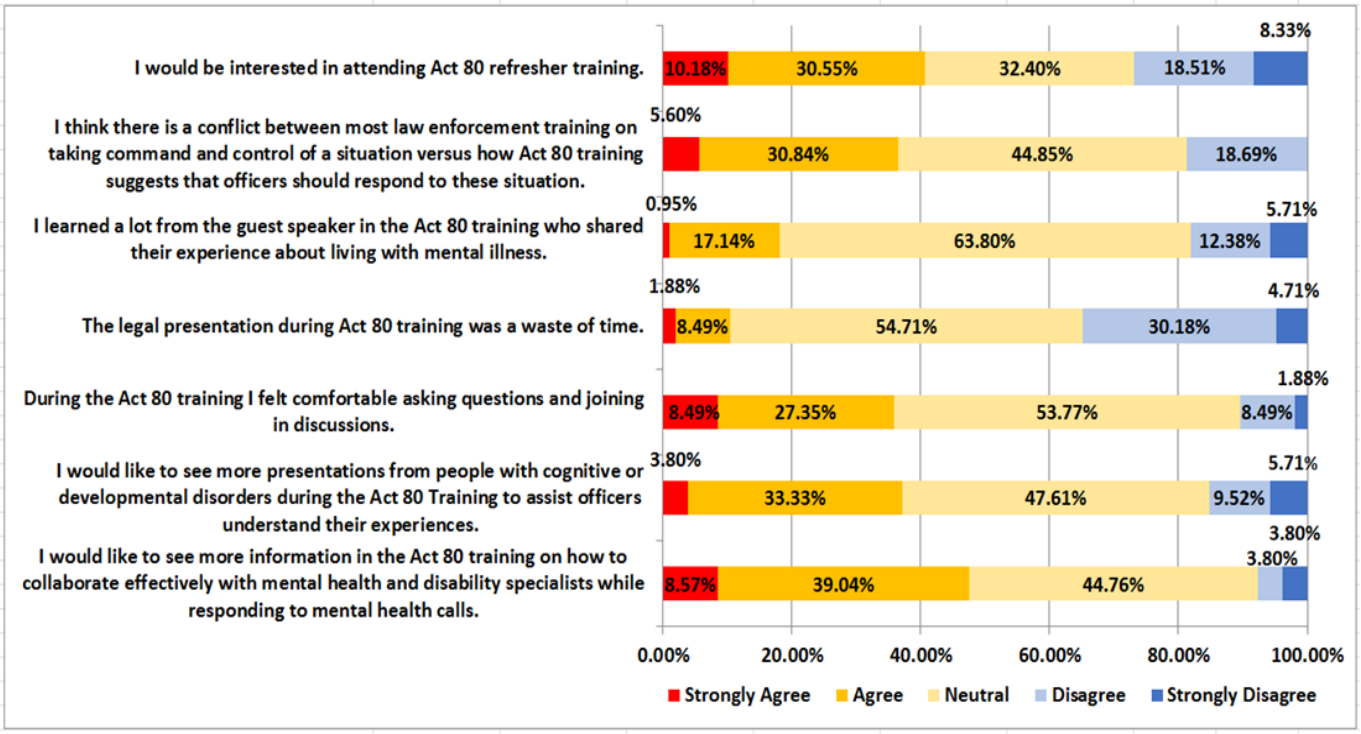


Figure 17
Ratings for Act 80 Training and Future Training Options
(n=108)



Officers were asked an open-ended question regarding which topics they would like to see addressed in future training. There were six responses which included the following training topics:

- The legal aspects surrounding emergency evaluations. (2)
- Scenarios of actually interacting with individuals having a crisis.
- Schizophrenia, Bipolar disorders, PTSD, Multiple Personality Disorder.
- Traumatic Brain Injury.
- Descriptions of disorders to help with identification.

Officers were subsequently asked for any other suggestions or comments to improve the Act 80 Training. The 11 comments to improve the Act 80 training included the following suggestions:

- The training was too basic. (3)
- More opportunities to speak with people who are living with mental health issues. (2)
- Include more interaction with street level workers. (2)
- More interactive scenarios and less lecture.
- Make the training annual.
- Create “Quick Reference Guides” which include emergency referral contact information.
- Provide more training dates and locations.

Demographic Information About the Respondents

A "Quick Pic" of the survey respondents suggests the following:

- 89% of the officers responding to the survey were male.
- 60% of officers were between 30-44 years old.
- Nearly 60% of officers had a Bachelor's or Graduate degree and 96% had at least some college course experience.
- 42% of officers indicated that a friend or family member has received or is currently receiving counseling, therapy, or taking medication for mental health problems.

Figures 18 and 19 below present detailed information regarding the age and educational levels of respondents.

Figure 18
Age of Respondents
(n=107)

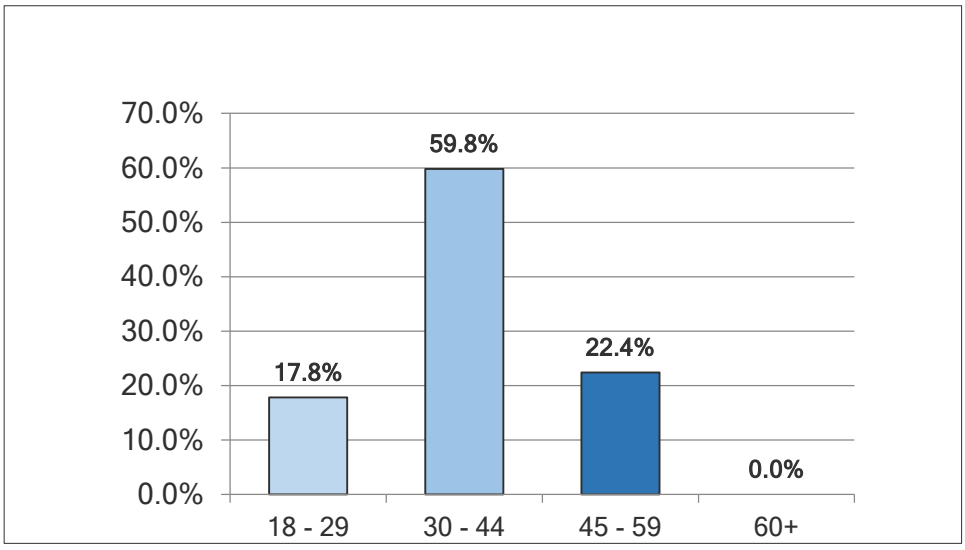
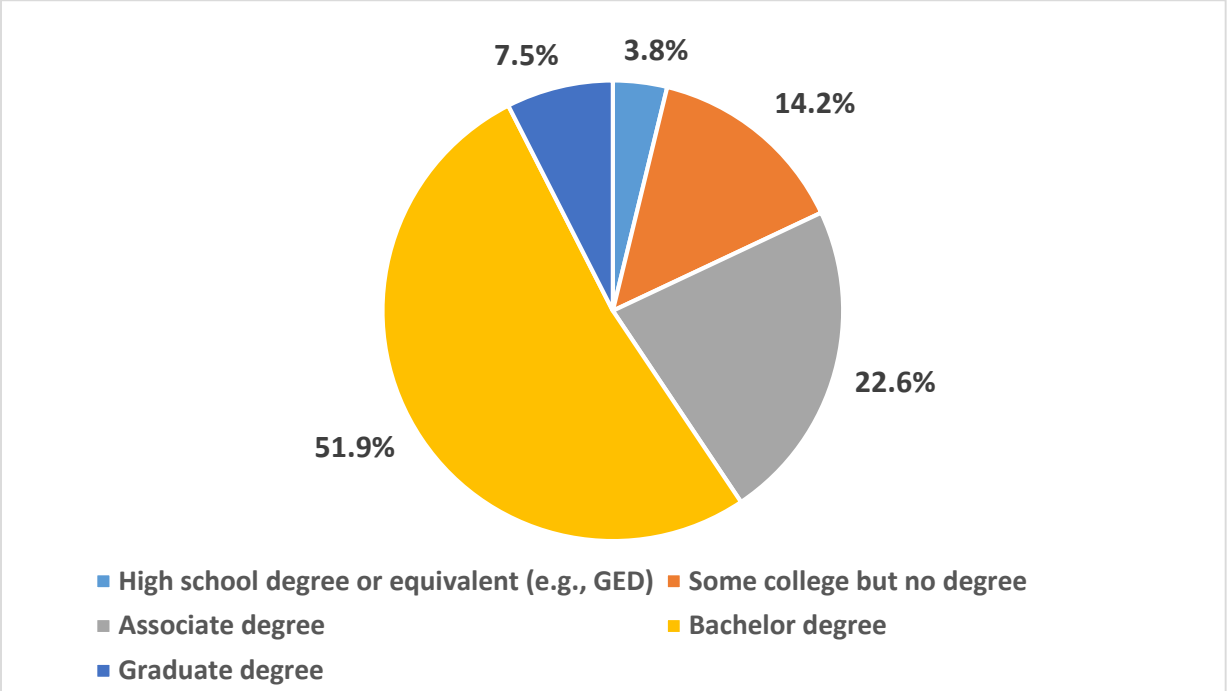


Figure 19
Education Level of Respondents
(n=106)



Summary and Discussion of Survey Findings

1. How generalizable are the results of the survey?

Though the sample was not a probability sample for which a margin of error can be calculated, the stratified non-probability sample of 122 police officers that participated in the survey appears generally comparable to law enforcement officers statewide. There are two issues with the final sample: 1) there was a slightly higher proportion of municipal police officers in the sample (75%) then is the case statewide (66%); and 2) the focus of the survey was on larger jurisdictions -- though participation by troopers at the Vermont State Police, St. Johnsbury Station and the Rutland Station does provide some insight into calls for service in less populated jurisdictions. Otherwise there was a reasonable distribution of respondents in terms of sex, age, education, years of law enforcement experience, and job description. That and the fact that over 90% of officers reported that their survey responses for the 366 cases in the survey are typical of the way they handle mental health cases suggests that we can be reasonably confident that: 1) the survey results accurately depict how law enforcement officers respond to mental health cases and; 2) the results from the survey sample are likely to be comparable to the results we would receive had CRG attempted to draw a statewide random sample.

2. How frequently do police come into contact with people experiencing a mental health crisis?

On average officers respond to calls involving people experiencing mental health issues six to seven times a month, though 30% of officers report handling more than 10 calls a month. This level of response is comparable to levels reported by law enforcement agencies nationwide. Based on national data, CRG estimated that seven to 10 percent of all police interactions in Vermont involve people who are experiencing mental health issues[19]. Over 95% of officers had contact with each of the three types of cases presented in the survey – psychotic/delusional, suicidal, and developmental or cognitive issues.

3. Do officers use the techniques addressed in the Act 80 Training when resolving cases which involve people experiencing mental health issues?

Yes, officers regularly use a variety of the techniques taught in the Act 80 class to help them resolve cases. Typically more than 60% of the techniques taught in the class were utilized by officers in each type of case. Typically law enforcement officers did **not** report using friends, family, or Peer Support Services to help resolve cases. Whether this was because officers determined that those techniques were inappropriate given the circumstances of the case, these types of referrals are the responsibility of the mental health crisis team to make, or because officers need additional training in this area could not be determined. It might be appropriate for the Advisory Group to clarify best practices for utilizing secondary resources to help resolve cases and revise course materials as appropriate.

4. How often do police involve mental health professionals when handling mental health cases?

Except in cases involving subjects exhibiting development/cognitive symptoms, mental health professionals are involved in the resolution of cases 75% - 80% of the time[20] [21]. Developmental Services workers or other clinical professionals are involved in only 38% of cases involving a person exhibiting developmental or cognitive problems.

[19] Cloud, David and Davis, Chelsea. (2015). *First Do No Harm: Advancing Public Health in Policing Practices*. New York, NY: Vera Institute of Justice.

[20] Unfortunately, there were no survey questions which measured whether mental health professionals were involved before, during, or after the police made contact with the subject.

[21] The high frequency with which police participating in the survey involved mental health professionals in their mental health calls may be due to the fact that they have active mental health crisis teams working in their jurisdictions. It is important to note, however, that police in other jurisdictions do not necessarily feel that they have the same level of access to mental health crisis teams and therefore the percentage of mental health calls where mental health professionals are involved is likely to be lower in other jurisdictions.

5. How are cases involving people who are experiencing a mental health crisis typically resolved?

How cases are resolved depends on the nature of the presenting problem – just as it should be. In suicide cases, more than 85% of subjects are evaluated and 62% are hospitalized. In cases involving delusional behavior 70% of subjects undergo a mental health evaluation and 40% are hospitalized. In contrast, only 36% of persons who showed developmental or cognitive problems were evaluated and of those only 12% were hospitalized[22]. Subjects are arrested and taken to the correctional center in only 2% - 8% of cases. At the other end of the continuum police took no action in 52% of cases where the person was exhibiting developmental or cognitive issues, 13% of cases where the subject was experiencing psychotic or delusional behavior, and 5.5% of suicide cases. Given that we don't know the circumstances of these cases it is not advisable to try and evaluate whether or not the outcomes were appropriate. It may be enough to say that officers appear to be handling cases based on what they perceive as the seriousness of the case and tailoring solutions as appropriate.

6. Are police using excessive force to resolve cases where subjects are experiencing mental health issues?

There is probably no issue that adversely affects police-community relations more than excessive use of force – this is particularly the case when the victim is a person who is suffering from a mental illness. In our survey no force was used to resolve matters in 70% of cases where the subject was exhibiting psychotic or delusional behavior, 70% of suicide cases, and 80% of cases where the person was exhibiting developmental or cognitive problems. When force was used it typically involved verbal commands or force involved with handcuffing the subject.

However, of the 366 cases reviewed, pepper spray, Conducted Electrical Weapons (e.g., Tasers™), and firearms were used in 25 of the cases (7.6%). Table 8 presents the details of when weapons were used to resolve mental health incidents by case type and by type of weapon used.

[22] It's important to note that the Vermont mental health commitment statute specifically excludes people with an intellectual disability. There is no comparable commitment procedure for people with an intellectual disability unless they have committed a sex offense and are eligible under ACT 248. Therefore the subjects with an intellectual disability who were hospitalized (12%) were likely to be dual-diagnosis clients who also presented with a major mental illness.

Table 8
Weapons Used to Resolve Mental Health Cases
(n=326 Cases)

Weapon	Psychotic Cases	Suicide Cases	Developmental or Cognitive Cases	Total
Pepper Spray	7	0	1	**8**
Taser Drawn	1	1	0	**2**
Taser Fired	1	0	0	**1**
Firearm Drawn	3	5	0	**8**
Firearm Fired	1	5	0	**6**
Totals	**13**	**11**	**1**	**25**

Given that we do not know the circumstances of the 25 cases where weapons were used it is not possible to try and assess the appropriateness of their use. However, the level of weapon reporting suggests that officers were candid when completing this section of the survey. We could infer that this level of openness on the topic might suggest that police are willing to engage in a discussions around weapons use, a topic which is generally left to departmental policy.

7. Are police knowledgeable about the Warrant for Emergency Examination (WEE) Process?

Only 32% of the officers who responded to the survey had ever applied for a WEE. However responses on this question were not substantially different for those who had applied and those who had not applied for a WEE. Most officers recognized that an officer has the authority to take the subject into temporary custody while pursuing the warrant. Slightly fewer officers knew that only a law enforcement officer or a mental health professional can apply for a WEE. However, two rather critical aspects of the WEE were not readily identified by both officers who had applied and those that hadn't as being true: 1) the officer needs to personally observe the subject's behavior to establish probable cause; and 2) the warrant cannot be used unless certification by a physician is not readily available. In reference to the personal observation requirement, as suggested earlier, there apparently is a discrepancy between the law and Department of Mental Health (DMH) practices regarding the WEE. While the statute (18 V.S.A. §7505) requires that a WEE must be based on the **officer's personal observation**, DMH is accepting WEEs based on the report of a **reliable eyewitness' personal observation**.[23] The discrepancy between the statute and the WEE form is taught in the ACT 80 training. This

[23] The application form for the Warrant for Emergency Examination form (Rev. 5/2015) indicates under the Reason for Application Section, "*State the facts you have gathered, from either (1) your own personal observations, or (2)* ***a reliable report to you by someone who personally observed the proposed patient's behavior****, that lead you to believe that the proposed patient is a person in need of treatment and presents an immediate risk of serious injury to himself or herself or others if not restrained."*

discrepancy may explain in part why some officers answered this question incorrectly. This issue should be resolved and the training revised accordingly.

8. Are police prepared to identify people who could benefit from an emergency intervention from a mental health crisis team?

The majority of police identified serious symptoms (cutting, delusions, teenage chronic trouble, and domestic trauma) as being cases where the subject might benefit from an emergency intervention with a mental health crisis team. They also correctly determined that a woman who was shoplifting to feed her 20 or so cats, a young male wearing a parka in July, an adult who had urinated on himself on the street, or a hyperventilating accident victim were **not** appropriate for an *emergency intervention* from a mental health crisis team.

9. What factors affect the way police handle calls where people are experiencing mental health issues?

The survey responses suggest that officers develop techniques for handling cases where people are experiencing mental health mental issues by utilizing a variety of different sources of information. The most influential factors were the officer's total law enforcement experience, departmental policies, and the overall culture of their department. The instruction from Field Training Officers and the Act 80 Training were reported to be the least influential. With that said, it is important to note that nearly 40% of officers reported that the Act 80 Training was Very Influential or Influential in helping them learn how to handle mental health calls – it's just that training is not as influential as experience. CRG also found that the officer's assessment of the training's influence tends to diminish over time – the more recent graduates reported the training to be more influential than those who had received the training several years ago.

The possible action items evolving from these findings are: 1) if the Advisory Group is committed to advancing progressive police strategies for working with people experiencing mental health crises then they might want to consider initiatives that can influence police department policies and culture in addition to supporting the Act 80 training; and 2) Act 80 refresher courses may serve as a booster for officers who have taken the course more than two years ago.

10. Does the Act 80 Training adequately prepare officers to handle cases where people are experiencing mental health issues?

There are were several questions in the survey asking the police to rate various aspects of their experience with mental health training and their local mental health agencies. In reference to the Act 80 training, on average officers were "Neutral" on the subject of how adequately the Act 80 training prepared them to handle cases where subjects were experiencing mental health

problems. Though 43% of officers Strongly Agreed or Agreed that the Act 80 training adequately prepared them, 41% were Neutral about the adequacy of the training, and 17% Disagreed or Strongly Disagreed that the training was adequate.

In later questions, officers were asked to offer suggestions on how to develop the training and what additional topics officers would like to see included in future training. There are several themes that run through the suggestions offered by officers: 1) most officers (75%) are interested at some level in receiving more mental health training; 2) officers want to hear from people who are living with mental illnesses; 3) officers want the training to be interactive; 4) officers want to learn how to collaborate better with mental health workers; and 5) officers are interested in learning about topics such as Schizophrenia, Bipolar Disorder, PTSD, Multiple Personality Disorder, and Traumatic Brain Injury.

There are challenges involved with interpreting these results for two reasons: 1) the Act 80 training has evolved over the years; and 2) officers took the training at different times – nearly 50% of officers took the course less than two years, 29% from two - five years ago and 21% took the course more than five years ago. As such it is not surprising that many of the suggestions made by officers are now currently in place – either in the Act 80 Training or the Team Two training referred to earlier in the report. The Act 80 training was expanded from six to eight hours in 2009 and now includes sessions with people living with mental illnesses, videos, and addresses all of the mental health disorders requested by officers. The Team Two training is an eight-hour program for law enforcement officers and mental health crisis workers. The course provides an overview of relevant mental health statutes, a refresher on Act 80 Training, and helps law enforcement and mental health crisis workers build the relationships necessary for working together during crises. Team Two appears to address all of the suggestions that officers have made regarding additional training, hearing from people living with mental illness, interactive training, and collaboration with mental health crisis workers.

The Act 80 Group's initial plan for the Act 80 training was to create a basic course which would provide an overview of mental illness and strategies for working with people experiencing a mental health crisis. The course was conceived as baseline training that would be the foundation on which more advanced training could be built in the future. The Act 80 Training is offered to both police trainees in the Officer Basic Training course and to more experienced officers as part of in-service training. The training for both in-service and Basic Training courses is essentially the same, though the discussions with in-service students are different because the level of experience is completely different. Instructors talk more with veteran officers about system problems they face and cases they've dealt with. The VCJTC reported that 1,553 law enforcement officers who are currently certified have received the Act 80 Training. Approximately 450 certified officers (22%) still need to be trained. The VCJTC is planning on offering one Act 80 training session per month until June, 2017 to complete the training of certified officers statewide.

The Team Two training was developed by the Department of Mental Health (DMH) based on a model utilized by Washington County Mental Health which emphasized collaborative working relationships between police and mental health workers. Team Two training is funded by a

grant from DMH and the Department of Public Safety. Vermont Care Partners [24]administers the grant and Washington County Mental Health provides supervision for the Team Two Coordinator. The Coordinator is responsible for scheduling and handling administrative details for the course as well as teaching some sections. The scenarios are facilitated statewide by 38 peer trainers (four to eight peer trainers per region). A recent evaluation of the training by the Vermont Cooperative for Practice Improvement and Innovation concluded, *Team Two training has successfully and effectively provided training and education to … law enforcement and mobile mental health crisis workers statewide.*[25]

Team Two is taught eight times a year in five different regions around the state. Average attendance for a course is 12 officers or approximately 100 officers annually. Team Two's inception was in May, 2013, when the train-the-trainer model was offered in four different regions around the state. The 210 officers trained thus far include 31 officers trained during those train-the-trainer sessions.[26] Based on information from the VCJTC there are approximately 2,000 certified police officers (full and part-time) in Vermont. At the current rate of training it will take an additional *18 years* to provide officers with the Team Two Training. Though there is probably some advantage to having a time lag between the time an officer takes the Act 80 Training and the time they take the Team Two Training, a time lag of several years may not be advantageous.

The combination of the Act 80 Training and the Team Two training appear to complement each other and in so doing provide the training that officers are requesting.

11. How Do Police Officers View Their Local Mental Health Systems?

On average police gave "Neutral" ratings for their local mental health system's responsiveness, cooperation, and effectiveness. Only about 15% of officers gave negative ratings for cooperation and effectiveness. Only 7% thought the mental health system in their area was hostile to police referrals. CRG thinks this is good news regarding the nature of the partnership between police and mental health agencies.

[24] Vermont Care Partners is a Vermont non-profit organization whose mission is to provide statewide leadership for an integrated, high quality system of comprehensive services and supports for people experiencing developmental disabilities, mental health conditions and substance use disorders.

[25] *Team Two Summary and Analysis of Evaluation Data*, Vermont Cooperative for Practice Improvement and Innovation.

[26] The current version of the training, which is training for officers, dispatchers, and developmental and mental health crisis workers, launched in January, 2014 with one session followed by a hiatus for six months until July, 2014. Since July, 2014, 179 officers have been trained.

12. Do Police Officers Perceive a Conflict Between Their Standard Practices and the TACT Approach?

An item of particular interest to the Act 80 Group involves whether officers perceive a conflict between standard police "command and control" techniques and the Act 80 TACT approach. Once again, on average officers were Neutral on this point. However, though the majority of officers do not perceive that there is a conflict, approximately 36% of officers Strongly Agreed or Agreed that there was a conflict. No other issue generated a higher level of opposition or negativity than this question. CRG subsequently did some additional analysis of the 39 officers who thought there was a conflict between the two methods. Those officers tended to give slightly more weight to their law enforcement experience as a factor in shaping the way that they handle mental health calls and were less positive about the responsiveness, effectiveness, and level of cooperation of their local mental health system. However, their ratings of the Act 80 training were similar to officers who did not perceive a conflict and they were only slightly less interested in attending additional mental health training than other officers. It might be that though some officers perceive a conflict in methods, they still find mental health training based on the Act 80 TACT approach to be useful.

Analysis of Law Enforcement Incident Data

Introduction

The second phase of the project was to focus on an analysis of law enforcement incident data from each of the sample sites to determine:

- The frequency of contacts between officers and persons experiencing mental health issues.
- The nature of the contacts between officers and persons experiencing mental health issues.
- The demographic characteristics of persons experiencing mental health issues.
- The outcome of those events.

To address these issues CRG needed to first address three underlying questions: 1) can quantitative data regarding incidents involving persons who are experiencing mental health issues be extracted from Vermont law enforcement agency incident data for research and planning purposes; 2) what is the data quality level of that information; and 3) how can that data be used by law enforcement, mental health workers/agencies and other stakeholders to better understand the nature and circumstances of police contacts with people who are experiencing mental health issues.

In order to answer these questions, CRG utilized existing codes within law enforcement databases to identify cases which involved mental health incidents during the time period July 1, 2014 through June 30, 2015. The sample agencies use two different Computer Aided Dispatch/Records Management Systems (CAD/RMS) – The Vermont Incident-Based Reporting System (VIBRS) and Valcour. For VIBRS, CRG partnered with the Vermont Department of Public Safety to extract data from incident reports that

have an offense code of "MENT" which denotes an encounter with a person experiencing mental health issues. Crystal Reports was the extraction application utilized for VIBRS. For Valcour, CRG partnered with the application developer, CrossWind, to extract data from incidents where the "Mental Health" box was checked on the incident report.

Data Extraction

Based on previous experience working with the VIBRS and Valcour CAD/RMS systems CRG identified the following data fields which could be used for developing research and planning reports regarding incidents involving subject who are experiencing mental health issues:

"Mental Health" Flags

- VIBRS: MENT Offense Code
- Valcour: Mental Health check box

Administrative Data

- Agency name
- Case number
- Responding officer(s)

Time and Location Data

- Incident start date/time
- Street number where the incident occurred
- Street name where the incident occurred
- City and/or zip code where the incident occurred

Case Circumstances Data

- Call type
- Scene/location type
- Suspected use of alcohol or drugs
- Injury
- Level of force

Case Disposition Data

- Incident disposition

Demographic Data for Subjects

- Person involvement/relationship to the case
- Subject Date of Birth (DOB)
- Subject race
- Subject sex

CAD/RMS systems are production data systems. They are designed to assist dispatchers take and dispatch calls, help police officers collect and record information regarding incidents and subjects, and assist investigators to search for information related to crimes and suspects. Production databases are not necessarily designed to handle analytics. As such, it can sometimes be a challenge to extract specific data from production databases for analytical purposes such as research and planning.

Working with Vermont Department of Public Safety and CrossWind, CRG was able to successfully extract all but a few of the fields of interest. CRG was not able to extract relationship data from the VIBRS system and was unable to extract injury data from the Valcour system. CRG was also not able to extract information regarding the level of force used to resolve a case from either system. The implications for research and planning are discussed below.

Data Quality

For purposes of this report the data quality assessment is focused exclusively on the completeness of the data. Trying to determine the accuracy of each data field would require a data quality audit which was beyond the scope of this project. It should also be made clear that the data quality issues identified in this report are not restricted to the agencies who participated in this project. Both authors have been involved in a variety of crime analysis projects which have uniformly pointed out data quality issues with agencies large and small from all regions of the state. The issues which will be discussed below were documented from an analysis of the incident data from five representative sample sites but CRG is convinced that these issues are widespread throughout the state of Vermont.

Mental Health Flags

For the period July 1, 2014 through June 30, 2015, CRG identified a total of 2,519 incidents from the five sample agencies that either contained a "MENT" offense code or the "Mental Health" box was checked on the incident report. During that same time period the five sample agencies responded to a total of 56,389 non-traffic related incidents. Therefore, the percentage of cases involving a person experiencing mental health issues was 4%. This was far less than the estimate of seven to 10% of total calls which was based on the survey responses provided by officers regarding the frequency with which they encountered people who were experiencing mental health problems. Given the low level of reporting CRG concluded that the coding strategy to identify cases involving people experiencing mental health problems was too incomplete to be considered valid and thus precluded a quantitative analysis of the remaining data for this report.

Until law enforcement agencies establish protocols at their agencies which require the entry of mental health flags when officers encounter subjects who are experiencing mental health problems it will not be possible to conduct a valid assessment of: 1) the frequency of contacts between officers and persons experiencing mental health issues; 2) the nature of the contacts between officers and persons experiencing mental health issues; 3) the demographic characteristics of persons experiencing mental health issues; and 4) the outcome of those events.

Administrative Data

Agency Name, Case Number, and Responding Officer(s) data were available for 100% of the cases extracted.

Time and Location Data

Time and date information was available for 100% of the cases. Addressing was generally good. 100% of cases could be mapped to the street level and 82% could be mapped to the exact street address level.

Case Circumstance Data

Call Type: In VIBRS the nature of the call is collected in several ways. The nature of the call as reported to the dispatcher is first recorded in both a text field and a coded field. VIBRS provides complete data with good detail on the nature of the call. All of the cases (n=203) included a "nature of the call" field. Twenty-seven different types of calls were recorded – the most frequently reported call type was "suspicious behavior" (20%). Officers also recorded the nature of the incident upon arrival at the scene (observed code). All cases had observed codes recorded. Twenty-five different observed codes were reported. The observed code is the code that law enforcement officers use to characterize the case – often the most serious offense observed. Approximately 130 cases or 63% were exclusively MENT cases. Seventy-five cases (37%) had additional offense codes attached to the case. The most frequently occurring additional offenses to MENT were juvenile problems, disorderly conduct, and other types of disputes.

Valcour uses a "call type" field to designate the nature of the case. All cases (n=2,316) contained a call type. Eighty-three different call types were noted – 31% were characterized as "Mental Health Issues." In 69% of the cases involving people who were experiencing mental health issues the cases were also characterized as involving criminal or quality of life issues including trespass (7%), intoxication (6%), threats/harassment (5%), disturbances (5%), and other miscellaneous minor criminal offenses and quality of life issues.

Location: The type of location for incidents (e.g., residence, roadway, retail store etc.) was recorded in 100% of VIBRS cases but in only 10% of Valcour cases. In Valcour it appears that location and other circumstance codes are only recorded for incidents that are reported to the National Incident-Based Report System (NIBRS). NIBRS is part of the FBI's Uniform Crime Reporting system and is based on reported crimes, not quality of life issues. Since a substantial percentage of calls involving people experiencing mental health problems do not constitute crimes, much of this data is missing for agencies using the Valcour system.

Suspected alcohol and/or drug use: Both systems afford officers with the opportunity to enter data regarding whether the subject was suspected of using drugs or alcohol. In VIBRS only 4% of cases indicated the subject was suspected of using alcohol and 1% were suspected of using drugs. In Valcour officers indicated that in 21% of cases the subject was suspected of using alcohol and 5% were suspected of using drugs. Though there is no way to verify the validity of this data without referring to the case report, the data from VIBRS seems significantly

underreported in light of other national findings. [27] The Valcour data, however, is reasonably consistent with some national findings.

Injury: In reference to data regarding injuries, no data was recorded from either system. In VIBRS officers can indicate that there was an injury or death associated with the case. None of the cases extracted from VIBRS included injury data. CrossWind reported that injury information is contained in incident reports but the company was unable to accurately extract the data at this time. The problem lies with correctly attributing the injury to the person who was injured in cases where multiple individuals are related to the case. CrossWind reports that this issue will be remedied in the near future.

Levels of Force: The level of force which was used to resolve a case is not available from either VIBRS or Valcour systems. Some departments do require officers to complete a paper form when force is used in a case but that data is not part of VIBRS. Valcour has established an automated form for reporting force but the form is not currently widely used and therefore was not provided in the extract.

Case Disposition

The disposition data in VIBRS is limited. In actuality the disposition data that is available is more like a clearance code than a statement of how the case was resolved. Ninety-five percent of VIBRS cases involving persons experiencing mental health issues were listed as "Completed." The remainder were either "Active" or "Cleared by Arrest" or "Exceptional Clearance." An additional field in VIBRS entitled "Judicial Status Description" provides a bit more detail on the outcome of the case. Forty-five percent of cases were coded as "Computer Entry Only," and 26% were coded as "Non-criminal Incidents." Other cases were listed as "Pending Submission to Prosecutor, "Adjudication Completed," and "Filed, Pending Adjudication. Twenty-one percent of cases were missing a "Judicial Status Description code."

Valcour disposition data is similar. The majority of cases were coded "Inactive-No Arrest (79%)." Approximately 8% were coded "Arrest-Prosecution," and 6% were coded "Closed-not active." Six percent of dispositions were missing.

Demographic Data for Subjects

Oftentimes there are multiple people associated with an incident. For example, there could be a Caller or Complainant, a Victim, an Arrestee, a Person of Interest (POI) etc. Demographic information (age, sex, and race) regarding each individual is associated with the case based on the person's relationship to the case – there is demographic information for the Caller, demographic information for the Victim and so forth. CRG encountered two problems with the extraction of this data: 1) the availability of the data; and 2) attribution of the data.

Availability of Demographic Data: In the VIBRS system demographic data is based on a person's involvement/relationship to the case. Unfortunately this data is stored in a backend

[27] Dorsey, Tina L. and Middleton, Priscilla. (2010). *Drugs and Crime Facts*. Washington, DC: U.S. Department of Justice. http://www.bjs.gov/content/pub/pdf/dcf.pdf.

table on a legacy server at the Department of Public Safety which causes lag issues when trying to query that table. That problem coupled with conducting data queries remotely made it nearly impossible for CRG to extract any demographic data from the involvement/relationship table without crashing the extract application. As a proof of concept CRG was able to extract involvement data for one day. However, CRG was able to obtain demographic information for complainants by querying a different table. Age information was available for 67% of complainants, sex was available for 64%, and race was available for 58%. In Valcour, CRG was able to extract demographic data for callers, victims, persons of interest, and arrestee. Age, sex, and race information were available for 100% of arrestees and approximately 99% of persons of interest. Demographic data for callers was available in approximately 65% of cases. For victims, age information was available for 53% of subjects, sex for 54%, and race for 76%.

Attribution of Demographic Data: Though CRG was able to extract demographic data from cases associated with people experiencing mental health problems we were not able to determine whether the demographic information that was available referred to the person experiencing the mental health crisis or to someone else associated with the case. Was the person experiencing the mental health problems, the caller, a victim, a person of interest, or possibly the subject who was arrested? Theoretically, the person experiencing the mental health problem could be associated with the case in any of those ways. About 27% of cases had one person associated with the case, 39% had two associations, 22% had three associations, and 12% had more than three people associated with the case. "Callers" and "Person of Interest" constituted the most frequently occurring associations.

Data entry conventions suggests that the person who was experiencing the mental health crisis would likely be characterized as a "Person of Interest." Approximately 66% of records contained a Person of Interest. As such demographic analysis could be conducted on at least 66% of cases, perhaps more if involvements were cross-tabulated by call type.

How to Use the Data

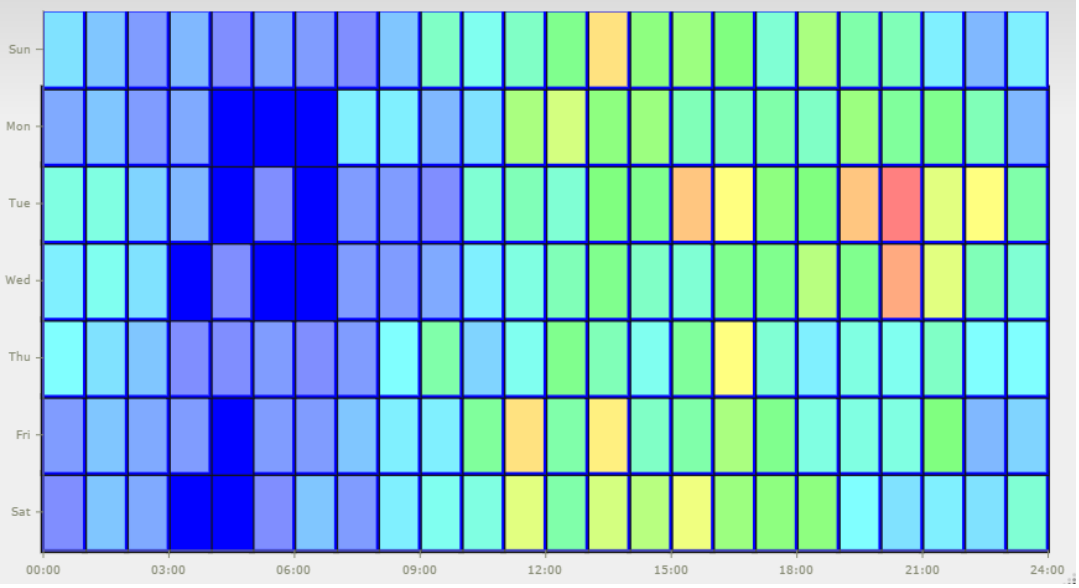
Administrative Data

Data regarding agency, case number, and responding officer are useful for determining the volume and location of incidents involving people experiencing mental health problems. When looking at the distribution of cases in a statewide study it is useful for resource planning and mental health crisis team planning to be able to determine where cases are most frequently occurring. Having case numbers available allows researchers and stakeholders to drill down to obtain detailed narrative information regarding significant cases. Information regarding the names of police officers who respond to cases informs us of how many officers are typically dispatched to cases, helps identify the level of experience that specific offers have in handling cases involving people experiencing mental health issues, and promotes accountability.

Time and Location Data

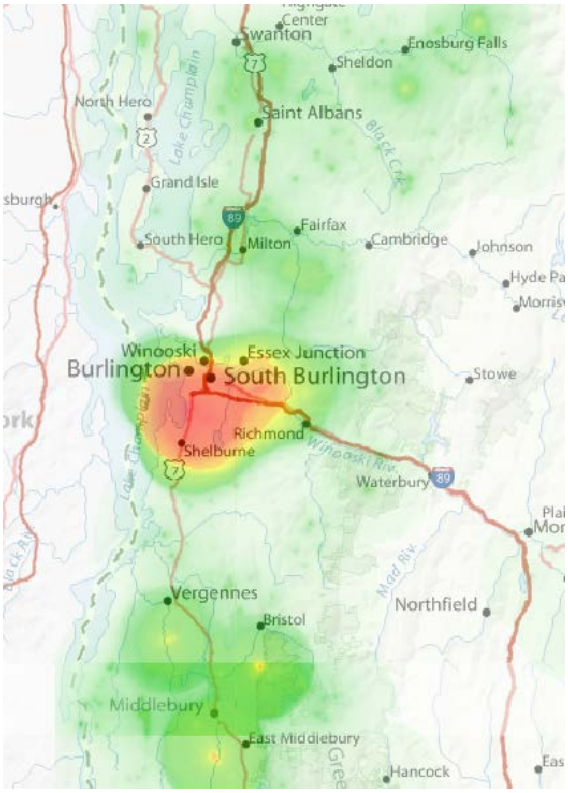
Information regarding the time and day when incidents involving people experiencing mental health issues provides a useful tool for resource planning. Figure 20 below depicts an example of a "Heat Chart." Days of the week are listed on the right and the times of the day are listed on the bottom of the chart. Each cell in the chart represents the number of incidents that occurred during that day and time. The cells are color coded to correspond to the volume of calls – as the volume of calls increases the cell color changes from shades of blue to shades of red. In this way law enforcement and mental health agencies can identify peak times when officers and mobile crisis teams can expect calls involving people experiencing mental health problems. This information is helpful for planning proper staffing levels and shift strength.

Figure 20
Sample Heat Chart



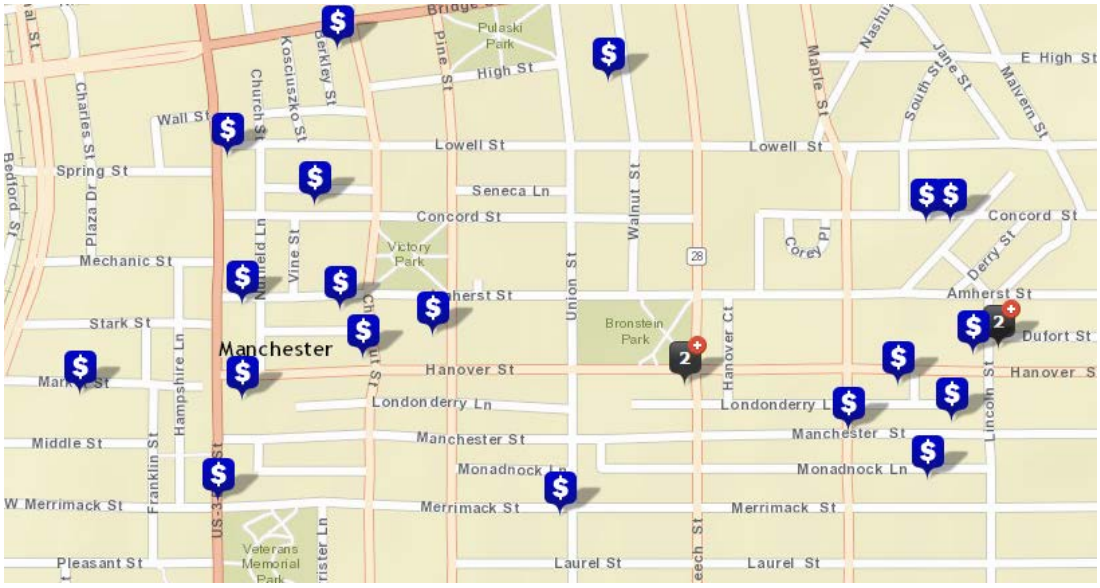
Place-based analysis is a crucial reporting tool to assist law enforcement, mental health agencies, planners, and other stakeholders to identify locations where incidents involving people experiencing mental health crises are occurring. Figure 21 below is an example of a "Hotspot Map" which identifies locations where cases are disproportionately occurring. As the number of incidents increases, the color-coding on the map increases from green to red. In the hypothetical map in Figure 21 the highest concentration of incidents would be in the Burlington, South Burlington, Winooski, Essex Junction, and Shelburne areas. Hotspot mapping can be used to assist planners identify areas in the state, county, or city where resources are most needed.

Figure 21
Hypothetical Hotspot Map



Mapping can also be used by local jurisdictions to help identify the locations where incidents involving people experiencing mental health issues are occurring. Figure 22 is a sample incident map for the city of Manchester, NH. In this map a "$" indicates the location of a theft. For the purposes of mental health planning the map could indicate the location of incidents involving persons experiencing mental health issues.

Figure 22
Sample Incident Map



Police often run from incident to incident during the course of a day. When different officers on different shifts, over a period of time respond to calls at the same address, police in larger jurisdictions may not realize that the address is generating a disproportionately high number of calls. Data-driven policing strategies suggest that it is important to identify addresses which generate high numbers of calls, determine why those locations are "hotspots," and develop and implement strategies to help individuals at those locations resolve issues. Those strategies frequently involve partnerships between police, mental health agencies, social service agencies, and schools working together to resolve problems. Figure 23 is a hypothetical Repeat Incident Report for calls flagged as MENT for a two month period. When the incident data is presented in this matter it is easy to identify locations which might benefit from a coordinated intervention.

Figure 23
Hypothetical Repeat Incident Report

MENT REPEAT INCIDENT REPORT
Date of Report: March 1 – April 30, 2015

123 Main Street					
Date	**Time**	**Call Type**	**Case #**	**Officer**	**Disposition**
03/01/2015	1300	Disorderly	2015DD00012	Cleary	Warning
03/05/2015	2000	Noise	2015DD0034	Boxer	Warning
03/10/2015	0400	Suicide Attempt	2015DD0220	Etienne	Transport to ER
03/20/2015	1500	Citizen Dispute	2015DD0540	Johnson	Citation
03/25/2015	2200	Domestic	2015DD0640	Schultz	Warning
66 Elm Street					
Date	**Time**	**Call Type**	**Case #**	**Officer**	**Disposition**
03/11/2015	0815	Suspicious Person	2015DD0230	Waiter	Closed
04/05/2015	1715	Quarrel	2015DD0844	Turner	Warning
04/15/2015	0215	Theft	2015DD1220	Totten	Closed
2 Taylor Blvd					
Date	**Time**	**Call Type**	**Case #**	**Officer**	**Disposition**
04/03/2015	1012	Animal Complaint	2015DD0750	Boxer	Warning
04/10/2015	1645	Juvenile Problem	2015DD0950	Nordstrom	Closed
04/12/2015	1210	Suspicious Person	2015DD0960	Colbert	Closed
04/17/2015	2000	Animal Complaint	2015DD1012	Cleary	Citation
04/25/2015	0300	Noise	2015DD1450	Schultz	Arrest

Case Circumstances Date

Circumstance data from the incident helps stakeholders to better understand the details of cases involving persons experieincing mental health problems. Call type data is crucial to understandng the nature of the call. Of particular importance is whether the call is essentially characterized as one where assistance is being rendered to a person experiencing a mental health crisis or whether additional issues are involved including criminal activity or quality of life disturbances. The location type where an incident occurs is a valuable tool for informing Act 80 and Team Two training. Incidents involving a mental health crisis which occur on the street may call for different intervention strateiges then those occuring in a residence, a bar, or a convenience store. Information regarding the percentage of people experiencing mental health problems who are also suspecected of being under the influence of drugs or alchohol is a useful indicator of the number of subjects who might have co-occuring disorders. Information regarding suspected alcohol and drug use is also important information for shaping the content of mental health training for officers and mental health workers.

Injury data for the subject experiencing the mental health crisis, the officer(s) involved with the case, or others associated with the case provides useful information regarding violence and/or force involved in MENT cases. Injury information is important for helping to craft appropriate training materials but is

also useful for calculating cost data when looking at the cost-benefit analysis for evaluating different strategies for intervening in cases involving persons who are experiencing a mental health crisis.

Use of force in cases involving people experiencing mental health issues is a key issue for law enforcement, mental health workers/agencies, mental health advocates, other stakeholders, and the public. Having accurate and complete statewide data regarding the use of force coupled with the other circumstance data associated with the case moves the discussion from the realm of anectodes and tragic headlines to a data-driven discussion of the issues. By using the datasets recommended in this report an objective analysis of force can be made based on geography, agency, officer, temporal factors, circumstances of the case, and the demographcis of the subject experiencing the mental health crisis. This type of analysis will more fully inform policy and training programs.

Case Disposition Data
Though case disposition data from VIBRS and Valcour is less descriptive than what we might want, the data is valuable for determining the extent to which cases involving people experiencing mental health issues are handled informally by law enforcement versus result in arrest and/or prosecution. This information is valuable for helping to evaluate the effectiveness of current practices and to develop data for cost-benefit analysis.

Demographic Data
Analysis of demographic data puts a face on the people involved in MENT cases. Though some additional work will need to be done on how to link demographic data to the correct person in cases where multiple people are involved in these cases, the benefits of this type of analysis are significant for police, mental health, and other stakeholders. Being able to accurately depict the age, sex, and race of subjects involved with the case helps to tailor training for officers in strategies which are appropriate for the needs of the people involved. A demographic analysis of the people who are experiencing the mental health problems can help planners target prevention and treatment programs.

Summary and Discussion of the Analysis of Law Enforcement Incident Data

1. Can quantitative data regarding incidents involving persons who are experiencing mental health issues be extracted from Vermont law enforcement agency incident data for research and planning purposes?

CRG was able to extract a sufficient number relevant data fields from both VIBRS and Valcour to conduct a robust analysis of police encounters with people experiencing mental health issues. However, there were some problems with the extraction process. CRG was not able to extract injury data from the Valcour system and information regarding the level of force used to resolve a case from either system. Valcour is currently in the process of correcting both of those issues. VIBRS needs to consider reminding law enforcement agencies regarding the importance of including injury data in their reports and automating their level of force reporting form -- possibly integrating it with the Vermont Justice Information Sharing System (VJISS). Finally, CRG was unable to extract relationship/involvement data from the VIBRS system. Since nearly 75%

of cases which involve people experiencing mental health problems involve more than one person, it is important to be able to access demographic information for each of the participants as can presently be done in the Valcour system. The Department of Public Safety needs to develop a strategy such that researchers can electronically access relationship/involvement data via remote extraction applications such as Crystal Reports.

2. What was the data quality level of the information that was extracted for this project?

The completeness of data varied by field and between systems. Though the level of completeness for administrative, time, and address data was excellent in both the VIBRS and Valcour systems, the flagging of cases which involved people experiencing mental health issues was so incomplete that it precluded including a quantitative analysis of the data for this report. Data completeness was excellent for information regarding the nature of the call, case dispositions, and demographic information for subjects associated with the call. Information related to the circumstances of the case were uneven. VIBRS agencies had location type information available for 100% of their cases while the same data was available only 10% of the time for Valcour agencies. Information regarding suspected alcohol or drug use was substantially underreported by VIBRS agencies but the Valcour data was reasonably consistent with some national findings. The level of force which was used to resolve a case is not currently available from either VIBRS or Valcour systems. The research identified a need to develop a strategy for correctly matching demographic information with the correct subject when the case involves multiple subjects, a situation which occurred in approximately 75% of the MENT cases extracted as part of this project.

Typically a commitment to data quality is associated with the value of the data. We at CRG hope that law enforcement agencies see this report, which is devoid of quantitative analysis, as an example of the repercussions that missing data has for data-driven policing. The funding was available, the technology was successfully deployed, but no substantive findings could be reported due to data quality issues – clearly a missed opportunity for people experiencing mental health problems, law enforcement, mental health workers, and other stakeholders.

3. How can data extracted from MENT cases be used by law enforcement, mental health workers /agencies, and other stakeholders to better understand the nature and circumstances of police contacts with people who are experiencing mental health problems?

All of the data collected for this project lend themselves to a variety of reporting strategies designed to facilitate data-driven approaches to better understand the nature of police interaction with people who are experiencing mental health crises. CRG recommends that law enforcement and mental health agencies consider using appropriate incident analysis techniques including Heat Charts, Hotspot Maps, Incident Maps, and Repeat Incident Reports to graphically display the distribution of incidents involving people experiencing mental health problems in their community, county, and statewide. CRG also recommends that stakeholders utilize administrative data, case circumstance data, disposition information, and demographic

data to provide evidence-based analysis to support Act 80 and Team Two training curriculum, resource allocation, and the development and advancement of effective strategies to assist people experiencing mental health problems while keeping the police and the public safe.

MAJOR CONCLUSIONS AND RECOMMENDATIONS

1. This evaluation suggests that the Act 80 training, as a basic mental health curriculum for law enforcement, is satisfactorily viewed by police and has positively influenced the way they handle cases involving people who are experiencing mental health issues. As such, the Act 80 training should continue to be taught because it has promoted effective law enforcement strategies and is a foundation for the also important Team Two training. With that said CRG recommends consideration of the following strategies to further develop both training courses:

    1.1 The Act 80 Group consider reviewing the Act 80 curriculum to determine whether materials can be revised or eliminated in order to provide more dynamic training that involves mental health concepts and best practices in scenario-based exercises. If the VCJTC is to revise the training in this direction, additional resources will probably be required for the VCJTC to meet that goal.

    1.2 Increase funding for Team Two Training such that training can be increased from eight to 10 or more sessions annually. This will expedite delivering advanced mental health training to as many officers as possible.

    1.3 Team Two Training needs to consider creative training schedules to facilitate attendance by police. Perhaps evening training sessions (2:00 P.M. to 10:00 P.M.) or night training (4:00 PM to Midnight) could be offered to facilitate attendance.

    1.4 Police Departments need to have additional financial resources to assist them to increase the number of officers they send to both the Act 80 and Team Two Trainings.

2. The police agencies included in this study routinely involved mental health professionals in their calls involving persons experiencing mental health issues. Police appear satisfied with the responsiveness, cooperation, and effectiveness of their local mental health systems.

3. Police officers appear to use a continuum of options to resolve cases involving people experiencing mental health issues.

4. Force was used by police in less than 30% of cases involving people experiencing mental health issues. When force was used it typically involved verbal commands or force involved with handcuffing the subject. Pepper spray, Conducted Electrical Weapons (e.g., Tasers™), and firearms were used in 7.6% of the cases reviewed for this report.

5. In order for evidence-based mental health planning and training to occur, law enforcement agencies statewide need to begin a statewide initiative to increase the commitment to data quality. At a minimum, law enforcement agencies need to develop data entry protocols which direct officers to properly flag cases which involve persons who are experiencing a mental health crisis. Further, law enforcement agencies statewide will need to improve their efforts to enter all relevant codes describing the circumstances of cases. CRG recommends that the Act 80 Advisory Group consider adding a short unit in the Act 80 Training which explains to officers: 1) the value of evidence-based planning and research; 2) the need to correctly flag incidents involving people experiencing mental health issues; and 3) the importance of entering all relevant circumstance codes when completing their reports.