Objective: This study explored whether a crisis intervention team (CIT) promotes public safety and diversion from jail to treatment. Methods: Police reports (N=655) were analyzed for CIT events that occurred between March 2003 and May 2005 to determine each subject’s potential for violence to self or others. Results: Some 45% of CIT events involved suicide crises, 26% involved a threat to others, and average violence potential ratings suggested minor to moderate risk. Officers’ use of force related strongly to violence potential (eta of .54). Nevertheless, officers used force in only 15% of 189 events posing serious to extreme risk of violence and used low-lethality methods. Of events, 74% were resolved through hospitalization, whereas only 4% were resolved through arrest. Conclusions: Although the study lacked a comparison group, the results are consistent with some studies suggesting that CIT holds promise in meeting safety and jail diversion goals. (Psychiatric Services 59:201–204, 2008)

When individuals with mental illness are involved in an emergency situation or public disturbance, police officers often are called to intervene. In fact, police contacts, arrests, and “other encounters with the legal system are regular occurrences” (1) for many of these individuals. These police contacts can be problematic. Although police may initiate psychiatric hospitalization for those who pose a danger to themselves or others, they do so relatively rarely (2). In fact, observation of 506 relevant encounters indicated that police were 67% more likely to arrest an individual with mental illness than his or her healthy counterpart (3). Police who do not recognize irrational speech, an inability to obey commands, and other symptoms of mental illness may respond punitively to such aberrant behavior. Occasionally, these encounters result in injury or death for individuals with mental illness and well-publicized outcries over the police’s use of force.

Some of these incidents have prompted jurisdictions to adopt specialty police programs for individuals with mental illness. One widely adopted (4) program is the crisis intervention team (CIT) (5), which involves two main components. The first is a team of selected volunteer police officers who complete 40 hours of training throughout the city, around the clock, to respond to relevant calls. The second component is a psychiatric emergency room that responds immediately to individuals transported by CIT officers, reducing the bureaucracy and hours of waiting that can lead officers to choose arrest over hospitalization.

Enthusiasm for the CIT model is based partially on a handful of nonexperimental studies suggesting that the approach increases safety during officer encounters with persons under investigation and might divert appropriate cases from jail to treatment. With respect to the latter point, three studies suggest that CIT links persons with treatment but may not reduce their likelihood of arrest. First, a comparison of 100 calls handled by three jail diversion programs indicated that CIT had the lowest rate of arrest (2%) and the highest rate of transportation to treatment services (75%) (6). Second, a one-year follow-up of over 1,000 jail detainees who were or were not enrolled in jail diversion programs, including CIT (7), indicated that the diverted sample was more likely to receive medication and counseling; less likely to receive emergency and inpatient services, but no more likely to improve in symptoms or arrest rates. Third, a pre-post analysis of CIT (8) indicated that, compared with officers without CIT training, CIT-trained officers were more likely to transport individuals to treatment but no less likely to arrest them.

Although even fewer studies address the primary CIT goal of increasing safety, the results are promising. A comparison of the three years before and after CIT was adopted in Memphis indicated decreases in officer injuries for mental health–related calls (from .04 to .01 per 1,000) (5).

Such findings are often interpreted as evidence that CIT-trained officers effectively defuse situations that might lead to the use of force on individuals with mental illness. After all, CIT emphasizes verbal deescalation for han-
dling potential violence. Nevertheless, extant designs cannot rule out the possibility that officers simply encountered fewer dangerous mental health calls over time. This study is the first to assess the risk of violence to self or others posed by these situations and examine officers’ use of force in light of that risk. Are CIT officers able to respond to dangerous situations with relatively little use of force?

This study focused on incident reports for events handled by approximately 200 CIT-trained officers in Las Vegas. This program modified the Memphis model in one major respect: the crisis triage center could not function as a drop-off site for officers at the time of this study. Although officers collaborated closely with local hospitals and ambulance providers to ensure a pipeline to services, this study was an evaluation of CIT training rather than the full model with an emergency center.

This study explored the extent to which this program meets its goals of promoting safety and appropriate jail diversion. Its aims were to assess the nature of events to which CIT officers were called to respond, including a person’s potential for violence; estimate the quality of CIT officers’ skills in defusing crises by comparing an individual’s potential for violence with officers’ use of force; and examine the frequency of dispositions that involved treatment versus arrest.

**Methods**

These aims were addressed via analysis of after-action reports (AARs) for events handled by the CIT team. In keeping with police practice, we use the term “subjects” to refer to participants who were the subjects of police response and investigation. After each event, CIT officers completed an AAR comprising an event narrative and form fields that captured the call type, subjects’ characteristics, police use of force, and event resolution. When officers could not gather reliable information through direct observation or conversation with others on the scene (such as family and friends), they recorded “unknown” for that form field (which included call type and the subject’s characteristics).

Participants were subjects associated with 655 AARs completed between March 2003 and May 2005. A minority of subjects (N=26) were associated with two or more crisis events.

We briefly describe the key variables. [A detailed description of the measures used in this study is available as a supplement to this brief report at ps.psychiatryonline.org.] First, form fields directly from the officers’ reports were used to code several variables. Officers coded whether a subject had a known mental disorder diagnosed by a mental health professional or was actively hallucinating or delusional at the scene. Analyses below compare those with and without a known mental disorder or current psychosis. Officers coded whether the subject was currently prescribed psychotropic medication, was intoxicated, was threatening or attempting suicide, or was physically threatening others or the police. Officers also recorded whether police used physical force to control the subject. If so, the type of force was coded on an ordinal scale (hands on, arm lock, handcuffs, pepper spray, Taser, or low-lethality gunshot with beanbags). Moreover, any injury to the subject or others as a result of use of force was coded as minor (such as bruises), major (such as broken bones), or death. Finally, officers coded whether and by whom the subject was transported and how the event was resolved (through involuntary hospital commitment, voluntary hospital commitment, arrest, treatment referral, or other on-site resolution).

Second, independent raters reviewed the narrative and form fields of AARs to code the event’s violence potential on a 6-point scale (none—0, slight, minor, moderate, serious, and extreme—5). They relied on a coding manual based on a review of AARs, indicators of subject resistance (9), and risk factors for violence and suicide (10,11). Violence potential was inferred from descriptions of the subject’s behavior (such as threats), state of mind (such as intoxication), and access to weapons. The rate of agreement between the first author and a police officer who independently rated 30 AARs for violence potential was excellent (intraclass correlation coefficient of .94). This study was approved by a university institutional review board.

**Results**

First, we describe the subjects, calls, and violence potential associated with CIT events. Subjects were predominantly white (485 subjects, or 74%), followed by black (124 subjects, or 19%) and Hispanic subjects (46 subjects, or 7%). Most subjects were male (400 subjects, or 61%). The mean±SD age was 36±16. Of the 598 events for which this information was coded, a majority (383 events, or 64%) involved persons with a known mental disorder. Of these, 375 subjects (98%) were known to have a formally diagnosed mental disorder. The main diagnoses were bipolar disorder, among 105 subjects (28%); depression, among 75 (20%); and schizophrenia or schizoaffective disorders, among 72 (19%); psychosis was manifested on the scene by eight subjects (2%).

Subjects with a known mental disorder (272 subjects, or 71%) were more likely to be prescribed psychotropic medication than those without a known disorder (13 subjects, or 6%; N=569, χ²=217.27, df=1, p<.001). Of all subjects prescribed medication, a majority (177 subjects, or 62%) were noncompliant with medication. Those with a known mental disorder were more likely to be intoxicated at the scene (234 subjects, or 61%) than those without (82 subjects, or 38%; N=598, χ²=6.85, df=1, p<.001).

Nearly half of all CIT calls (295 of 655 calls, or 45%) were for suicide threats or attempts. The most common suicide plans and methods involved knives or edged weapons (106 incidents, or 30%), overdose (45 calls, or 15%), and firearms (35 calls, or 12%). The second most frequent call type involved family disturbances (98 calls, or 15%).

The subject posed a threat to others (128 calls) or police (39 calls) in 25% of events. Threats typically involved physical force (71 incidents, or 43%), firearms (48 incidents, or 29%), or edged weapons (two incidents, or 1%).

Across the 595 CIT events that provided sufficient information for coding, average violence potential ratings suggested minor to moderate risk (M=2.5±1.7). As shown in Table 1, potential for violence was evenly distributed, and subjects with a known mental disorder obtained lower ratings than...
those without a disorder (Kolmogorov-Smirnov z=1.54, df=5, p<.01). Second, having described CIT events, we analyzed the relation between events’ violence potential and CIT officers’ use of force. Overall, CIT officers used force in only 39 (6%) events. Of events in which force was used, only two (5%) resulted in injury to the subject (both were minor), three (8%) in injury to police (two were minor), and five (13%) in injury to someone else (three were minor). Of 36 events in which force was used and the type was coded, a majority involved hands-on or arm-lock force; Taser, handcuffs, low-lethality gunshot, and pepper spray were used less often (Table 2). A SWAT unit rarely was activated for these calls (seven calls, or 1%).

Correlations were computed to assess the relation between violence potential and use of force (that is, any type of force and any degree of force). First, as an event’s violence potential increased, officers were more likely to use some form of force ($\eta^2=.29$, p<.001). Nevertheless, even for the 189 events that posed from serious to extreme potential for violence, CIT officers used force in only 28 (15%). Second, an event’s violence potential was strongly related to the severity of force that CIT officers used ($\eta^2=.54$, p<.001). CIT officers used force conservatively, both in absolute and relative terms. As shown in Table 2, force was limited to physical force and handcuffs for all events involving minor to serious potential for violence, and for 42% of events involving extreme violence potential. Of the remaining events posing extreme risk of violence, the most common type of force used was Taser.

Third, we assessed how these events were resolved. The most common event disposition involved hospitalization (485 events, or 74%). Of hospitalizations, a relatively high number (344 hospitalizations, or 71%) were involuntary commitments. Remaining dispositions included on-site resolution (25 dispositions, or 18%), arrest (six dispositions, or 4%), and treatment referral (six dispositions, or 4%). Dispositions did not differ significantly as a function of known mental disorder. Transportation to the hospital typically was provided by ambulance (373 events, or 77%, versus by CIT officers, for 34 events, or 7%).

**Discussion**

This study produced three chief findings. First, CIT officers often responded to crises in which persons with mental illness posed a risk of violence to themselves or others. Second, the degree of force officers used related strongly to the subject’s potential for violence. Nevertheless, CIT officers used force conservatively, even with subjects who posed an extreme risk of violence. Third, officers resolved most events through hospitalization. Subjects rarely were arrested. Here, we note the study’s strengths and weaknesses before discussing each of these findings.

This study was the first to explore the extent to which CIT officers are able to defuse dangerous crises without resorting to force. Subjects’ potential for violence to themselves and others was reliably rated for over 600 events. Despite these strengths, this study has two important limitations. Because the study did not include a control group, it cannot indicate whether CIT officers responded to potentially dangerous events with less force than traditional officers. Also, the study relied on CIT officers’ AARs, which are subject to possible reporting bias. Future quasi-experimental, observational studies are needed to test directly whether CIT officers use verbal deescalation strategies to defuse

**Table 1**

<table>
<thead>
<tr>
<th>Potential</th>
<th>No known disorder (N=206)</th>
<th>Known disorder (N=360)</th>
<th>Total (N=566)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>41 (20)</td>
<td>72 (9)</td>
<td>113 (20)</td>
</tr>
<tr>
<td>Light</td>
<td>21 (10)</td>
<td>31 (24)</td>
<td>52 (9)</td>
</tr>
<tr>
<td>Minor</td>
<td>29 (14)</td>
<td>88 (21)</td>
<td>117 (24)</td>
</tr>
<tr>
<td>Moderate</td>
<td>33 (16)</td>
<td>74 (16)</td>
<td>107 (19)</td>
</tr>
<tr>
<td>Serious</td>
<td>45 (22)</td>
<td>59 (10)</td>
<td>104 (18)</td>
</tr>
<tr>
<td>Extreme</td>
<td>37 (18)</td>
<td>36 (21)</td>
<td>73 (13)</td>
</tr>
</tbody>
</table>

**Table 2**

Association between events’ violence potential and officers’ intensity of force between March 2003 and May 2005

<table>
<thead>
<tr>
<th>Potential</th>
<th>Hands on (N=20)</th>
<th>Arm lock (N=1)</th>
<th>Handcuffs (N=4)</th>
<th>Pepper spray (N=1)</th>
<th>Taser (N=7)</th>
<th>Low lethality (N=3)</th>
<th>Total (N=36)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minor</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Moderate</td>
<td>3</td>
<td>15</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Serious</td>
<td>8</td>
<td>40</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>11</td>
</tr>
<tr>
<td>Extreme</td>
<td>8</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>31</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>100</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>36</td>
</tr>
</tbody>
</table>
dangerous situations.

Our first finding was that the 655 events to which these CIT officers responded were typically psychiatric emergencies. In these events, subjects often threatened to harm themselves or others and, on average, presented a minor to moderate risk of violence. The frequency of such threats and the level of risk are not surprising, given that most subjects had a diagnosis of a mental disorder and that mental disorder is a relatively strong risk factor for suicide attempts and self-harm (11). Our results suggest that, although one subject died by suicide before officers arrived on the scene, CIT officers successfully controlled 207 suicide threats and 85 suicide attempts over a two-year period.

Relative to those with no known mental disorder, subjects with a known mental disorder were rated as less potentially violent. Nevertheless, most subjects with a known mental disorder were intoxicated and most subjects who were prescribed medication were noncompliant, and both of these features have been linked with violence toward others (13) in samples with psychiatric problems. Nevertheless, our results suggest that, although one subject, two police officers, and eight others were injured on the scene, CIT officers controlled an additional 157 threats to others without injury over a two-year period.

Our second finding references the extent to which CIT met its goal of protecting subjects’ safety. Calls involving threats to self or others differed in their violence potential. We found that CIT officers were more likely to use force, and to use higher-intensity force, as subjects’ violence potential increased. Nevertheless, even in 189 cases posing serious to extreme risk of violence, officers used force in only 28 (15%) events and relied chiefly on physical force and Tasers.

CIT officers used physical force in only 39 (6%) of all events. Given that these events typically were resolved via involuntary hospitalization, it is useful to compare this rate for CIT officers with that of traditional officers for cases resolved via arrest. In a study of over 7,500 arrests of adults (14), police used physical force in 17% of events. This comparison is indirect and imperfect, as it examines use of force where the endpoint is involuntary hospitalization versus arrest. Nevertheless, it suggests that CIT officers might rely on strategies other than physical force to deescalate crisis events more often than traditional officers.

Use of force by CIT officers in this study also injured suspects less often (two injuries, or 6%) than use of force by traditional officers in 110 agencies (38%) (15). The study’s third finding references the extent to which CIT met its jail diversion goal. In this study, CIT officers resolved most of the incidents through hospitalization and rarely resorted to arrest. These rates are comparable with those found in other studies of CIT (5,6,8). Moreover, the program’s arrest rate is four times lower than that found in a study of traditional officers’ response to calls involving persons with mental illness (14%) (2).

This CIT program relies heavily on the active cooperation of other services. In contrast with other studies (6), ambulances, rather than CIT officers, typically transported individuals to hospitals. Las Vegas lacked an emergency center with a no-refusal policy, which necessitated active collaboration with other agencies.

Conclusions
Even when CIT officers responded to calls involving extreme potential for violence, they used force infrequently, relied on measures with a low potential for being lethal, and did not seriously injure any subjects. Although firm conclusions cannot be drawn, given our lack of a control group, these findings are consistent with past research that has suggested that CIT promotes safety and jail diversion.

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References