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Use of Tasers on people with mental illness
A New Zealand database study

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ABSTRACT

Background: In 2006–2007 New Zealand police deployed the Taser X26 electro-muscular incapacitation device for a twelve month trial across four police districts. Criteria for use of the Taser included "individuals in various states of mental health crisis".
Aims: To provide a descriptive analysis of the use of Tasers by the New Zealand police; to identify those incidents that involved people in mental health emergencies; and to compare this use with that which occurred in incidents of criminal arrest.
Method: Descriptive analysis of the police Tactical Operations Database.
Results: Tasers were deployed on a total of 141 people in 124 events, and discharged 19 times. Of the 141 subjects, 30 (21%) involved people in mental health emergencies. Tasers were more than twice as likely to be discharged at mental health emergencies (8 of 30; 27%) than at criminal arrests (11 of 111; 10%) ($X^2 = 5.69$; df = 1; $p = 0.017$). There were two incidents that involved a Taser being used as part of police response to in-patient mental health services and two incidents involving mental health community residential accommodation.
Conclusions: Introduction of Tasers into policing in New Zealand will disproportionately impact on people with mental illness. Guidelines are needed to manage the future use of Tasers in mental health emergencies.

1. Introduction

Tasers are hand held battery operated devices that have the capacity to disable individuals through the discharge of an intense burst of electrical energy. Also known as conducted energy devices (CEDs), the intent of this technology is to subdue or incapacitate individuals exhibiting aggressive behaviour in order to protect the police and the general public during arrest, without causing serious harm to the individual. Mental health service users have a high level of involvement with police (Deane, Steadman, Borum, Veysey, & Morrissey, 1999; Tucker, Van Hasselt, & Russell, 2008) and are therefore at risk of being subject to the use of Tasers (Munetz, Fitzgerald, & Woody, 2006; White & Ready, 2010a). Concern about deaths proximal to Taser use (Amnesty International, 2006; Stanbrook, 2008) has led to a study by the United States National Institute of Justice to address whether CED use can contribute to or cause mortality (Mukassey, Sedgwick, & Hagy, 2008).

Tasers are used by police forces in the United States (White & Ready, 2007) Canada (Synyshyn, 2008), Australia (Hancock & Gant, 2008), England and Wales (Sprague, 2007) and were used in a one year trial in New Zealand from September 2006 to August 2007. Following an evaluation of the trial (Police Operations Group, 2008) 773 of the devices are to be employed nation-wide by the New Zealand police in 2010 (Police update on Taser training, 2009). The X26 Taser model used by the New Zealand police fires two barbed electrodes on copper wires up to 35 ft, at 180 ft/s. The barbs embed themselves in the victim's skin or clothes and deliver up to 50,000 V of electricity with 1.76 J of energy in rapid pulses over a period of five seconds, causing uncontrollable muscle contraction and overwhelming pain (Taser International, 2009). Repeated charges of electricity can be administered.

The New Zealand Police Standard Operating Procedures (Police Operations Group, 2008) describes five modes of Taser deployment: presentation (drawing and presenting the device), laser painting (applying the laser sighting system of the device on the subject); arcing (activating the device without an air cartridge fitted, as a visual deterrent); discharge (firing probes and subsequent applications of electrical current); and drive stun (firing the device while it is applied to the body of the subject).

Three groups were initially identified in the New Zealand trial as targets for the use of Tasers. They were: (1) unarmed (or lightly

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armed), but highly aggressive people, (2) individuals in various states of mental health crisis, and (3) people under the influence of mind altering substances, solvents or alcohol (Taser Operational Trial to Begin, 2006). The inclusion of people in mental health crisis as potential targets resulted in concern from mental health professionals, in part because no consultation about this policy had taken place between the police and mental health service providers (O'Brien, McKenna, & Simpson, 2007). Mental health emergencies are an integral aspect of police work, with 9250 responses to people with mental illness or disability reported in New Zealand in the 2007–2008[1] year (New Zealand Police, 2008).

Few publications address issues of Taser use on people with mental illness. Typically, health data is excluded apart from reporting of injuries (DeLone & Thompson, 2009). Mental health status is seldom reported. Researchers from Ohio reported of use of Tasers as part of combined police and crisis intervention team (CIT) response (Munetz et al., 2006). Over an 18 month period there were 541 CIT responses, 35 of which involved use of a Taser. Of the 35 incidents, 27 individuals were judged to have mental illness. A United States study (Ho, Dawes, Johnson, Lundin, & Miner, 2007) found that 2452 (23%) of 10608 Taser incidents involved people with mental illness. Another United States study (Bozeman et al., 2009) noted that coexisting medical and psychiatric conditions and substance use may increase risks from use of Tasers, however, the report did not identify how many of 1201 cases involved mental illness. Ho et al.'s (2010) recent study reported use of Tasers by hospital security staff, however their analysis of records did not report the characteristics of the 24 individuals subjected to Tasers. A five year United States study of 691 media reports of Taser use identified 520 (75% of cases) in which the individual was "emotionally disturbed or mentally ill" (White & Ready, 2010a), although this categorisation was based on police officer statements as interpreted by newspaper reporters and is likely to include individuals who would not meet more rigorous criteria for mental illness. Finally, another United States study (White & Ready, 2010b) examined all deployments of Tasers in New York over a three year period and reported on the effectiveness of the device in overcoming subject resistance. Of the 375 incidents, 92.5% were reported by arresting officers as exhibiting signs of mental illness. This proportion is also likely to be an overestimate as the criteria used in the study were over-inclusive with poor discrimination.

White and Ready (2010a,b) noted that despite concerns about the use of Tasers, there is a lack of empirical evidence to inform the debate. This is especially apparent in relation to use of Tasers in mental health emergencies. This paper contributes to the existing literature by providing a comparative analysis of use of Tasers in criminal arrest and use on people in mental health emergencies. The study aimed to provide a descriptive analysis of the use of Tasers by the New Zealand police during their one year pilot; to identify those incidents that involved people in mental health emergencies; and to compare this use with that which occurred in incidents of criminal arrest.

2. Methods

Taser deployment during the one year pilot was recorded by the police using a mandatory reporting process. Narrative and categorical data on each incident of Taser use were documented electronically in the police's Tactical Operations Database (TOD). This documentation was posted on the New Zealand Police website (www.police.govt.nz). The TOD served as the source of data for this study.

In order to identify incidents that involved people in mental health emergencies, we applied explicit criteria to select cases for inclusion. We read all incident reports and identified those recorded as '1 M', a code used by police for an incident involving a person with mental illness. We also identified reports that included specific wording indicating that mental illness or substance use may have contributed to the need for a police response. Inclusion criteria were terms such as "history of mental illness", "mentally ill", "suicidal" or "psychotic". In addition, we sought indications of substance use, reference to use of mental health legislation, reference to the presence of a mental health professional (usually a nurse as part of a crisis team); and reference to involvement of mental health services.

We then read the selected reports to confirm that a mental health issue contributed to the need for a police response. This process eliminated reports recorded as 1 M when there was no other corroborating information that indicated a person may have been experiencing mental health emergency. To be included as a mental health emergency, cases had to show the presence of two criteria given above. At this stage, we also excluded reports where substance use alone was noted unless these had additional evidence of mental illness. Substance use, especially alcohol, is a highly prevalent in New Zealand society (Minister of Health, 2005) and frequently plays a part in criminal behaviour (Fergusson & Horwood, 2000). We also excluded reports where the word 'suicidal' or 'suicide threat' was documented if it was clear that threat of suicide was being used as a bargaining strategy during arrest and there was no other evidence of mental illness. It is not unusual for criminal suspects to use the threat of self injury or suicide as a bargaining strategy (Watson, Corrigan, & Ottai, 2004). In analysing the reports, our overall concern was to include those where it was clear that mental illness was involved, whether or not that was known to police at the time of the callout. Reports were read by three researchers, and cases discussed to make final decisions regarding inclusion.

All reports on the TOD were analysed for demographic data, mode of Taser use, location of incident, presence of weapons, and use of alcohol or other drugs. Reports involving suspected criminal behaviour were compared with those involving mental health emergencies.

3. Results

3.1. Sample description

The TOD included a total of 132 reports. There were five reports where two officers documented the same event, and three others which were either incomplete or reported on tactical options other than a Taser, such as firearms. This reduced the sample to 124 individual reports.

Of these 124 incident reports, some involved more than one person. A total of 141 individuals were subjected to Taser deployment. Most subjects were male (n = 129, 91.5%; female n = 5, 8.5%; missing data = 7). Maori (the indigenous people of New Zealand) and Pacific (people with Pacific Island ethnicities) were over-represented among subjects where ethnicity was recorded (127 of 141: missing data = 14). Twenty-eight percent of the sample was Maori and 25% Pacific compared with 14.6% Maori and 6.9% Pacific in the national population (Statistics New Zealand, 2007). Europeans were under-represented with 31% of all subjects compared to the New Zealand European population of 67.6%. In the TOD the ages of subjects were blacked out and could not be included in this analysis.

4. Mode of Taser use

In most cases of Taser deployment (n = 95; 67%) the device was used in laser painting mode; in a further 16 cases (11%) the device was either arced or simply presented and the subjected verbally warned of its presence. Nineteen of the total sample of 141 (13.5%) received electrical discharge via the probes or drive stun.

[1] The figure for 2006–2007 was 8438 (New Zealand Police, 2008).

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5. Taser use in mental health emergencies

Of the total sample (n = 141), 105 (74.5%) were identified as potentially exhibiting some form of mental health problem. This included 60 (42%) who were under the influence of alcohol or other drugs only. These were excluded from further analysis. When the full inclusion criteria were applied a further 15 of the sample were eliminated, leaving 30 incidents (21% of 141) that met the inclusion criteria for involvement in a mental health emergency. Table 1 gives a breakdown of these incidents. Of the 30 people who met the criteria for a mental health emergency, substance abuse occurred with mental illness and/or suicidal behaviour in 11 (37% of cases). Suicidal behaviour was evident with 16 people in mental health emergencies (53% of cases). In 13 of the 30 mental health emergencies (43%) a mental health professional (usually a registered nurse as part of a crisis team) was present at or about the time of the deployment of the Taser. Eight of the nineteen Taser discharges involved people in mental health emergencies. Four subjects were of European ethnicity and two were female. The person was believed to have a weapon in their possession in seven cases. This was confirmed in five cases. A health professional was involved in half of the eight cases of Taser discharge.

6. Comparison of criminal arrests and mental health emergencies

Incidents involving criminal arrest and mental health emergencies are compared in Table 2. The Taser was discharged at 11 of 111 criminal arrests (10%) but in a significantly greater proportion (8 of 30, 27%) of mental health emergencies ($X^2 = 5.69$, df = 1; $p = 0.017$).

Females were more frequently subject to Taser use in mental health emergencies (4 of 30; 13%) than in criminal arrests (1 of 104; 1%) ($X^2 = 9.921$, df = 1, $p = 0.002$). Furthermore, people of Maori (6 of 30; 20%) and Pacific Island ethnicities (3 of 30; 10%) were less likely to be involved in mental health emergencies than in criminal arrests (Maori 34 of 111; 31%; Pacific Island 32 of 111; 29%) ($X^2 = 8.69$, df = 2, $p = 0.01$).

In 95 of the 111 criminal arrests (86%), a weapon was believed to have been present. This was confirmed in 50 (45%) of these cases. Similarly, in 25 of the 30 mental health emergencies (83%) the person was believed to be in possession of a weapon and this was confirmed in 16 cases (53%). There was no significant difference between criminal arrests and mental health emergencies in the presence of weapons. In ten incidents (two criminal, eight mental health emergencies) a weapon was used to threaten self harm rather than to harm another person. Weapons ranged from improvised implements such as sticks, bottles and baseball bats, to knives, machetes and firearms.

There was no significant difference between the use of alcohol and other substances in cases involving criminal arrests (63 of 111 cases; 57%) and mental health emergencies (11 of 30 cases: 37%) ($X^2 = 3.82$, df = 1, $p = 0.051$). Substances reported were alcohol, marijuana, methamphetamine and solvents.

Table 1
Mental health emergencies.

Mental Health category	Number of subjects (n = 30)	Percentage of subjects
Mental illness only	11	37
Suicidal behaviour only	4	13
Mental illness and substance use	3	10
Mental illness and suicidal behaviour	4	13
Substance use and suicidal behaviour	2	7
Mental illness, substance use and suicidal behaviour	6	20
Total	30	100

Table 2
Comparison of mental health and criminal arrests.

		Criminal arrest (n = 111)	Mental health (n = 30)
Ethnicity[a]	Maori	34 (31%)	6 (20%)
	Pacific	32 (29%)	3 (10%)
	European	45 (40%)	21 (70%)
Gender[b]	Male	110 (99%)	26 (87%)
	Female	1 (1%)	4 (13%)
Presence of weapons	Believed present	95 (86%)	25 (83%)
	Confirmed present	50 (45%)	16 (53%)
Substance use[c]		63 (57%)	11 (37%)
Mode of Taser use	Present, laser painting, arc	100 (90%)	22 (73%)
	Discharged[d]	11 (10%)	8 (27%)

[a] $X^2 = 8.69$, df = 2, $p = 0.01$.
[b] $X^2 = 9.921$, df = 1, $p = 0.002$.
[c] $X^2 = 3.82$; df = 1; $p = 0.051$.
[d] $X^2 = 5.69$; df = 1; $p = 0.017$.

7. Locality

Most deployment of Tasers occurred in domestic locations (n = 81; 57%), such as private houses, apartments or other residential accommodation. Two mental health emergencies occurred in in-patient mental health services. In one incident the person was reported to be "extremely aggressive and violent" and damaging property. In the other report, the person had threatened staff with a pair of scissors. In both situations the police were called by staff and the person was compliant following laser "painting" with the Taser. Another two incidents reported occurred in community residential facilities housing mentally ill persons. In each of these incidents the individuals were reported as having both mental health problems and being under the influence of substances. One incident took place in a boarding house in which the person was "aggressive and threatening" to residents. The subject was reported to be compliant following laser "painting". In the other residential facility described as a "half way house for mental health patients" the person was reported as violent and was damaging property. The Taser was discharged on this individual.

8. Discussion

This study is limited by its small sample size and the quality of the available data which depended on accuracy of police incident reports. A strength of the study is that the sample includes all cases in a single jurisdiction over the one year trial period. Because our criteria were restrictive, it is possible that we underidentified cases of people with mental illness. However our restrictive criteria make it unlikely that we wrongly identified cases in which mental illness was a factor in the person's involvement with police.

The study confirmed that police use of Tasers has implications for people with mental illness who are likely to find themselves subjected to use of this technology. We showed that people with mental illness are more likely to be subjected to Taser discharge than those whose involvement with police is a result of criminal activity. This finding is consistent with that of Deane et al. (1999) who found that the likelihood of a Taser being used in a mental health emergency was more than twice that of its use in comparable law and order cases. Our study adds to a growing body of literature demonstrating that police use of Tasers is an issue that demands the attention of mental health clinicians, researchers and policy makers. In the United States up to 25% of Taser deployments were reported as being on people with mental illness (Ho et al., 2007. Further, White and Ready (2010b) reported that 92.5% of their New York sample exhibited signs of mental illness. Even allowing for overestimation, this figure indicates that use of Tasers in people with mental illness is a real issue. Concern is not limited to disproportionate use. White and Ready (2010a)

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argued that risk of death following Taser use may be greater in people mental illness because of the use of prescribed psychotropic medication. One factor making the use of Tasers more likely is related to police perception of people with mental illness as dangerous (Watson et al., 2004). Officers may be more likely to respond aggressively in such cases.

In terms of the location of incidents, our results are consistent with United States research that found 73% of incidents occurring in private premises (DeLone & Thompson, 2009), with the remainder in public buildings, including mental health in-patient facilities. The use of Tasers in mental health facilities was an unexpected finding in this study, and one which is of concern to mental health professionals. In this regard, we note the recent report (Ho et al., 2010) of Tasers being introduced to hospital security staff in the United States. Recent mental health policy has been concerned with the quality of the therapeutic environment in in-patient services, and the introduction of Tasers seems inconsistent with New Zealand policy aimed at improving in-patient services (O'Hagan, 2006). We have previously argued that mental health professionals need to be involved in policy decisions on the use of Tasers, and the findings of this study give further impetus to that argument (O'Brien et al., 2007).

The use of Tasers on Maori and Pacific people was far greater than with European people, a finding consistent with that of White and Ready (2010a) in relation to African American and Hispanic people. An incidental finding was that compared to non-Maori, involvement of Maori and Pacific people with the police is less likely to be attributed to mental health issues. This intriguing finding may suggest that where police become involved with these groups, there is less likelihood of appeal to the potentially mitigating circumstance of mental illness, and instead the incident is managed as a criminal case. This is an issue that should be carefully monitored when Tasers are made available nationally in 2010.

The proportion of incidents in which weapons were present (86%) is greater than the 40% reported in the recent study carried out in New York (White & Ready, 2010b), although that difference might be due to different definitions of 'weapons'. In the New York study this appears to have been limited to knives and guns, while in the New Zealand study we included improvised weapons. The high proportion of cases involving weapons in New Zealand suggests that Tasers were more likely to be used in situations that involved perceptions of an increased level of threat, and mental health and criminal groups were similar in this respect. It should be noted, however, that people in mental health emergencies were more likely to pose a threat to themselves rather than to others, while the reverse applied to the criminal group. Clearly there is a need to take account of each situation as a whole when considering the Taser deployment, not single aspects in isolation. Substance use was also a significant factor in cases involving criminal arrests and mental health emergency. Considered in the light of the presence of weapons, substance use adds further complexity and risk to situations of potential danger.

The study supports the need for close cooperation between mental health services and police in New Zealand, who have a large area of shared responsibility in response to mental health emergencies in the community. This shared responsibility is recognised in pilot projects involving nurses based in police stations (O'Connor, 2009) and in the existing relationship between police and mental health services (Memorandum of Understanding, 2003). It is noteworthy that in almost half the cases of Taser deployment in mental health emergencies a mental health professional was present at or about the time of Taser deployment.

9. Conclusions

The role of police in responding to mental health emergencies in the community is not new (Watson & Angell, 2007) but has become more overt as community based mental health services rely on police presence in containing situations of high risk and in transporting people to places of assessment and treatment. To understand the use of Tasers in this police role, we urge researchers to include mental health status in database analyses of Taser deployment. We recommend that police reports document this information along with other variables, and note that New Zealand police practice of making reports publicly available is recommended by other researchers (Hickman, Piquero, & Garner, 2008; White & Ready, 2010a).

If, as seems likely, the national deployment of Tasers in New Zealand is associated with proportionately greater use in mental health emergencies, it is a matter of some urgency that the existing Memorandum of Understanding between the police and mental health services is reviewed to include Taser use. With the planned nation-wide introduction of Tasers in 2010 the opportunity exists for planned evaluation of the impact of this device on mental health service users. This could include merging data from police and health databases to gain a better understanding of the extent and nature of service users' involvement with Tasers, and to better understand the implications for service users, police and mental health clinicians.

References

Amnesty International (2006). USA Amnesty International's continuing concerns about Taser use. www.amnesty.org/en/library/info/AMR51/030/2006.

Bozeman, W. P., Hauda, W. E., Heck, J. J., Graham, D. D., Jr., Martin, B. P., Winslow, J. E., et al. (2009). Safety and injury profile of conducted electrical weapons used by law enforcement officers against criminal suspects. *Annals of Emergency Medicine*, *53*, 480–489.

Deane, M. W., Steadman, H. J., Borum, R., Veysey, B. M., & Morrissey, J. P. (1999). Emerging partnerships between mental health and law enforcement. *Psychiatric Services*, *50*, 99–101.

DeLone, G. J., & Thompson, L. M. (2009). The application and use of TASERs by a Midwestern police agency. *International Journal of Police Science & Management*, *11*, 414–428.

Fergusson, D. M., & Horwood, L. J. (2000). Alcohol abuse and crime: a fixed-effects regression analysis. *Addiction*, *10*, 1525–1536.

Hancock, L., & Gant, F. (2008). *Tasers: A brief overview of the research literature.* Crime and Misconduct Commission, Queensland.

Hickman, M., Piquero, A. R., & Garner, J. H. (2008). Toward a national estimate of police use of nonlethal force. *Criminology & Public Policy*, *7*, 563–604.

Ho, J. D., Clinton, J. E., Lappe, M. A., Heegaard, W. G., Williams, M. F., & Miner, J. R. (2010). Introduction of the conducted electrical weapon into a hospital setting. *Journal of Emergency Medicine (ahead of print)*, doi:10.1016/j.jemermed.2009.09.031.

Ho, J., Dawes, D., Johnson, M., Lundin, E., & Miner, J. (2007). Impact of conducted electrical weapons in a mentally ill population: A brief report. *American Journal of Emergency Medicine*, *25*, 780–785.

Memorandum of Understanding between the New Zealand Police and Ministry of Health; 2003. Retrieved from www.moh.govt.nz/moh.nsf/0/2E3D656B-D30AB1B7CC256FC60002E25F/$File/mou.PDF on February 8 2009.

Minister of Health (2005). *Te Tāhuhu—Improving Mental Health 2005–2015: The Second New Zealand Mental Health and Addiction Plan.* Wellington: Ministry of Health.

Mukassey, M. B., Sedgwick, J. L., & Hagy, D. W. (2008). *Study of deaths following electro muscular disruption: Interim report.* Washington: National Institute of Justice.

Munetz, M. R., Fitzgerald, A., & Woody, M. (2006). Police use of the Taser with people with mental illness in crisis. *Psychiatric Services*, *57*, 883.

New Zealand Police (2008). *Annual Report for the year ended 30 June 2008.* Wellington: New Zealand Police.

O'Brien, A. J., McKenna, B. G., & Simpson, A. I. F. (2007). Health professionals and the monitoring of Taser use. *Psychiatric Bulletin*, *31*, 391–393.

O'Connor, T. (2009). Improving relations between police and mental health services. *Kai Tiaki: Nursing New Zealand*, *15*(8), 18–19.

O'Hagan, M. (2006). *The acute crisis. Towards a recovery plan for acute mental health services in New Zealand.* Wellington: Mental Health Commission.

Police Operations Group and the Evaluation Team at Police National Headquarters (2008). *Operational evaluation of the New Zealand Taser trial.* Wellington: New Zealand Police.

Police update instructions on Taser training (2009). Retrieved from www.police.govt.nz/news/release/21323.html on February 8, 2009.

Sprague, O. (2007). The deployment of Taser weapons to UK law enforcement officials: An Amnesty International perspective. *Policing*, *1*, 309–315.

Stanbrook, M. B. (2008). Tasers in medicine: An irreverent call for proposals. *Canadian Medical Association Journal*, *178*, 1401–1402.

Statistics New Zealand (2007). *Profile of New Zealander responses, ethnicity question: 2006 census.* Statistics New Zealand: Wellington.

Taser International. (2009). Product for law enforcement and corrections. Retrieved from. www.taser.com/products/law/Pages/TASERX26.aspx on 30 October 2009..

Taser operational trial to begin. (2006). Ten-One Community Edition 284. The New Zealand Police Online Magazine. Retreived from. www.police.govt.nz/news/tenone/20060428-284/ on February 8, 2009.

Tucker, A. S., Van Hasselt, V. B., & Russell, S. A. (2008). Law enforcement response to the mentally ill: An evaluative review. *Brief Treatment and Crisis Intervention*, *3*, 236–250.

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Watson, A. C., & Angell, B. (2007). Applying procedural justice theory to law enforcement's response to persons with mental illness. *Psychiatric Services*, *58*, 787−793.
Watson, A. C., Corrigan, P. W., & Ottati, V. (2004). Police officers' attitudes toward and decisions about persons with mental illness. *Psychiatric Services*, *55*(1), 49−53.
White, M. D., & Ready, J. (2007). The TASER as a less lethal force alternative. Findings on use and effectiveness in a large metropolitan police agency. *Police Quarterly*, *10*, 170−191.
White, M. D., & Ready, J. (2010a). Examining fatal and nonfatal incidents involving the TASER. Identifying predictors of suspect death reported in the media. *Criminology & Public Policy*, *8*, 865−891.
White, M. D., & Ready, J. (2010b). The impact of the Taser on subject resistance. Identifying predictors of effectiveness. *Crime and Delinquency*, *1*(56), 70−102.

Please cite this article as: O'Brien, A.J., et al., Use of Tasers on people with mental illness, *International Journal of Law and Psychiatry* (2010), doi:10.1016/j.ijlp.2010.11.006