The Impact of Enforcement On Intoxication and Alcohol Related Harm

Final Report
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EXECUTIVE SUMMARY

The enforcement of liquor licensing laws by police and regulatory officials is intended to keep drinking environments safe, contribute to the reduction of liquor abuse, prevent excessive consumption of alcohol, and prevent the sale of alcohol to minors.

In Wellington, the enforcement of licensing laws involves regular visits to licensed premises by police and regulatory officials. These visits serve several purposes. Licensing officials make visits to licensed premises during the day for the purposes of monitoring licensees' compliance with licensing requirements as well as providing an opportunity to discuss host responsibility issues. Police staff also visited licensed premises at night-time to ensure that under-age and intoxicated patrons are not being served on licensed premises in accordance with the Sale of Liquor Act. These visits by police and licensing officials are often targeted to licensed premises where breaches of licensing laws have been identified during previous visits. Where breaches of licensing laws are identified, police and regulatory officials meet with the licensees to talk about why the breach occurred and how the situation can be prevented from happening again. These meetings are attended by members of the Co-ordinated Enforcement Group (KEG) which is made up of staff from the licensing unit of the Wellington City Council, staff from the Regional Public Health unit and Police. If breaches are identified on several occasions, the KEG may consider taking action against the licensee.

The present study sought to test the effectiveness of these visits to licensed premises, by using an interrupted time series quasi-experimental approach. This involved a comparison of the impacts of heightened police and regulatory official presence on licensed premises during two six-week periods, during November 2004 to December 2004 and March 2005 to April 2005. Heightened enforcement and regulatory presence meant an increased number of visits from these officials and a greater number of staff dedicated to the task. Police formed a specialist Liquor Policing Unit (LPU) of six staff to achieve the heightened levels of enforcement. The impact of these interventions was compared to the impact of "normal" enforcement activity during the month preceding the first intervention, the intervening two months between interventions and during the month following the second intervention.

The impact of the police and other regulatory officials' activities on licensed premises was measured using a range of quantitative indicators of alcohol-related harm and crime and by assessing qualitative information. The harm indicators were:

1. Police crime and incident statistics for violence, disorder, property damage and breaches of liquor licensing laws
2. Injury presentations to Wellington Hospital's emergency department.
3. Ambulance attendances at assaults and alcohol-related incidents.

Additional qualitative information was gathered from "non-participant" observers on licensed premises; and from focus-group interviews with licensees and police following the completion of the enforcement programme.

Quantitative Evidence

Records from the police visits to licensed premises were used to indicate breaches of licensing laws on licensed premises. Police reports showed that intoxication among patrons was a regular occurrence on the licensed premises they visited. Police use a five-point scale to assess the level of intoxication of any affected patron. According to that scale, extremely intoxicated or highly intoxicated persons display obvious signs of alcohol impairment, such as loss of co-ordination, slurred speech and aggression. The second intervention of heightened enforcement coincided with a period where relatively few patrons were recorded by police as being highly intoxicated, indicating that the increased attention on licensed premises from

police and regulatory officials may have contributed to a reduction in the number of highly intoxicated persons. However, information from the focus-group interviews raised the possibility that Police changed the way they assessed the level of patrons' intoxication, with premises' managers "negotiating" assessments with police, which may have resulted in a greater proportion of "moderately intoxicated" assessments compared to "highly intoxicated" assessments.

Police crime statistics reflecting violence and disorder indicated that the interventions may have contributed to reductions in these offences.

The interventions appear to have had more of an effect on disorder offending compared to assault. There were lower than normal levels of disorder offending during the first intervention (a 17% decrease from comparable time periods during the preceding five years) and during the second intervention (a 31% decrease). Both violence and disorder offending peaked when there were significant public events (such as Guy Fawkes, New Year's Eve, and major sporting events held in the city).

Wellington Hospital Emergency Department data proved difficult to assess due to the fact that data identifying alcohol-related causes had only been collected since September 2004. Hence no adjustment of presentation for seasonal variation could be achieved.

Ambulance attendances to assault-related and alcohol-related incidents were reduced during the periods of heightened enforcement, with the March 2005 to April 2005 period particularly marked by several weeks of low attendances at assault-related injury events.

Qualitative Evidence

Observers trained in qualitative research methods were asked to report their impressions of server and patron behaviour before, during and after police enforcement visits to licensed premises. They also provided information relating to the conduct of the police visits. Observers' identities were unknown to police or to licensees or bar staff. Observers were given guidelines as to which environmental or behavioural issues to focus their attention on, for example whether the bar was busy or not, whether patron behaviour changed during and after the police visits, or whether serving behaviour changed during or after the police visit. Ultimately the structure of their reports was not prescribed. Each Friday or Saturday night a pair of observers visited approximately four to five city bars. Observers collected data on both nights during the intervention periods and during periods of normal policing and regulatory activity.

Observations made indicated it appeared difficult for bar staff to assess levels of intoxication in the brief interactions they had with patrons. This appeared to be particularly difficult in very busy bars which served large groups of younger patrons. Observers rarely saw bar staff denying service and often noted that people who appeared to be intoxicated people were served. They observed that the physical environment in many of the bars did not appear conducive to bar staff making good assessments of patrons' degree of intoxication.

Changes to server behaviour were noticed during the period that heightened enforcement visits were conducted, and included bar staff being more attentive to customers. There was a noticeable increase in the visibility of bar signage relating to serving underage or intoxicated persons as the interventions progressed. Bar staff participating in focus groups indicated that they felt they had introduced stricter bar entry requirements and this was noticed by police and observers.

Focus group feedback from bar owners and managers also revealed that they elt the interventions had a noticeable impact on business and they predicted that their profits would

be reduced because of this. Many bar owners were also unhappy with what they perceived to be the unfair targeting of their bars by police, based on Last Drink Survey information. Bar owners were also concerned that inner-city premises appeared to be targeted, while suburban bars appeared from their perspective to have been ignored. Police records indicated that visits to "problem" suburban bars continued throughout the intervention but are not reported in this study as they were outside the geographical focus of the research.

Police and licensees also commented on the change in the approach of police during visits as the interventions progressed. Non-participant observers also reported police appeared to become more relaxed and friendly as the interventions progressed. Police staff members indicated that they valued the use of a specialised unit and the opportunities this offered to use a more proactive approach to liquor policing. They also felt that bar staff were initially unfamiliar with a heightened "enforcement approach" and had become quite sensitive to police visits. They noted that the behaviour of licensed premises staff had changed during the heightened focus but felt that when the heightened focus ended the behaviour might return to normal. It was also noted by police that the opportunity to communicate messages about intoxication to the public also seemed to result in a perceived change in patron behaviour.

Overall the qualitative data revealed some positive changes in serving practices and licensees indicated a willingness to work with police and partner agencies to reduce alcohol-related harm.

Factors Affecting the Outcomes of the Interventions

External factors may have had an impact on the results of the research. The introduction of an amendment to the Smoke-Free Environments Act 1990 during December 2004 (during the final week of the first intervention period) was a significant environmental change with bars and nightclubs no longer allowed to permit smoking inside their premises. This meant increased use of balcony and outside areas by smoking patrons. Many licensees applied to the Wellington City Council to obtain "pavement leases" so that they could provide a smoking area outside; effectively expanding their premises into the street.

Another external factor was a street policing operation ("Operation Hurricane") which was initiated by police on 4 March 2005 and terminated on 14 May 2005 (coinciding with the second intervention period). This operation was focused predominantly on addressing public place drinking, youth problems and violence in Wellington City. The additional police activity surrounding Operation Hurricane may have influenced violence and disorder during this period of the study. This operation was a police response to sexual assaults and other violent offences that had occurred in Wellington city during January 2005 and February 2005 and had not been planned at the outset of the study.

Summary

The interventions in this study were targeted at creating an effective regulatory compliance environment that would lead to reduced levels of alcohol-related harm. For these interventions to be effective, three elements were necessary. The first was to ensure that premises' managers and serving staff had knowledge of their obligations relating to how to prevent intoxication and awareness of the regulatory agencies' interest in ensuring the prevention of alcohol-related harm.

The second element was a heightened police enforcement of the Sale of Liquor Act (1989) requirements. Police targeted a small group of licensed premises for increased attention. These premises were identified on the basis of Last Drink Survey (LDS) information and other police intelligence that led police to believe the premises were serving intoxicated patrons. The third requirement was maintaining conditions to ensure licensees were motivated

to comply with the regulatory requirements. This involved maintaining a credible process for penalising any significant breaches of regulatory requirements. Questions arise as to whether this third condition was effectively fulfilled. The threshold to initiate processes to penalise breaches of the Sale of Liquor Act was set high by police and no prosecutions of licensing action was initiated during the research period.

The quantitative data analysis reveals some indication that the number of highly intoxicated patrons was reduced during the intervention periods. Despite the questions arising as to whether the interventions could have been more effective, they do appear to have coincided with reduced periods of alcohol-related harm in Wellington city. This evidence exists across a range of indicators from independent sources.

The impact of the targeting of intoxication was most pronounced during March 2005 and April 2005, a period when the combined impacts of the licensed premises intervention and Operation Hurricane are difficult to separate. The two tactics targeted separate problems, but had the potential to impact on the same disorder and violence indicators, and health data. Since the highest impacts were apparently during the period when both tactics were applied, this may lend some weight to arguments that multifaceted enforcement approaches can be effective.

1 INTRODUCTION

This research evaluates the effectiveness of a targeted enforcement model addressing compliance with Sale of Liquor Act 1989 (SOLA) on licensed premises. The study was completed in the Wellington Central Business District between October 2004 and June 2005. Sale of Liquor Act requirements relating to the need for licensed premises to refuse service to intoxicated patrons were the specific focus of the study.

The research has sought to establish whether crime and alcohol-related harm can be reduced by police and other regulatory agencies heightening their focus on the enforcement of Sale of Liquor Act requirements for responsible alcohol service particularly relating to intoxication. The research has been undertaken to provide feedback to regulatory agencies about the potential effectiveness of targeted enforcement approaches. To achieve this, the research monitors a range of crime and alcohol-related injury statistics with a view to identifying whether there is any potential link between changes in these statistics and periods of heightened and targeted regulatory activity. It also provides qualitative feedback from participating agencies and licensees, and non-participant observers about the effectiveness of a heightened and focussed enforcement approach.

The linkage between intoxication and harm is covered by a substantial body of published literature. Links between intoxication and harm are particularly pronounced among younger people (Rossow, 1996) and between intoxication and aggression, particularly among male drinkers. Heavy drinkers in general have also been shown to be more likely to engage in risky behaviours that may be antecedents to alcohol-related harm (Plant & Plant, 1992; Plant *et al*, 2002). The link between alcohol consumption and personal harm resulting from violent assault has already been established in New Zealand, by a WHO funded study that focused on Dunedin City (Kypri, 2003).

In a comparable context (Australia) it has been reported (Stockwell *et al*, 1993) that one in four patrons leaving licensed premises has blood alcohol levels of 100mg/100ml and one in ten exceeds 150mg/100ml[1]. Licensed premises themselves also tend to be common and predictable locations for violence. However, problems associated with licensed premises themselves are not the only issues in alcohol-related harm. Drinking in New Zealand takes place in what is regarded as a relatively permissive social environment that is tolerant of at-risk drinking behaviours (Habgood, *et al*, 2001).

The question for agencies that regulate the use of alcohol in New Zealand is how their activity can be best targeted to help to reduce at-risk behaviours. Although a wide variety of basic evidence exists about the causes of alcohol-related harm, there is less research available to support knowledge transfer into operational practice (Wiggers *et al*, 2004).

This research attempts to fill that gap with an analysis of the effectiveness of enforcement approaches to control alcohol supply to intoxicated patrons on licensed premises.

1.1 The Sale of Liquor Act

The framework for control of alcohol in New Zealand is the Sale of Liquor Act (1989). As set out in Section 4 of the legislation, the Act seeks to establish: *"A reasonable system of control over the sale and supply of liquor … with the aim of contributing to the reduction of liquor abuse…"*

[1] Compare these to New Zealand's blood alcohol limits for driving of; 80 mg/100ml for adults; and 30 mg/100ml for drivers under 20 years of age.

The Act attempts to achieve this by providing controls over the consumption of alcohol and ensuring that safe venues are available as drinking environments. Enforcement of liquor laws is a key element in ensuring that the Act is effective in addressing alcohol-related harm in and around licensed premises. This enforcement activity reduces the risks associated with licensed drinking environments, contributes to the reduction of liquor abuse, prevents excessive consumption of alcohol leading to intoxication and prevents the sale of alcohol to minors.

Police and other regulatory agencies already adopt a focus on alcohol misuse as a mechanism to address broader harm, such as crime and incidents. The police role includes enforcement interventions to ensure licensed premises comply with liquor laws and regulations. Police also play an important role in minimising alcohol misuse through other crime prevention work, problem solving and incident response that prevent or reduce alcohol-related problems.

Police are only one of several agencies that work to put in place controls around alcohol misuse. Other regulatory agencies addressing alcohol issues also include public health authorities and district licensing agencies. These regulatory agencies have a number of other key partnerships including with the liquor industry itself and with community based groups (such as groups who provide alternative social venues for youth, Maori Wardens, etc).

1.2 Alcohol Harm Reduction Strategies

New Zealand's *National Alcohol Strategy* sets out three general strategies covering the reduction of alcohol-related harm. These are supply control, demand reduction and problem limitation (ALAC & MOH, 2001). Supply control approaches address measures to control the availability of alcohol. These types of interventions tend to be focused on licensed alcohol outlets such as hotels, clubs and off-license premises. Supply control initiatives can be separated into three general types; enforcement approaches (the subject of this research), industry led initiatives to improve compliance, and planning based approaches.

Enforcement approaches involve police and other regulatory agencies (district licensing agencies and public health authorities). These measures tend to be predominantly focused on licensed premises, although they can also be broadened to include controls that address the supply of liquor through unlicensed venues, as well as by friends and families.

In contrast to enforcement based approaches, industry-led initiatives involve self-regulating activity that occurs either at the level of individual licensed premises or revolves around formal relationship models such as regional alcohol accords. In practice, these measures can also involve the regulatory agencies in an advisory capacity or supporting problem solving initiatives that might be led by the local liquor industry itself. These arrangements for self-regulation often involve education and industry responsibility programmes. In Wellington city there is no formal industry alcohol accord, a mechanism being used in some other parts of New Zealand to address alcohol-related problems. However, a combined enforcement agency group coordinates some forums to resolve alcohol supply issues with the local liquor industry.

Planning-based approaches are measures involving the use of district planning processes by local authorities to restrict the geographic density and trading hours of licensed premises, and to address other supply factors that can be influenced by the district planning framework used by local communities. There are no specific initiatives in Wellington that use planning-based approaches to reduce alcohol-related harm, although there is an informal strategy to limit licensing hours for new premises to 3am. According to this informal strategy, police and other regulating agencies generally support applications for extended hours of trading only in the case of premises that have operated for longer than one year with no significant problems.

Demand reduction strategies address the reduction of alcohol consumption and encourage responsible drinking behaviours. These involve a range of measures including increasing

alcohol taxation (to make alcohol more expensive) restricting the advertising of alcohol, social marketing to cause culture change in drinking behaviours, and problem solving interventions that are focussed on at-risk drinking behaviours. In March 2005, the Alcohol Advisory Council of New Zealand (ALAC) launched a national advertising campaign targeted at altering New Zealanders' apparent tolerance of binge drinking and intoxication.

Alongside the national culture change programme, there are a variety of other demand focused interventions underway in Wellington. These include education programmes run by police and other agencies (such as the "DARE" programme and youth-at-risk projects that target problem drinking alongside other high risk behaviours by youth).

The final types of interventions targeting alcohol-related harm are problem limitation strategies. Problem limitation strategies tend to be applied to the drinking, victimisation or offending environment. These strategies aim to reduce the likelihood of the drinking or other environments playing a role in any alcohol-related harm. These include measures that aim to reduce public place drinking (often directed to liquor bans and to underage drinking) and situational prevention initiatives such as Crime Prevention Through Environmental Design (CPTED) that aim to improve the quality of public spaces. There are presently a range of these types of environmental initiatives underway within Wellington. These include City Council led initiatives such as street patrols by council staff, lighting enhancements, and an inner city liquor ban. A new environmental initiative that was introduced during the period of the research was the monitoring of closed circuit television (CCTV) surveillance cameras, which commenced during March 2005.

1.3 Requirements for Effective Enforcement

Supply control strategies are grounded in the effective enforcement of the Sale of Liquor Act in its application to licensed premises. The main regulatory agencies working on supply issues are police, licensing agency and public health authorities.

Licensed premises offer a prime target for reducing alcohol-related problems. These locations are implicated as a high-risk setting for harmful drinking. Licensed premises also represent an often predictable and recurring source of problems, and therefore offer considerable opportunities as a focal point for addressing the reduction of violent crime. Intoxication and aggression are more likely to occur in some licensed premises than others (Plant *et al*, 2002) presenting an opportunity to utilise resources more effectively by targeting these premises. Interventions targeting compliance have an advantage over those that are targeted towards drinkers themselves (i.e. demand-based strategies) as they are not reliant on the judgement of alcohol-impaired persons.

Enforcement of the Sale of Liquor Act requirements involves visits by police and licensing officials/regulatory staff to licensed premises, in order to identify compliance issues. If compliance issues are identified, these visits may be followed up with prosecution and/or licensing action. The focus of compliance visits is primarily directed towards identifying underage patrons and intoxicated persons and other Sale of Liquor Act requirements. These visits provide a mechanism for motivating licensees to comply with their Sale of Liquor Act obligations. During these visits, expectations about compliance can be set and compliance encouraged.

In practice, licensed premises visits vary in style from more educative visits in the afternoon or early evening to enforcement teams targeting hot spots during peak business hours. Sometimes, these visits are thought to have an effect without requiring additional prosecutorial or licensing action. For example, McKnight and Streff (1994) have stressed that the effectiveness of any enforcement effort in achieving deterrence is dependent upon awareness among the target group and therefore the visibility of the enforcement. Certainly,

sustaining awareness is important. Weatherburn (2000), for example, has observed that in respect of liquor legislation *"consistent and effective enforcement …is the key to achieving successful compliance"* (Weatherburn, 2000).

Other studies have shown these types of enforcement interventions to be effective, but they can be dependent on subsequent penalties. Penalties can take many forms; including punishment imposed by court or by the Liquor Licensing Authority. In the absence of penalities, liquor licensing laws have been shown to have poor deterrent effect (Stockwell 2001).

In summary a mix of visibility, publicity and perceptions of risk of penalties have collectively been shown to increase compliance in enforcement-based approaches.

2 PRIOR RESEARCH

2.1 Defining Alcohol-Related Harm

Definitions of alcohol-related harm vary within the research literature, and often depend on the type of data that is available.

Studies examining the physiological harms associated with alcohol are generally concerned with measurements of disease or death associated with particular patterns of consumption. In New Zealand, attempts to quantify the morbidity and mortality associated with alcohol have examined rates of several forms of cancer, diabetes, neuro-psychiatric disorders, cardiovascular disorders, digestive disorders, conditions arising during pregnancy, poisonings, drowning, falls, and injuries such as road traffic injuries, violence and alcohol poisonings (Connor *et al*, 2005).

In contrast, attempts to gauge the impact of patterns of consumption on the prevalence of other outcomes where boundaries may be more subjective generally rely on survey data. The *Drinking in New Zealand* surveys, which examine patterns of drinking in 1995 and 2000, grouped fifteen indicators together within the "alcohol-related problems" category. The survey covered a wide range of indicators, ranging from *"felt the effects of alcohol after drinking the night before"* to *"stayed intoxicated for several days"*, and *"been drinking and driving and had a motor vehicle crash"*. A survey of alcohol-related problems experienced by Dunedin students covered similar topics, including the impact of other peoples drinking on the respondent, but extended their definition of alcohol-related problems by examining the incidence of other events in association with alcohol consumption such as: emotional outbursts, vomiting, inability to pay bills as a result of spending too much money on alcohol, having unprotected sex, and committing a crime or being arrested for drunken behaviour (Kypri, 2003).

Survey data is often used to examine crime and victimisation associated with patterns of alcohol consumption. Many studies utilise data collected in administrative systems, for example by police, to measure the involvement of alcohol in some crime – most commonly violent crime (i.e assault). Interpretations of this relationship are complicated by the nature of the circumstances in which the data is collected. Langley and colleagues (1996) suggest that studies of people presenting to hospital with alcohol-related injuries provide balance to alcohol-related crime statistics, as assault victims are more likely to seek medical help rather than police assistance. Stockwell (2001a) adds that interpretations of crime statistics are often complicated by the fact that heightened policing may generate significant changes in crime statistics, as an increased police presence creates more opportunities for assaults to be observed and reported.

Patterns *versus* Levels of Consumption

As the types of information available (survey data, crime statistics etc) have a role in defining the relationship between alcohol and harm, so too do measures of alcohol exposure. In a survey of alcohol consumption conducted in the UK, Kreitman (1986) observed that most people have experienced adverse consequences from drinking even though their average consumption levels were considered to be within the "moderate" range. Work by Gmel *et al* (2001) in Switzerland confirmed that, in terms of volume, moderate drinkers reported more problems associated with their drinking than "hazardous" drinkers (who were defined as consuming more than four to five standard drinks on one occasion). These results may seem counter-intuitive, but earlier work sheds some light on the findings (Stockwell *et al*, 1996) Stockwell's team demonstrated that binge drinkers report more problems associated with their drinking than drinkers who don't binge. Moreover, there are a greater proportion of binge drinkers among those whose average total consumption of alcohol is considered "moderate"

than any other group or drinkers, and moderate drinkers are the largest group in the drinking population. In light of their findings, Stockwell and co-investigators suggested that strategies to prevent alcohol-related harm would be best aimed at the majority of the population rather than a small proportion of people considered "problem drinkers", and that such strategies should be more focused on the amount of alcohol consumed in a single drinking occasion rather than average consumption levels (Stockwell *et al,* 1996).

Research in New Zealand reiterates that patterns of drinking – i.e. how much alcohol is consumed on a typical drinking occasion, how often such occasions occur, where they occur and with whom – are a more relevant measure of consumption than average daily consumption levels alone (Connor *et al,* 2005). ALAC addresses patterns of consumption in its' "safe drinking" recommendations – a weekly intake of no more than 21 standard drinks for men and 14 standard drinks for women, with any single drinking occasion including no more than six standard drinks for men and four for women[2].

Studies of injured people attending emergency rooms with injuries support the idea that how much is consumed on a single drinking occasion may be more predictive of injury risk than average consumption levels. In other words, a person who engages in fewer drinking occasions but binge drinks on these occasions may be at greater risk of injury than a person who drinks more alcohol on average but spreads this consumption over a greater number of drinking occasions (Borges *et al,* 2004). Earlier data from an Australian study of people presenting with injuries to an emergency department in Western Australia had also highlighted the significance of consumption levels on a single occasion (McLeod *et al,* 1999). These researchers observed that six standard drinks in six hours was sufficient to elevate the risk of receiving an injury which would require medical attention at an emergency room by three times. Nine standard drinks raised risk by five times. McLeod *et al* (1999) also observed differences in risk for men compared to women; although the pattern of risk was similar (with increases in risk when consumption went over six standard drinks) the risk to women was much higher.

Attitudes towards alcohol in New Zealand

Comparison of the 1995 and 2000 national *Drinking in New Zealand* surveys (Habgood *et al*, 2001) reveals that "heavy" consumption (8+ drinks for men and 6+ drinks for women) occasions increased among men and women between both surveys with the increase among women drinkers being greater than that among men. Both men and women increased the amount they consumed on a "typical" drinking occasion between the two surveys; from about two drinks per occasion to three to four drinks for women, and from four drinks per occasion to five drinks for men. Although differences in drinking patterns for men and women may be diminishing according to these statistics, international research suggests that their risk profiles continue to be quite different (McLeod *et al,* 1999; Teece & Williams, 2000). As well as increases in consumption on "typical" drinking occasions, more alcohol was consumed by New Zealanders in "heavy" drinking occasions in 2000 compared to 1995. These drinking patterns have significant implications in light of the international evidence describing the risks associated with binge drinking (Kreitman, 1986; Stockwell *et al*, 1996; Gmel, 2001).

Local research has highlighted the impact of differences in drinking patterns on health and mortality outcomes for New Zealanders. Differences in alcohol-related health conditions and mortality for Maori and non-Maori have been attributed to differences in patterns of consumption rather than total average volumes of consumption; with Maori consuming more on an average drinking occasion than non-Maori (Bramley *et al,* 2003; Connor *et al,* 2005). Drinking frequency across different age groups remained relatively unchanged between the two surveys with the exception of drinkers aged 14-17 years; whose frequency of drinking

[2] Where a standard drink contains 10g of alcohol for example a glass of wine or a standard can of beer.

increased. This is significant in light of evidence which suggests that these early drinking patterns predict drinking patterns later in life (Casswell and Zhang, 1997).

A survey examining New Zealanders' attitudes to alcohol reveal a society which enjoys the benefits of alcohol as a "social lubricant" and "relaxant", with almost 70% of current drinkers agreeing that alcohol helps them to wind down and relax. This survey also described a culture in which drunkenness is tolerated by many people, with one in ten drinkers admitting that they drink to get drunk, and a quarter of drinkers disagreeing with the statement *"I try not to drink so much I forget what I was doing or what happened"*. Almost a quarter of drinkers disagree with the statement *"I limit the amount of alcohol I drink so that I don't wake up with a hangover*". Despite this, a large proportion of adult drinkers were unconcerned about the long-term effects of their drinking on either their physical or mental health. (*The way we drink*, BRC Marketing and Social Research, final report 5 May 2004). These attitudes have recently been the target of an ALAC media campaign carrying the slogan *"It's not the drinking, it's how we're drinking"*. ALAC Chief Executive Officer Dr Mike MacAvoy has observed: *"New Zealand is a nation that seems to pride itself on the 'save it up for Friday night' style of drinking…this pattern of drinking results in more harms and social costs than those incurred by the dependent drinker"* (ALAC Media Release, "It's not the drinking it's how we're drinking", 07/03/05).

2.2 Cost of Alcohol-Related Harm

Health and Injury

Recently, Connor *et al* (2005) published a study estimating the burden of death, disease and disability resulting from alcohol consumption in New Zealand. Connor *et al* (2005) estimated that 3.9% of all deaths in New Zealand in 2000 were attributable to alcohol (1,037 deaths) with over 50% of these deaths being injury related (including alcohol poisoning, unintentional injuries, self-inflicted injuries, violence and other intentional injuries, among other antecedents).

The number of alcohol-related deaths for males far outnumbered those of females (718 compared to 319). The greatest number of deaths occurred in the 15-29 year age group (this was also true when the data was adjusted to account for differences in the total population in each age group). Connor *et al* (2005) summarised the most significant findings in their research as being that:

- Patterns of drinking are an important determinant of the health effects of alcohol;
- Injury is a major component of the alcohol burden;
- Alcohol use disorders underlie many of the adverse effects of alcohol; and
- The health burden of alcohol falls inequitably on Maori.

Alcohol, Crime and Victimisation

There is significant international evidence of a link between alcohol and crime, in particular violence and physical assault. Data from the *Drinking in New Zealand* survey for the year 2000 (Habgood *et al*, 2001) suggests that rates of physical assault involving alcohol may be lower than those observed in Australian surveys (Teece and Williams, 2000) although similar patterns have been observed in comparisons of men and women in Australia and New Zealand; with 8% of men and 5% of New Zealand women reporting that they were physically assaulted by someone who had been drinking in the previous 12 months. Women were more likely than men to report sexual harassment (10% compared to 3%, respectively); whilst the

likelihood of experiencing physical assault or sexual assault was greater overall for younger people. Indeed, it appears that gender and age have the most significant effect on the risk of victimisation. Young males, who have the highest risk of being victimised, are also the greatest consumers of alcohol with peak consumption occurring around the age of 22 years (Teece and Williams, 2000; Casswell *et al*, 1997).

Although there is little New Zealand based research examining the relationship, a correlation between alcohol and the perpetration of crime has been suggested in international research, with some evidence of a link between levels of consumption and the odds of committing crime or disorder being greater for people who report heavy consumption or binge drinking[3] (Makkai, 1998). Makkai used Australian National Survey data to focus on perpetrators of crime and found that in 1995, 17% of survey respondents had, at least once in the previous year, physically abused somebody, damaged property, driven a car, or verbally abused someone while intoxicated. Risk analysis presents similar age and gender effects to those observed among victims of alcohol-related crime (Teece, and Williams, 2000; Habgood *et al*, 2001) with women less likely to report committing crimes while under the influence of alcohol.

The Economic Cost

Translations of the social cost of alcohol-related harm into a dollar value in New Zealand are not regularly drawn. Where data is available, definitions of alcohol-related harm vary from author to author and comparisons can be difficult to draw against international data for this reason. Subtle differences in the collection of the data can also have an impact on the interpretation of any comparisons that are made internationally.

One of the more recent papers to provide estimates of the economic cost of alcohol-related harm in New Zealand, and details of how such estimates were reached, was published by Easton in 1998. In this paper, Easton described two classes of alcohol misuse – excessive alcohol consumption and inappropriate alcohol consumption. Easton argued that a reduction of high individual consumption would result in a healthier and larger population (due to fewer alcohol-induced diseases leading to early deaths). Such a population would be more productive and would have additional resources available to them which would otherwise have been diverted by alcohol consumption and treatment. Easton summarized that a conservative estimate of the total social cost of alcohol misuse was about $16.1 billion for the 1990 year (roughly 4% of GDP).

In economic terms, the most well documented costs of alcohol-related harm in New Zealand are those associated with drinking and driving. People with a high blood alcohol level (over 80mg per 100ml) are more likely to be injured or killed in a crash than those who are sober (LTSA "Crash Facts", Dec 2001). The LTSA reported that in 2003 drinking and driving contributed to 124 fatal crashes, 370 serious injury crashes and 859 minor injury crashes. Thirty-one percent of all road deaths were in drinking-related crashes; a figure which is similar to findings based on US data (reviewed by Borges *et al*, 2004). The estimated cost of alcohol-related crashes was $760 million for 2003 (23% of the social costs associated with all injury crashes). In estimating the social cost, the LTSA include costs associated with loss of life and life quality, medical treatment, property damage and enforcement (LTSA, "Crash Facts", Dec 2001).

[3] Where harmful drinkers were defined as males consuming 5+ drinks a day, 7 days a week *or* 7+ drinks a day, 4-6 days a week *or* 12+ drinks a day, 2-3 days a week; women consuming 3+ drinks a day, 4 days a week *or* 5+ drinks a day, 2-3 days a week *or* 6+ drinks a day, 2+ days a week. Binge drinkers were defined as males who drink 7+ drinks once a week at most and females who drink 5+ drinks once a week at most (Makkai,1998).

2.3 Approaches to Reducing Alcohol-Related Harm

Stockwell and Gruenewald (2003) propose that approaches to controlling alcohol availability could be divided into those that target economic availability, and those that target physical availability. Kypri (2003) has suggested that for any attempts to reduce alcohol-related harm, whether they target economic or physical availability, there are two groups within the population that need to be considered; the general population and high-risk populations. For these two groups, harm reduction strategies may be targeted towards the supply of alcohol, or the demand for alcohol (refer to table below). As Kypri points out, the strategies outlined in the table target consumption and do not include other broader strategies which may reduce alcohol-related harm without affecting consumption – for example the provision of public transport.

Supply-side	***General population*** Pricing/taxation Minimum drinking/purchase age legislation Legislative restriction on days/hours/location of sale Host responsibility initiatives Policing and other enforcement Advertising regarding on-supply or provision	***High risk populations*** In-patient care Imprisonment
Demand-side	Drink-driving legislation Random breath testing Restrictions on alcohol advertising Drinks labelling, packaging and health warnings Public health advertising School education curriculum Social norms marketing	Pharmacotherapies Psychological treatment Education strategies Screening and brief intervention

Strategies to Reduce Alcohol-Related Harm

Several authors have demonstrated that the most efficient approaches to reducing alcohol-related harm may be those which target particular drinking behaviours (i.e. binge drinking) among the moderately drinking majority of the population (Stockwell *et al,* 1996; Gmel *et al,* 2001).

A recent review of evidence in this area (Babor *et al,* 2003) has discussed in detail the effectiveness of strategies targeted towards the general population. On the whole, strategies targeting the supply of alcohol to the general population were found to be associated with greater gains in reducing alcohol-related problems (Babor *et al,* 2003). In particular, the authors cite evidence to support controls on taxation and pricing of alcohol, and physical availability as a means of limiting alcohol-related problems (Loxley *et al,* 2004; Chaloupka *et al,* 2002; cited in Toumbourou *et al,* 2004). There is also a large body of evidence demonstrating the significance of the context in which drinking occurs.

Significance of Drinking Context

A significant proportion of drinking by New Zealanders occurs in licensed premises. The *Drinking in New Zealand* National Survey (Habgood *et al*, 2001) reported that in 2000, a third of mens' alcohol consumption and a quarter of womens' took place on licensed premises. For both men and women, pubs and clubs were over-represented in terms of the number of heavy drinking occasions that occurred there. Other studies examining drinking patterns in New Zealand have demonstrated an association between heavy consumption and drinking on licensed premises (Casswell and Zhang, 1997).

The National Alcohol Survey (Habgood *et al,* 2001) reveals that the majority of alcohol consumed by New Zealanders is consumed in their own homes. Over a third of men's alcohol consumption and a quarter of women's took place on licensed premises. Interestingly pubs and nightclubs were among the locations over-represented in heavier drinking occasions, along with motor vehicles, outdoor public places, marae and special events. The international literature demonstrates the significance of time and place of consumption as factors which impact on the likelihood of experiencing alcohol-related harm. In particular the risk of becoming a victim or perpetrator of violence appears to be related to the time and place of alcohol consumption. Australian authors Teece and Williams (2000) hypothesized that the places where alcohol is consumed, the timings of absences from the home, and the frequency of these absences might be more important factors than being young and male, in terms of the likelihood of experiencing alcohol-related violence. This study revealed that the largest proportion of alcohol-related assaults (over a third) took place in licensed premises; and they were more likely to take place at night and in the weekend. In keeping with the hypothesis that time and place impact on the risk of being involved in alcohol-related violence, Briscoe and Donnelly demonstrated a relationship between the hours of trading on licensed premises and violent assaults; with extended trading hours being associated with greater numbers of assaults occurring on premises (2003).

These patterns of consumption are significant given the international evidence indicating that drinking on licensed premises may be associated with a greater risk of injury from violence than drinking in other locations. In their recent study examining alcohol involvement in the injury cases presenting to two emergency departments in California and Mexico, Borges *et al* (2004) found that the risk of injury associated with alcohol consumption was higher in licensed premises than other public places. A study of emergency rooms in Australia, the US, Mexico, Canada, Spain and Argentina showed that injuries associated with restaurants and bars are far more likely to be violence-related than accidental (MacDonald *et al*, 2005).

Australian research highlights similar associations between consumption on licensed premises and violent crime. A survey conducted in 2000 indicated that over one-third of assaults experienced at the hand of someone under the influence of alcohol, occur on licensed premises (36.5%) followed closely by assaults occurring on the street (35.5%; Teece & Williams, 2000). Australian surveys examining drinking patterns present a similar picture to NZ-based research findings, indicating that a significant amount of at-risk drinking occurs on licensed premises (Donnelly & Briscoe, 2003). This was highlighted in a study carried out over a 12-month period in New South Wales which revealed that, of people involved in incidents attended by police, almost all those who cited a licensed premise as their last place of drinking were moderately or seriously intoxicated (Wiggers *et al,* 2004).

Findings of New Zealand-based research are in keeping with international studies suggesting a link between drinking on licensed premises and increased risk of violence or victimisation. The National Survey of (Morris *et al,* 2003) 2001 indicated that a significant proportion of all violent assaults in New Zealand occur on licensed premises. Where violence occurred on licensed premises, it was more likely to have been committed by a stranger. In fact, 18% of all violent victimisations (perpetrated by a person not well known to the victim) and 9% of all threats of violent victimisation occurred in a pub, club or nightclub. Roughly 75% of these incidents resulted in injury. Earlier research suggested that licensed premises may also be overrepresented as the place of death in homicide statistics (Langley, Chalmers and Fanslow 1996).

Last Drink Survey data from the Auckland region in 2003 indicated that licensed premises were reported as the last place of drink in up to 33% of police apprehensions. It is possible that the proportion of alleged offenders who had their last drink at a licensed premises was much higher than this; because the remaining proportion of cases includes those where no premises (licensed or otherwise) was named on the charge sheets or survey forms. The most

commonly reported offences reported in the Last Drink Survey data were drink-driving, violence and disorder offences. Survey data also indicated that alleged offenders who named a licensed premises as their last place of drink were more likely to be extremely intoxicated than those whose last place of drink was not a licensed premises, or where the location was not specified (Broughton, 2004 *a, b ,c;* Newton, 2004 *a, b, c*).

Whilst there is some pharmacological evidence that alcohol may have a role in encouraging aggressive responses in some individuals through biochemical means (Fulweiler, Eckstine and Kalsy, 2005), there is more definitive evidence describing the environmental factors that have a significant role in the etiology of violence and aggression in licensed premises. In their discussion of Community Action Projects Homel *et al* (2001) point out that serving practices are only one aspect of the licensed premises environment which contribute to the overall atmosphere and activity within the bar/nightclub and surrounding areas. Aspects of the physical environment that are associated with increased aggression within the licensed premises environment include unclean or poorly maintained venues, poor ventilation, inconvenient access to the bar, inadequate seating, high noise level, crowding, dancing, and pool playing. The availability of food has been associated with reduced risk of aggression. In addition aspects of the social environment have been shown to influence levels of aggression within licensed premises; including the standard of behaviour expected by the premises and staff interactions with patrons (Homel *et al,* 2004).

These findings may explain why some licensed premises are associated with more problems than others. There is substantial evidence indicating that the majority of violence and crime associated with licensed premises may in fact be limited to a small proportion of licensed premises, with particular characteristics (Considine *et al,* 1998; Briscoe and Donnelly, 2003). A recent study in New South Wales found that in Sydney over the period 1998-2000, 12% of hotels and nightclubs were responsible for 58% of all assaults on licensed premises (Briscoe and Donnelly, 2003). As Quigley *et al* (2003) have observed; *"not everyone who attends bars experiences violence and not all bars are places in which violence frequently occurs."* In New Zealand, Last Drink Survey data confirms that criminal offending associated with drinking on licensed premises may be limited to a relatively small number of premises – between 23% to 40% in the Auckland region for example (Broughton, 2004 *b, c*).

In their study, Quigley *et al* (2003) attempted to examine the characteristics of bars in which violence occurs while accounting for the personalities of those who patronise the bar – it was hypothesised that while the personality characteristics of the patrons would be associated with the characteristics of the bar, the characteristics of the bar itself would be stronger predictors of whether or not the bar was violent. Analysis of the characteristics of the bars themselves revealed that bars in which violence occurred were reported to be smokier with poorer ventilation, more crowded, dirtier, darker, noisier, warmer and more likely to have pool tables, dancing and illegal activities than bars where no violence occurred. Violent bars had higher numbers of male staff compared to female staff and were more likely to have bouncers; and the cost of drinks was lower in these premises. Patrons who were younger, higher on trait anger and had alcohol dependence problems were more likely to attend bars with these characteristics. The results of the study confirmed that the patrons who frequent violent bars have different characteristics than those who do not (more likely to be younger, less "agreeable" and more impulsive than patrons who visit non-violent bars), but that the strongest predictors of violence in the bars come from the characteristics of the premises, rather than the patrons.

Altering Drinking Context

In their review of the literature, Babor *et al* (2003) define approaches to alter the drinking context as prevention measures which seek to limit the environment where alcohol is sold and consumed. These include:

- Community action projects in which local groups and organisations attempt to influence licensees and raise public awareness of issues relating to alcohol sale/consumption.
- Responsible Beverage Service policies which prohibit the sale of alcohol to intoxicated patrons, involve training bar staff and managers to prevent and better manage aggression and voluntary codes of bar practice.
- The enforcement of on-premises regulations and legal requirements.

Other authors reviewing the effectiveness of these strategies agree that enforcement is crucial if liquor laws are to have an impact on server behaviour; likewise the effectiveness of licensee "codes of conduct" depends on external pressures from police and other regulatory officials for compliance (review by Stockwell, 2001a; Loxley *et al*, 2004).

Community Action Projects

Community approaches involve local action and awareness-raising from community groups, residents and business people. Such interventions encounter difficulties on several levels, and so far it has been difficult to demonstrate that they result in any permanent reductions in disorder, crime or violence, although there is some evidence that they can be successful in the short-term. Several studies in the US (see Grube, 1997) have documented their attempts in exploring the potential of local policies to lower alcohol retail availability as a means of reducing alcohol-related problems, but this is yet to be undertaken on a similar scale in New Zealand. The Surfers' Paradise Safety Action Project which took place in Queensland in 1993 is one example of a community based initiative which initially had significant impacts on reducing aggression in and outside licensed premises and reducing drunkenness and drinking rates (Homel *et al*, 1997 cited in Homel, McIlwain and Carvolth, 2001). This was the result of a wide range of measures which included encouraging managers to introduce a Code of Practice in order to regulate serving staff, security staff, advertising, and entertainment within the venue. Follow-up two years later however, suggested that violence and drunkenness levels had returned to the levels observed prior to the initiation of the project. The authors suggested that displacement of patrons may have been responsible for the initial reductions in aggression and drunkenness.

Based on their analysis of the Surfers' Paradise Safety Action Project and other similar community action projects undertaken in Queensland; Homel *et al* (2001: 731) outline the features of a successful community intervention as being:

- *"strong directive leadership during the establishment period*
- *The mobilization of community groups concerned about violence and disorder*
- *The implementation of a multi-agency approach involving licensees, local government, police, health and other groups*
- *The use of safety audits to engage the local community and identify risks*
- *A focus on the way licensed venues are managed, particularly those that cater to large numbers of young people*
- *The re-education of patrons concerning their role as consumers of "quality hospitality"*
- *Attention to situational factors including serving practices that promote intoxication and violent confrontations"*

Generally, it seems that in order for any community action project to be successful (in the short or long term), it needs to focus on the management practices which may contribute to an unsafe environment and to have legal, regulatory and enforcement support (Saltz and

Stanghetta, 1997; cited in Homel, McIlwain and Carvolth, 2001). The critical role of enforcement in conducting a successful community action project was demonstrated in California by Grube (1997) who outlined the "community trials project". This trial sought media advocacy while focusing on the provision of responsible server training to serving/sales staff and outlet policy development, and heightening the enforcement of underage sales laws. This led to significant reductions in the sale of alcohol to underage drinkers. Support from local enforcement agencies was critical to the success of this project, with failure of police and liquor licensing authorities to "follow through" with support in the form of enforcement identified by some authors as a weak point in many community action projects, and perhaps the most significant factor in achieving long-term change (Homel, McIlwain and Carvolth, 2001). It has been suggested that a lack of investment from some agencies, including local government bodies, is the result of perceptions that successful strategies require long-term investments of time and resources at a level that is hard to define (Bennet *et al,* 2003).

In New Zealand, short term successes have been used to garner support for such initiatives from local enforcement and regulatory agencies. Recently the Auckland Regional Community Action Project (ARCAP) set out to achieve change at a local level, relying on existing resources (Huckle *et al*, 2005). The project sought to reduce supply of alcohol to minors, to reduce supply by off-license premises to minors, and to challenge existing social norms about alcohol use amongst young people. A purchase survey of off-licenses was undertaken during the pre- and post- intervention phases with the aim of determining age checking practices and the ease with which minors are able to purchase alcohol. These purchase surveys involved 18 year old field workers attempting to purchase alcohol from an off-license premises. Key enforcement stakeholders and licensees were informed of the results of the survey prior to their general release. ARCAP also undertook a media advocacy campaign to increase awareness of age verification practices, and sent media releases to all newspapers in the Auckland region on the day of the campaign launch.

Overall the proportion of sales made without age identification in the Auckland region significantly decreased from 60% to 46% between pre- and post-intervention phases. The proportion of age identification signage that was present and visible significantly increased from 53% to 64%. Maintaining the impact of the intervention was seen as a key challenge, and this has certainly proven to be an area of weakness in other similar studies. Adequate, on-going resourcing is a significant issue; one key informant from the local police hoped that the results of this purchase survey might lead to an increase in the resources police have available to carry out their licensing responsibilities (Huckle, 2005).

Responsible Service Programmes

Babor *et al* (2003) suggest that of the various ways to alter the drinking context the most effective measure to take (in terms of reducing alcohol-related harm) is the enforcement of serving regulations and legal responsibilities of bar staff and owners. Responsible service programmes are a means of targeting one aspect of the "supply-side" of the licensed premises environment. Such programmes focus on the serving practices of bar staff – who have been described as the "gatekeepers" that contribute to community drinking practices (Buka and Birdthistle, 1999). Studies evaluating the long-term impact of server-based interventions have indicated that staff who attend training sessions report significantly higher levels of desired behaviours than untrained staff (such as checking IDs, and offering food or low alcohol alternatives) even five years after initial training (Lang *et al,* 1998; Buka and Birdthistle, 1999). However other studies suggest that any long-term impact of training depends greatly on factors other than the training itself, such as the perceived likelihood of prosecution for breaking licensing laws (which may be related to the level of enforcement dedicated to maintaining the licensing laws), and the particular behaviours which are being measured (see review by Stockwell, 2001*b*).

Survey data from NSW, Australia indicates that while many patrons are becoming intoxicated on licensed premises, relatively few are experiencing responsible service initiatives in these settings (Donnelly and Briscoe, 2003). Of the 412 respondents who reported that their last acute-risk drinking occasion had occurred at a licensed premises, over 55% reported showing at least one visible sign of intoxication – loss of co-ordination, slurred speech, loud or quarrelsome behaviour, spilling drinks, or staggering/falling over. However, of these visibly intoxicated respondents over half continued to be served by bar staff. Of the remaining respondents showing signs of intoxication; 2% were refused service, 3.5% were asked to leave, 5% had transport home arranged by staff or were advised of transport options, and staff suggested to 3.5% that they stop drinking. Over a third of respondents showing signs of intoxication stopped drinking of their own accord. While there is no local research which examines patrons' experience of RBS practices in as much detail, results of the National Alcohol Survey conducted in 2000 indicated that 73% of respondents who drank at pubs/hotels/taverns and 76% of those who drank in nightclubs thought it was likely that a drunk would be served alcohol there (Habgood *et al*, 2001).

United States' studies suggest server training appears to have the greatest impact on the serving behaviour of staff that are relatively inexperienced, and those working in establishments that do not have written policies regarding serving practices (Buka and Birdthistle, 1999). There is also evidence to suggest that repeat sessions targeting specific serving skills may be more effective in the long term compared to one-off, short duration training sessions (Buka and Birdthistle, 1999). However, this evidence is based on self-reported serving behaviours rather than direct observations of the servers' adherence to the training; and rates of follow-up participation in the self-report assessments were less than ideal.

A brief review by Buka and Birdthistle (1999) of evaluations of server interventions in North America identified the need for more evidence to determine the long-term effects of such interventions; the authors suggesting that the majority of evaluations were concerned with relatively immediate effects of RBS programmes. The authors also pointed out that these studies had not shed light on "optimal components of specific training curriculum" or the role of "booster" sessions. The authors themselves sought to address these gaps in the evidence base by assessing the short and long term effects of a server training intervention on Rhode Island in the United States. Three communities were chosen – in one community a series of five-hour server intervention training programmes were staged, while the other two sites were designated as comparison sites. The intervention was staged over a five-year period, and the effectiveness of the training was based on self-assessment, with short and long term impacts measured through a survey questionnaire identical to the one which had been administered during the training itself. The authors defend the use of self-assessment rather than observation to determine compliance by suggesting that use of observational techniques would risk jeopardising the Health Department's rapport with the communities involved. The result of the study indicated that trained servers consistently reported significantly higher levels of desired serving behaviours (including checking IDs of young patrons and practices towards intoxicated patrons) compared to non-trained servers. Although the authors acknowledge that follow-up participation in later years was low, they suggest that the results showed that while positive serving practices were still significantly higher than pre-training levels, there was a decline in the effect three to four years after training.

Several studies have demonstrated that compliance among licensees and managerial staff is crucial to the success of RBS policies. In a study which sought to measure the impact of RBS training on alcohol-related harm, Lang *et al* (1998) observed that some bar staff cited lack of managerial support, personal objections and fear of customer hostility as the reasons for their "ambivalent" views on RBS training. The authors observed that management support was generally difficult to obtain; with one manager warning their staff against spending too much

time on checking for age and another telling staff that *"their job was not to act as health promotion advisers but to meet the needs of customers" (Lang et al, 1998, pp 49).*

This study was conducted in Fremantle (Western Australia) in "high risk" bars, identified from drink-driving statistics and alcohol purchasing data. Matched control bars were used; these bars were located in another city and matched the case bars in terms of risk. Staff from the "case" bars underwent RBS training, while those in the control bars did not. Core components of the RBS programme utilized in this study were: service to underage patrons; dealing with drunken customers; the effects of alcohol, the concept of a standard drink; recognizing the signs of intoxication and the development of a responsible house policy relating to bar service.

In practice, the latter two points appear to have been somewhat neglected in the training and the authors acknowledge that this may be one of the major reasons they did not observe the positive outcomes they had hoped for in terms of harm reduction. Despite this shortcoming and a lack of support from the police in terms of enforcement, Lang *et al* (1998) found a significantly greater drop in the number of intoxicated patrons leaving intervention compared to control sites (measured during "patron exit surveys") and a decrease in observations of extreme intoxication in the intervention group compared to the control group.

Local research has highlighted similar issues to those raised by Lang *et al* (1998). An evaluation of host responsibility practices in Auckland during the period 1993 – 1995 indicated that while many bar managers were generally positive about host responsibility practices, they also expressed reservations about how fully such practices could be implemented *"It slows you down at certain times so you can do your host responsibility. When I say it's hard to do at times that's because you get a full bar, and you don't know how many people are hiding in a corner could be rotten…somebody else is buying the drinks, and that's where it becomes very hard and totally impractical to be a good host. You can't be everywhere"* (Webb *et al,* 1996: 12).

Other managers felt that they were either powerless to prevent intoxication, or felt it was not their responsibility - echoing similar sentiments to those expressed by licensees in Lang *et* al's study (1998): *"I don't really give a shit to be honest. My job is to sell beer, if they get drunk that's their problem"* (Webb et al, 1996).

As Lang has noted, such attitudes have the potential to undermine any gains made in the promotion of RBS policies. Earlier research conducted among licensees in Wellington reiterated the impact that managerial attitudes can have on the behaviour of the serving staff they employ. If staff felt that management wanted them to sell as much alcohol as possible, regardless of age, intoxication, and behaviour, then they were less likely to adhere to RBS guidelines than staff whose managers encouraged responsible behaviours (Baker *et al,* 1995).

Baker *et al* (1995) reported that many staff, even those who had received formal host responsibility training, did not always put their knowledge into practice particularly in their assessment and handling of intoxication. Several respondents attributed this to difficulties in interpreting or defining intoxication. Some pointed out that there is a *"spectrum of intoxication"* rather than an absolute state; making it difficult to form consistent judgments about intoxication. Indeed, the lack of a consistent, widely understood (locally at least) definition of intoxication has proven to be an issue for both licensees and regulatory/law enforcement officials, not just in New Zealand *"one obstacle to enforcement of prohibitions upon serving alcohol to the intoxicated is the subjectivity of the signs by which servers are to judge whether a patron is intoxicated"* (McKnight and Streff, 1994: 81).

It is interesting to note Webb *et al's* observations that bar managers felt that intoxication had become easier to deal with over the course of the three-year evaluation; they attributed this to

changes in attitudes to drinking generally, changes in the law that allowed the banning of patrons and raised awareness from staff of the reasons for preventing and dealing with intoxication appropriately. Several managers also suggested that police visits had helped them to control drunkenness. Interviews with managers highlighted the significance of the manner in which these visits were conducted *"…more support by police, they seem to be working with us now, and will pop in on a casual basis only to see how things are going"* (Webb *et al,* 1996).

Critical Role of Enforcement

Enforcement has a significant role in the ensuring the success of community action projects and RBS programmes in terms of their impact on the drinking environment, and the compliance of licensees with liquor licensing laws (Jeffs and Saunders, 1983; McKnight and Streff, 1994; Webb *et al,* 1996; Lang *et al*, 1998). Enforcement approaches do not necessarily need to rely solely on police (Homel 1996), although studies attempting to address alcohol-related harm by targeting intoxication on licensed premises through interventions centred around RBS principles, for example, have found only limited success when police enforcement is scant or irregular (refer to Lang *et al,* 1998). In their study which examined the effect of heightened police enforcement on drink-driving citations and service of alcohol to intoxicated patrons, McKnight and Streff (1994) demonstrated that while serving staff may be well able to recognise patrons intoxication, they are in many cases only motivated to refuse service in an environment where licensing laws are strictly enforced. This re-iterates the need for enforcement to support RBS policies and training programmes.

Early research demonstrated that increased police activity on licensed premises resulted in greater compliance with liquor licensing laws and a decrease in crime committed by people who had become intoxicated on licensed premises. A study carried out in a beachside town the UK in the late 1970s showed that the majority of offenders were under the age of 25 years and over 90% of people arrested between the hours of 10pm and 6am had consumed alcohol in the four hours preceding their arrest (Jeffs and Saunders, 1983). Jeffs and Saunders sought to test their hypothesis that increased enforcement of liquor licensing laws would result in a drop in crime rates compared to "normal" levels of enforcement in the years before and after the period of increased enforcement. Indeed, arrests decreased by over 20% during the period of heightened enforcement. Furthermore, the authors observed that the reduction in "alcohol-related arrests" (including drunkenness, drink-driving, breach of the peace, and criminal damage) was significantly greater than the reduction in arrests where the alcohol factor was deemed by the authors to be low (for example theft and burglary). Taken in isolation, Jeffs and Saunders (1983) findings can only be interpreted so far – the study was undertaken in a small beachside resort town in England. The population of the town fluctuated significantly depending on seasonality and the authors acknowledged that the nature of the resort tended to draw in large numbers of young people during the summer months when the heightened enforcement took place. This may explain, at least in part, why such a large proportion of those arrested were under the age of 25 years.

Burns *et al* (1995) attempted to replicate Jeffs and Saunders work in New South Wales. As in Jeffs and Saunders' earlier research, the objective of the study was to assess the effect of heightened police supervision of the local liquor licensing laws on the number of recorded criminal offences and assaults. This particular intervention consisted of a two-month period of heightened police supervision, during which time uniformed "beat" officers visited known trouble spots with a particular focus on service to underage and intoxicated patrons. The number of criminal offences (including assaults) and the number of hospital admissions for assault-related injuries occurring during this period of heightened enforcement were compared to the preceding two months during which time policing of the liquor licensing laws had occurred at "normal" levels. Police offence data during the intervention period was

also compared to offences occurring in the two months following the intervention, however hospital admission data was not.

Of all licensed premises in the area, 64% were visited on average two times a week during the course of the intervention; with police making approximately 79% of their scheduled visits. Burns *et al* (1995) did not observe the decrease in criminal offences during the intervention that they expected to; in fact they were somewhat dismayed to report that the number of offences (including assaults, which were examined separately) actually went up during the intervention compared to the two-month blocks either side of the intervention. However, it is of note that the number of hospital admissions for assault related injuries were significantly fewer when compared to the admission rates for the two months preceding the intervention. The most likely explanation offered by Burns is that the increased offence reporting observed during the intervention is due to the increased police presence, which meant that there were more opportunities to observe and report such crimes (see review by Stockwell, 2001a). A recent study of the impact of a heightened police presence on crime during terror alerts in the US indicates that while a heightened police presence on the street may result in a drop in certain types of offences, namely "street crimes" such as theft of and from cars, the circumstances under which other types of offences are committed (for example assaults which are most frequently perpetrated on private property) means that increased police visibility on the streets is unlikely to have an impact on the reporting rates of these offences (Klick and Tabarrok, 2005).

Burns *et al* (1995) also suggested that the higher offence rate observed during the intervention period may have been because the police visits themselves were conducted in too "mild" a manner. In fact, surveys of New Zealand bar managers indicate that such an approach is preferable as it fosters an environment more conducive to positive change and compliance with liquor licensing laws than an aggressive, threatening approach (Webb *et al*, 1996). Burns and others have pointed out that for any intervention targeting compliance with liquor licensing laws to be successful, the incentives to comply with the law must outweigh the incentives to break it (Burns *et al*, 1995; McKnight and Streff, 1994). Law enforcement/regulatory officials must have effective means of deterrence at their disposal; in this case the threat of significant financial loss. However, the manner in which enforcement activities are carried out does not necessarily need to reflect the severity or likelihood of these punishments being applied where licensees/serving staff are found to be in breach of licensing laws.

More recent evaluations have indicated that if the enforcement component of licensed premises interventions is approached with a harm-reduction focus rather than one that is strictly focused on compliance with laws, the outcomes may be positive for all involved, including licensees. This was demonstrated recently in another study carried out in New South Wales, where community concern regarding high levels of violence and crime in and around licensed premises prompted the development of a program designed to enhance police enforcement of liquor licensing laws relating to licensed premises (Wiggers *et al*, 2004). The authors reasoned that while there were several examples of well documented police enforcement approaches in the literature, there was in fact little evidence of the impact or efficacy of these strategies in reducing alcohol-related harm.

As part of their planning, Wiggers' team made an initial assessment of existing police enforcement activity. The findings of this assessment provide some insight into the factors which may impede effective enforcement of liquor licensing laws, and are not limited in their relevance to New South Wales:

- "*Inadequate intelligence data regarding alcohol involvement in crime*
- *Inadequate intelligence data regarding the last place of alcohol consumption by people involved in crime*

- *System difficulties in retrieving alcohol-related intelligence data and in identifying high-risk premises*
- *Insufficient police resources for enforcement of liquor licensed laws*
- *A low priority being given to enforcement of licensed premises; and*
- *High cost of proven enforcement strategies"*

(Wiggers *et al*, 2004; 357).

In order to address the inadequacies of intelligence data regarding alcohol involvement in crime in NSW, Wiggers *et al* (2004) developed what they have called the "Alcohol Linking Program". This involved all operational police routinely collecting specific information from persons involved in police attended incidents including whether the person had consumed alcohol prior to the incident, how intoxicated the person appeared to be, where the person had last consumed alcohol including details of licensed premises. This information is similar to that which is collected by New Zealand Police, as part of the Last Drink Survey. The information collected was then used to direct policing efforts to particular premises.

Police conducted audits of service and management practices at these premises and findings were then discussed with the licensees, together with recommendations for improvement. The efficacy of their approach was assessed through a randomized controlled trial involving 400 licensed premises in NSW. Wiggers *et al* (2004) reported a statistically significant reduction in alcohol-related incidents associated with premises that were part of the test group assigned to the "Alcohol Linking Program" compared to those that received "normal" policing. A survey of police staff, licensees and residents in the area found that the majority of people found the new policing approach acceptable; in addition many of the licensees said that they found the audit and feedback reports from police to be helpful.

In addition to these findings, a comparison of alcohol-related crime rates following the implementation of the strategy with the crime rates during a "baseline" period in the previous year suggested a reduction of up to 22% in the number of intoxicated patrons involved in incidents that followed their reported consumption of alcohol on audited premises (Wiggers *et al*, 2004).

3 METHODOLOGY

3.1 Approach

This research involved an enforcement intervention involving targeted visits to on-licensed premises to perform intoxication checks and reinforce the requirements to refuse alcohol service to intoxicated patrons. The intent of this intervention was to reduce the extent and magnitude of public intoxication. Other studies have shown these types of enforcement interventions to be effective when supported by penalties. It was hypothesised that a mix of visibility, publicity and perceptions of risk of penalty collectively would increase compliance.

There are a wide variety of policy-related interventions aimed at reducing alcohol-related harms, each of which has shown some promise in harm minimization. These include interventions and controls that affect: how, when, and where alcohol is sold, consumed and priced; the broader social environment surrounding alcohol use; how existing alcohol policies are enforced and how underage youths obtain alcohol (Wagenaar and Toomey 2000).

It is also important to recognize that an effective alcohol-control strategy typically involves participation from the wider community as well as regulatory agencies, and that alcohol interventions may be most effective at reducing harm when several are enacted together (Holder *et al,* 1997). However, given resource and methodological constraints, this project involved assessing the impacts of one intervention for decreasing alcohol-related harm.

It was recognised early during the research design that policies targeting intoxication were likely to receive mixed reception by the public, licensed premises owners and workers and among frontline police. It was envisaged that adult patrons of these premises might resent police checking on their drinking behaviour, potentially alienating the public and police to some degree. Further, if people felt harassed by their experience in a particular establishment or area, they might simply choose to consume alcohol in establishments or places that were less likely to be the focus of enforcement activity. Other studies have also shown that drinking establishment owners and workers are often concerned with the potential loss of business resulting from enforcing responsible beverage service practices, as well as the time and cost involved with training employees in such policies (Saltz & Stanghetta, 1997). Some members of the police may also feel less inclined to enforce responsible drinking behaviour by adults, understanding such interactions are more likely to be confrontational.

Time Period

A quasi-experimental research design was chosen as it was seen to be important methodologically that the outcome of one intervention be assessed at a time (Cresswell, 1994). Examining one intervention at a time is preferable (and generally necessary without complex modelling) because when multiple interventions are introduced and examined simultaneously, it is impossible to disentangle the effect of one intervention or measured outcomes from the other.

The present study was conducted over a shorter period than other similar studies, which have taken place over a number of years (see Holder *et al,* 1997). This brief initial study was intended to examine the efficacy of the enforcement approach for reducing alcohol-related harm, providing the background for a larger study in the future.

The intervention involved undertaking two six-week periods of heightened police and other regulatory agencies presence on licensed premises, separated by a period of eight weeks

where regulatory presence on licensed premises returned to "normal" levels.[4] As depicted in Chart 1 below, the period of heightened interventions were during November 2004 to December 2004, and March 2005 to April 2005

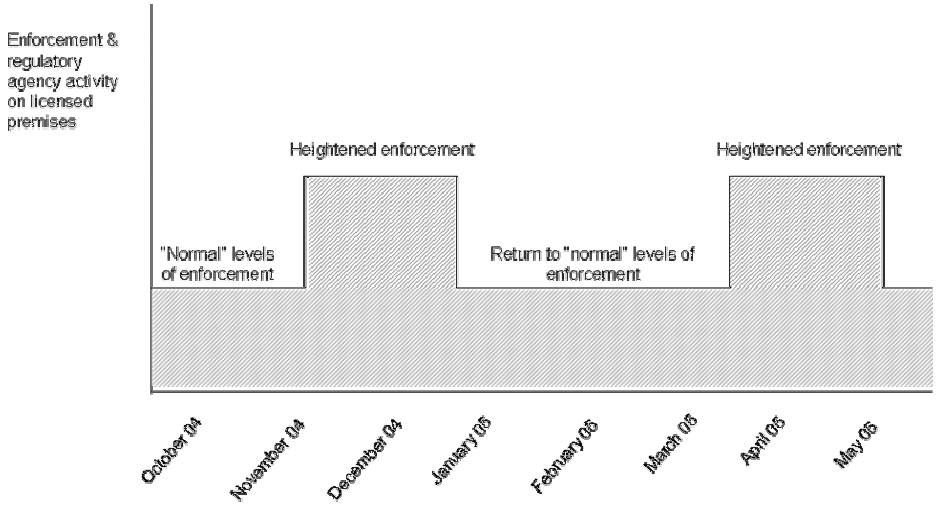

Chart 1 **Intervention Timeline**

Data collection commenced one month prior to the first intervention and extended to May 2005 in order to obtain sufficient data from different periods of enforcement activity.

Geographic Focus

The geographic focus of this study was on licensed premises located in the Wellington Central Business District. Performing the research in Wellington had several advantages. One of these was that a variety of other alcohol-related interventions were already employed, including an inner city liquor ban, community safety patrols, and public place policing of the alcohol ban. As long as these measures were consistently applied during the present research then it was felt that they provided a mechanism to ensure that any displacement effects to other drinking locations would be minimised. Secondly, the city also has a high density of licensed premises within a confined area, enabling intelligence targeted patrolling of problem outlets to be achieved.

[4] In Wellington, "normal" policing of the licensed premises environment is carried out by a specialist liquor licensing sergeant, supported by occasional licensed premises visits by more generalist team policing and wharf police units. These staff make visits to licensed premises as directed by the liquor licensing sergeant, to check compliance with liquor licensing laws. During the intervention periods the consequences of breaches of liquor licensing laws, including the threshold to prosecute breaches of liquor licensing laws, remained unchanged from practices during "normal" policing.

3.2 Enforcement Intervention on Licensed Premises

The intervention was intended to increase licensees focus on intoxication and involved four key components: (1) Notification of the heightened focus on intoxication to licensees (2) Increased focus on intoxication in regulatory visits to licensed premises (3) Targeted police enforcement visits to licensed premises focusing on intoxication (4) Combined regulatory agency visits to resolve problems or initiate processes to penalise non-compliant premises.

Communication with Licensees

In order to raise awareness of responsible serving practices and preventing intoxication on licensed premises, several communications were issued to the licensing industry in Wellington.

During October 2004, a briefing was provided to a large group of Wellington licensees. This briefing was made to licensees invited to a "Business Before Five" (BB5) meeting. These meetings are scheduled approximately every six months by the regulatory agencies to meet with the licensing industry, the BB5 meetings represent opportunities to exchange information about liquor licensing issues.

The BB5 briefing highlighted that police were about to heighten their focus on intoxication and alerted licensees to the researchers' intention to evaluate the results of that heightened enforcement. The people attending the meeting were also briefed on police expectations in regard to the refusal of service to intoxicated patrons and the guidelines that they would be using to assess any patron's level of intoxication. Those attending the meeting also received advice on how to deal with intoxicated patrons including a recommendation to use "places of safety", which are alcohol-free spaces away from the general drinking area within a licensed premises. If bar staff are concerned that a patron is intoxicated then they may direct them to this area, where they will not be served alcohol, until a taxi arrives to take them home or they are able to leave safely. If intoxicated patrons are located in this area when police conduct a visit, then licensees/bar staff will not be cited as they would if the intoxicated patron was in the general area of the bar. These "places of safety" are not compulsory under liquor licensing legislation but are encouraged by the Wellington Police.

In addition to the BB5 briefing, licensees were also informed of the focus on intoxication through a number of other channels. There were several radio broadcasts and newspaper publications alerting the community to the forthcoming focus on intoxication and these items also mentioned the intention to undertake research into the impacts of heightened regulatory activity. These media items involved two newspaper articles that were published in the daily Wellington newspaper (The Dominion Post; refer to appendices). There were also two radio interviews.

During October 2004, all Wellington licensees received letters (co-signed by Police, District Licensing Agency and Regional Public Health officials) outlining the regulatory agencies' combined focus on intoxication.

Licensing Agency and Public Health Visits

In addition to the heightened police presence on licensed premises during the intervention periods, premises also received visits from regulatory staff from the Wellington District Licensing Agency and from Regional Public Health team members working for the District Health Board. These visits were generally conducted outside of busy trading hours and represented an opportunity for regulatory officials to identify general license compliance issues, and to discuss with each licensed premise's duty manager their Sale of Liquor Act responsibilities. On occasion the police liquor licensing sergeant also attended these

regulatory visits, alongside other agency officials. Such visits are conducted routinely as part of the "normal" licensing environment in Wellington; to support the heightened focus on intoxication the number of visits made to licensed premises was increased and the focus of visits was altered slightly. During November 2004 (the beginning of the first intervention period) and March 2005 (the beginning of the second intervention period) visits were conducted specifically to alert licensees to the police focus on intoxication. During the first intervention, these visits were mainly directed towards identified problem premises (i.e. the 20 problem bars identified through the Last Drink Survey data). During the second intervention (March 2005), the visit locations were broadened to include a wider range of premises.

In addition to their visits to on-licenses, health official and licensing agency staff also continued their normal schedule of visiting other liquor outlets including off-, club- and restaurant licenses. They also conducted a programme of scheduled visits to premises located outside the Wellington CBD.

The time of day that these compliance visits were conducted was determined by the licensing agency and public health officials in accordance with their own rosters and insights as to when these visits might be most effective. The licensing agency and health officials undertook follow-up visits where any problems were identified.

During the compliance visits the licensing agency and public health officials checked compliance matters according to their normal practice (ensuring that licenses and certificates were displayed, the duty manager was present, food menus and alcohol service policies were in order). The licensing agency and health officials were also asked to discuss, with the bar staff, the specific issue of intoxication in some depth. This involved discussing with the duty manager the need to focus on intoxication and the combined regulatory agencies' current concerns about seeing an improvement in host responsibility practices.

These discussions with each premises' duty manager would cover questions regarding the bar's policies for dealing with intoxication; staff understanding and skills in dealing with intoxication and made reference to supporting literature. Managers were asked to pass information on to door staff, serving staff and to other duty managers[5].

Police Visits

During the periods of heightened enforcement intervention, additional police resources were assigned to undertake licensed premises visits. This was achieved by forming a specialist Liquor Policing Unit (LPU). The unit comprised a sergeant and five other uniformed police staff who patrolled licensed premises from Wednesday through Saturday nights, usually between the hours of 8pm and 4am.

The LPU operated in parallel with continued normal policing activity (such as visits to licensed premises by Team Policing sectional staff and other police units). LPU staff received specific training on conducting licensed premises visits and conducting these visits were their only role during the intervention periods. Other police groups need to be constantly available to attend to other duties, such as response to general calls for police assistance, in addition to any premises visits.

All police units visited licensed premises according to schedules that were developed by the Wellington Liquor Licensing Sergeant who used data from Last Drink Surveys and other intelligence information to identify problem premises for particular enforcement attention.

[5] A more detailed description of these visits can be found in the appendices.

Visits by the LPU involved a structured approach to identifying any intoxicated patrons. Upon arriving at a licensed premise, the Sergeant in charge of the LPU would identify and approach the duty manager to discuss the reason for their police visit. There would also normally be a check that the duty manager's name was correctly displayed. Another member of the LPU team would usually remain at the door. Other police staff would then move amongst patrons and interact with people to determine whether any were intoxicated or under the minimum legal purchase age for alcohol. Any persons identified either as intoxicated or underage would be escorted to an area outside the bar, where a further assessment would be made. Intoxication would be judged against a five point scale[6]. The duty manager (and the group's Sergeant) would be asked to observe and attest to this assessment. Generally, any intoxicated person would then be asked to leave the bar (by the duty manager). These assessments were recorded on a police 101LPP form (refer to appendices). Any minors found on premises were usually issued with a liquor infringement notice and also asked to leave the premises.

A record of these visits was recorded on a police 101LPV form (refer to appendices) and this form was provided to the liquor licensing sergeant as a record of the visit.

Guidance was issued to the police staff conducting licensed premises visits in other sections, about how to identify signs of intoxication. Staff members in the LPU also received special training on the skills required to recognise signs of intoxication.

This assessment of intoxication involved looking for observable signs of a person being affected by alcohol. Officers were advised that a person should be considered to be intoxicated if their speech, balance, coordination, or behaviour is clearly impaired. The specific factors they were asked to assess included whether the patron exhibited signs of:

- Altered speech patterns.
- Glassy, bloodshot eyes, lack of focus, loss of eye contact.
- Lack of coordination, stumbling or swaying.
- Aggressive, belligerent or argumentative behaviour.

These guidelines were developed by police in consultation with other agencies and took into account material published by the Alcohol Advisory Council of New Zealand (ALAC). Importantly, there is no definition of intoxication in the Sale of Liquor Act.

In addition to their training on observing signs of intoxication and how to conduct licensed premises visits, members of the police LPU team also received a briefing from the researchers to make them aware of the purpose of the research.

Combined Enforcement Group (KEG)

Prior to this research project, the three Wellington alcohol regulatory agencies had introduced a combined enforcement group ("KEG") partnership initiative. This was based on the New South Wales Linking Program and involved the Wellington City Council District Licensing Agency, Regional Public Health and Police as partners (see review by Box, 2005).

The KEG group was formed to adopt a group problem-solving approach to local liquor related problems. The group regularly meet to collectively assess data from all agencies and to determine strategies to address alcohol-related harm associated with licensed premises.

[6] The five point intoxication scale used the categories: slight, slight/moderate, moderate, moderate/extreme, extreme.

One important activity of the KEG, which is of relevance to this research, is that they convene as a group to follow-up any problems that are identified with particular licensed premises. Invitations to attend KEG meetings are issued to any licensee or manager of bars that have been identified during police or combined agency visits as having seriously breached the Sale of Liquor Act by having underage drinkers or several intoxicated persons on their premises. These KEG meetings represent an opportunity for the combined agencies to reflect their concerns to the bar owners and managers and seek immediate remedial action to resolve any performance problems.

If owners and managers fail to improve their performance following any warnings and any KEG meetings, the police and other agencies become motivated to take a case against the bar to the Liquor Licensing Authority.

Wellington police do not follow the practice of prosecuting Sale of Liquor Act offences through the District Court. Instead, they prefer to adopt a policy of following up serious breaches by taking cases to the Liquor Licensing Authority to seek penalties such as license suspension, or revocation. Police adopt this approach because they perceive the Authority to provide a more timely and effective resolution to breaches of the Act. They note that penalties, such as suspension of trading, tend to have more impact than modest monetary fines imposed by the courts. They also note that the Authority's hearing processes, which are based on inquiry rather than prosecution, tend to lead to more satisfactory outcomes.

3.3 Observation of Police Visits

Non-participant observers were used to examine the impact of police visits and police interactions with patrons and bar staff.

The "complete" or "non-participant" observational method is most suitable for this research project as the behaviour under study is occurring openly and in a public place. This method is preferable to other, more invasive observational strategies because the level of associated "reactivity" is minimized. That is, non-participant observation minimizes the chance that research subjects will alter their behaviour due to the presence of the researchers in the research environment. This approach is particularly appropriate for busy, public venues such as licensed premises, because, as Schutt (2001: 272) notes *"In social settings involving many people, in which observing while standing or sitting does not attract attention, the complete observer is less likely to have much effect on social processes."*

Thus, although observers were present in the field of study (i.e. drinking establishments) reactivity concerns were minimal, as observers made every effort to exercise discretion in their observation and recording and avoid any direct interaction with other patrons as well as limiting their contact with servers to requesting (non-alcoholic) beverages and/or food.

Ethical concerns surrounding the research project are also minimized with this approach as compared to observational strategies involving more researcher involvement (Schutt, 2001).

Selection and Training of Observers

Observers were selected based on their previous training and experience in carrying out observational studies. In total, 14 observers were recruited. Eight of these observers were post-graduate social science students familiar with anthropological methods; the remainder were university students with observational experience. Observers were vetted to identify any conflicts of interest; including connections to the hospitality industry in Wellington or previous work for the New Zealand Police. Observers had no contact with the police members, licensing agency or public health workers involved in the study at any point during the course of the research.

Methodology and procedures for the observations were discussed with observers as part of their induction process. An observer protocol was developed and delivered as part of their training process. Observers understood that the details of the study, and in particular where they would be conducting their observations, were to be kept confidential.

Observers attended one formal health and safety training seminar as part of their induction at the outset of the study. Material covered in this session included identifying potential hazards and developing strategies to deal with any hazards identified. Several feedback sessions allowed observers to discuss any issues that had arisen in the course of their observations and records were kept of any issues raised by observers.

Observers were supervised by two research co-ordinators throughout the study and these co-ordinators were in contact by cell-phone while observers were "in the field".

Scheduling of Visits

Observers worked in pairs, with two pairs working each Friday and Saturday night during the "heightened enforcement intervention" periods. Schedules of premises to be visited and the timing of observations were produced by the research co-ordinators after receiving a planned schedule of intended police visits to premises. Observers were scheduled to arrive at each venue 30 minutes prior to a scheduled police visit, and to remain for 20 minutes after the police had left the premises. The observers' schedules allowed for police visits of up to 30 minutes in duration, which meant that observers were generally in each of the premises for 1 hour 20 minutes.

Observations were made during the month prior to the first period of heightened enforcement intervention, in the weeks between the two periods of heightened intervention, and following the end of the second heightened intervention, were scheduled in a different manner. Observations during these times were not co-ordinated with the police schedule; this allowed a shorter period of observation of 30 minutes duration. This meant that observers attended more premises per night compared to the periods of heightened intervention. Premises for these observations were selected based on the frequency of their appearance on the Last Drink Survey.

Observational Procedure

Observers were provided with maps and details of the locations of the premises they were scheduled to visit. Because the majority of Wellington's bars and nightclubs are focused in a relatively small area of the CBD, observers were able to move between premises on foot. This was an advantage in terms of data collection as information about the environment outside licensed premises provided context for the observational data collected inside premises.

Upon entering each bar/nightclub, observers undertook a thorough "walk-through" in order to identify subjects of interest and to familiarize themselves with the premises. At this stage observers identified the most suitable place(s) to locate themselves in the establishment. This decision was made by finding a location that represented the best balance in terms of unobtrusiveness combined with suitability for observing the subjects "of interest" (selection took into account visibility of subjects; visibility of the bar; and whether a large portion of the establishment could be observed). Safety issues were also considered in this decision, such as access to the bar staff and strategic concerns such as having a wall on at least one side wherever possible.

Observational Guidelines

A set of guidelines was developed by the researchers in consultation with the observers. Throughout the course of their observations, researchers were asked to consider six variables on licensed premises:

- Environment (including crowding, visibility and noisiness).
- Individual behaviour/intoxication (including aggression, physical co-ordination and other obvious signs of alcohol impairment).
- Group dynamics (including group size, behaviour within or among groups and interaction with others on premises).
- Serving practices (including whether patrons were denied service and if patrons were provided drinks by their associates)
- Supervision (including if people are turned away at door and if so, why and whether staff appeared to have oversight of drinking areas).
- Police visits (including any changes in patron behaviour during or following each visit, changes in serving behaviour during or following each visit and any changes in supervision of bars)

Observers were instructed to use the same indicators used by police to assess whether any person appeared observably affected by alcohol and or other drugs to the extent that their speech, balance, coordination or behaviour is clearly impaired.[7]

These indicators are consistent with existing international research in the area, (for example, Toomey *et al*, 2001). Observers did not directly engage patrons to assess speech and eye contact, though at times they located themselves nearby to make assessments of these factors. However, there were limitations on such assessments, so observational results cannot be regarded as equivalent to any assessments conducted by police staff or by the staff employed by each licensed premise.

The research assistants provided written reports of their observations based on the variables as outlined above. These notes were written as soon as practicable after making the observations. Several observers found it useful to make notes while they worked; some jotted notes between visits, and others saved text messages into their phones to prompt their recall for their written records.

Focus-group interviews were conducted with observing staff to provide feedback after both interventions. The feedback from the first intervention was used to guide changes to the police approach to visits in the second intervention. Information from both observer feedback sessions was also used to validate data collected from other participant feedback focus-group interviews.

Participant Feedback

Participant feedback was sought from officers in the Liquor Policing Unit (LPU) and from bar owners and managers after the second enforcement intervention was completed.

[7] These indicators are:

- Altered speech patterns, such as slurred speech.
- Glassy, bloodshot eyes, lack of focus, loss of eye contact.
- Aggressive, belligerent or argumentative behaviour.
- Lack of co-ordination, stumbling, or swaying.

Focus-group interviews were chosen because they are particularly suited to obtaining several perspectives about the same topic. These interviews were designed to obtain information about participants' perceptions of the police interventions. Such interviews are not intended to generalise findings to a whole population, given that they involve a small number of participants and the likelihood that participants will not be a representative sample. They represent the views of the particular participants involved in this study.

Participants for the police focus-group were selected by police supervisors on the basis of availability. They included police staff of mixed rank. Participants in the bar owners/managers focus-group interview were selected from a list provided by the Hospitality Association of New Zealand of bar owners and managers from bars that had been visited frequently during the interventions.

Police, bar owners and managers' focus-groups followed a similar format. The format involved discussion around six key areas:

1. What they knew about the intervention
2. What participants "gut feelings" were about the interventions
3. What they liked about the interventions
4. What they didn't like about the intervention
5. How the interventions could be improved
6. Agreement on key points to summarise findings

3.4 Alcohol-Related Harm Indicators

Alcohol-related Crime

Recorded crime statistics are one indicator of alcohol harm outcomes. Data from five offence categories were analysed:

- Violence - all violence offences excluding kidnapping (but including homicide and assault and intimidation offences)
- Sexual – sexual attack offences only
- Drugs and antisocial – disorder offences only
- Property abuse - property damage offences
- Administrative - littering (of glass)

These offences were chosen as alcohol has been implicated as a potential aggravating factor in these types of crimes. These types of offences all feature in the Wellington police's Last Drink Survey results. Other studies of alcohol-related harm have utilised similar offence data. New Zealand and international research shows links between alcohol and street crime such as violence, disorder and property damage (e.g. APHRU, 2001; Teece and Williams, 2000; Casswell *et al*, 1997; Felson *et al*, 1981 cited in Quigley, Leonard and Collins, 2003; Makkai, 1998). Some of these studies draw potential links between the level of alcohol consumption and the likelihood committing violence, disorder and property crime.

The majority of these violence, disorder and property crimes occur at locations other than licensed premises (such as streets and parks). As the research design solely involves assessing the impact of police patrols to licensed premises patrols this means that the interventions themselves are unlikely to introduce any significant confounding effect on recorded levels of these indicator statistics.

Some other offences were also monitored relating to liquor related crime (such as underage drinking). However, as the intervention involved proactive policing and as a result of contacts in establishments, it was recognised the rate of issuance of alcohol offences would not be independent of the increased enforcement focus (for example, infringement notices issued to minors could be expected to increase if the level of police contact with underage drinkers increased).

There were other candidates for indicator statistics, but these were rejected for the current study. The Last Drink Survey implicates some other types of offending, such as dishonesty and traffic crime, as having potential alcohol antecedents. Dishonesty offending was not included as an indicator in this study, because the majority of dishonesty offences that are recorded in official crime statistics are not also reflected in Last Drink Survey data[8].

Traffic offending was not included as an alcohol harm indicator, because recorded traffic alcohol offences were expected to show a high dependence on the frequency and location of proactive police traffic alcohol operations. The frequency and location of these traffic operations was not controlled during the study so these types of offences were not considered appropriate as an indicator statistic.

Official crime statistics for the indicator offences were obtained for the calendar years 1999 to 2004. Provisional offence data was also sampled, on May 26 2005, for the period January 2005 to May 2005. This provisional offence data needs to be interpreted with the knowledge as they are not always directly comparable with official offence data. This is because provisional offence information changes (particularly in offence categories such as sexual attack) when any backlogs in data entry that might exist are cleared, new historical offences become reported, or when some offences become reclassified as a result of cases being resolved. As a result, data for May 2005 is likely to under-represent the actual number of recorded offences for that month.

Last Drink Surveys

During 1999, Wellington Police adopted a Last Drink Survey system to gather information about alcohol use during the processing of persons apprehended for certain types of crime (primarily disorder, violent offending, sexual offending, and drink-driving). This alcohol information allows police to ascertain whether those persons apprehended have been drinking alcohol prior to the commission of the offence, their level of intoxication, and the location at which they have taken their last drink.

The Last Drink Survey data involves police officers assessing the level of intoxication of the person apprehended and asking the arrested person where they had their last drink. Police staff members are usually instructed on how to make these assessments by the Wellington Liquor Licensing Sergeant. It is important to note that the assessment of the level of offender intoxication that is made by the apprehending officer may not be as consistent as similar types of assessments made by some other police staff who frequently undertake licensed premises visits (such as assessments made by liquor policing unit team members).

This Last Drink Survey information is collected to enable police to gain a clearer intelligence picture about alcohol-related offending occurring and enables them to target their enforcement activity accordingly.

[8] Some dishonesty offences do appear in the LDS data but total dishonesty offending is an order of magnitude higher than the numbers that are recorded in the LDS as having any alcohol involvement.

Data from the Wellington Last Drink Survey conducted was provided to the researchers by Regional Public Health who until recently were responsible for data entry of Last Drink Survey returns[9].

The data from the Last Drink Survey is arguably a sensitive indicator of the impact of any alcohol enforcement interventions. This is because offences specifically identifying apprehensions with alcohol involvement and drinking locations are able to be attributed to individual premises. However, for several reasons the data was not used as an alcohol harm indicator in this study.

Last Drink Survey data is not independent of the intervention, because the data was actually used to target licensed premises for increased enforcement activity.

There are also elements of the survey, such as intoxication assessments, which are based on subjective assessments by officers who are not necessarily experienced in making such assessments.

It is also arguable that the Last Drink Survey approach is unreliable because licensed premises identification depends on the ability or inclination of intoxicated persons to identify the premises they have been drinking at prior to their apprehension.

There has been no independent verification of the quality of any of the historic data (unlike official police crime statistics which are subjected to quality control procedures). This led the researchers to question the quality of data collected during the five years prior to this study, making it difficult to confidently establish a baseline for comparison with survey results obtained during the enforcement interventions.

It is also important to note that approximately two-fifths of apprehensions are not accompanied by Last Drink Survey information.

Offences Relating Intoxicated Patrons

Crime statistics relating to the Sale of Liquor Act and liquor ban offences were also monitored during the research. Breaches of the Sale of Liquor Act by any Wellington bar staff are not recorded in official crime statistics. Partly this is because Wellington police are not currently using the District Court to prosecute offences involving licensees, bar managers and staff. Instead they are recording these breaches in "informal" licensing records to support any action with the Liquor Licensing Authority.

Police officers have the power to issue infringement notices to deal with alcohol problems that involve youth (under the Summary Offences Act 1981). Officers also have offences (under the Local Government Act 2002) that they use to warn or arrest persons who transgress the Wellington City liquor ban. To assess the wider alcohol context that the licensed premises intervention has been preformed within, both infringement and alcohol ban offence data were analysed:

1. Infringement offences issued to minors for public consumption or possession of alcohol (Summary Offences Act offences).
2. Offences against the Wellington City liquor bylaw (Local Government Act offences).

[9] As part of a national initiative, Police are now responsible for such data collection as part of the Alco-Link project.

Geographic Location

Police offence data was obtained for the Wellington scene station, which covers an area that exceeds the area of the inner-city. The Wellington station area covers western and southern suburbs of Wellington and the central business district. The boundaries of this Wellington scene station area are shown in a map included in the appendices.

To enhance the sensitivity of the crime data to the liquor intervention; only crime occurring in public locations was selected. Offences occurring in private dwellings, private businesses and educational institutions were excluded from the data. Thus, offences remaining in the data primarily occurred in settings such as streets, parks, public buildings, shops and on-licensed premises. Using these public place scene codes also eliminated most family-violence related offences from the data.

Police offence data (for the period July 2004 to June 2005) was manually collated to specifically identify offences occurring within the confines of the Wellington CBD. The list of inner city Wellington streets used to identify these offences occurring in the inner city is attached reporting the appendices. Unfortunately, because of the volume of data involved, similar identification of central city offending could not be performed on offence data prior to June 2004. Hence a baseline pattern of seasonally adjusted offending in the CBD from previous years could not be established for comparison with the data collected during the period of the research.

Health Statistics

In addition to crime statistics a range of health data was analysed to assess alcohol-related harm.

Emergency Department Presentations

The Wellington Hospital emergency department maintains records of alcohol-related patient presentations. Identification of alcohol-related factors is undertaken by a hospital data analyst who assesses information recorded on the clinical files that are completed by admitting and medical staff. This set of alcohol-related presentation data was made available to the researchers to use as an outcome indicator for the present study.

A limitation of this alcohol presentation data is that is not available prior to September 2004. The hospital only began identifying and collating alcohol data at that point as a result of a partnership arrangement with Wellington public safety agencies. Because of the lack of data from prior years, it is not possible to assess any impacts of seasonality factors on the data collected during the research period.

Ambulance Attendance

Wellington Free Ambulance provided the researchers with case record data for the Wellington City CBD geographic area. This is coded “Area 401” for ambulance attendance and covers Central Wellington - north of Wellington Hospital; including Mt Cook, Mt Victoria, Thorndon (Te Aro Flat), Brooklyn and Kelburn[10].

[10] Surrounding suburbs that are excluded from this area are:

- Southern Suburbs - south of the hospital, includes Newtown, Berhampore, Island Bay, Mornington, Kingston, Happy Valley and Owhiro Bay.
- Eastern Suburbs - east of Alexandra Road, includes Hataitai, Melrose, Houghton Bay, Kilbirnie, Lyall Bay, Rongotai, Miramar, Maupuia, Strathmore and Seatoun.
- Western Suburbs - west of Kelburn Viaduct, includes Karori.
- Northern Suburbs - Northland, Wilton, Crofton Downs, Wadestown, Ngaio, Khandallah, Broadmeadows.

These records contain codes completed by the attending paramedic, who complete a case record for each patient, including making a provisional assessment of the nature of the emergency. A copy of the full range of these codes is listed in the appendices.

Three codes appeared to be potentially sensitive to the licensed premises enforcement intervention. These were:

1. Code 761: Intoxicated
2. Code 560: Intentional injury by another
3. Code 570: Other accidents

Data with these case codes were obtained for the period from July 1999 to June 2005. Subsequent charting of that data indicated that the intoxication category code 761 had been used only since mid 2000. Hence, only data collected subsequent to July 2000 was retained for comparison with ambulance attendance data covering the research period.

3.5 Statistical Model

Time Series

Time series analyses were conducted to determine the most appropriate model to apply to adjust for predictable seasonal variance in each data series.

Offending (particularly disorder and violence offences in public places) ambulance attendances, and emergency department presentations, all follow a predictable weekly cycle for the frequency of events. These cycles are illustrated in the following three diagrams.

Chart 2 (below) illustrates the time profile for police statistics of recorded violence and disorder offences. Peak times for these offences occur during Friday and Saturday nights between the hours of 9pm Friday and 4am Saturday, and then between 9pm Saturday and 6am Sunday. The "quietest" day for recorded offences were Sunday nights and Mondays, though Tuesday to Thursday offending is generally also low.

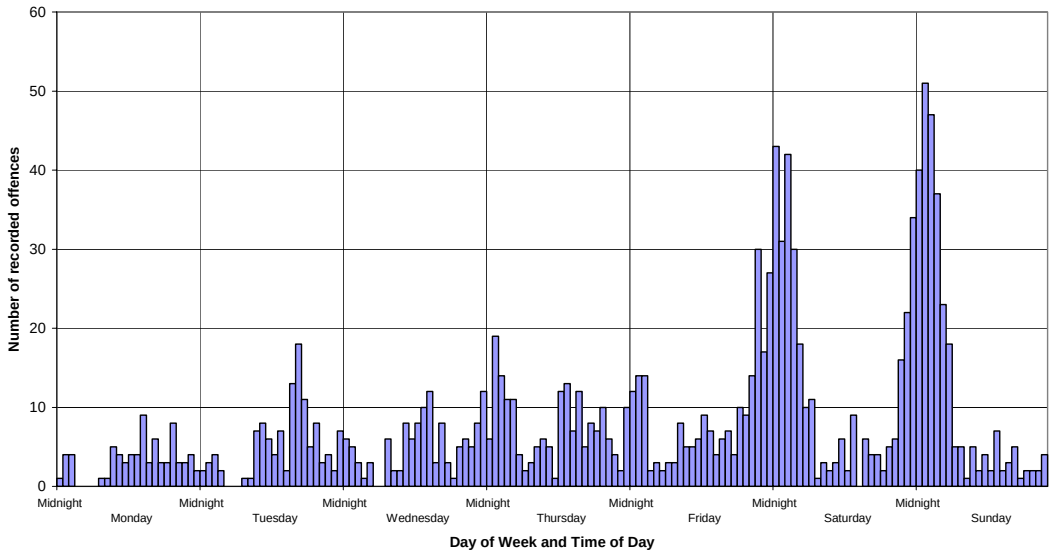

Chart 2 **Time Profile of Violence and Disorder Offences**
Located in Wellington CBD area July 2004 to May 2005

The time profile for ambulance attendances to intoxication, intentional injury by others (assault) and "other accidents" is remarkably similar to the time profile for recorded violence and disorder offences, as shown in Chart 3.

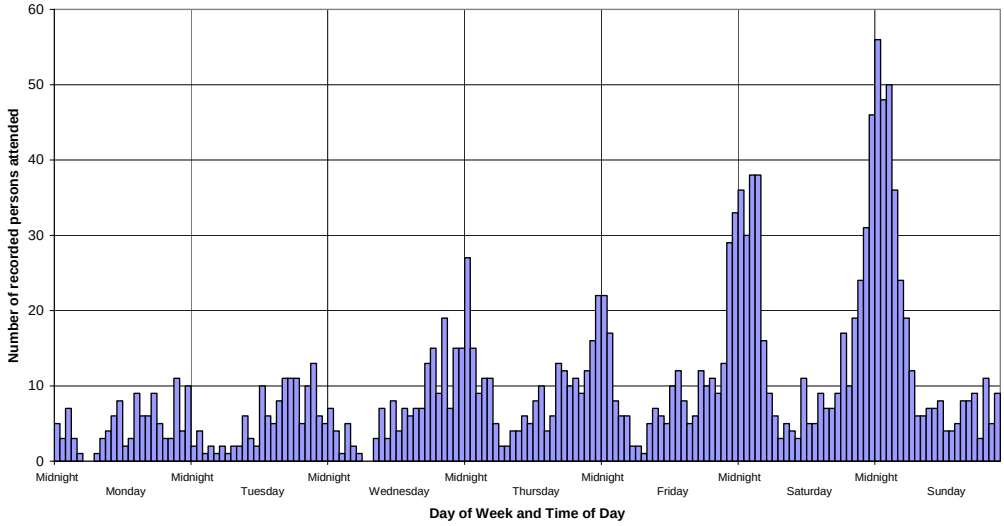

Chart 3 **Time Profile of Ambulance Attendance to Intoxication, Assault and "Other Accidents"**

Events located in Wellington CBD are during 2004

Peak times for these attendances occurred during Friday and Saturday nights between the hours of 9pm Friday and 5am Saturday, and then between 6pm Saturday and 7am Sunday. The lowest day for recorded attendances was Sunday night, Mondays and Tuesdays. Wednesday and Thursday attendances are also lower than those during the weekend.

The time profile relating to triage time for alcohol-related presentations to the Wellington Hospital emergency department is shown in Chart 4 (below).

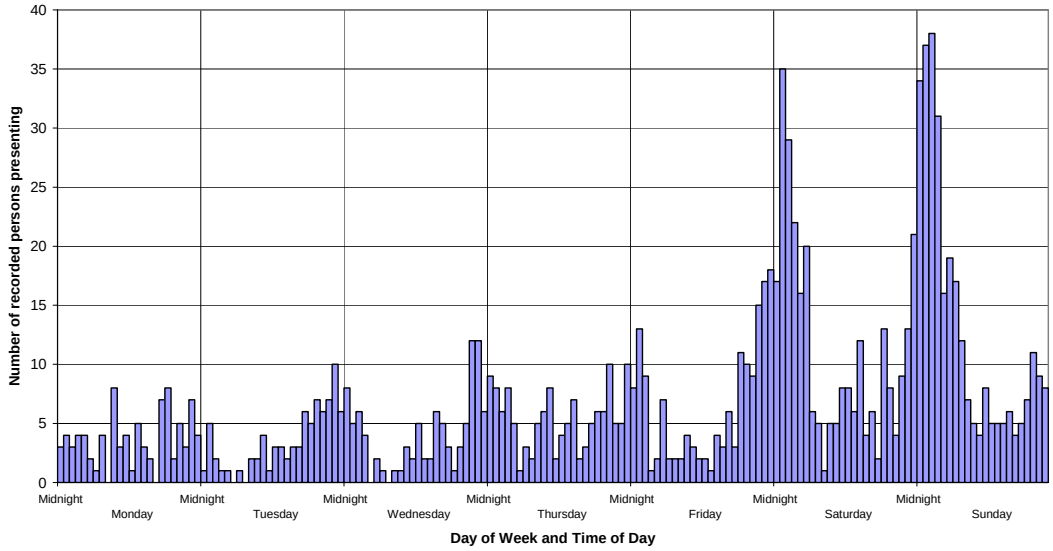

Chart 4 **Time Profile of Triage of Alcohol-Related Events**

Wellington Hospital Emergency Department (September 2004 to June 2005)

Peak times for these presentations occurred during Friday and Saturday nights between the hours of 9pm Friday and 6am Saturday, and then between 10pm Saturday and 8am Sunday. The lowest day for recorded attendances was Mondays and Tuesdays. Wednesday and Thursday attendances are also lower than those during the weekend.

In summary, all these data series have a common weekly repeating unit. The highest numbers of incidents or patient presentation occur on Friday and Saturday nights and early during the following mornings.

Seasonal Variation

As well as predictable patterns attributed to weekday and time there is other variability present in the indicator data that is not attributable to the quasi experiment, which is attributable to uncontrolled variables. For example, this includes the influence of a range of factors following repeatable seasonal patterns, such as the prevalence of major public events at certain times of the year, climatic factors, festive days and holidays. These types of variables can affect the number of people using Wellington bars and the demeanour of people frequenting the city.

Chart 5 shows the impacts of these seasonality driven patterns on a plot of recorded criminal offences. The solid line shows monthly averages for five years of recorded offending within classes of crime having some alcohol harm associations (violence, sexual attack, disorder and property damage). The chart shows that the period from April to July represents a time of traditionally lower levels of recorded offending compared to other months of the year.

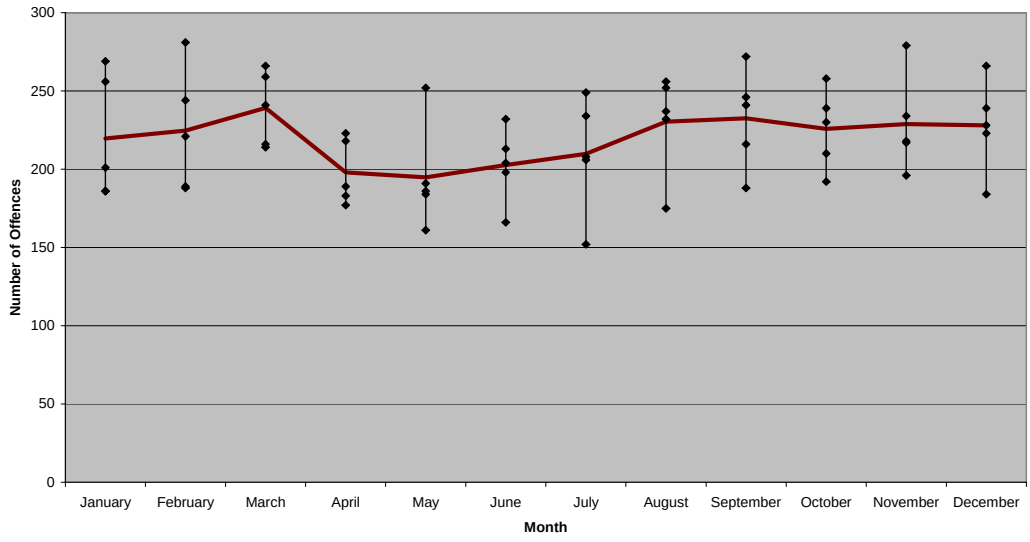

Chart 5 **Number of Offences recorded during the period 1999 to 2004**
(Violence, Disorder, Property Damage)

Monthly categories, whilst providing some insight into seasonality, do not provide enough of a detailed distribution for assessing the impacts of the intoxication intervention, as this intervention has not been applied on a monthly basis. A better trend line to compare any indicator statistics to is data classified on a weekly basis.

Thus, a baseline has been established from historical records of each alcohol harm indicator[11] covering data from the previous five years of recorded incidents in Wellington (previous three years in the case of ambulance attendance data). Taking these historic data, the number of incidents recorded in each corresponding week of each year has been averaged and used to predict trend lines that would be expected to occur during the period of the quasi-experiment (subject to continuing enforcement activity consistent with historic practice).

Chart 6 shows this trend line for a group of alcohol-related crimes recorded in Wellington city between 1999 and 2004.

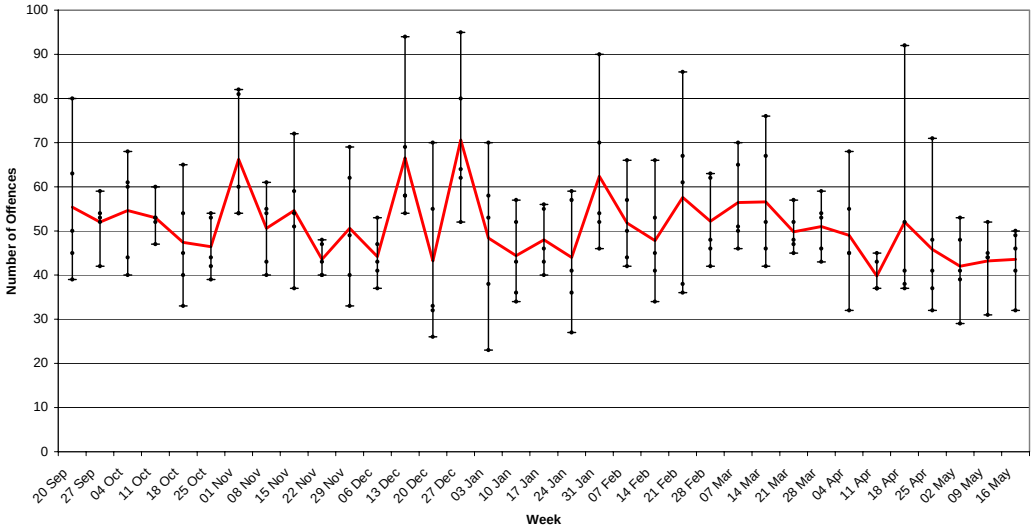

Chart 6 **Baseline for alcohol-related offences**

(Violence, Sexual Attack, Disorder, Willful Damage)

A simple linear relationship is hypothesised between each weekly baseline data point - obtained from the average of previous years - and any future values observed during the quasi-experiment. This relationship can be examined in the form of a simple arithmetical difference between the baseline trend ($Y_{1,x}$) and the values obtained during the quasi experiment ($Y_{2,x}$).

The interrupted time series design coupled with the establishment of a baseline obtained from the averaging data from prior years allows a simple linear statistical model to be used to interpret the quantitative data. This means it is not necessary to apply complex regression methods to identify whether the interventions have any significant impact on the outcome variables or to further correct for seasonal variation (as seasonal influences are already incorporated in the average trend line).

Statistical Tests

A simple linear model in the form of a Student's *t* test was used to test the hypothesis H_1: that the combined periods of heightened enforcement would be characterized by a lower level of alcohol harm than the periods prior to and following each intervention.

An alternative hypothesis H2: was tested that the periods of heightened enforcement plus a lag period of two weeks following each intervention would be characterized by lower levels of alcohol harm than the periods prior to and following each intervention plus lag period.

[11] Obtained from either police or ambulance service administrative records.

Student's *t* tests assess the probability that the difference between the means of two sets of data is caused by chance. For example, in the case of the first hypothesis (H_1) this tests whether there is any difference between:

The mean of weekly data collected during the intervention periods of heightened enforcement and;

The mean of weekly data collected during non-intervention phases, when normal enforcement was occurring – these being the period 8 weeks directly prior to the first heightened enforcement intervention, the 11 week period intervening between the two interventions and the five week period following the second enforcement intervention.

The means subjected to the *t*-test are calculated on the differences between each weekly baseline data point and the weekly harm indicators recorded during the experiment ($Y_{1,t} - Y_{2,t}$). Chart 7 illustrates the calculation of this variable.

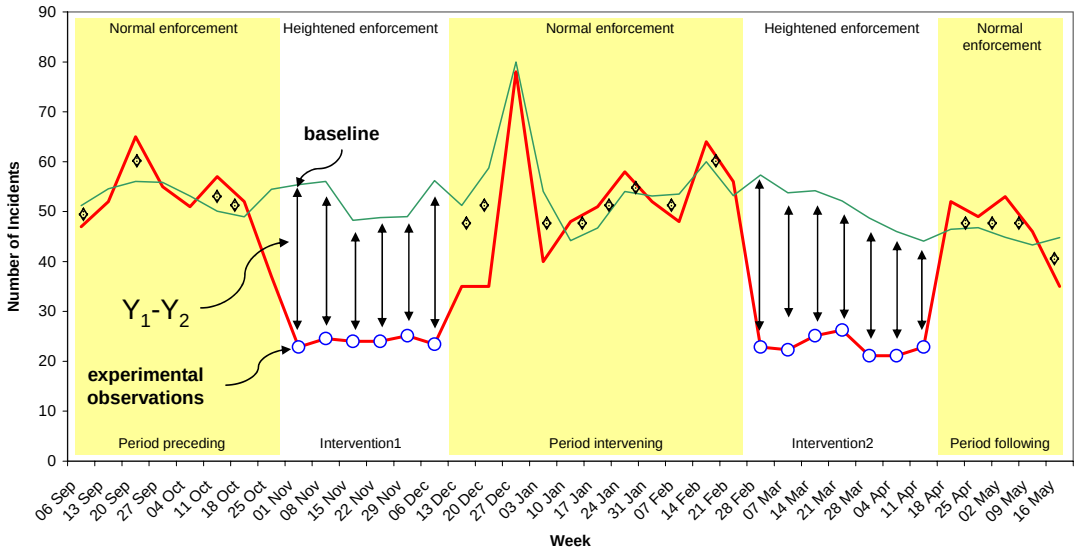

Chart 7 **Calculation of $Y_{1,t} - Y_{2,t}$**

Where the probability coefficient obtained from a two sided *t*-test was less than t=0.05, the difference between the period of heightened enforcement intervention and the periods of normal enforcement activity are considered significant; that is, they are not likely to be caused by chance.

Autocorrelation

Autocorrelation and partial autocorrelation functions were calculated for the residuals to identify the presence of any underlying time based dependence on previous data points. This process tests for non-randomness in the data and highlights whether the simple linear model, established between the experimental data and the baseline series, is an appropriate time series model to evaluate the impact of the enforcement interventions. Tests were also performed on the residuals for normality.

The results of these autocorrelation, partial autocorrelation, and normality tests are provided in the appendices. The results illustrated no significant concerns about time dependence and supported the validity of the linear model fitted to the alcohol harm indicators.

3.6 Limitations

A number of limitations confronted this study.

Data Quality and Availability

There were several limitation regarding data availability and quality. There were limitations associated with the availability of spatially precise crime data because of the limited geographical information available in crime statistics. Unfortunately official crime statistics are not currently classified according to precise location attributes (such as x-y coordinates). Similar limitations existed for ambulance service data but were not as significant as the ambulance service actually maintained a geographic location codes covering predominantly the CBD area and a small number of additional inner city suburbs.

There were also limitations associated with the data obtained from Wellington Hospital. In particular, there was no historical data available prior to September 2004 indicating emergency department presentations relating to alcohol. This was because coding of alcohol-related admissions only commenced in September 2004. The absence of data from previous years meant that a baseline could not be established, so statistical tests were not undertaken on this data set.

Focus Groups

The focus-group components of the study are not meant to reflect a statistically representative sample of any particular expert or industry group. They represent convenience samples of groups that have interests and perspectives on issues concerning the control of intoxication on licensed premises.

Quasi-Experimental Design

Although some alcohol policy studies are sometimes performed over an extended period (see Holder *et al,* 1997) resources and the objectives of the current research precluded a longer time frame. Ideally there may be opportunities to continue evaluation over a longer time frame or to test alternative enforcement or policy approaches.

The researchers recognised that a number of problems would need to be confronted in conducting research within an operational policing context. A critical focus of the research team was to ensure that a close working relationship was established with the operational police commanders in the Wellington District to assist in the identification and resolution of any potential policing versus research conflicts. Unfortunately, a problem of this nature arose.

In this type of quasi experiment, it can be difficult to separate the impacts of the intervention from other factors that might impact on indicators of alcohol-related harm. It was considered to be important that Police enforcement strategies should not change significantly over the experimental time period. This was necessary as a major change in police practice could compromise the ability to attribute any changes in outcome parameters to the effects of the intervention. For example, if Police decided to implement a greater number of late-night patrols in the CBD over the experimental time period, or to have significantly fewer patrols, this would likely affect levels of recorded crime. Unfortunately some changes in policing tactics did occur during the study. This was most evident with the implementation by police of a significant street policing operation during the latter phases of the research, which was directed at violence problems in public places.

3.7 Ethical Issues

Ethical review of the research methodology and associated police operational proposals was sought and granted from New Zealand Police's Research and Evaluation Steering Committee.

Ethics approval was sought from and granted by the Central Region Ethics Board for the acquisition and use of Wellington Hospital's emergency department data.

In addition, approvals for the proposed tactical interventions and protocols for interaction between the research team and operational staff were agreed in consultation with the management of participating agencies.

4 RESULTS

The first part of this section describes how the heightened enforcement interventions were implemented; the number and location of licensed premises that were visited by the Liquor Policing Unit (LPU) and by other police staff, and the timing of these visits. Other significant events which occurred during the research period, which may have had an impact on the outcomes of the study, are also highlighted in this section.

The second part of this section presents the analysis of the impact of the enforcement interventions. Qualitative and quantitative data are presented in this section. The qualitative analysis examines the information obtained from the non-participant observers on licensed premises, and focus group feedback from police and bar owners and managers. The quantitative data examined in this section includes police crime and incident data, alcohol-related presentations to the Wellington Hospital Emergency Department, and ambulance attendances to incidents involving intoxication, injury and other accidents in Wellington's inner city.

4.1 Implementation of Intervention

There were two periods of heightened enforcement, when visits to licensed premises by police and other regulatory agencies occurred more frequently than usual.

This involved combined agency compliance visits (by the district licensing agency and public health officials) and by police enforcement teams. Most visits were directed towards the 20 premises most commonly identified on Last Drink Surveys as "problem bars". Police formed a new group to conduct many of these additional bar visits - a specialist police liquor policing unit (LPU) – staff on the LPU were specifically trained in, and tasked with, identifying intoxication. Visits by other police units continued during the entire period of the study.

Premises Visited by Police

Chart 8 shows the frequency of visits by police to licensed premises in Wellington city during the period of the research.

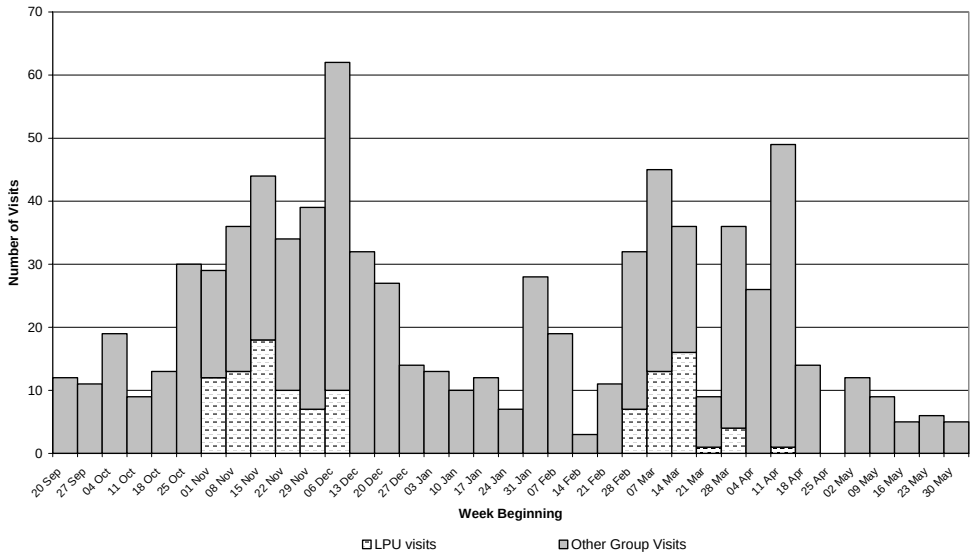

Chart 8 **Frequency of Licensed Premises Visits by Police and Other Agencies**

The first period of heightened enforcement occurred in the six weeks between 5th November and 12th December 2004. During this time the Liquor Policing Unit conducted visits to licensed premises; focusing particularly on identifying intoxicated persons. Other police units continued normal visit schedules to licensed premises during this period.

The second heightened enforcement intervention took place between 3rd March and 17th April 2005. Other police groups also heightened their focus on licensed premises visits during this period.

Enforcement visits by other police groups

In addition to the visits conducted by the LPU, ten other Wellington police groups conducted licensed premises visits during the period from July 2004 to June 2005. These groups were:

- Five different sections of general duties staff;
- The team policing unit;
- CIB staff;
- The specialist liquor licensing sergeant (one person);
- The wharf police; and
- The road policing group.

As shown in Table 1 below, the team policing unit conducted a large proportion of these visits by groups. One of the five individual general duties sections also conducted 103 of the 366 visits by sectional staff.

Table 1 **Frequency of licensed premises visits from difference police teams**

Police Group	***Visits conducted July 2004 to June 2005***
Team policing unit	294
Wharf police	192
Total visits made by five GDB sections	366
CIB staff	36
Liquor licensing sergeant	20
Road policing group	10
Group not identified	4
Total Visits	*922*

The 922 visits by general staff covered 100 different bars. This included a small number of premises located outside the Wellington CBD.

The visits by general staff were generally proactive, being targeted according to a premises "watch list" maintained by the Liquor Licensing Sergeant, although many bars were also visited that were not specifically covered on the watch list each week (with other locations either selected by team supervisors or undertaken in response to incidents). The watch list identifies the top one to three problem licensed premises according to alcohol-related offending recorded in the Last Drink Survey and from other intelligence.

District Licensing Agency and Public Health visits

As well as visits from police, bars were visited by health and licensing agency staff. As Chart 9 shows, staff from the Regional Public Health team and from the District Licensing Agency also visited a total of 134 on-licensed premises within the Wellington CBD during the course of the study. At times these visits were conducted by combined teams of staff from both

agencies. At other times, only one agency visited premises. These visits were designed to discuss compliance issues with bar managers and to inspect host responsibility policies and other licensing requirements. During the period of the first heightened enforcement intervention, 62 of these health and licensing agency visits were conducted. During the second intervention, a further 49 visits occurred.

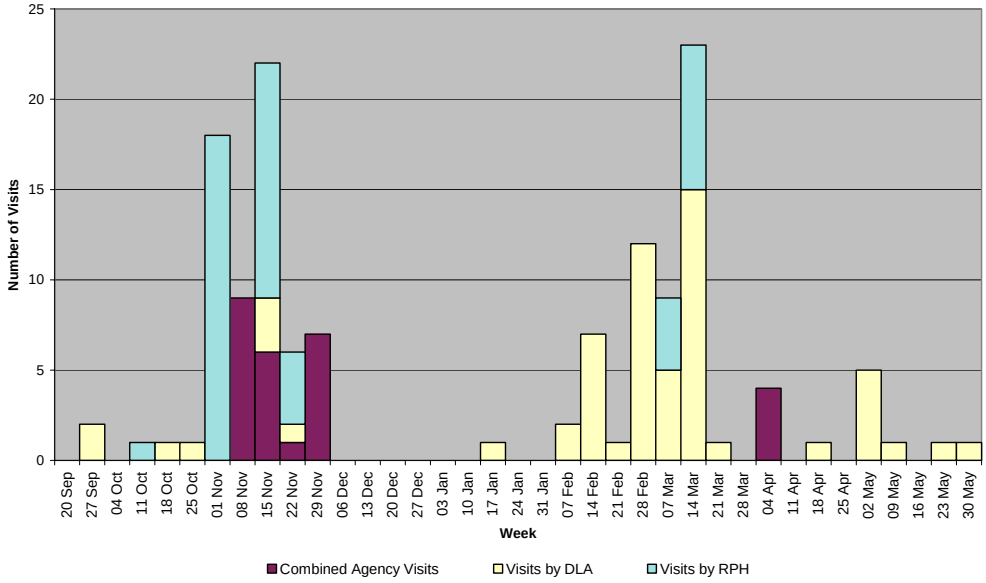

Chart 9 **Frequency of licensed premises visits from District Licensing Agency and Health Officials**
(To premises within Wellington CBD)

Regulatory visits to other sites

During the period of the study, the Regional Public Health team also undertook a further 76 visits to licensed premises (between 28 August 2004 and May 2005) that were located outside the Wellington CBD (including visiting premises in Porirua and on the Kapiti Coast), as part of their normal programme of visit activity.

The District Licensing Agency also visited an additional 177 premises. Some of these were Wellington city locations holding restaurant licenses or off-licenses. Others were premises located outside the CBD area.

Summary of combined agency visit programme

The combined programme of compliance and enforcement visits from all police, health, and licensing agency teams is shown in Chart 10 (below), which clearly illustrates the increased frequency of visits to licensed premises during the two periods of heightened enforcement.

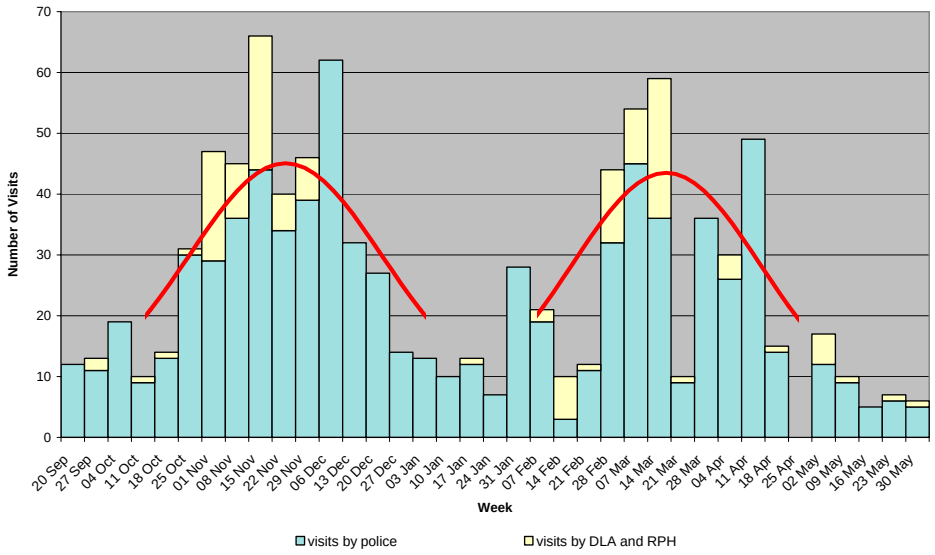

Chart 10 **Police, DLA and RPH visits to Licensed Premises**
("On-licenses" within Wellington CBD)

Timing of Visits

The visits by licensing agency and health officials were mostly conducted during normal working hours. Most of the visits by police teams were conducted between 8pm and 4am. Chart 11 illustrates police visits conducted according to hour-band. The majority of tavern licenses require bars to close at 3am, although some premises have licenses extending beyond 3am. Hence a few visits were also conducted after 3am. Some earlier visits were focused on bars that cater to office worker clientele immediately after normal working hours (hence a small peak in the number of visits conducted between 5pm and 6pm in the evening).

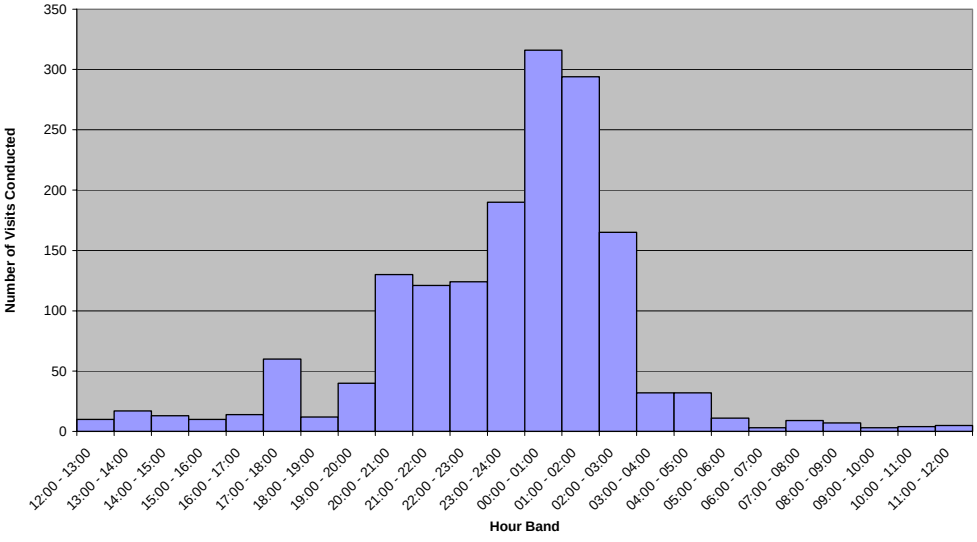

Chart 11 **Timing of Police Visits to Licensed Premises**

Premises Visited by Specialist Liquor Policing Unit

Over the entire period of the study, the specialist liquor policing unit visited 60 bars (clubs and taverns) in the Wellington CBD on a total of 247 occasions as shown in Table 2. The most frequently visited bars received approximately one visit per week, with three of these premises being visited on 15 separate occasions during the interventions.

Table 2 **LPU visits to licensed premises**

Number of visits per bar	***Number of bars***	***Total visits by LPU***
1	18	18
2	12	24
3	3	9
4	8	32
5	3	15
6	5	30
8	2	16
9	3	27
10	2	20
11	1	11
15	3	45
Totals	**60**	**247**

In addition to these visits to premises in the Wellington CBD, the LPU also conducted a further 21 visits to six suburban bars. One bar in Wellington's Southern Suburbs received 10 of these visits.

Bar Visit Summary

In total, from 1 July 2004 to 30 June 2005, a combination of police teams visited 108 bars making 1190 visits.

- During the first period of heightened enforcement, police teams visited 60 bars on 244 occasions.
- During the second period of heightened enforcement, police teams visited 76 bars on 233 occasions.

Although some of these visits were made outside the CBD, the majority of visits made were to bars located in Wellington's inner city.

In addition to the police visits, public health and licensing agency officials visited 134 premises in the Wellington CBD:

- This included 62 bars visited during the first heightened enforcement intervention; and
- 49 bars visited during the during the second heightened enforcement intervention.

Prosecution or Licensing Action

Together, the regulatory agencies operate a combined enforcement group (KEG) that follows up significant compliance problems identified on any licensed premises.

During the period of this study, despite a number of repeated instances where individual premises appeared to fail to comply with the Sale of Liquor Act (particularly the requirements

related to intoxication) the combined regulatory agencies held only two KEG meetings with licensees.

One case against a licensee was taken to the Liquor Licensing Authority during the same period.

This low level of action appeared to be a result of police's informal policy of requiring a substantial case to be established (repeated problems of serious compliance failure) before initiating any follow up action against any licensee.

It appeared that the regulatory agencies:

- Treat the combined enforcement agency meetings as a final warning process prior to initiating licensing authority action.
- Seek to establish an extremely robust case against any premises (involving repeated failures of a serious nature) before gaining commitment to take any matter to the Liquor Licensing Authority.

Adopting this high standard (wishing to compile evidence of repeated or serious breaches before initiating follow-up action) appears to undermine earlier opportunities to focus bar owners and managers on improving compliance. It also places primary focus on the actual enforcement visits as the primary tool to ensure compliance.

4.2 Other Factors Impacting on Alcohol-Related Harm

Street Policing Operation

During the study, police introduced a new tactic that was unanticipated during the design phase of the research. They commenced a street-focused policing operation during March 2005, targeting youth drinking and violence in public places. This was named Operation Hurricane by police. The operation was initiated in response to an increase in alcohol-related offending that had occurred during January 2005 and February 2005.

Operation Hurricane coincided with the second planned heightened enforcement intervention on licensed premises, running from 4th March to 14th May 2005. Although the demographic group that was targeted (youth) and the locations targeted (public places) differed from those that were the focus of the intervention, this operation still had the potential to impact on the outcomes of the study. Having two enforcement activities occurring in parallel with one another in the Wellington CBD area is likely to have had a combined impact on general crime and disorder and on health related incidents. The effects of the different intervention prove difficult to separate.

Smoke-Free Environments Act

The introduction of an amendment to the Smoke-Free Environments Act 1990 was a significant environmental change that occurred during the period of this research.

This legislation had a high profile launch during December 2004. From 10th December 2004, licensed premises (bars, restaurants, cafes, sports clubs etc.) became smoke-free indoors. The amendment prohibits smoking in all substantially enclosed places on licensed premises, by directing licensees to take all reasonably practicable steps to ensure that no person smokes at any time in a part of the premises that is not an open area.

4.3 Non-Participant Observations

To observe the impact of the heightened focus on intoxication, non-participant observers visited Wellington bars during the study and recorded observations about the impact of enforcement visits, serving and patron behaviour.

Server Behaviour

Observers noted examples of good and bad server behaviour throughout the study. Server behaviour varied according to a number of key factors. The most significant variables appeared to be the style of bar (which affected the type of clientele), the apparent skills of the bar staff and the layout of the bar. Generally, the more upmarket bars appeared to have older, more experienced bar staff, attracted an older clientele and had less intoxicated patrons. However, there was variation within bars in that some nights some bars seemed to have many intoxicated people and other nights few, if any.

It was uncommon to observe servers denying patrons service throughout the study. Intoxicated people appeared more likely to be identified at point of entry than when requesting service at any bar. At some establishments some people appearing obviously intoxicated were not only served, but were occasionally observed purchasing multiple drinks and lining them up in front of them. Some patrons appeared to be able to conceal their intoxicated state by 'sobering up' while ordering drinks at the bar and others frequently had drinks purchased for them by friends/associates.

Some bar staff appeared to have difficulty assessing the intoxicated state of patrons. This was particularly problematic when servers were busy. Observers felt the ratio of servers to patrons also affected their ability to assess patron intoxication. Bar staff with their heads down, hurrying to serve patrons, appeared unable to interact well with patrons, thus limiting their ability to identify signs of intoxication. The layout of each bar area was also felt to affect the ability of bar staff to assess patrons' state of intoxication.

Changes in serving behaviour were observed during the two heightened enforcement intervention periods. Many bars increased their signage relating to underage drinking and intoxication and in one establishment a newspaper article relating to the intervention was displayed prominently. Also at the beginning of the intervention many bar staff appeared nervous or anxious during Police visits. This anxiety was observed less frequently as the intervention progressed.

There were a number of changes in server behaviour during the police visits. Again this varied according to the clientele and the style of bar. At the bars that were identified as a higher priority for regulatory attention and thus visited more often it was noticed that bar staff altered their serving style during police visits. At a few of these establishments, younger staff were noticed "dropping back" during police visits while more apparently experienced staff (often bar managers) took their place serving patrons. Some bar staff were observed being more attentive to their patrons during police visits and on occasion this resulted in more attentive behaviour after the visit. However, it was more common for serving behaviour to return to "normal" after the departure of Police. Some observers also noticed that a greater proportion of the drinks sold were rung up on the tills during police visits, and more soft drinks appeared to be sold and water offered during visits particularly later in the intervention. There were also more frequent checks of the drinking areas for empty glasses by "glassies" during police visits.

In some premises the music was turned down by supervisors during visits. It was unclear whether this was a courtesy to police (to facilitate better communication) or whether this was a way of altering the atmosphere in the bar. Observers noticed a "calming down" of patrons behaviour on the dance floor when the volume was decreased. The number of people serving

drinks in these bars during police visits also decreased, which had the effect of slowing service. It was also noticeable, particularly in the earlier part of the intervention, that patrons did not tend to approach the bar for service as much during visits. Once police had left premises there was a very obvious "bounce-back" effect reported; with observers noting that some patrons whose behaviour had become relatively subdued during police visits then became even more extroverted or attention-seeking (i.e. more aggressive, or more vocal) than it had been prior to the police visit. Generally, it was noted that this "bounce-back" occurred in the larger bars with younger clientele.

Supervision

Earlier in the study, patrons were observed being removed by bar staff only when unable to purchase any more drinks (e.g. when. asleep). On one occasion a security staff member was observed telling a patron he was too drunk to be allowed in, only to apparently change his mind five minutes later and allow the patron entry. The patron was admitted and served at the bar. Also earlier on in the study, some security staff appeared to have advance notice of an impending police visit and increased the patrolling of venues just before their arrival. However, in some bars, despite frequent "walk-throughs" by security staff, apparently intoxicated people were not identified and continued drinking. Observers wondered if security staff saw themselves as reactive rather than proactive and were waiting until patrons became uncoordinated or aggressive rather than intervening earlier to prevent intoxication.

Observers noted in some venues, that bar managers/security people actively mingled with patrons which gave them opportunities to assess intoxication. However, they only seemed to remove patrons if police were present or approaching. Observers very rarely observed removal (by bar staff) of patrons for intoxication once they were in the bar, apart from when a police visit appeared imminent or in progress. However, there were some observations of patrons being denied entry for intoxication. It was not possible to quantify the frequency of this occurring since observers were only able to observe on occasions when they were in queues. It was rarely possible to observe refusal of entry from inside the licensed premises so it is possible that this occurred more frequently than was reported.

Observers noted that security staff appeared to become more attentive as a result of police visits. Security staff would often stop admitting people to the premises during a police visit or turn them away completely. This sometimes created longer queues and decreased the number of patrons within the venue, since some younger patrons were either seen leaving of their own volition or being actively encouraged to leave by staff when they saw the police. On a few occasions an intoxicated patron appeared to be "removed" via a back entrance.

Supervisors were also observed to become more active during a police visit. There were more sweeps by "glassies" during visits and one bar manager succeeded in shielding an apparently intoxicated person from police by standing between the patron and police officers. The patron was later removed from the premises by the bar staff. One manager was also observed telling bar staff to give an apparently intoxicated person a glass of water as police entered the venue.

Police visits

Observations of police practices in the early part of the first enforcement intervention suggested the police still tended to focus on younger patrons and males. Some observers felt that the less experienced police staff in particular appeared more likely to target younger people, except on one occasion when an older person was in a venue populated with very young-age patrons. Also, observers noted that many older patrons appeared to be better at disguising intoxication than younger patrons, and were less likely to be identified by police.

Some observers noted an increase in extroverted behaviour after police visits and police were sometimes ridiculed by patrons or the object of jokes from bands playing certain venues.

There were some observations of police not taking action despite being confronted with very obvious signs of intoxication (dancing on tables, drinking games.

Many patrons were observed leaving as soon as they saw police. These patrons appeared to be underage or may have been police-averse for some other reason.

The approach or style of the police visits appeared to change over the course of the study. This was possibly influenced by the feedback given to police by the research group encouraging a more interactive approach. Observers noticed at the beginning of the study that police appeared "stand-offish" or "authoritative". They noted more interaction between patrons and police on occasions when a more relaxed, less aggressive approach was used. As a result of being given this feedback police adopted a more interactive approach during the second enforcement intervention. This appeared to result in more friendly "educative" communication with patrons which observers noticed resulted in less of an adverse reaction from patrons. However, this could also be attributed to patrons and bar staff becoming used to police presence. Despite this more interactive approach some venues still emptied out, particularly the less upmarket premises or those with younger clientele.

Observers noted fluctuations in patronage at a number of venues as the study progressed. This seemed to influence the effectiveness of police visits, as at times police visited venues at quiet times where there were few intoxicated patrons while later on or earlier at that venue there were often many observations of apparent intoxication. Both observers and police noted that timing affected the quality of police visits.

4.4 Focus Group Comments

Three focus groups were conducted at the conclusion of the study. One was conducted with the observer staff, to obtain their insights into the overall impact of the interventions. A focus group was conducted with police staff members who had been involved in the liquor policing unit or in supervising that team. A third focus group was held with several of the managers and bar owners from premises that had been targeted by police during the interventions.

Police Feedback

Police staff felt their heightened presence on premises raised awareness of issues of underage drinking and intoxication. The heightened enforcement interventions were seen as an opportunity to communicate informally with the public messages regarding underage drinking and intoxication. They felt it was important to have a specialised police group because it allowed them to use a more proactive approach than usual. It was felt that the usual reactive approach of officers, who spend the majority of their time responding to incidents, results in a different mindset making it harder for officers to be relaxed and friendly. Police felt having a specialised LPU allowed a more consistent approach to liquor policing. It also provided opportunities for staff skill development. They felt that newer staff had a more authoritarian approach and that it takes time to develop good communication skills. They felt that the more successful visits were those where police had improved their communication of messages and that more interactive visits would result in improved outcomes. This would also mean better quality of information for the Liquor Licensing Sergeant to work with bar owners on issues of underage drinking and intoxication.

Police perceived a decrease in crime occurred during the interventions and observed that Council *Walkwise* officers (a group of Council Employees who act as civilian "ambassadors", patrolling the inner city at peak times) also felt the impact of the heightened police presence in the inner city.

The licensed premises environment

Police felt a negative aspect of the first intervention was that bar staff and patrons were not aware of what they were doing or why they were doing it. They also commented that the environment in a lot of bars is not conducive to good communication. Many bars were dark and/or loud which made it difficult for Police to communicate with patrons and bar staff (observers noted that Police usually took patrons outside to talk to them to assess their degree of intoxication).

Police also suggested that serving staff must have difficulty assessing patrons' state of intoxication in a noisy or dark bar environment. Police felt door staff had more opportunity to assess intoxication and that it might be possible for door staff to rotate duties to allow better assessment within bars. One suggestion was that perhaps they could take turns acting as "glassies" or perhaps be given an opportunity to do a walk-through of the premises (security staff were observed conducting "walk-throughs" in some bars, but this appeared to be intended to prevent violence rather than to identify intoxicated patrons). Police felt "glassies" had a good opportunity to assess patrons' degree of intoxication, but required training in intoxication indicators.

Impact of enforcement

Police noticed a change in procedures in bars as the interventions progressed. They felt security staff began to limit entry to bars during police visits. Since a lot of people would leave the bars when the Police arrived this resulted in an emptying of the premises, which may have contributed to bar owners' concerns that the police visits had a negative impact on patronage, resulting in reduced income. Police also observed that some bar staff had reacted like they had been singled out and "picked on".

Police felt that bar owners and staff were so unused to a proactive "enforcement approach" to liquor policing that they became very sensitive to Police visits. Some apparently developed special record keeping systems to track police visits. This was seen as a kind of paranoia within the industry because they were not accustomed to this level of police presence. It was suggested that bar staff changed their behaviour but they were doing it under pressure – when the policing stopped it was felt the behaviour would return to normal.

It was noted that the opportunity to communicate messages about intoxication to the public had resulted in a change in patron behaviour, in that police felt people were not drinking as excessively. Police felt that some bar staff may see this as a negative impact as alcohol sales might decrease. Police suggested that bars with older clientele might be less likely to change their behaviour, as patrons had more firmly established drinking habits, whereas the younger patrons were more likely to take on board the messages regarding intoxication.

Staffing Issues

Achieving adequate levels of police staffing to maintain an effective LPU was felt to be an issue, with most police interviewed agreeing that this was difficult from an organisational point of view. Police felt a need for a consistent approach with a need for continuity of staff for the LPU. Difficulties maintaining consistent staffing levels were particularly noticed in the second intervention when less experienced police were used and there were more personnel changes on the team each week. Having continuity of personnel meant better development of a consistent and focussed approach by the team. It was perceived to be more difficult for junior constables with very little experience to adopt the proactive educative approach the team preferred[12]. Police felt that team members needed the opportunity to develop effective

[12] This is supported by observers and bar owners/licensees, who noted the younger, newer constables' body language was more intimidating than the more experienced officers.

visit techniques and that it was preferable that they were able to work in the team for at least a couple of weeks, rather than a week on and a week off situation. Police felt that this continuity may be difficult to achieve in other parts of the country where Police resources might be less flexible, particularly in smaller communities.

Police felt there was a need to look at the make-up of the community to make sure their policing is targeted effectively. As an example they argued that liquor policing in the neighbouring Hutt Valley area would be very different to Wellington City due to the different clientele, with a greater number of students in Wellington City compared to higher proportions of middle-aged or older people in Hutt Valley drinking establishments.

Targeting and Timing Issues

Police participants felt that the timing of visits was perhaps too early for some establishments since the majority of people are on the street at 2.30 – 3.00am. Consequently a 5.00am finish might be more appropriate in Wellington CBD[13]. This also highlighted a perceived need for a specific assessment around each venue, in terms of timing of monitoring visits and the number of staff required for enforcement.

Quality of police visits

The length of the police visits was also identified as an important factor influencing effectiveness. Police felt they were better able to assess and identify intoxicated patrons when they stayed in the venue for 20-30 minutes. They felt some intoxicated patrons could "hold it together" for 5-10 minutes, but a longer visit gave greater opportunity to observe and assess patrons. Police participants who had worked on the Team Policing Unit found it took time to adjust to the more relaxed approach of the LPU.

Possible improvements

Police also felt it could be useful to use covert officers to give feedback to the LPU about which bars are busy and requiring enforcement and which are quiet and not requiring an enforcement visit. However, some police also appreciated the visibility their uniforms had, which could affect public perceptions of their commitment to liquor policing.

Participants believe a dedicated "Bar Alcohol Group" similar to the Traffic Alcohol Group should be established to maintain the proactive focus of the intervention. Police felt there was real value in the use of a dedicated Liquor Policing Unit and commenting:

"It's a billion dollar industry and how serious are we about regulating it?".

[13] This may vary in other communities given different trading hours' environments

Bar Owner and Manager Feedback

Bar owners and managers felt that the concept of a focus on intoxication was good in principle and could contribute to maintaining a good environment within the premises. However, participants felt quite negative about aspects of the police enforcement interventions[14]. The key issues appeared to be related to the effect of the presence of uniformed police in their bars and potential for negative impacts on their businesses. There was also a concern that police were providing additional resourcing to staff this dedicated LPU but other police were not available when the bar contacted them for assistance with problem patrons. Some participants felt that the police are so used to dealing with criminals they have a negative mindset, and think of bar owners/managers as criminals or "licensed drug dealers".

Targeting licensed premises

Many licensed premise owners felt that they were being unfairly targeted given that there was a perceived larger problem with young people being able to buy alcohol from off-licenses compared with the relatively controlled environment of licensed premises. Bar owners commented that seventy percent of alcohol is purchased at off-licenses and that it was unfair that police were targeting licensed premises but not private venues. One participant commented that the majority of people are there to socialize, not to make trouble. Bar owners do not want troublemakers in their bars and they perceive security is tight so they rarely have any major problems. They felt it was unfair that they were being targeted and thought the government and police would want to encourage people to drink in a controlled environment where they do not get into trouble or fights.

Some participants also felt the targeting of bars based on Last Drink Survey data was unfair, as the patron's intoxication may have occurred at a venue visited earlier in the evening. This was considered to be a particular problem for premises which attracted patrons later in the evening. There was also a perception that police were not dealing with suburban bars during the intervention[15]. Participants were also concerned that police removed staff from their bars, but didn't prevent them going on to drink at another bar. This was seen as pointless as participants felt it did not fit with the objectives of the intoxication intervention.

Some focus group participants felt that bars with cheap drinks specials were not targeted enough, and while some argued that "drinks specials" encourage intoxication, others felt that this was only a problem if time limits were imposed and people were encouraged to consume drinks in a short timeframe. However, some felt that this was more of a problem with younger drinkers, and that it was just as likely that these kinds of drinkers could drink large quantities of alcohol before they enter licensed premises. Some commented it was better for younger patrons to drink in the more controlled environment of licensed premises than at private venues or in public places.

Bar owners/licensees felt there was not enough consultation with bar staff and the public before the intervention, which resulted in a lot of complaints from customers since patrons' own perception of how intoxicated they were didn't usually match the judgments of police. They felt there wasn't enough public awareness of the campaign. Participants were concerned that the number of uniformed police in their premises made patrons uneasy, as they often did not know why police were there. Some bar staff felt that having their own managers

[14] Participants in this focus-group interview were self-selected from the bars that were targeted most heavily during the interventions. As in all such interviews, the views expressed are the views of the participants and cannot be generalised to any wider population.

[15] Suburban bars were targeted by the LPU, but were not included in the evaluation of the interventions as they were outside the geographical boundaries of the study.

present was adequate to control intoxication and underage drinkers, and that if police did visit for enforcement reasons that they should be "plainclothes"officers. They felt that this would have less of a negative impact on patronage and would also provide police with better liquor policing intelligence.

Police approach

Bar manager and owner participants felt that a lack of understanding by patrons coupled with an intimidating approach by police officers resulted in many patrons leaving their bars. One participant estimated that approximately twenty percent of patrons might leave as a result of each police visit.

Bar owners were aware that several different groups of police were conducting visits and commented on the different styles of each group. They also felt that sometimes being re-visited in the same night by a different group of police was unnecessary and problematic given the different approach of the various teams. One manager described a visit where both teams came at the same time and two-thirds of their patrons left costing "thousands of dollars". Another participant likened this approach to "having the mongrel mob in your bar".

Participants also noted that younger constables in particular had a more intimidating approach than older more experienced officers. This approach was particularly noticed amongst Team Policing officers, who are "used to going out to big punch-ups etc". Bar owners felt that police needed to explain themselves better to patrons who often refused to go outside when requested. One participant commented that at times, and particularly with older patrons, the bar manager would have to intervene to explain to patrons that they were not in trouble and they were not being arrested. Participants felt that poor police-patron communication then exacerbated problems, as patrons would then become agitated and/or aggressive which then fitted the criteria of "intoxicated" on the police assessment scale.

There were also some concerns that established procedures were not always followed with one participant commenting that police did not always introduce themselves to the duty manager before removing patrons. This denied the duty manager the opportunity to agree or disagree with the judgment of police. Focus group participants agreed that poor procedures do not often occur, but it do happen sometimes.

One participant felt that, after the two heightened periods of enforcement, police might now have a better idea of how Wellington "works", as many of their early visits were too early in the evening when there were too few patrons. This could result in situations in which there appeared to be more police than patrons in a bar which would have a negative impact on patron perceptions of the bar.

Changes during interventions

Some participants felt that the police began the intervention with a mindset that there were intoxicated people in bars and that they had to find them. They felt that police believed that they had not done their job unless they found someone intoxicated. However, participants also noted that this changed over time as police became better at assessing patrons' states of intoxication. They also noticed that towards the end of the study fewer people were being identified as intoxicated. Participants identified a problem when police identified a patron as being "moderately" then the bar owner asked that they not be readmitted to bar the police would then change the assessment to "intoxicated". Participants noted that when someone was returned to a bar following a "moderate" rating, they then had an expectation that they could still be served as the "Police said I was OK". This caused problems for serving staff when trying to refuse the patron service.

Improved police approach

Not all the bar owner and manager feedback was negative. Participants appreciated the ability to negotiate with police about the level of intoxication of patrons. They also felt that the approach of police improved towards the end of the heightened enforcement period, noting that police were removing fewer patrons towards the end of the study. They felt that police had come in at the beginning "with a big stick wanting to prove themselves" but that this had resulted in some people developing negative attitudes towards the police which was counter-productive as police need the help of the general public.

Changes in licensed premises

When asked what changes they had made as a result of, or during the enforcement interventions, participants agreed that they had become much stricter on bar entry. One bar owner described how this had resulted in many complaints being received (usually following each weekend) from patrons who were not admitted because they were deemed to be intoxicated. Most bar owners/managers had also roster more staff on duty, and in particular more duty managers.

Possible improvements

When asked how the police could improve their enforcement visits it was suggested that police should reduce the number of officers visiting and that they could consider using plainclothes officers so that only the patrons who are taken out know they are police. Participants also felt there was an opportunity to work more closely with bar management, security staff and *Walkwise* to identify persons of interest. Bar owners were appreciative of the role *Walkwise* plays in monitoring what is going on around town, and felt that police could utilise this knowledge to prevent alcohol-related harm.

There was a strong feeling that police and bar owners should be working together in policing licensed premises, and that plainclothes police working with managers would be less disruptive and more effective at doing this. One participant commented:

"It should be a working together thing".

4.5 Analysis of Alcohol-Related Harm Indicators

Three types of alcohol-related harm measure were analysed. Crime figures and police intelligence data (the Last Drink Survey) were analysed to identify whether the intoxication interventions had any impact on alcohol-related crime. Ambulance attendance data was used to identify whether any impact was evident on attendance at injuries potentially related to intoxication. Hospital emergency department data was analysed to identify any impact on alcohol-related presentations.

The analysis reveals some reduction in alcohol harm indicators did occur during the enforcement interventions. However, it is difficult to separate the effects of the on-premises enforcement from the impacts of other enforcement activity occurring in public places.

Crime

During the period November 2004 to June 2005, there were 1487 apprehensions recorded in Last Drink Surveys completed by Wellington police. The majority of drinking locations identified prior to offender apprehension were unlicensed premises. 38% of offenders indicated that their last drink was consumed at an unlicensed location. This includes public places, motor vehicles, private homes or functions, work places, or on boats. This finding must be treated with caution as a high proportion (39%) of Last Drink Surveys do not identify any drinking location.

As Chart 12 shows, licensed premises were implicated in 24% of the surveys, with most of those being locations covered by a tavern license. A small percentage (2% or less) of drinking prior to apprehension was recorded at other licensed venues (restaurants, licensed functions or clubs).

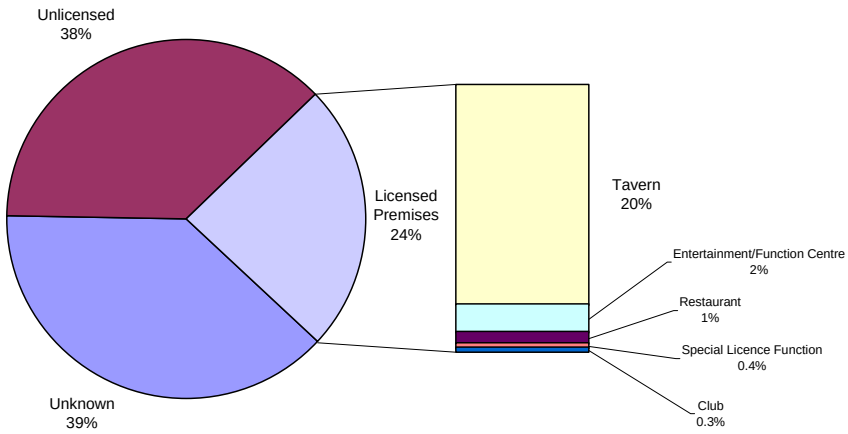

Chart 12 **Location of Last Drink from LDS since November 2004**

As shown in Chart 13, over 80% of the offending identified in the Last Drink Survey is attributable to three categories of crime: (1) violence, (2) traffic alcohol offences (EBA) and (3) disorder.

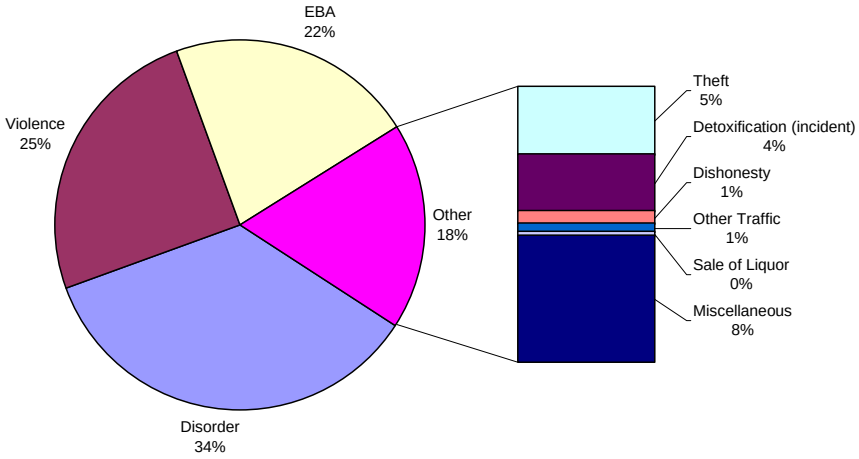

Chart 13 **Offences recorded on LDS**
Following drinking on licensed premises since November 2004

Offender intoxication

The level of intoxication of offenders is identified in 80% of the Last Drink Survey records. The intoxication assessment in the surveys is made on a five point scale (from slight to extreme). Chart 14 shows the results of this assessment prior to, during, and after the period of the intoxication interventions. The data covers all licensed premises in the Wellington local authority area, and is not isolated specifically to focus solely on the Wellington CBD. As can be seen in the charts, from the period before the licensed premises intervention through to the period following the interventions, a moderate level of intoxication represents the most frequent assessment.

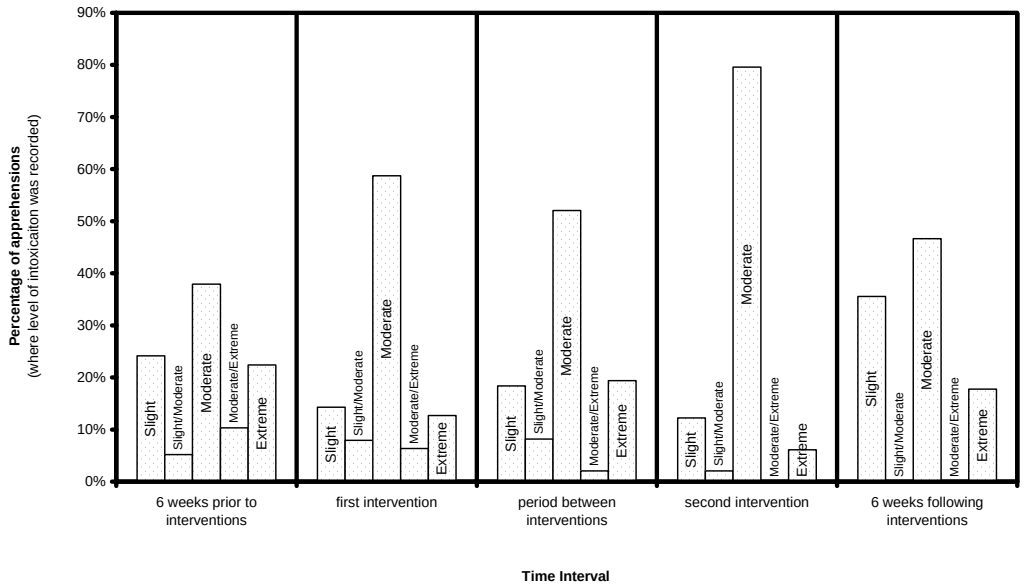

Chart 14 **Level of intoxication recorded on LDS**

A time series plot of the number of apprehensions made where the offender had been assessed as either (a) extremely intoxicated or (b) moderately to extremely intoxicated is shown in

Chart 15. This shows that the first intervention period does not coincide with any noticeable change in the apprehension rate, but the second intervention coincides with a period where assessments of highly intoxicated persons appear to be recorded less frequently (these are shown as data points represented by open circles on the chart).

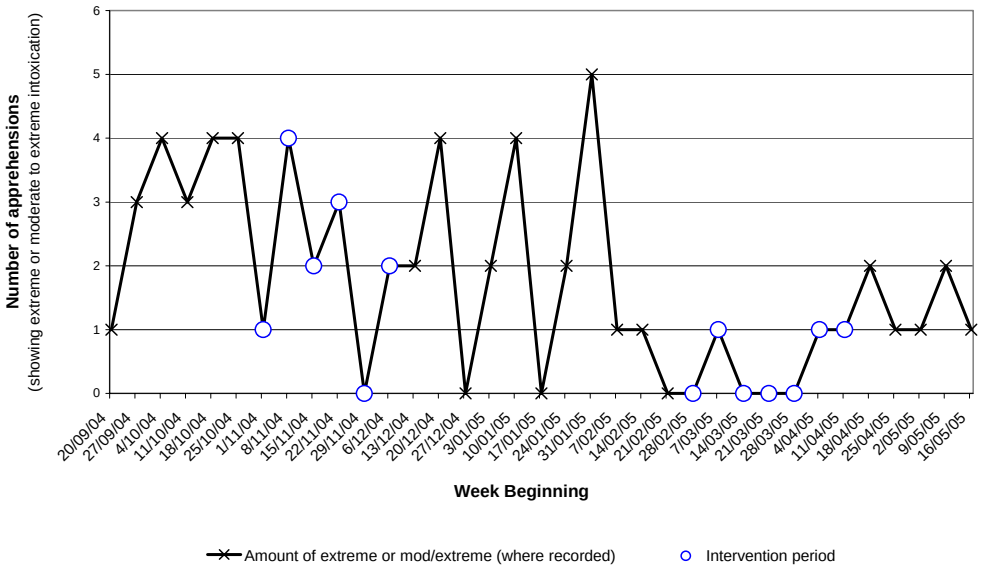

Chart 15 **Time series showing amount of extreme or moderate-extreme intoxication**
(Recorded in LDS for Wellington TLA)

Patron intoxication

Assessments of patron intoxication were made by police officers conducting licensed premises visits.[16] Chart 16 shows that peaks in the number of detected intoxicated persons actually occurred during periods of heightened licensed premises enforcement. This increase in detected patron intoxication can be explained when it is considered that more licensed premises were visited and police officers were tasked with identifying signs of intoxication during the periods of heightened enforcement.

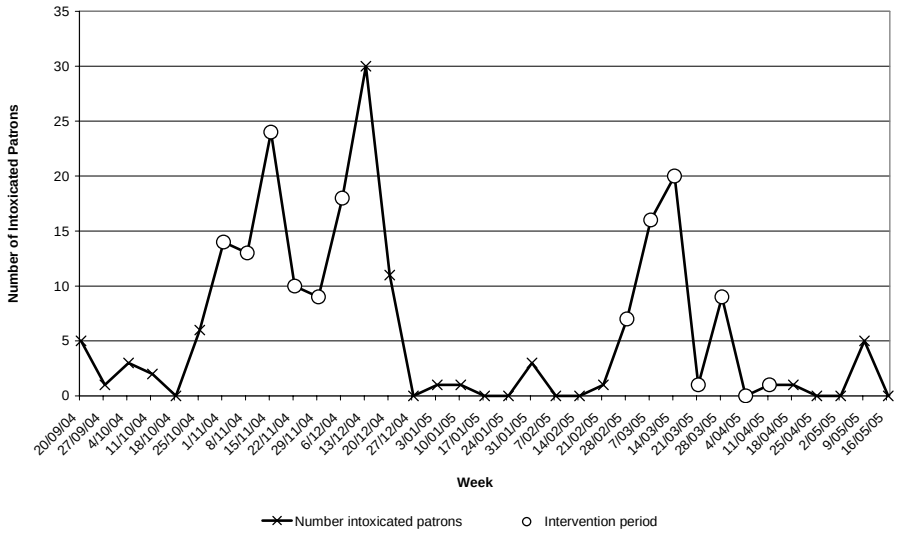

Chart 16 **Total intoxicated patrons detected on licensed premises during licensed premises visits**

[16] This is different to the Last Drink Survey of apprehended offenders.

To reduce the influence on the data of the different number of visits conducted each week, Chart 17 shows a time series plot of the amount of intoxication detected, expressed as a proportion of the number of licensed premises visited. This normalised plot still shows a higher proportion of intoxication was identified during the two heightened intervention periods. Again, this is likely to be due to the increased sensitivity of police staff during these periods to any signs of patron intoxication.

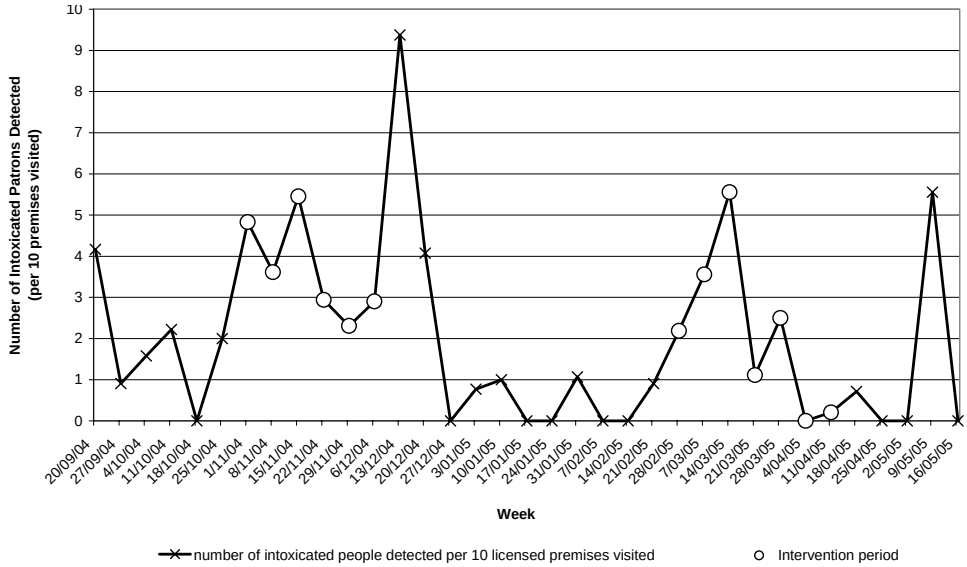

Chart 17 **Intoxicated patrons detected on licensed premises**
(Expressed as a function of licensed premises visited)

In summary, the results of intoxication assessments showed.

- Higher than usual numbers of intoxicated bar patrons were detected during the enforcement interventions, though police staff visiting bars were specifically asked to focus on identifying intoxicated patrons.
- Lower than usual numbers of *extremely intoxicated* offenders were detected during the period of the second enforcement intervention.

Underage drinking

In addition to addressing intoxication, police also looked to establish compliance with other Sale of Liquor Act requirements. In this regard, police predominantly looked for any underage patrons illegally present on licensed premises.

One indicator of the number of underage persons found on licensed premises is the rate at which liquor infringement notices are issued to minors for being in a restricted area or for purchasing liquor from licensed premises. Only 12 of liquor infringement offence notices were issued to minors during the period from 1 July 2004 to 30 June 2005. Six of these notices were issued during the periods of heightened enforcement (possibly influenced by the increased presence of police in bars during those periods). There was never more than one infringement notice issued in any week. Higher levels of underage drinking have been detected during previous years.

One explanation for the low numbers of underage drinkers encountered is that previous safety initiatives in Wellington, such as training of door staff and an ongoing police licensing focus

on preventing underage drinking, may have had an impact on the number of underage patrons entering licensed premises.

Another explanation is that police members were more focused on intoxication issues than on drinking-age compliance.

Data from the Last Drink Survey can be used to validate whether the low numbers of underage drinkers detected on licensed premises is attributable to high compliance. Chart 18 shows the age range of all persons apprehended for offences following drinking at any of the premises that received police visits during the interventions. Ages are predominantly in the range 18 years to 26 years and 31 years to 36 years. No offenders less than 18 years of age were recorded. This appears to substantiate there was not a major problem with underage drinking on any of the licensed premises visited frequently by police.[17]

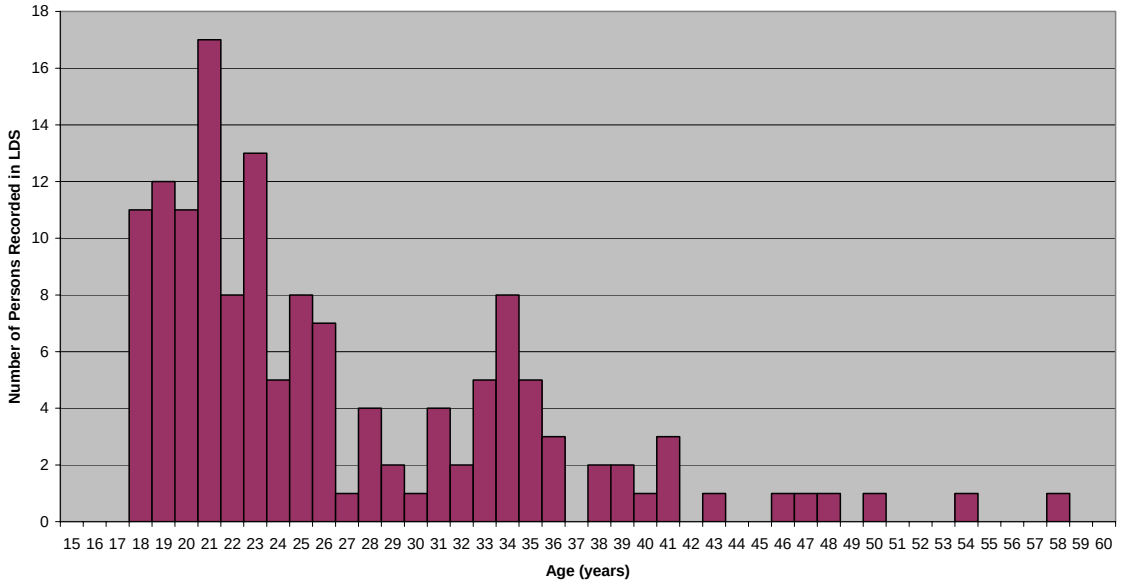

Chart 18 **Age distribution of persons recorded in LDS as having last drinks on top 20 targeted premises**

Chart 19 shows the age of persons apprehended following drinking at other licensed premises (i.e. not premises that received any targeting by police during the interventions). Persons apprehended after drinking at these premises have a wider age distribution, possibly reflecting that premises targeted by police tended to have a clientele with a younger age demographic than the non-targeted group. There were only two persons less than 18 years of age apprehended. Again, this supports the assertion that there is not an identifiable problem with underage drinking on licensed premises.[18]

[17] The ages of three apprehended persons were not recorded on the Last Drink Survey forms.

[18] There were 11 persons whose ages were not recorded on the Last Drink Survey and three persons aged >60years of age not shown on the chart.

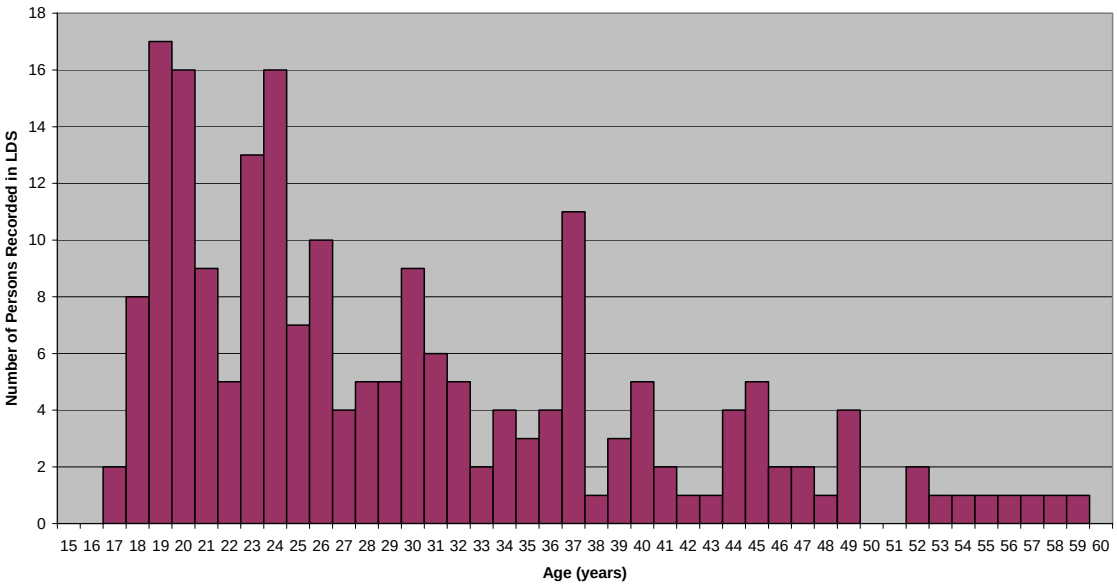

Chart 19 **Age distribution of persons recorded in LDS as having last drinks on other premises**

Violent crime

Chart 20 shows recorded violent offending in Wellington City. The most numerous offences in this series are assault and threatening behaviour offences[19]. Offences occurring at any private dwelling have been excluded; with offences only occurring in public places being included in the figures that are shown.

The violence data has high weekly variability.. However, the first intervention does appear to coincide with several weeks of relatively low levels of recorded crime. Similarly, the second intervention also coincides with two weeks of significantly lower recorded crime as compared to baseline levels established from previous years.

Statistical tests comparing violent offending during the intervention periods with normal enforcement periods do not indicate a statistically significant impact attributable to the enforcement interventions.

[19] This data excludes harassment offences and kidnapping offences but includes any intimidation, assault, and homicide offending.

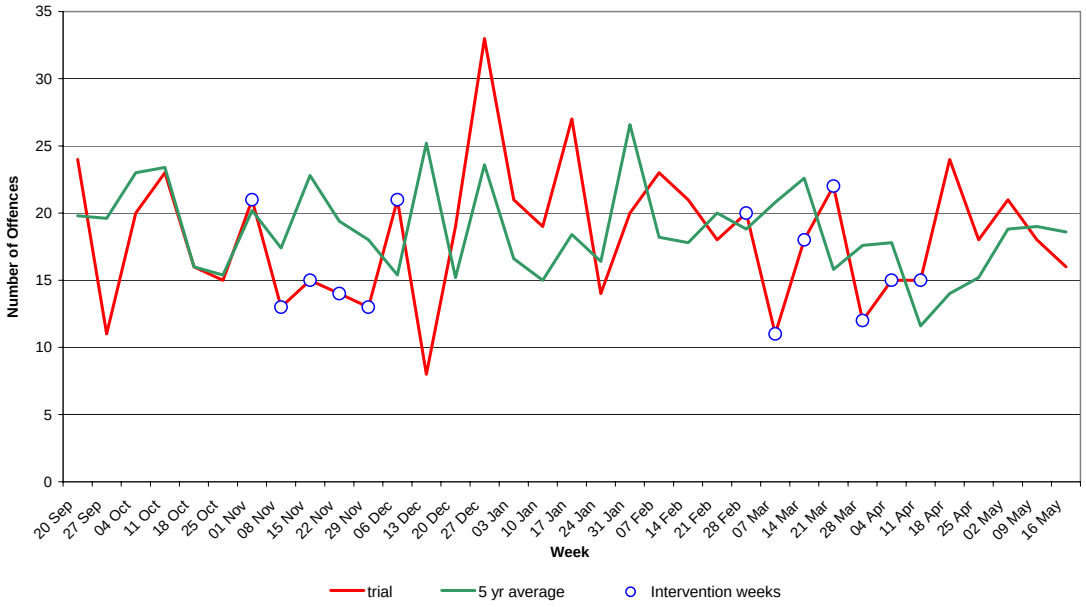

Chart 20 **Violence Offences**

Disorder offences

Chart 21 shows recorded data for disorder offences.[20]

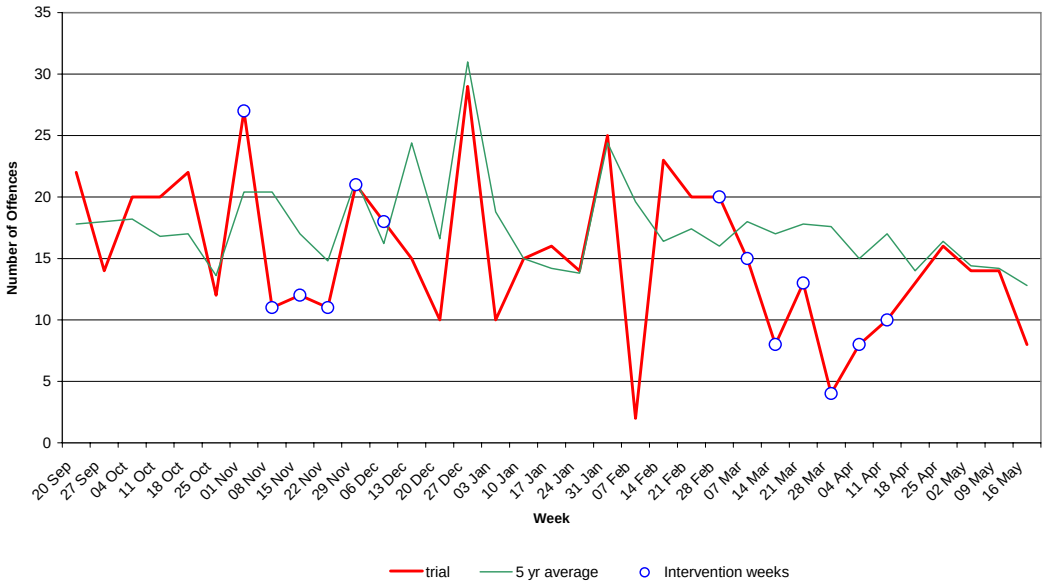

Chart 21 **Disorder offences (excluding SOLA)**

As with the violence data, disorder offending has high weekly variability. Several of the peaks in recorded offending coincide with significant public events (i.e. Guy Fawkes, New Years Eve, International Seven's Rugby tournament).[21]

Despite the variability of the data, the two intervention periods are both characterized by relatively low levels of disorder. During the eight weeks from the beginning of November

[20] The data include disorderly assembly and other street disorder offences but excludes Sale of Liquor Act offences, which are also classed as disorder offences by police.
[21] The dates of these events are tabulated in Appendix 9.

(commencing at the start of the first intervention), 125 disorder offences were recorded compared to an average of 151 offences during the same period over the previous five years. This represents a 17% decrease on the average of the five previous years.

A reduction in offending is particularly visible during the period of the second intervention. During the eight weeks from the end of February (commencing at the start of the second intervention), 78 disorder offences were recorded compared to an average of 118 offences during the same period over the previous five years. This represents a 31% decrease on the five year average. Contributing factors to several periods of low recorded offending, such as the low number of offences recorded during the week beginning 7th February, are not understood.

Statistical tests comparing disorder offending during the two six week intervention periods with normal enforcement periods does not indicate a statistically significant impact attributable to the enforcement interventions. However, if the two weeks following each intervention period are included in the analysis, testing whether there is a lag effect from the interventions, then a decrease becomes evident to a level of significance of p=0.1.

Sexual assault offences

Sexual assaults are not a high volume crime in Wellington. Generally there are fewer than two sexual offences recorded per week. Because of the low number of sexual attacks, sexual offence data is not evaluated separately.

Wilful damage offences

Recorded wilful damage offending is plotted in the following Chart 22. The number of recorded damage offences is very variable on a week by week basis, but shows no decrease during or immediately following the heightened licensed premises enforcement. The cause of an early February 2005 peak in recorded wilful damage offending is not known.

Statistical tests indicate do not indicate any significant difference in the recorded wilful damage offending between the intervention periods compared to normal enforcement periods.

Chart 22 **Wilful damage offences**

All offences with potential alcohol antecedents

Chart 23 shows the sum of violence, sexual attack, disorder and damage offences as one indicator. The total crime in this collective grouping is less variable, week by week, than any of the individual series.

The highest numbers of weekly recorded offending occurs during Guy Fawkes and New Year's Eve celebrations. There are also peaks in offending during the weeks commencing 31st January (the week of a 7's rugby tournament) and 14th February (the week of a one-day international cricket match).

Periods prior to the intoxication interventions follow similar trends to the baseline of the previous five years. A lower level of recorded offending is visibly apparent during both the two heightened enforcement intervention periods.

The two weeks following the first intervention are characterised by visibly lower levels of recorded offending. The eight week period covering the November and December period had 15% fewer offences than the baseline average.

The eight week period commencing with the start of the February enforcement intervention also had 14% fewer offences than the baseline average.

However, statistical tests comparing the intervention periods with periods of normal enforcement do not indicate a significant difference between the intervention periods and the baseline.

When a lag effect following each heightened enforcement intervention is included, then the test statistic improves to become T=1.77, which indicates some impact attributed to the enforcement intervention to a level of significance of p=0.1.

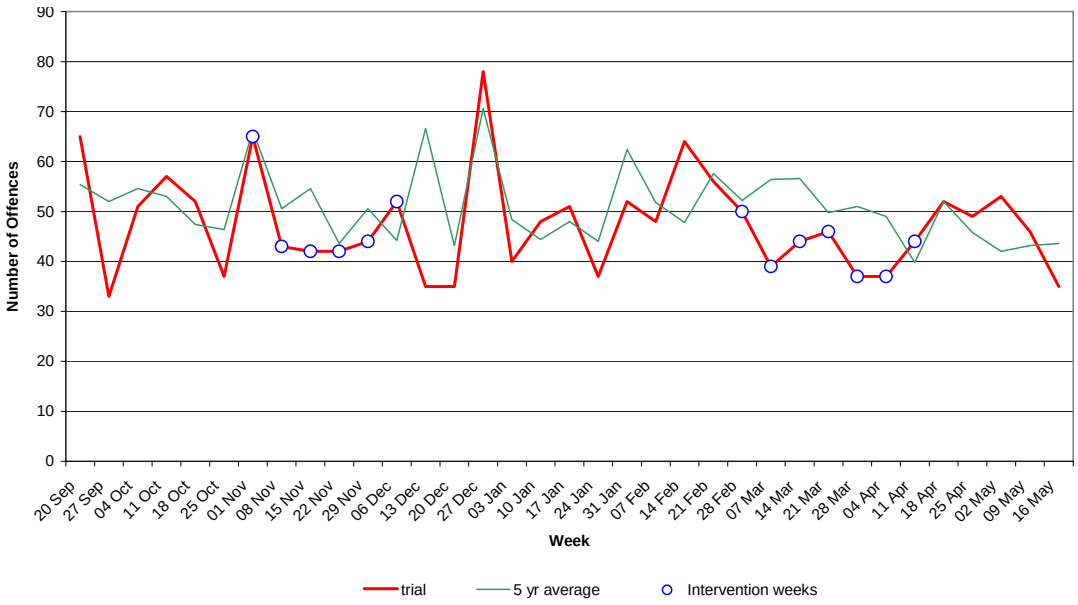

Chart 23 **All indicator offences**
(Violence, sexual attack, disorder, wilful damage)

Inner city (CBD) offending

Police offence records are not able to be automatically sorted to geographically isolate offences that occurred within the confines of the Wellington inner city.[22]

To gather a more precise picture of the effect of the enforcement interventions, offences from the CBD area were specifically coded during the research. This process was laborious and could not be repeated to develop a comparative seasonal trend line from previous years[23].

The data Chart 24 shows the number of recorded CBD violence and disorder offences; the prime target for alcohol-related harm reduction. Chart 24 shows that the intervention periods coincide with relatively low periods of offending, particularly the second intervention period. The significance of this decline in offending cannot be statistically tested because of the absence of a comparable baseline.

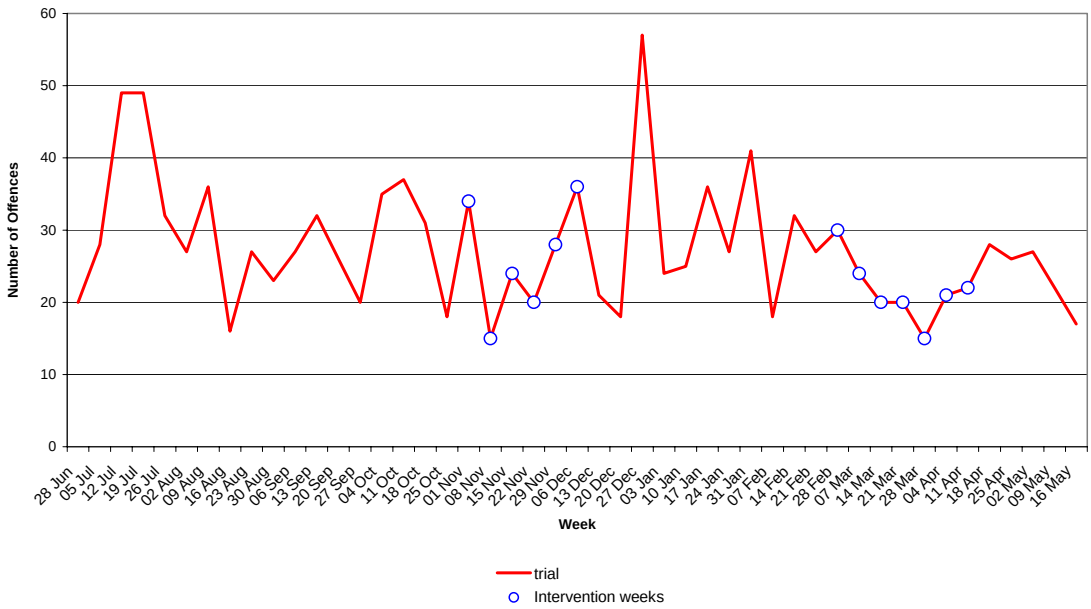

Chart 24 **Inner City Offending**
Violence (1000) and Disorder (3500) Offences

Impact of Operation Hurricane

Coinciding with the second period of heightened enforcement on licensed premises, police commenced a new street policing operation, "Operation Hurricane". This operation was predominantly focused on public place drinking, youth problems and violence. The operation involved proactive targeting of youth drinking and enforcement of Wellington city's liquor ban. The operation involved foot patrols, static observations, vehicle turnovers, liquor enforcement and the proactive application of provisions in the Children, Young Persons and Their Families Act 1989. The operation was predominantly focused on reducing problems in the Manners Street, Cuba Mall and Te Aro Park areas. The operation commenced on 4th March 2005 and terminated on 14th May 2005.

[22] The preceding charts all illustrate offending trends for offences recorded in a wider geographical area covered by the Wellington scene station – but located in public places.
[23] Because of the large amount of time that would have been involved reviewing individual police offence records

As a result of the proactive tactics applied during Operation Hurricane, there was an increase in the number of liquor ban offences recorded in the city. Chart 25 illustrates the increase occurring during the March 2005 to May 2005 period.

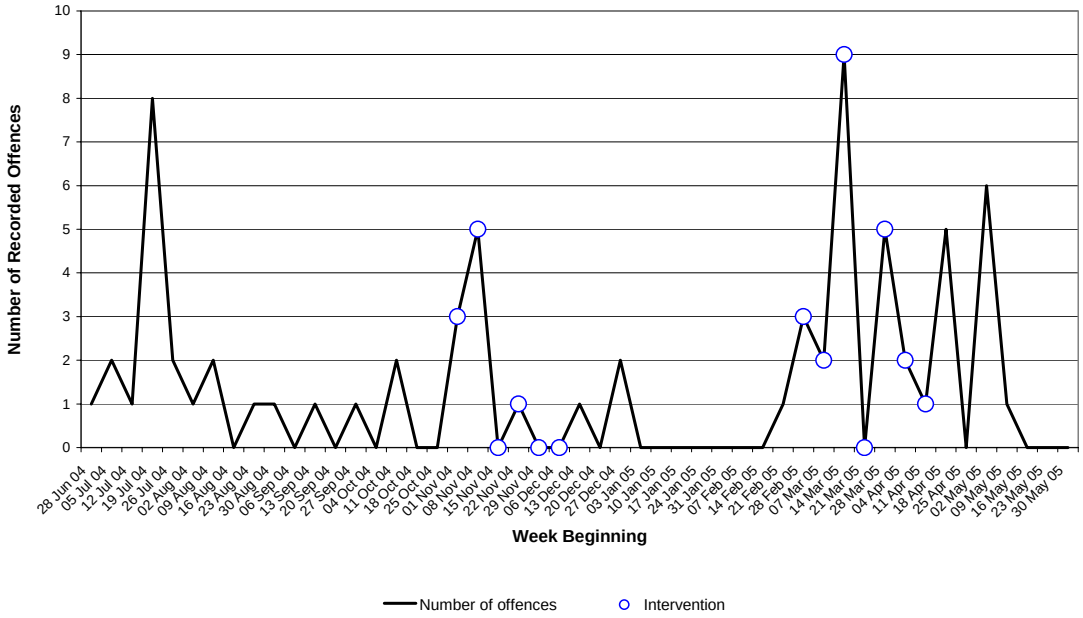

Chart 25 **3985: Recorded Liquor Ban Offences**

Chart 26 also shows there were some liquor infringement notices issued to underage persons possessing alcohol in the city, although these were not issued in high numbers. Whilst there were a small number of notices issued during Operation Hurricane, a higher rate of issuance of these infringement notices corresponded with the first intervention, particularly issued during the week of Guy Fawkes celebrations during November.

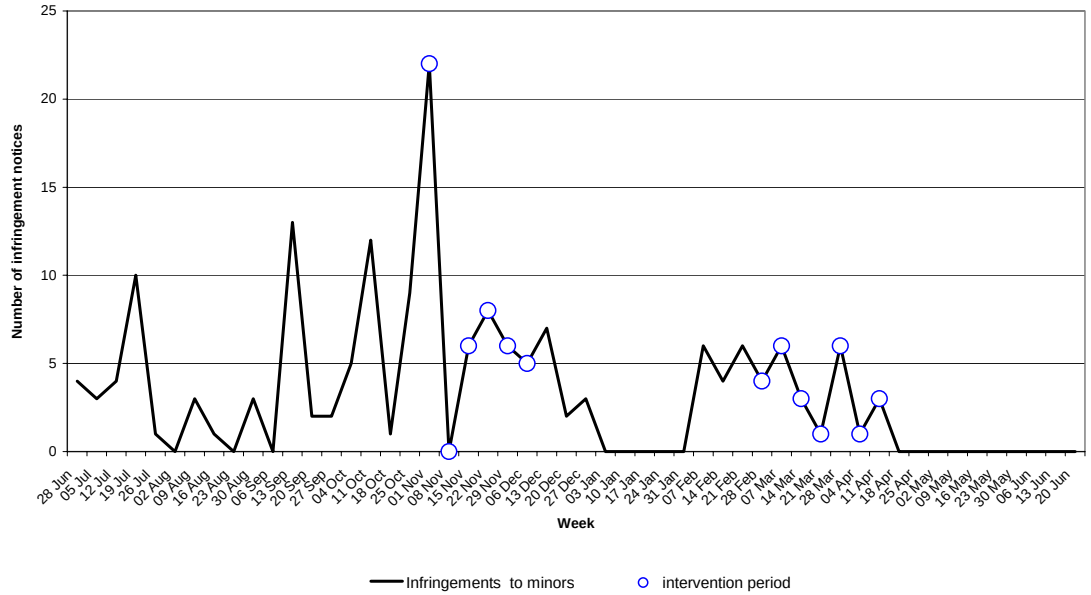

Chart 26 **Infringement notices issued to minors**
For drinking or possessing alcohol for consumption in public places

The researchers consider that the additional police activity surrounding Operation Hurricane may have influenced disorder and violence levels during the period from March 2005 to May

2005. Accordingly, it is impossible to distinguish the relative impacts of the licensed premises enforcement intervention from the impacts of Operation Hurricane during this period.

Summary of crime results

The preceding analysis of crime statistics shows:

- Disorder offending appears to have been most affected by the heightened enforcement interventions.
- Combined data for recorded violence, disorder, sexual attack and damage offences shows reduced periods of offending coincide with heightened police enforcement. This reduction is particularly evident if a lag period after the heightened enforcement is taken into account.
- It is difficult to confidently state that any decrease in offending has arisen solely as a result of the licensed premises interventions. The tactics employed by police in the street-policing focused Operation Hurricane may also have had an impact on recorded crime results.

Emergency Department Presentations

Wellington Hospital data identifying alcohol-related presentations to the emergency department for the period from September 2004 to June 2005 is illustrated in the Chart 27.

The emergency department data reveals increased numbers of alcohol-related presentations occurred during the weeks of the New Year's Eve celebrations and the week of 31st January 2005. This mirrors similar peaks in police data for assault and disorder occurring over these same periods.

The licensed premises intervention does not appear to coincide with any noticeable decrease in the number of alcohol-related presentations to the emergency department. However, the week of 7th March does coincide with the lowest week of recorded presentation in the entire series. Unfortunately, it is difficult to assess the influence of the intoxication intervention on these emergency department presentations without the benefit of data collected during previous years.

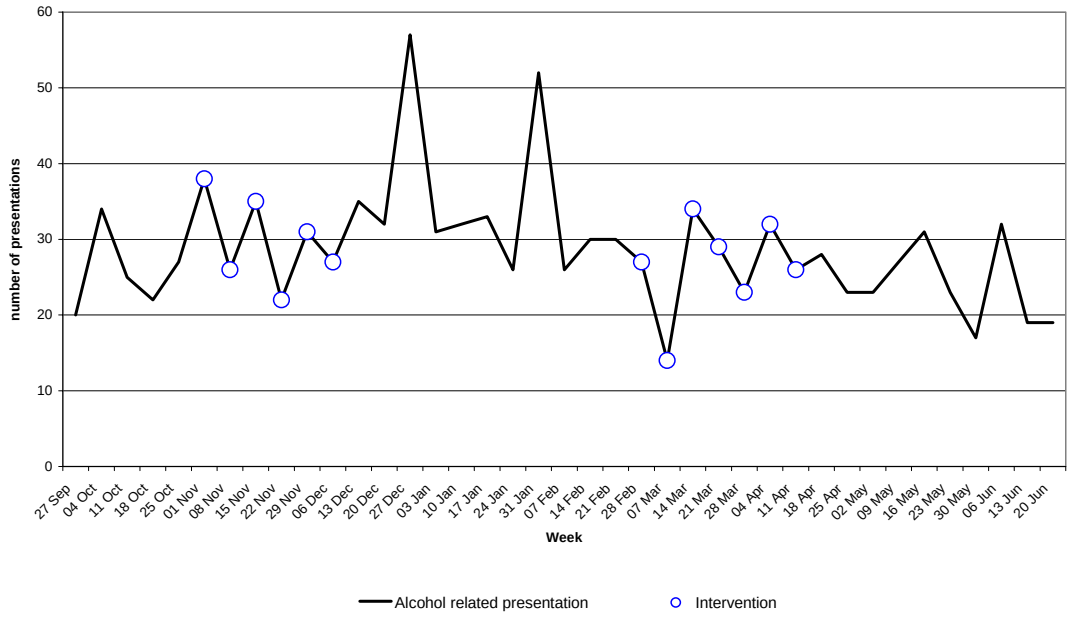

Chart 27 **Weekly alcohol-related presentations**
to the emergency department at Wellington Hospital

Ambulance Attendance

Intoxicated Patients

Chart 28 shows the number of attendances by ambulance service paramedics to intoxicated patients.

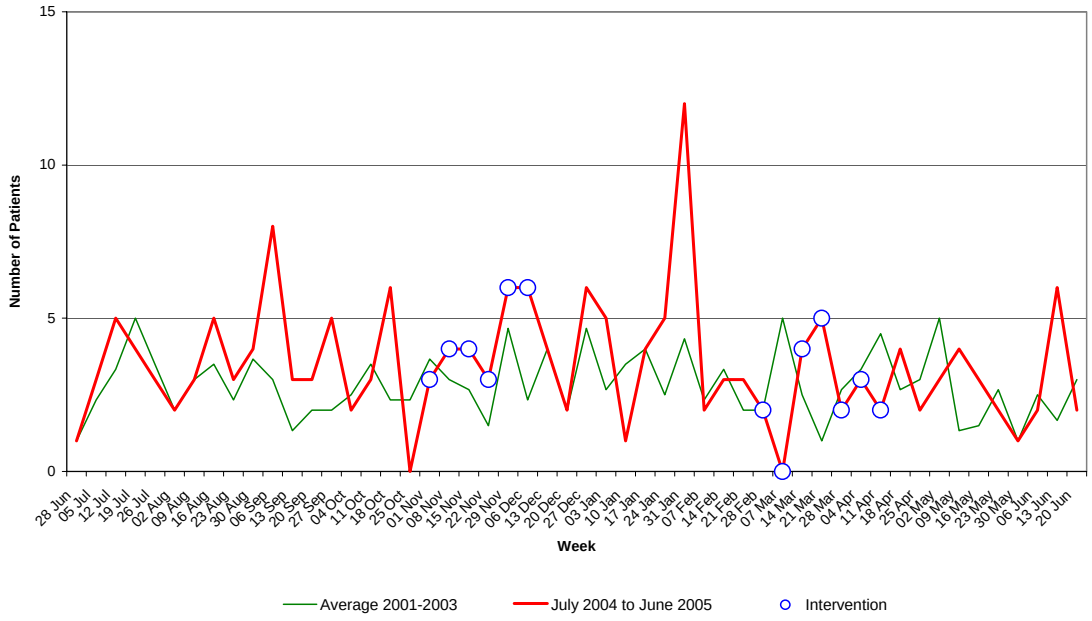

Chart 28 **Patients attended by ambulance in Wellington city area**

Diagnosis category 761: Intoxicated

Chart 28 shows there is high weekly variability in the number of intoxicated patients recorded. It is notable that the number of intoxicated patients attended during the July 2004 to June 2005 period (3.5 patients per week) is higher than average attendance levels for the previous three years (2.8 patients per week).

The impact of the interventions on the number of intoxicated patients is difficult to visually ascertain, because of the high level of variability in the chart. The first intervention coincides with a period of recorded intoxicated patients that is higher than the average for the previous three years. The second intervention coincides with several weeks where there were fewer presentations of intoxicated patrons.

Statistical tests comparing data obtained during the periods of heightened police enforcement with normal enforcement periods does not indicate any significant difference exists between the different periods. No further difference is noted if the two week period following each heightened enforcement intervention is included.

Intentional Injury by Others

Chart 29 shows the number of patients for whom an ambulance category code of 560: *Intentional Injury by Others* has been recorded.

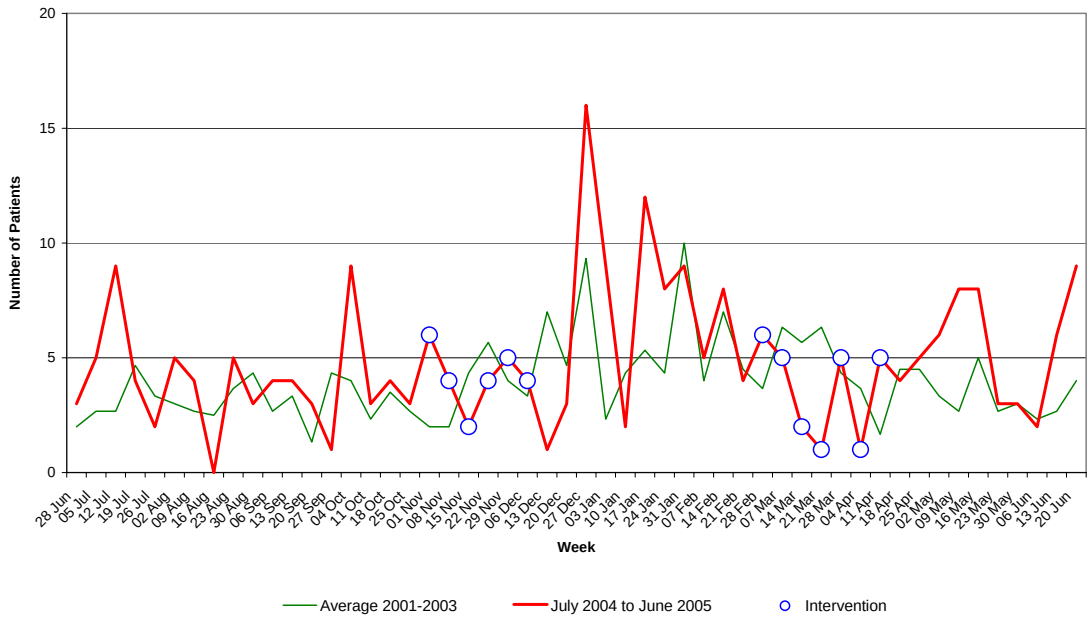

Chart 29 **Patients attended by ambulance in Wellington City area**

Diagnosis category 560: intentional injury by another

There is lower weekly variability in this injury series than in the data series for intoxicated persons, possibly because the overall attendance numbers in this category are higher. During the past year attendances to intentional injury by others have averaged 4.8 persons per week. The previous three years trend has averaged 4.0 persons per week.

Both the first and second periods of heightened intervention have coincided with several weeks of low recorded intentional injury. This mirrors a similar trend for recorded assaults in crime statistics. The period covered by the second intervention in March 2005 to April 2005, in particular, is marked by three weeks of low attendances at incidences involving *intentional injury by others*.

Statistical tests comparing the recorded attendance to patients *intentionally injured by others* during the heightened enforcement periods with normal enforcement periods do not indicate a significant difference between the two types of enforcement. However, if the two week period following each heightened enforcement intervention is incorporated as part of the intervention then a statistically significant difference is evident, with p=0.01).

Other Accidents

Chart 30 shows the number of patients for whom an ambulance category code of 570: *Other Accidents* has been recorded[24].

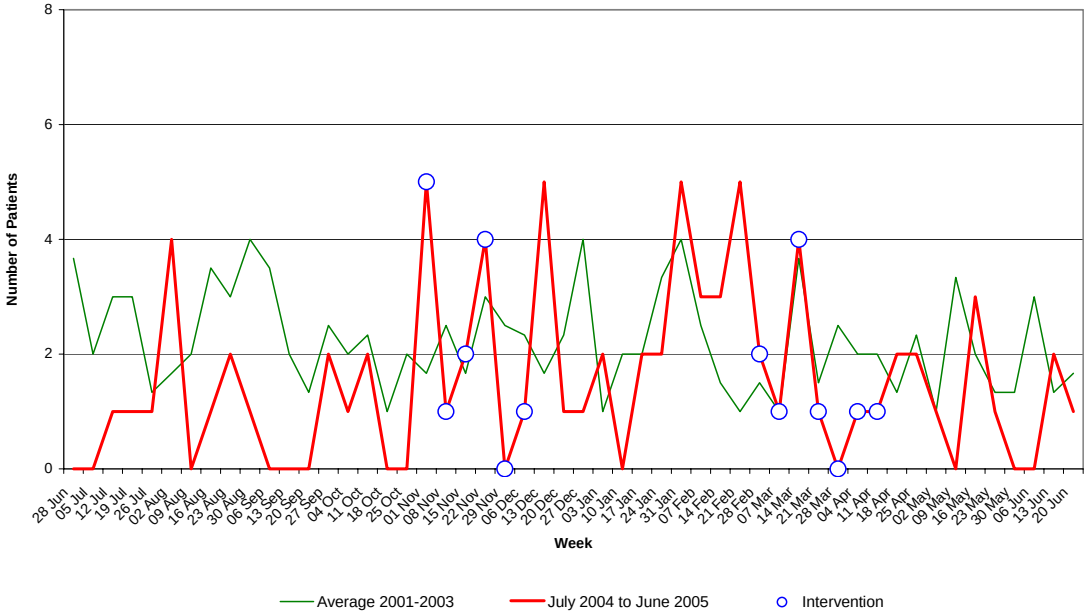

Chart 30 **Patients attended by ambulance in Wellington City Area**
Diagnosis category 570: Other Accidents

There is very high variability in this parameter, with between zero and five attendances per week during the past year. Over the study period, ambulance attendance at *Other Accidents* has averaged 1.5 attendances per week compared with 2.2 attendances on average during the previous three years.

The first intervention period coincided with weeks of both high and low recorded cases of *Other Accidents*. The second intervention period coincides with a period of generally higher than baseline levels. Statistical tests comparing the recorded attendance at *Other Accidents* during the heightened enforcement periods compared with normal enforcement shows no significant difference.

[24] "Other accidents" are accidents not specifically covered by other case codes – which are listed in the appendix

Combined Attendance Figures

Chart 31 combines all of the three patient category codes (560, 570, 761) into one ambulance attendance indicator.

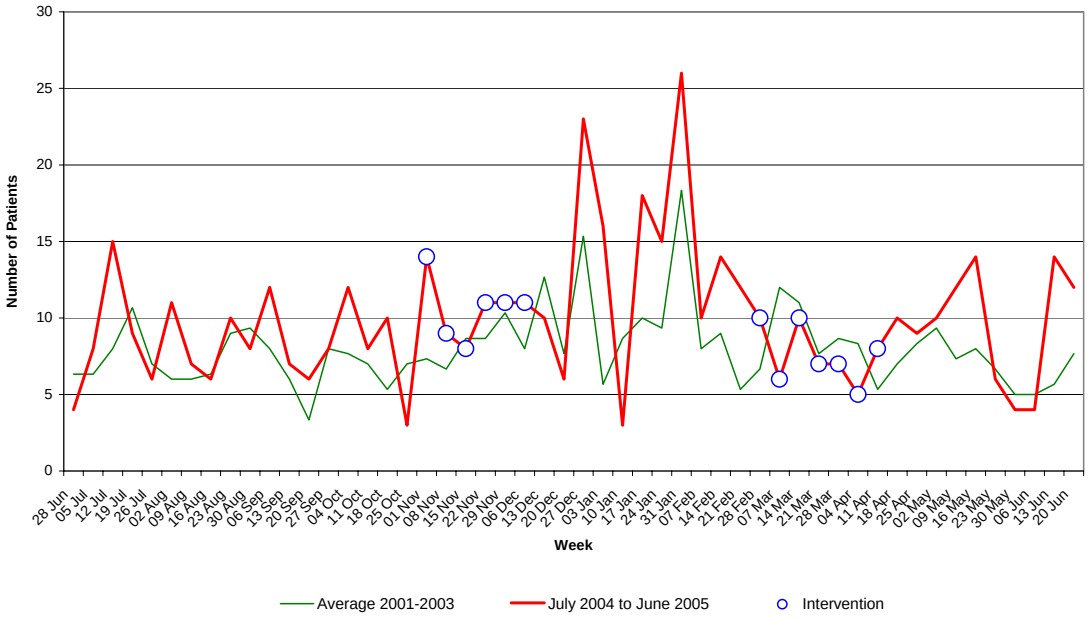

Chart 31 **Patients attended by ambulance in Wellington City Area**

All three diagnosis categories 560, 570, 761

The first period of heightened enforcement does not visually coincide with any noticeable decline in ambulance service attendances compared to the baseline obtained from previous years. Outside of the two heightened enforcement periods, ambulance attendances have averaged 2.4 more events per week more than during previous years.

The first heightened enforcement period (November 2004 - December 2004) also averaged 2.3 more attendance than previous years.

The second heightened enforcement period (March 2005 - April 2005) coincides with a drop in recorded ambulance attendance, averaging one fewer attendance per week than previous years.

Statistical tests comparing the recorded ambulance attendance at all three types of indicator events during the heightened enforcement periods with normal enforcement periods indicates a significant difference exists between the intervention periods and the baseline at a level of significance of p=0.06.

This difference continues to be significant if the two week period following each intervention is included as part of the intervention series (p=0.01).

Summary of Ambulance and Hospital Results

The analysis of ambulance and hospital statistics shows:

- It is not possible to determine whether the rate of hospital emergency department presentation has been affected by heightened police enforcement. Analysis is hampered by the absence of baseline data for previous years, which prevents an assessment being made of any seasonal variation factors.
- There is evidence that the number of ambulance attendances to alcohol-related incidents and assaults has declined during the periods of heightened police enforcement activity, particularly when a lag effect is taken into account.
- Just as for crime data, it is not possible to confidently state that the decrease in ambulance attendance might have been caused solely by the licensed premises interventions, because Operation Hurricane may also have had an impact on ambulance attendance results.

5 DISCUSSION

5.1 Requirements for Effective Enforcement

The aim of the intoxication enforcement interventions was to create an effective regulatory compliance environment that would reduce levels of alcohol-related harm. Effective implementation of the intervention had three requirements.

The first, was ensuring that licensees and serving staff had knowledge of their legislative obligations, including how to prevent and deal with intoxication, and awareness of the regulatory agencies' interest in ensuring the prevention of intoxication and subsequent harm.

The second requirement was heightened police enforcement of the Sale of Liquor Act (1989). This enforcement was specifically directed toward at-risk licensed premises using police intelligence data.

The final requirement was maintaining conditions to ensure licensees were motivated to comply with the regulatory requirements. This involved maintaining a credible process for penalising any significant breaches of regulatory requirements. In Wellington city, this would have included use of the combined enforcement group (KEG) to warn licensees, and the combined agencies taking cases to the Liquor Licensing Authority against licensees exhibiting ongoing or serious breaches of the Sale of Liquor Act.

It is questionable as to whether each of these conditions were effectively fulfilled during the study. Firstly, licensees and liquor industry representatives indicated to police that the heightened police attention towards some premises was leading to the deterioration of relationships with the licensed premises community. Whilst awareness of responsible serving practice was certainly high under these conditions, there may have been an adverse impact on willing compliance among serving staff. In large part, this may have been driven by frequent visits to a small core group of licensed premises, which was perceived by some licensees to be unfair.

Whilst police presence on a small group of licensed premises was maintained at high levels, the initiation of KEG processes and any subsequent licensing action was very low. Only one case was taken to the Liquor Licensing Authority during the period of the research and only two KEG meetings were held. This infrequent application of the KEG response or Liquor Licensing Authority applications appears to have been a function of setting high thresholds to take matters into any licensing review or prosecution setting. This high threshold was unlikely to have assisted the effectiveness of the interventions.

Qualitative evidence from this study and others (see Burns et al, 1995) indicates that adopting a heavy handed approach can risk alienating licensees and may not be necessary to achieve compliance. In this study, the regulatory focus was predominantly expressed solely through the enforcement visits, which licensees felt was a *heavy handed* approach. Importantly, the main penalty felt by licensees was continued premises visits by police, with an associated possible detrimental impact on trade. The fact that there was little follow-up action by the KEG group or with the LLA means that compliance problems identified during premises visits were not reinforced by appropriate penalties. Licensees felt that police were subjecting them to ongoing visits in the absence of sufficient evidence of non-compliance to justify any licensing action. They reflected that this approach was unfair.

Other research has shown that maintaining a risk of prosecution is important. In particular, unless motivated by potential penalties, servers can be reluctant to intervene when persons are already intoxicated (see Webb et al, 1996).

5.2 Influencing Factors

Smoke-Free Environments Act

The introduction of an amendment to the Smoke-Free Environments Act 1990 was a significant environmental change that occurred during the period of this research. As a consequence of the new legislation many bar owners introduced new outdoor spaces for smokers, sometimes using areas obtained through pavement leases. These factors had the potential to influence the drinking environment, particularly in terms of the numbers of persons using licensed premises, the length of time people remained on premises, the location of drinking in respect of using indoor or outdoor spaces, and other factors affecting drinking patterns. The non-participant observers noticed many more people were drinking outside after the introduction of this legislation.

It is possible that this may have influenced patron behaviour since there is a well established body of evidence highlighting the role of environmental factors (such as crowding and patron/server ratios) in the aetiology of violence and crime on licensed premises; with the strongest predictors of violence on licensed premises coming from these environmental factors rather than the personality traits of the patrons themselves (Quigley et al, 2003).

Importantly, these changes coincided with the final week of the first heightened enforcement period, and may have influenced the reduction in several alcohol harm indicators (e.g. disorder and assaults) that occurred during the two week lag period post- intervention.

Operation Hurricane

Operation Hurricane was predominantly focused on public place drinking, youth problems and violence. The operation coincided with the second period of heightened enforcement. The additional police activity surrounding Operation Hurricane may have influenced disorder and violence levels during the period from March 2005 to May 2005. As a result of the operation, there was an increase in the number of liquor ban offences recorded, demonstrating an impact of increased police activity and visibility on crime statistics that has been similarly observed in other studies (see Klick and Tabarrok, 2005). The influence of OperationHurricane on reduced alcohol-related harm and offending is impossible to separate out from that of the Liquor License Intervention.

Other Interventions

A wide range of problem solving and public safety initiatives targeted at alcohol-related harm have been implemented in Wellington in recent years. These include initiatives such as Walkwise patrols, the use of CCTV surveillance cameras, and the liquor ban by-law (all initiatives which have been introduced in the four years preceding this study) and training of licensed premises door staff which is ongoing but not compulsory according to liquor licensing legislation.

5.3 Effects on Licensed Premises

Server Behaviour

Information about the practices of bar serving staff in this study was collected by non-participant observers and to a lesser degree from police. Both observers and police noted that it appeared difficult for bar staff to assess intoxication; given the very brief interactions serving staff often had with patrons. This appeared to be particularly difficult in very busy bars which served large groups of younger patrons. Bar owners did not specifically address this issue of responsible alcohol service in their feedback session.

Observers and police also noted that the physical environment in many of the bars visited was not conducive to bar staff making good assessments of patrons' degree of intoxication, as many bars were very dark and some used lighting and smoke effects which obscured patrons from bar staff. Observers also felt the ratio of bar staff to patrons often inhibited responsible alcohol service, as staff appeared too busy to fully assess intoxication. There was a noticeable difference in server behaviour of staff in more upmarket bars, who appeared to have more skills and/or experience than those in the less upmarket bars.

Observers rarely observed bar staff denying service and often noted that obviously intoxicated people were not only served, but in some instances were seen to purchase multiple drinks and line them up in front of them. Observers noted that intoxicated patrons appeared to be able to conceal their intoxication long enough to purchase drinks, particularly in bars where servers were busy and the physical layout of the bar did not enable bar staff to monitor the behaviour of patrons. However, even though the brief interactions bar staff had with patrons made the assessment of intoxication difficult, there were some occasions when observers noticed that clearly intoxicated patrons being served by bar staff. This suggests similarities with Australian findings which have indicated that while many patrons become intoxicated on licensed premises, relatively few experience responsible alcohol service initiatives in these settings (Donnelly and Briscoe, 2003). Surveys of patrons in New Zealand also suggest low expectations of experiencing responsible alcohol service practices in licensed premises (Habgood et al, 2001).

While acknowledging that serving staff find it difficult to assess intoxication, earlier research in Wellington has shown that if staff believe that management want them to sell as much alcohol as possible, regardless of age, intoxication and behaviour, then servers are less likely to adhere to responsible alcohol service guidelines (Baker et al, 1995). This suggests that a lack of responsible alcohol service is not necessarily caused by an inability to identify intoxicated patrons, but rather by a lack of motivation to refuse service. McKnight and Streff (1994) demonstrated that the effect of enforcement was not to increase the ability of servers to recognise patron intoxication, but rather to motivate refusal of service.

Changes to server behaviour were noticed to occur during police visits and included bar staff being more attentive to customers. In some bars observers noticed more soft drinks were sold and more water was offered to patrons during police visits; particularly later in the intervention. On some occasions this behaviour continued after the police visit, however, it was more usual that bars exhibited a bounce-back effect after a police visit, with some bars turning the music back up and increasing the numbers of serving staff behind the bar. Patrons often appeared to delay purchasing drinks until after the police visit. In premises where this was most noticeable there was no decrease in the "bounce-back" effect observed as the study progressed. This would suggest the need for ongoing heightened police enforcement of liquor licensing laws on such premises to encourage responsible alcohol service.

Impact

There was a noticeable increase in bar signage relating to serving underage or intoxicated persons as the interventions progressed. Observers also noticed that some younger bar staff appeared anxious during police visits at the beginning of the study, but were less anxious as the study progressed. Feedback from bar staff and managers indicated that they felt they had become much stricter on the door; this was also reported by police and observers. Police felt door staff were in a much better position to assess intoxication while observers saw an opportunity either for security staff or "glassies" to take more opportunities to assess intoxication while circulating throughout the premises.

Police felt that their heightened presence had raised awareness of the issues of intoxication and underage drinking on licensed premises. Police and observers also felt the lower-key

approach adopted for the second intervention facilitated better communication of these messages. Previous studies examining licensee attitudes towards the enforcement of licensing laws confirms a preference for this approach over what can be perceived as more aggressive interactions (Webb et al, 1996).

Most bar owners and managers participating in focus-group discussions felt the interventions had a noticeable impact on business and predicted that their profits would be greatly reduced.[25] While unhappy with a perceived lack of consultation and the aggressive approach of police at the beginning of the study, most felt that the approach had improved as the interventions progressed. They also felt that police got better at assessing intoxication after adopting a less assertive approach, and believed that fewer people were being judged 'extremely intoxicated'; with a greater number being assessed as 'moderately intoxicated'.

Police Approach

All three groups noticed a difference in the approach of the younger, less experienced, police compared to older police members, as well as differences in the style of the dedicated Liquor Policing Unit compared to other police groups. Police were particularly enthusiastic about the dedicated team approach of the Liquor Policing Unit because it allowed them to develop a proactive approach which was better suited to a monitoring of licensed premises. Police members felt that the reactive mindset developed when carrying out other police duties such as Team Policing was less effective in the licensed premises they would normally visit between callouts to incidents. Staff who had worked in both proactive and reactive situations reported finding it difficult to alter their style when going from an incident such as a domestic disturbance or a violent fight, to the licensed premises environment where it was more appropriate to have an open and relaxed approach.

Several bar owners/licensees felt that they should be working with the police but felt the initial approach of police had been 'over-the-top' with up to 10 officers in uniform entering some premises. Some bar owners likened this to having a gang visit the premises, and reasoned that it would have a worse effect than not visiting, because patrons would get wound-up by such a visible police presence. While some bar owners thought they were responsible enough to manage intoxication issues themselves, most felt that a plainclothes approach by police would be appropriate, less disruptive and just as effective.

Many bar owners felt had been unfairly targeted by police based on information from the Last Drink Survey. Bar owners were also concerned that inner-city premises were targeted while they felt that suburban bars were ignored.[26]

Observers, police and bar owners/licensees were in agreement about the timing of visits. Visits were scheduled to fit in with the police shifts and had to be flexible if the LPU were called away to an incident. Occasionally this resulted in police visits to bars that were nearly empty and in some cases there were more police than patrons in the premises. Police felt that ideally the visits should start later for most bars although this varied depending on the type of bar. Bar owners and managers felt that police could now schedule visits more appropriately.

Bar owners and managers were also concerned with how the police applied the intoxication rating scale. Although they liked having the ability to negotiate an assessment, they felt that

[25] Participants in this focus-group interview were self-selected from the bars that were targeted most heavily during the interventions. As in all such interviews, the views expressed are the views of the participants and cannot be generalised to any wider population.

[26] This was not the case as suburban bars were also visited, but were not included in the intervention study.

they were presented with a Catch-22 situation when a patron was assessed as moderate. This meant that the patron could return to the bar and they said that often the patron then had an expectation of continued service because "the cops said I was alright". If denied service, some moderately intoxicated patrons sometimes then became argumentative; behaviour suggested as indicating extreme intoxication rather than moderate intoxication. In an effort to overcome this problem, bar owners asked police to refuse some moderately intoxicated patrons re-entry to the bar, which resulted in police changing their assessment of intoxication. As a consequence, it was feared that this assessment would reflect badly on the bar in police statistics.

Improvements

When asked to identify any potential improvements that could be made to liquor policing in Wellington's inner-city, there was general consensus that Police should take a less aggressive or gang-like approach to enforcement visits. Bar owners and managers were hopeful for a more co-operative approach with police – working together rather than feeling like "licensed drug dealers". Some felt use of plainclothes police was necessary as it would be less intimidating for patrons. Police also suggested that plainclothes officers could be an effective tool as part of maintaining an ongoing specialist Liquor Policing Unit.

Observers felt there were opportunities for bar managers to take a more proactive approach to responsible alcohol service by either allowing their serving staff to circulate through the bar more often (perhaps acting as glassies would give bar staff more opportunity to monitor intoxication), or by encouraging security staff to adopt a more proactive approach perhaps by 'walk-throughs' to identify intoxicated patrons before they cause problems and more use of 'places of safety'.

5.4 Alcohol-Related Harm Outcomes

Intoxication

Analysis of a range of police and ambulance data provides an ambiguous picture about the impact of the two intervention phases on intoxication. Last Drink Survey data shows that the first intervention coincides with a period of highly variable intoxication results. During this first intervention, the number of persons that were assessed as being *highly intoxicated* varied significantly from week to week (i.e. where the offender is assessed as either extremely intoxicated, or moderately to extremely intoxicated). The second intervention coincides with a period where there were relatively low numbers of persons recorded as *highly intoxicated*, indicating that either Operation Hurricane and/or the second licensed premises intervention may have reduced the number of highly intoxicated persons encountered.

The assessments of patron intoxication by officers who actually visited licensed premises showed peaks in detected intoxication during the heightened enforcement periods. This appears largely a function of the heightened intervention itself, rather than any indication of increased levels of intoxication during those periods.

Ambulance data indicates that the number of attendances involving intoxicated patients is highly variable week by week. In general the number of intoxicated patients attended over the past year (3.5 per week) has been higher than the average of the previous three years (2.8 per week). The first intervention coincides with a period of recorded intoxicated patients that is higher than the average for the previous three years, though this is generally the situation that has prevailed since July 2004. During the second intervention observably lower levels of intoxicated patients were encountered by the ambulance service.

Violence and Disorder

Violent crime and disorder may have been reduced by the heightened focus on intoxication. Disorder offending appears to be the most profoundly affected type of crime.

There were lower than baseline levels of disorder offending during both the intervention periods (a 17% decrease during the first intervention and a two week lag period and a 31% decrease during the second intervention and a two week lag). This reduction in disorder offending appears to be significant.

For both violence and disorder offending, there are a number of peaks in recorded offending that coincide with significant public events (such as Guy Fawkes, New Year's Eve, a one day cricket internationals and the International Sevens Rugby tournament).

When a wide range of offences with potential alcohol antecedents are combined (violence, sexual attack, disorder, and damage offences) this aggregate statistic is less variable, week by week, than the individual crime series. Both intervention periods corresponded with a significant decrease in these combined offences (a 15% decrease during the first intervention and a two week lag period and a 14% decrease during the second intervention and a two week lag).

Personal Injury

Overall, the two periods of heightened enforcement (particularly the second intervention) appear to have coincided with a period of reduced ambulance attendance at incidents with potential links to alcohol-related harm.

Reductions in the number of ambulance attendances at assault-related incidents (Intentional Injury by Others) coincided with the intoxication interventions. This mirrors the trend for recorded assaults in police statistics. The period covered by the second intervention (March 2005 to April 2005) is marked by three weeks of low attendance rates.

When all three ambulance attendance codes (*intentional injury by others, intoxication, and other accidents*) are combined the first enforcement intervention did not coincide with any noticeable decline in ambulance service attendances compared to previous years. Attendances during this period were at the same high levels that have been observed since June 2004. However, the second intervention coincides with a drop in the number of incidents attended by ambulance staff. Overall, the decrease in ambulance attendance during both periods of heightened enforcement, when combined, appears to be statistically significant.

Wellington Hospital emergency department data for alcohol-related presentations are difficult to assess. Because the data has only been collected since September 2004, it is not possible to compare the rate of presentations of any injuries with alcohol- related causes against previous years.

5.5 Summary of Enforcement Effectiveness

Despite the questions arising as to whether the interventions could have been more effective, they do appear to have coincided with reduced periods of alcohol-related harm in Wellington city. This evidence exists across a range of indicators from independent sources.

The research has revealed the following results:

- There are indications that violence and disorder has been affected by the interventions, demonstrating a reduction in offending.

- This impact is most pronounced during March 2005 and April 2005, where the combined impacts of the licensed premises intervention and Operation Hurricane are difficult to separate.
- There is some indication that extreme levels of intoxication have been reduced during the intervention periods.
- There are positive indications that ambulance service attendances at assaults were reduced during the intervention periods.

5.6 Lessons Learnt

An important feature of conducting this research was the attention placed on the coordination of the three regulatory agencies' operational activities. This was required to achieve a coordinated response toward at-risk licensed premises during the periods of heightened enforcement. There were a large number of other uncoordinated activities undertaken by these agencies that had the potential to impact on measurement of the research outcomes; Operation Hurricane being the most significant of these. Others include the deployment of *Walkwise* patrols, other regulatory visits to premises in the wider Wellington area including off-licenses, and CCTV implementation. To a large extent, these other activities are not amenable to being controlled, particularly over a lengthy period of time, as each agency maintains its own operational independence.

Achieving the heightened level of visits to licensed premises over the two intervention periods proved itself to be a challenging coordination issue. Consistency and sustainability of proactive tactics was particularly sensitive to the amount of resources the three agencies had available, with pressures to maintain required levels of activity in other areas. For example, the research was conducted at a time when, nationally, there had been heightened interest in police emergency response capability. Future research should consider more formal or structured arrangements to facilitate the coordination of any operational commitments. For example, within police this could mean establishing formal Operations Orders to provide a clear reference point for operational commitments and tactics. Early planning with all agencies, to agree and embed any resource requirements and tactics within annual plans, would also place future researchers in a sound coordinating position.

Data issues did not prove to be a significant problem for the researchers except in limited areas. The ability to pinpoint crime to precise geographic zones proved to be a limitation to some analysis of impacts in the geographic interest area (the central business district). This situation will undoubtedly improve as police information systems improve. More precise geographic attribution is an area that any future research could also focus on for health data.

Future research will also benefit from ongoing improvement in the availability of indicators of alcohol harm. Operational agencies such as police and Wellington Hospital are still developing techniques for recording and collating data that indicates potential alcohol antecedents to crime and incidents.

The relatively low impact on most indicators by the intervention means that, in the final analysis, it has been difficult to ascertain the effectiveness of the intervention. Effectiveness may become clearer if the techniques can be repeated over several seasonal cycles in order to see if the gains that have apparently been indicated can be repeated under different environmental circumstances.

The research also showed that the effectiveness of police teams in licensing roles appears to improve with their experience of licensed premises visits, and testing of different approaches to these visits. Over time, staff deployed on licensed premises visits became more skilled at observing intoxication and more interactive with patrons.

Consideration should be given to broadening the focus of the interventions to address some concerns highlighted by this study; these include the trigger level for processes to seek penalties for regulatory non-compliance, and the introduction of processes to improve local police- liquor industry relationships. Improving these two factors may lead to higher levels of compliance.

In this respect, future heightened enforcement responses should take into account integration with other strategies for licensed premises control. Such multifaceted approaches have been shown to be successful in other studies.

Finally, the research is faced with some uncertainty about the relative impacts of Operation Hurricane compared to the licensed premises interventions. The two tactics targeted separate problems, but had the potential to impact on the same disorder and violence indicators, as well as health data. However, it can be said that the highest impacts were apparent during the period when both tactics were applied, and this may lend some weight to arguments that multifaceted enforcement approaches can be effective.

5.7 Recommendations

In addition to the observations outlined in the *Lessons Learnt* section above, it is recommended that consideration be given to the following issues:

- This study has demonstrated some harm reduction outcomes as a result of a focus on intoxication on licensed premises. Refinement of enforcement approaches that have led to these outcomes would benefit from further investigation.
- The difficulty in controlling the operational enforcement environment presented confounding problems to this project. Future researchers should seek to achieve commitments from regulatory agencies to maintain operational consistency during any similar research.
- It appeared, from focus group feedback, and from observations made during the study, that the effectiveness of licensed premises visits by the liquor policing unit increased over time. This occurred as the police members involved developed improved rapport with bar staff and bar patrons and improved their skills in conducting visits. The benefits arising from this experience, and the ability of a dedicated team to maintain a focus on proactive activity, has the potential to lead to higher levels of effectiveness if the approach can be continued for a longer period of time.
- Local police and the licensing industry may benefit from discussing enforcement approaches – both have shared objectives in terms of reducing harm. Feedback from focus groups and the review of literature conducted during this study also support the benefits of collaborative and multifaceted approaches.
- The researchers noted that control of the drinking environment by bar staff can be very difficult. It is also noted that obligations for greater levels of individual-accountability are becoming more prevalent in many public place drinking situations (compliance with liquor bans and compliance with underage drinking laws being two examples). Seeking greater emphasis on patron responsibility within a licensed premises environment is a policy area that may merit some exploration by ACC, police and other interested agencies.

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APPENDICES

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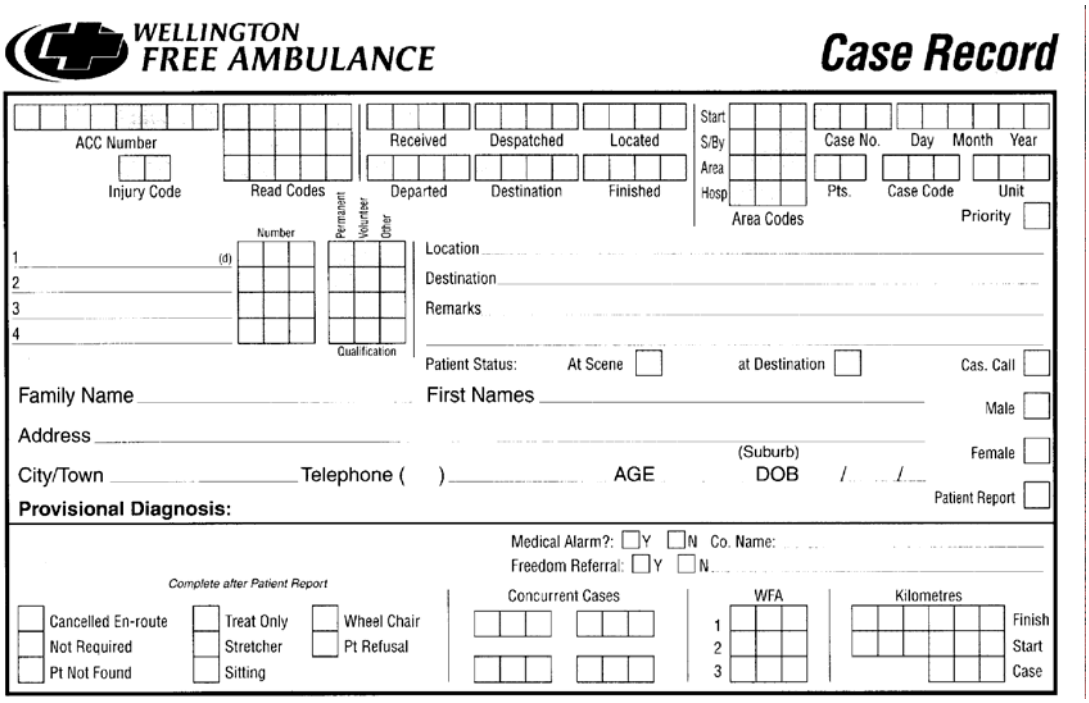
Wellington's public event calendar during 2004/2005 ..... A30

Ambulance Case Record Form



WELLINGTON FREE AMBULANCE

Case Record

ACC Number | Injury Code | Read Codes | Received | Despatched | Located | Departed | Destination | Finished | Start | S/By | Area | Hosp | Area Codes | Case No. | Pts. | Day | Month | Year | Case Code | Unit | Priority

1 (d) 2 3 4 — Number — Permanent / Volunteer / Other — Qualification

Location

Destination

Remarks

Patient Status: At Scene ☐ at Destination ☐ Cas. Call ☐

Family Name First Names Male ☐

Address (Suburb) Female ☐

City/Town Telephone ( ) AGE DOB / / Patient Report ☐

Provisional Diagnosis:

Medical Alarm?: ☐Y ☐N Co. Name:

Freedom Referral: ☐Y ☐N

Complete after Patient Report

☐ Cancelled En-route ☐ Not Required ☐ Pt Not Found

☐ Treat Only ☐ Stretcher ☐ Sitting

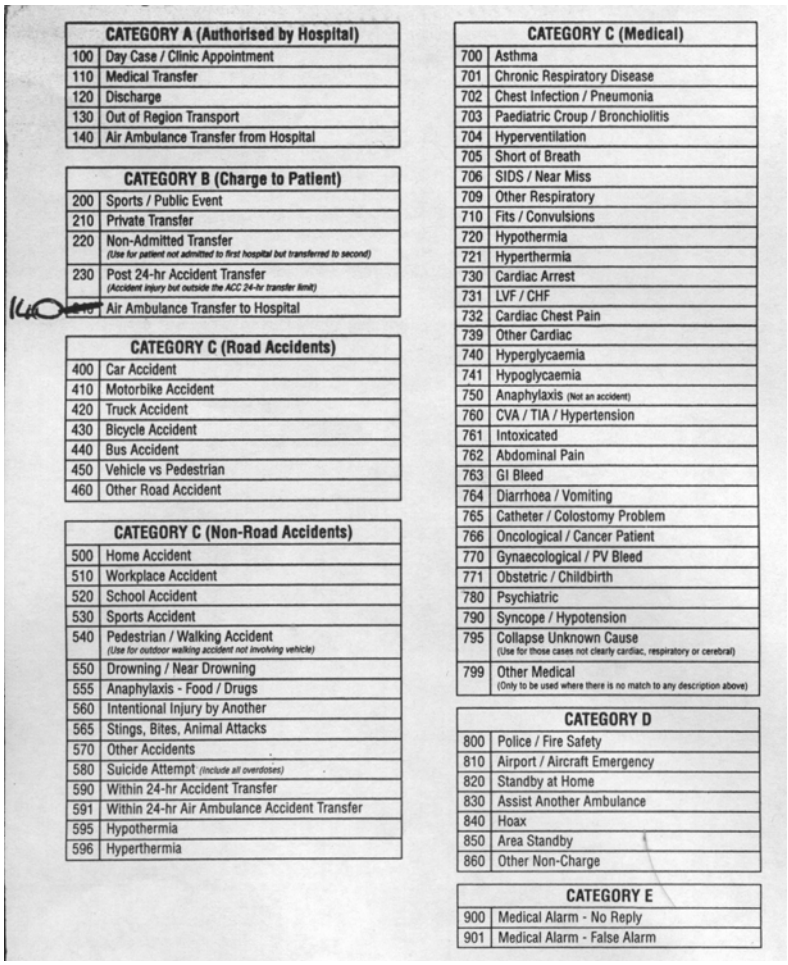
☐ Wheel Chair ☐ Pt Refusal

Concurrent Cases

WFA 1 2 3

Kilometres Finish Start Case

Ambulance Case Codes



CATEGORY A (Authorised by Hospital)	
100	Day Case / Clinic Appointment
110	Medical Transfer
120	Discharge
130	Out of Region Transport
140	Air Ambulance Transfer from Hospital

CATEGORY B (Charge to Patient)	
200	Sports / Public Event
210	Private Transfer
220	Non-Admitted Transfer *(Use for patient not admitted to first hospital but transferred to second)*
230	Post 24-hr Accident Transfer *(Accident injury but outside the ACC 24-hr transfer limit)*
[illegible]	Air Ambulance Transfer to Hospital

CATEGORY C (Road Accidents)	
400	Car Accident
410	Motorbike Accident
420	Truck Accident
430	Bicycle Accident
440	Bus Accident
450	Vehicle vs Pedestrian
460	Other Road Accident

CATEGORY C (Non-Road Accidents)	
500	Home Accident
510	Workplace Accident
520	School Accident
530	Sports Accident
540	Pedestrian / Walking Accident *(Use for outdoor walking accident not involving vehicle)*
550	Drowning / Near Drowning
555	Anaphylaxis - Food / Drugs
560	Intentional Injury by Another
565	Stings, Bites, Animal Attacks
570	Other Accidents
580	Suicide Attempt *(Include all overdoses)*
590	Within 24-hr Accident Transfer
591	Within 24-hr Air Ambulance Accident Transfer
595	Hypothermia
596	Hyperthermia

CATEGORY C (Medical)	
700	Asthma
701	Chronic Respiratory Disease
702	Chest Infection / Pneumonia
703	Paediatric Croup / Bronchiolitis
704	Hyperventilation
705	Short of Breath
706	SIDS / Near Miss
709	Other Respiratory
710	Fits / Convulsions
720	Hypothermia
721	Hyperthermia
730	Cardiac Arrest
731	LVF / CHF
732	Cardiac Chest Pain
739	Other Cardiac
740	Hyperglycaemia
741	Hypoglycaemia
750	Anaphylaxis (Not an accident)
760	CVA / TIA / Hypertension
761	Intoxicated
762	Abdominal Pain
763	GI Bleed
764	Diarrhoea / Vomiting
765	Catheter / Colostomy Problem
766	Oncological / Cancer Patient
770	Gynaecological / PV Bleed
771	Obstetric / Childbirth
780	Psychiatric
790	Syncope / Hypotension
795	Collapse Unknown Cause (Use for those cases not clearly cardiac, respiratory or cerebral)
799	Other Medical (Only to be used where there is no match to any description above)

CATEGORY D	
800	Police / Fire Safety
810	Airport / Aircraft Emergency
820	Standby at Home
830	Assist Another Ambulance
840	Hoax
850	Area Standby
860	Other Non-Charge

CATEGORY E	
900	Medical Alarm - No Reply
901	Medical Alarm - False Alarm

Wellington Hospital Emergency Department Clinical Record

Capital & Coast District Health Board

Emergency Service Clinical Record

TITLE LAST NAME: [redacted]		NHI No [redacted]
FIRST NAME: [redacted]		G.P. GP-NOT IN [redacted]
ADDRESS: [redacted]		D.O.B. [redacted]
SUBURB [redacted]	DOMICILE 9999	ADMISSION DATE

Treating Nurse: ,

Treating Doctor: [redacted] Time Seen: 09:00 Date Seen: [redacted] JAN 2005

Primary Diagnosis: [redacted]

Addt. Diagnoses:

Consultations: [redacted]

Investigations:

Procedures: [redacted]

Alerts: *DRUG ALLERGY*MANAGEMENT PLAN*MRSA

Vital Signs - Observations:

Time	Temp °C	Pulse /min	Resp Rate	SYS BP mm Hg	DIA BP mm Hg	BP Details	Oximetry %SaO_2	Oximetry F_iO_2	CO_2 mm Hg	BSL mmol/L	Weight kg

Actual Departure Time: Date: Destination: HOME

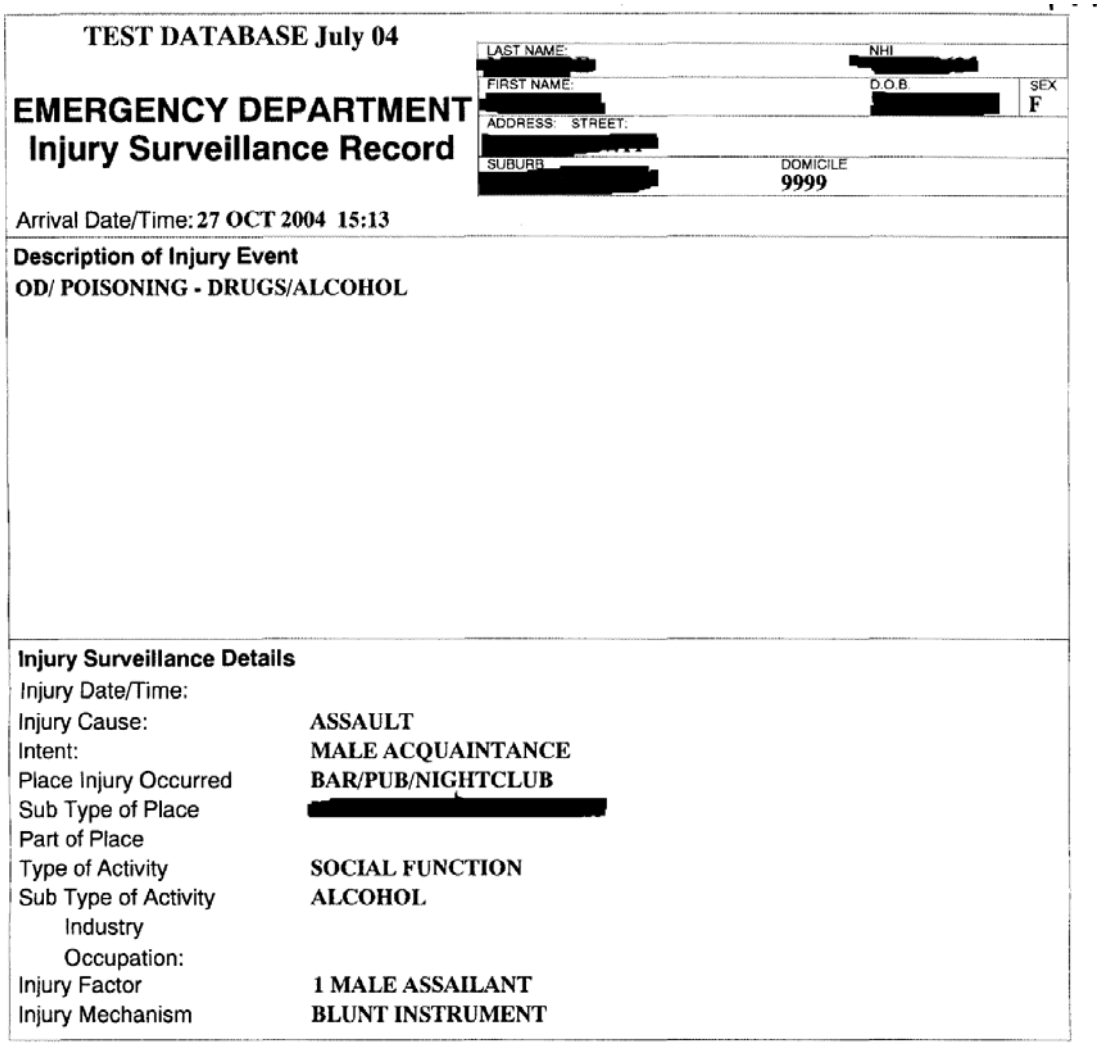
Clinical Notes

19 NOV 2004 14:06 - [redacted]

28 FEB 2005 09:34 - [redacted]

28 FEB 2005 09:36 - [redacted]

Wellington Hospital Emergency Department injury Surveillance record



TEST DATABASE July 04

EMERGENCY DEPARTMENT
Injury Surveillance Record

LAST NAME: [redacted]
NHI [redacted]
FIRST NAME: [redacted]
D.O.B [redacted]
SEX F
ADDRESS: STREET: [redacted]
SUBURB [redacted]
DOMICILE 9999

Arrival Date/Time: 27 OCT 2004 15:13

Description of Injury Event
OD/ POISONING - DRUGS/ALCOHOL

Injury Surveillance Details

Injury Date/Time:	
Injury Cause:	ASSAULT
Intent:	MALE ACQUAINTANCE
Place Injury Occurred	BAR/PUB/NIGHTCLUB
Sub Type of Place	[redacted]
Part of Place	
Type of Activity	SOCIAL FUNCTION
Sub Type of Activity	ALCOHOL
Industry	
Occupation:	
Injury Factor	1 MALE ASSAILANT
Injury Mechanism	BLUNT INSTRUMENT

Offender Report: Appendix B

NZ POLICE

OFFENDER REPORT
AND OFFENCE CLEARANCE DATA

POLICE 24 Com.1 11/97
APPENDIX B

Offender No.

If used to describe a suspect-put a large "Q" on the Offender No. Box on top right of the form	2 Full Name (Surname First)			
	3 Nicknames		4 M/PRN	
5 Date of Birth: Day / Month / Year		6 Suspects Age	7 MISC No.	FOR MO USE ONLY

8 Known Family Members/Associates (include addresses where known)

9 Others Charged with this Offence (Name & PRN)

10 Best Approach Used Interview Situation

11 Places and Addresses Frequented

VEHICLES Used/Owned

12 Reg. No.	13 Year	14 Make	15 Model	16 Colour

17 Further Vehicle Information

18 General Information which may help in future investigations. Full description (if Summons Case)

19 Offence Committed Whilst On: Bail **Yes/No** Parole **Yes/No** N/A ☐

CLEARANCE

20 SEX	21 RACE	22 AGE	23 POB	24 GANG	

25 File Number of all Files being cleared	Item No.	Offence Code	Mode of Apr.	How Cleared	Date Cleared	Clearance Station

26 Stats Entered by
Name
Date

27 Completed by	28 Checked by
Name: **EMN688** QID	Name: QID
23/09/2004 Date	**23/09/2004** Date
FILE:	**CARD EVENT No:**

Short Offence Report form 101

MINOR OFFENCE REPORT

AND STATISTICS DATA

POL 101
11/01

JOB:			CODE:
DATE 1		TIME 1	
DATE 2		TIME 2	
LOCATION:			
SCENE STATION		SECTOR	SCENE TYPE
SUBJECT - OFFENDER'S NAME:			
ADDRESS:			
BUSINESS ADDRESS:			
HOME PHONE:	BUSINESS PHONE:		GANG AFFILIATION:

SEX	RACE	AGE	DOB	PLACE OF BIRTH	APPREHENSION CLEARANCE

ASSOCIATED NAME (PARENT/GUARDIAN):	Assoc
ADDRESS:	
Complaint Acknowledgement Form Issued	☐ Yes ☐ No

Stolen/Mis-Appropriated Property Stats	Item 01	CLASS	Value $	Quantity	Rec Value $	Rec Qty
	Item 02	CLASS	Value $	Quantity	Rec Value $	Rec Qty
	Item 03	CLASS	Value $	Quantity	Rec Value $	Rec Qty
	Item 04	CLASS	Value $	Quantity	Rec Value $	Rec Qty

TEXT:

Offence Report form 23

N.Z. POLICE

OFFENCE REPORT

AND STATISTICS DATA

POLICE 23 Com 11/97

APPENDIX A

Item No 01

Check ANY box that applies

2A Offence in full	Offence Code	2 On/From/To	MON ☐	TUE ☐	WED ☐	THU ☐	FRI ☐	SAT ☐	SUN ☐
		Day / Month / Year							Times

9 Offence Location in Full	3 On/From Date 1		4 At	
	5 To Date 2		6 At	
10 Station / Sector Code	7 Reported		8 At	
	11 Police Attended		12 At	

14 Select Scene Type									
B Bank Finance	C Chemist/ Pharmacy	D Dwelling	E Educational Schools etc	F Factory or Warehouse	G Garage Service Stn	H Hospital or Grounds	I Office Single or in Block	K Casino	L Licensed for Sale of Liquor
M Medical Room Surgery Clinic	P Public Place Road Street	S Shop, Store Super-market	W On water Lake Harbour	X Unknown Scene	Z Not Applicable	O Other Specify			

13 Weapon Code	If "other" also specify			
15 Was Offender A Stranger	☐ Y Yes	☐ N No	☐ X Unknown	☐ Z Not Applicable
16 Member who fingerprinted scene	Rank and Surname	Result ☐ POS	☐ NEG	

17 Subject - Complainant Firm or Individual Mr/Mrs/Miss/Ms ASN Sex	18 Address in Full	19 Hm Ph 20 Bus Ph
21 Associated Names - Surname First Mr/Mrs/Miss/Ms 22 ASN Sex	23 Address in Full	24 Involvement / 25 Hm Ph 26 Bus Ph
27 Mr/Mrs/Miss/Ms ASN Sex	Address in Full	29 / 30 Hm Ph 31 Bus Ph
32 Mr/Mrs/Miss/Ms ASN Sex	Address in Full	34 / 35 Hm Ph 36 Bus Ph
37 Mr/Mrs/Miss/Ms ASN Sex	Address in Full	39 / 40 Hm Ph 41 Bus Ph

42 Victim D.O.B. (If relevant)	43 Victim Occupation	44 Victim Business Address
45 Best Time/Place to Contact Victim	46 Physical Injuries(Mandatory field) ☐ Yes ☐ No	47 If Hospitalised – Where

Stolen/Mis-appropriated Property Stats	48 Item 01	Class	Value $	Quantity	Rec Value $	Rec Qty	49 Item 02	Class	Value $	Quantity	Rec Value $	Rec Qty

50 Office Details – State mode of entry, Means Used, any Peculiar Acts, or Words Used, By Offender, Fully Describe Property Including Values, But otherwise do not repeat information already on the form.

51 Estimate of Damage	Value $	Complaint Acknowledgement Form Issued ☐ Yes ☐ No	If insufficient space – Use supplementary sheet

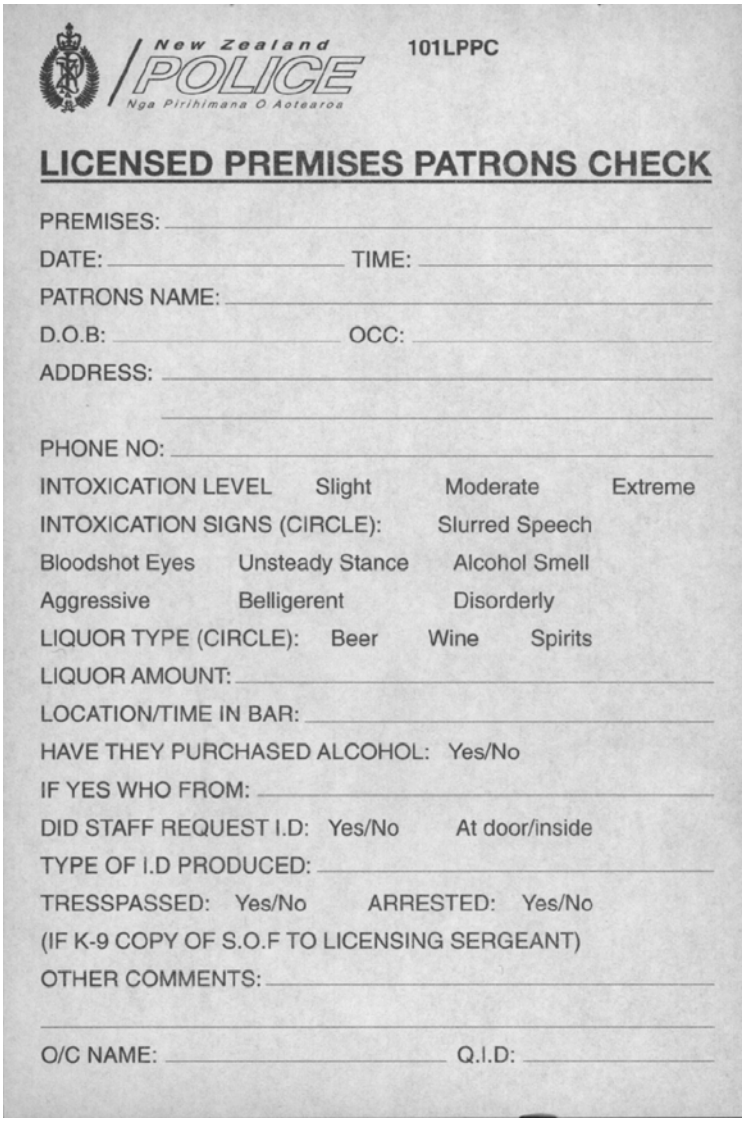
52 To-Det/Sen Sgt/Sgt	Where Stationed	Signature	Date	53 Checked by
	QID. EMN688	(Reporting Member)	23/09/2004	Rank QID

54 Forwarding Minute	Code of Station/Branch	Signature	Date
	Forwarded to	(Forwarding Member)	

56 Minuted To	Det/Sen Sgt/Sgt/Const	QID	Signature	Date
	Of Member/Section Intended		(Minuting Member)	

55 ATTACHMENTS	Name of Form	No. Att'ed
	Related Offence Report	
	Person and Vehicle Input	
	Property Input	
	Offender Report	
	Supplementary Sheet	

Police form 101LPPC – Patron check



New Zealand POLICE
Nga Pirihimana O Aotearoa

101LPPC

LICENSED PREMISES PATRONS CHECK

PREMISES: _____

DATE: _____ TIME: _____

PATRONS NAME: _____

D.O.B: _____ OCC: _____

ADDRESS: _____

_____

PHONE NO: _____

INTOXICATION LEVEL Slight Moderate Extreme

INTOXICATION SIGNS (CIRCLE): Slurred Speech

Bloodshot Eyes Unsteady Stance Alcohol Smell

Aggressive Belligerent Disorderly

LIQUOR TYPE (CIRCLE): Beer Wine Spirits

LIQUOR AMOUNT: _____

LOCATION/TIME IN BAR: _____

HAVE THEY PURCHASED ALCOHOL: Yes/No

IF YES WHO FROM: _____

DID STAFF REQUEST I.D: Yes/No At door/inside

TYPE OF I.D PRODUCED: _____

TRESSPASSED: Yes/No ARRESTED: Yes/No

(IF K-9 COPY OF S.O.F TO LICENSING SERGEANT)

OTHER COMMENTS: _____

_____

O/C NAME: _____ Q.I.D: _____

Police form 101L – Licensed Premises Visit

New Zealand POLICE
Nga Pirihimana O Aotearoa

101L

LICENSED PREMISES VISIT FORM

Date: _____

Arrival Time: _____ Departure Time: _____

PREMISE NAME: _____

STREET ADDRESS: _____

LICENCE NUMBER: _____ **ROUTINE VISIT:** YES / NO

DESIGNATIONS: SUPERVISED / RESTRICTED / NON-DESIGNATED

LICENCE TYPE: ON / OFF / BYO-ON / CLUB / SPECIAL / OTHER

DUTY MANAGER'S NAME: _____ **CERTIFICATE:** YES / NO

STATUTORY REQUIREMENTS		**Prohibited Person(s) / Breach**		
Duty Manager present:	YES / NO	**Total Persons Present:**		____
Display Duty Manager's name:	YES / NO	**Minor:**	YES / NO	**Number:** ___
Displayed licence:	YES / NO	**Intoxicated:**	YES / NO	**Number:** ___
Displayed trading hours:	YES / NO	**Arrests:**	YES / NO	**Number:** ___
Range of non-alcoholic drinks:	YES / NO			

Describe reason for visit, persons spoken to, reasons for arrests / warnings, management response, any promotions which may encourage consumption, compliance with licence conditions, and any other details.

.....

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.....

.....

DUTY MANAGER'S INITIALS AND COMMENTS:

_____

_____

POLICE MEMBER'S SIGNATURE _____

QID: _____ **STATION / BRANCH:** _____

FOR FURTHER INFORMATION CONTACT: OFFICER IN CHARGE, LIQUOR LICENSING

Infringement Notice

INFRINGEMENT NOTICE POL 1030

(ISSUED UNDER THE AUTHORITY OF **Section 162C Sale of Liquor 1989 and/or Section 38C Summary Offences Act 1981**)

New Zealand POLICE

Address for correspondence and queries:
New Zealand Police Infringement Bureau
PO Box 9147 Wellington

NOTICE NUMBER **A 6000004**

TO Name	Forename(s)	Family Name
Address		
Occupation	Date of Birth	
Issuing Officer Name	Full Officer Number	Date of Notice

ALLEGED OFFENCE (S) DETAILS

Offence Date	Time	Day of Week S M T W T F S

Details of Location (specific) and Premises Name

Street/Road	Town/City

The Police Officer issuing this notice has reasonable cause to believe that on the above day and date at the above place you committed the following infringement offence(s):

Offence Number	Offence (up to 3 – **DELETE THOSE NOT APPLICABLE**)	Infringement Fee Payable		
1	Under 18, purchased liquor from licensed premises.	$	PREC 1 W601	ST 1
2	Under 18, in restricted area on licensed premises.	$	PREC 2 W602	ST 2
3	Under 18, in supervised area on licensed premises without parent, etc.	$	PREC 3 W603	ST 3
4	Under 18, without guardian, in public place drinking intoxicating liquor.	$	PREC 4 W604	ST 4
5	Under 18, without guardian, in public place in possession/control of intoxicating liquor for consumption there.	$	PREC 5 W605	ST 5

IMPORTANT - PLEASE READ THE INFORMATION PRINTED ON THE REVERSE OF THIS FORM.

PAYMENT OF INFRINGEMENT FEE(S)

The infringement fee(s) is/are payable within 28 days after (Earliest date notice delivered personally, or posted)

BATCH No.

COURT CODE

SECTOR

OFFICER NUMBER: PRINT Surname & Initials

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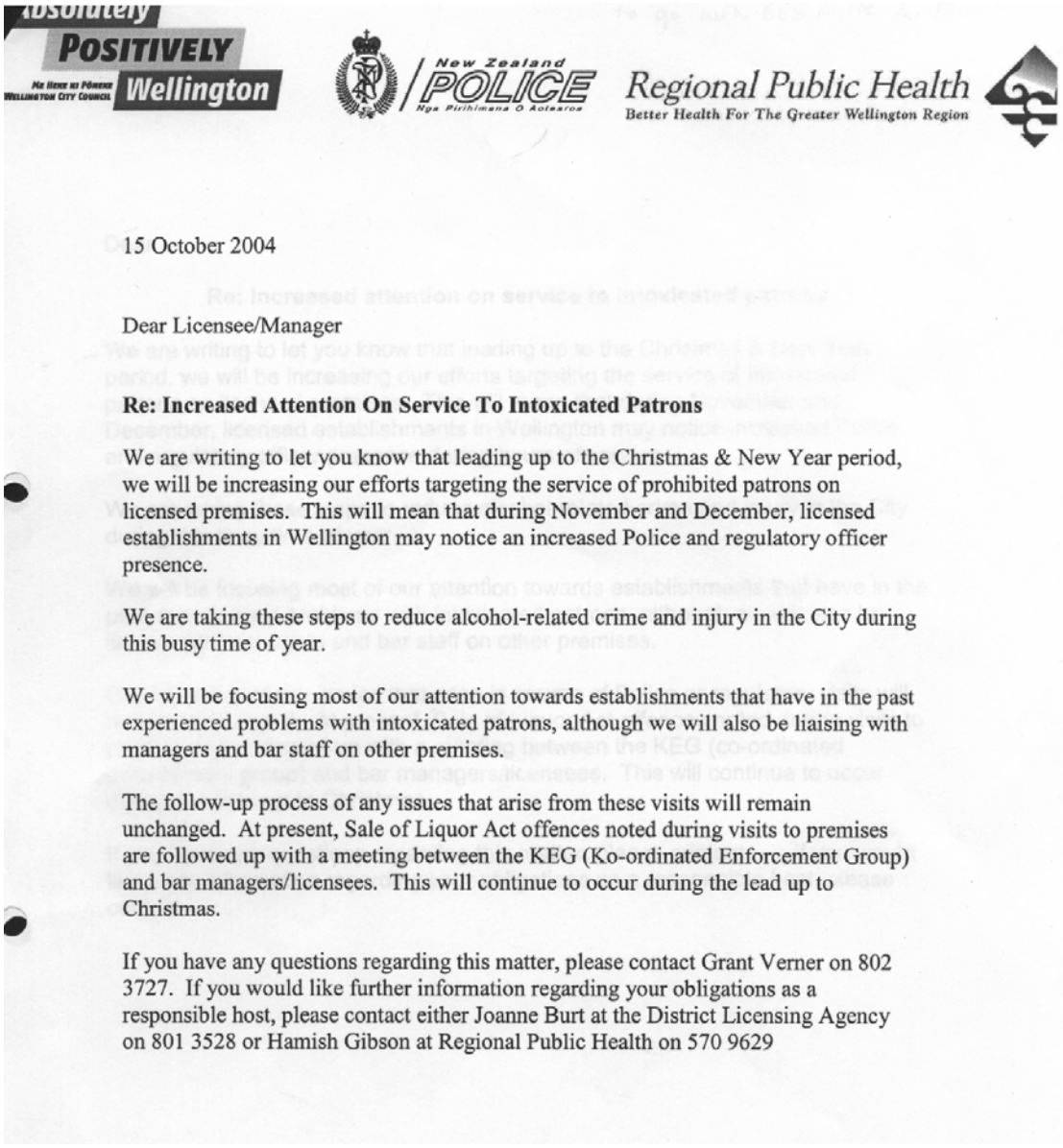
Letter to Licensee's



Absolutely POSITIVELY Wellington — Me Heke Ki Pōneke — Wellington City Council

New Zealand POLICE — Nga Pirihimana O Aotearoa

Regional Public Health — Better Health For The Greater Wellington Region

15 October 2004

Dear Licensee/Manager

Re: Increased Attention On Service To Intoxicated Patrons

We are writing to let you know that leading up to the Christmas & New Year period, we will be increasing our efforts targeting the service of prohibited patrons on licensed premises. This will mean that during November and December, licensed establishments in Wellington may notice an increased Police and regulatory officer presence.

We are taking these steps to reduce alcohol-related crime and injury in the City during this busy time of year.

We will be focusing most of our attention towards establishments that have in the past experienced problems with intoxicated patrons, although we will also be liaising with managers and bar staff on other premises.

The follow-up process of any issues that arise from these visits will remain unchanged. At present, Sale of Liquor Act offences noted during visits to premises are followed up with a meeting between the KEG (Ko-ordinated Enforcement Group) and bar managers/licensees. This will continue to occur during the lead up to Christmas.

If you have any questions regarding this matter, please contact Grant Verner on 802 3727. If you would like further information regarding your obligations as a responsible host, please contact either Joanne Burt at the District Licensing Agency on 801 3528 or Hamish Gibson at Regional Public Health on 570 9629

Newsletter to Licensee's

POLICE & DLA NEWSLETTER

Date: 21 October 2004

Introduction

In this issue of the Police & DLA Newsletter we talk about:
Alcohol Intervention Project
Seizing of ID
Business Before 5
Pavement

ALCOHOL INTERVENTION PROJECT

From the 5th of November 2004, the Police, District Licensing Agency and Regional Public Health are taking part in a project that will measure the effectiveness of alcohol interventions. The duration of this project is six months.

This project which is sponsored by A.C.C., will involve Researchers measuring how effective "enforcement action" is in reducing the number of patrons that become intoxicated in licensed premises, which should result in less alcohol related violence and drink-driving related harm.

How will this project affect you?

A separate Liquor Policing Group has been established for this project. The Police that currently conduct licensed premises visits will continue to do so and the new group will make additional visits. In addition to the Police visits there will be increased visits from a team that comprises of a member of Police, Liquor Licensing Inspector and an Officer from Regional Public Health.

This means that more premises will be visited and some premises will be visited more often. During the next six months I envisage it being a common practise to visit some premises two or three times on busy nights.

If you are a Responsible Host and have clear procedures in place to ensure you identify and remove intoxicated patrons. You have nothing to worry about.

If you are not a Responsible Host, you should be worried about this project. As this increased enforcement action will identify your premises, and action will be taken to ensure you raise your standards to the required level.

SEIZING ID's

For some time now door-staff have been seizing ID's (mainly Drivers Licences) when they have been altered or they belong to someone else.

The number of ID's that have been altered or used by a friend or relative is unbelievable.

This system of seizing ID's is an attempt to reduce the number of "fake" ID's that are in circulation. Which will hopefully reduce the number of minors, who by using "fake" ID's are able to enter bars in Wellington.

I believe this system, which is being used around New Zealand, is helping to reduce the number of minors entering bars.

As this system is having a positive effect, I want to keep it going as long as possible. The problem I have is that some bars are not forwarding seized ID's to me. This then creates a problem when the owner contacts me to get their ID back.

If this system is to continue to operate in Wellington, **you must follow the procedure outlined below.**

[1] You must provide me with the following information – Date ID seized, Name of bar, Full name on the ID, Type of ID, Reason seized.
A sample form is attached at the end of this newsletter.
[*I need this information as I am currently wasting a lot of time trying to find ID's when the owners contact me*]

[2] You must forward the ID's to me as soon as possible. This means that ID's that are seized on Thursday, Friday, Saturday, Sunday, should be received by me no later than midday on Tuesday. ID's seized on Monday, Tuesday, Wednesday should be forwarded to me the following day.

[3] You must place the ID's in an envelope, which is addressed to me (Sergeant Grant Verner), and bring it into the Central Police Station.
Do not post these ID's as they are valuable documents which could "go missing" in the post.

If you are not sure about the procedures I have outlined, contact me immediately. As I will be monitoring this system very closely during the next couple of weeks. If everyone does not follow this procedure, I will not continue to support this system.

Without my support this system can not continue, **as bar staff** (which includes door-staff, managers, and other staff) **have no lawful authority to seize these documents.**

If you want to keep using this system, follow the procedures outlined and "encourage" everyone else to do the same.

Business Before 5 (BB5)

A Business Before 5 presentation is being held on Tuesday 9 November 2004, Pride Bar – Upstairs at Shed 22, 23 Cable Street, Wellington from 3.00 pm to 5.00 pm.

This presentation is aimed at providing you with a clearer understanding of the Smokefree Legislation. A representative from the Ministry of Health will outline the legislation. There will also be valuable information about Pavement Permissions and the Liquor Ban.

If you would like to attend this presentation please RSVP Joanne Burt by Monday 1 November 2004, 801 3528 or joanne.burt@wcc.govt.nz.

Pavement Permissions

The District Licensing Agency have received a number of applications to allow customers to consume liquor at specific areas on the footpath directly in front of licensed premises. If you would like to apply for a pavement permission to allow your customers to eat and drink on the footpath, especially in light of the Smokefree Legislation which comes into force in December please contact Caroline Anderson on 801 3868.

You must also remember that as part of this process if this increased area does not form part of your current licensed premises an application will need to be made to the Liquor Licensing Authority to re-define your licence to include the footpath area.

For more information about any of the issues raised in this newsletter please contadf Sergeant Grant Verner or DLA Team Leader Alison Box, refer contact details listed below:

Grant Verner
Liquor Licensing Sergeant
Wellington Central Police Station

Ph: (04) 802 3727
Fax: (04) 470 1614
Grant.verner@police.govt.nz

Alison Box
Team Leader
Wellington District Licensing Agency

Ph: (04) 801 3828
Fax: (04) 801 3012
alison.box@wcc.govt.nz

Council Publication: You Can't Beat Wellington, Issue 5 September 2004

BEHIND THE BAR

Office hours over the Christmas–New Year period

The Wellington City Council will be open from 8am to 5pm during the Christmas–New Year holiday period on the following days:

- Wednesday 29 December
- Thursday 30 December
- Friday 31 December
- Wednesday 5 January
- Thursday 6 January
- Friday 7 January.

The Liquor Licensing and Environmental Health Teams would like to wish you and your staff a very Merry Christmas and a Happy New Year. We look forward to working with you again in the New Year.

Closing dates for liquor licence applications

With Christmas and New Year fast approaching, December is a busy month for District Licensing Agency staff. Please note the following closing dates for the receipt of special licence, temporary authority and renewal applications:

- special licences – Monday 13 December
- temporary authorities - Monday 13 December: temporary authorities expiring in January 2005 should be renewed in December if it looks like the substantial application will not be processed prior to the Temporary Authority expiring
- renewal of licences and managers' certificates – Friday 17 December: Licences and certificates expiring in January 2005 should be renewed in December.

These are important dates to keep in mind, so think ahead. If you want to file any of these applications for the holiday period, do so now. If you do not make the deadline you may miss out.

Guidelines for special licence applications for statutory days

The District Licensing Agency, Police, and Regional Public Health have produced guidelines for special licence applications. The guidelines will improve consistency and clarify the information and documentation needed to support an application. These can be found on our website at www.Wellington.govt.nz/services/liquor

Special licence criteria for Christmas Day

Licensees and managers of hotels and taverns wanting to apply for a special licence to trade on Christmas Day need to meet the following criteria:

- there is a compelling reason for the event ie religious or cultural celebration. Evidence of arrangements or cultural significance will be required, and you will need to describe how the event is to be statutory day-specific and how it differs from your normal trade.
- the event is to be date-specific and there must be a good reason why the event could not be held on any other day. One example might be a 21st birthday party, though evidence of the birth date will be required.
- the event must be private. Copies of the invitation, guest list, membership list will be required to be attached to the application.
- closing time for statutory day applications will be 2am.
- special licences have no provision for a drink up time. The premises where the event is being held must be cleared of all patrons no later than the closing time specified on the special licence.

Under these new guidelines, some events that were approved in the past may not meet the new criteria.

Bearing in mind that the application fee is non-refundable, we are happy to discuss your arrangements with you before you lodge an application.

If you intend to run an event and you are not sure if you can demonstrate that the event meets the criteria set out above, give liquor-licensing staff a call on 499 4444.

Increased licensing visits

Wellington liquor licensing staff are involved in a research project in conjunction with the Police, Regional Public Health and funded by ACC, that is looking at the effectiveness of regulatory and enforcement actions around intoxication on licensed premises.

It is anticipated the project will provide the Council and other parties involved with information on the benefits of monitoring in dealing with problem licensed premises. It is hoped the result will be a reduction in alcohol-related harm including alcohol-related violence, drink driving harm and alcohol-related injuries in the Wellington area.

The project runs until March 2005. All licensees should have received a letter outlining the increased licensed premises visits starting in November.

Wellington City Council liquor licensing staff focus on ensuring licensees are meeting their requirements under the Sale of Liquor Act, in particular signage, intoxication, minors and obligations in regard to food and non-alcoholic refreshments.

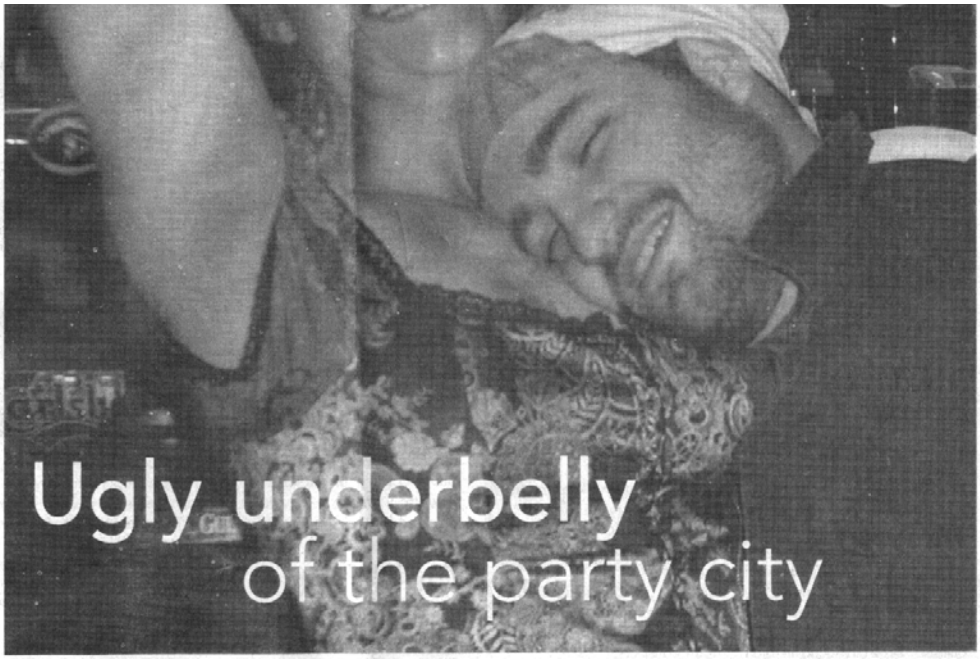
The main issues for licensees are a continued focus on ensuring:

- door and bar staff are vigilant when checking ID and for intoxicated patrons
- bar staff closely monitor patrons, alcohol consumption and intoxication levels especially in busy periods
- "Glassies" and staff clearing tables identify to duty managers those patrons that are becoming, or are, intoxicated
- the duty manager is focussed on ensuring patrons, behaviour and consumption is monitored at all times, and appropriate action is taken in regard to intoxicated patrons.

For premises operating in accordance with good server and intervention practices this enhanced period of inspections should be seen as a positive move to ensure that correct practices are in place and working effectively.

Newspaper article - Capital times 16-22 March 2005

The Kiwi propensity to have "just one more drink" until we literally can't take any more alcohol is fuelling a spate of street violence. Violent crime surged 57% on Wellington streets in January, and that surge must be halted, says Wellington police Area Commander Marty Grenfell.



Ugly underbelly of the party city

LIONEL* was walking into the railway station after a night out when two teenagers approached him and demanded his camera.

When he refused to surrender it, Lionel was attacked. He punched one of the would-be robbers to the ground before a blow to his mouth broke his dental plate.

Police arrived quickly (alerted by a taxi driver) and Lionel avoided more serious injury. One of the youths was arrested. The other is on the run.

Linda* was eating a burger in Waitangi Park during a break from clubbing. A drunk girl approached her and demanded a bite. When she refused, Linda was slapped, had her glasses ripped from her face and found herself surrounded by an aggressive gang.

> "If it's not okay to drink and drive, why should it be okay to drink and fight?"

The arrival of Linda's friends discouraged the attackers, who melted into the early morning crowds.

These are just two of many violent incidents in Wellington that have put a nasty spin on the New Year. January saw a surge in violent crime – rapes, fights, muggings – that has police very concerned.

January's violence reverses a downward trend experienced over recent months. The six-year trend shows an average of 90 violent incidents per month in the city. October (88), November (63) and December (80) were below that average, part of a trend towards lower crime rates that has seen total crime fall 11% in the city over the past 18 months.

In January, the number of violent incidents spiked up to 126 – unexpected in what is usually a quiet month.

"That is alarming to us," says police Area Commander Marty Grenfell.

"And it's going to play havoc with our six-year trend."

Grenfell says a busy social calendar during January, which included numerous concerts, festivals and the popular X-Games, may have been a contributing factor because there were many visitors in the city.

But many of the offenders and victims of violence were city residents rather than visitors. And the attacks are happening in front of people at times when the city is bustling – busy Friday nights in Manners Mall and along Courtenay Place are the locus. It's the ugly underbelly of the party city.

As Wellington has learned to party harder and later, police have had to concentrate more resources on managing the crowds of drunken revellers. With pubs and clubs now staying open all hours, the Strategic Response Unit (formerly the Team Police) is considering extending its hours to 6am.

January's surge was driven by that subgroup of society that finds it difficult to get car insurance – the under-25s. Many of the incidents were assaults and robberies by groups of juveniles, what Grenfell terms "pack attacks".

Alcohol is almost always a factor – offenders full of Dutch courage, victims reckless or feeling bulletproof after visiting local bars. The lesson is that people who drink to the point of drunkenness are more likely to be involved in violence, either as perpetrators or victims, Grenfell says.

"Local figures show around 70% of all police work is in some way related to alcohol, or alcohol has been a factor leading up to the police work."

Grenfell, who spent time as a shift commander of a Strategic Response Group – "Actually out there doing the business with them." – says the surest way to reduce the harm from violence is to change the Kiwi attitude to drunkenness. On a Friday and Saturday night, 95% percent of those arrested have been drinking.

"You only need to go down to the cells on a Friday night and the stench... It's a vivid memory. If we are serious about reducing violence, a major factor is changing attitudes to alcohol," he says.

"We talk a lot about motor vehicle accidents. Why don't we talk about alcohol related violence? As a nation, we have been able to change the culture and attitudes around drunk driving. Our challenge now is to change people's attitudes to the way they behave on the streets and in their homes after having consumed alcohol.

> Alcohol is almost always a factor – offenders full of Dutch courage, victims reckless or feeling bulletproof

"If it's not okay to drink and drive, why should it be okay to drink and fight?"

Police enjoy a night out and a few beers as much as the next Kiwi. They aren't interested in telling people not to drink.

But Grenfell wants the community to make it clear that drinking to excess is no excuse for violent or anti-social acts. And he says the public need to be aware of their limits, so they don't let alcohol get the better of them and become a soft target for criminals.

Over the past few years a number of initiatives have been introduced to deal with changes in Wellington's nightlife culture. A liquor ban is now in force on the streets from 6pm to 6am, Friday and Saturday nights. The Wellington City Council has introduced "city safety officers" to help police monitor the streets. And police have introduced a new Liquor Police Unit, targeting the point of sale of alcohol.

"The Liquor Policing Unit is focusing on licensed premises, primarily to assess intoxication. Our goal is to influence the sale of liquor so that bar staff, bar managers and licensees take their responsibilities seriously."

The LPU visit bars looking for "behavioural indicators" of drunkenness such as stumbling, becoming loud and obnoxious.

"If you work at the point of consumption, I believe you can influence what may happen during the night. I believe it's the key to reducing violence and harm in the community."

For many years the police have maintained a "last drink" survey recording the premises on which a person had their last drink before becoming involved in violence. Bars that show up repeatedly on the survey are targeted and risk prosecution if they fail to clean up their act.

But people have to take care of themselves and their friends by not overdoing the drink, he says.

Grenfell says police will make a concentrated effort over the next 10 weeks to ensure violent crime is diminished in the city.

Aaron Watson

*Names changed by request.

Safety tips for drinkers

- Know your limits.
- If you drink too much, you are more likely to be involved in crime either as an offender or a victim.
- Be with friends.
- Know how you are getting to and from social venues.
- If you decide to "go off" with someone you have just met, make sure your friends know who you are going with.
- Keep your wits about you.
- Extinguish a flaming sambuca by placing your hand over the glass to starve the fire of oxygen before putting the drink to your lips.

Newspaper article – Dominion Post

Bar blitz to target drunks

■ **WELLINGTON**
HAYDON DEWES

POLICE will crack down on drunks in Wellington bars as part of a six-month crime control experiment.

The blitz, to start next month, will allow researchers to assess whether harsher policing of drunkenness on licensed premises would lead to less alcohol-related incidents such as violence, drink-driving and disorderly behaviour.

Lead researcher, Murray Sim, said the trial would hopefully prove that investing police time in stopping crime before it happened would pay off. "The logic behind this approach is sound; what we're trying to do is get some solid numbers behind it."

Wellington area commander Inspector Marty Grenfell said a six-member liquor policing unit will work closely with Wellington police's strategic response group — the former team policing unit responsible for maintaining order at protests and events, policing bars, clubs and the inner-city liquor ban, and keeping the city's streets safe.

Problem bars and clubs identified by police as being drinking holes for people who went on to commit crime would be targeted first.

The Alcohol Advisory Council welcomed the crackdown. Manager of population strategies Sandra Kirby said drunk people on licensed premises were accepted as a fact of life. "Without consistent enforcement of the law, there is no chance of either the public or the licensees recognising the behaviour as dangerous."

Bar and licensed restaurant owners and staff had a legal obligation not to serve drunk people and could help improve the quality of life for all, she said.

News release: NZ Police

New Zealand POLICE
Ngā Pirihimana O Aotearoa

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Police turn up heat on public liquor ban winter hours

Wellington News Release 3:01pm 29 April 2004

People who breach Wellington city's public liquor ban can expect a hotter approach from police as the liquor free zone hours change for the winter on Saturday, 1 May.

Inspector Marty Grenfell, Wellington City Area Commander, says introduction of the winter hours will coincide with a police change in tactics from one of education to enforcement of the liquor ban.

The winter hours mean that on Friday and Saturday nights from 5pm to 6am until 31 October, it is an offence to drink and possess alcohol in the defined public place liquor free zone. This changes from the previous summer hours of 8pm to 6am on both nights.

Wellington City Council introduced the ban as a public safety strategy on 21 November last year following an approach from police. Since the ban's introduction police recorded 1819 interventions which were dealt with by warnings. In addition, 61 arrests were made for breaches of the alcohol ban.

"Warnings were the educative approach. We will now be turning up the heat as winter sets in as it is clear people's attitudes to drinking in public places needs to change.

"Those prepared to flout the ban can expect to pay the consequences."

He says police are working with Wellington City Council and ACC to evaluate the ban's effectiveness, part of which will include a survey to assess compliance.

"Our figures show just the number of times we were on the spot to intervene. They don't tell us the total compliance picture."

Liquor Infringement Notices issued against minors drinking in the city are also on the rise. In the first nine months of this financial year Wellington District has issued 612 notices, 459 of which were in Wellington City Area. This compares with less than 300 across the greater Wellington District for the 2002/2003 financial year.

"Infringement notices attract a $200 fine. That's likely to attract plenty of family discussion when a young person arrives home and fronts up to mum or dad to tell them about the cost of being caught for drinking under age in a public place."

Inspector Grenfell says the liquor ban, use of infringement notices and the KEG (co-ordinated police, district licensing authority and regional public health) initiatives with the hospitality industry are key components of the strategy to reduce alcohol related harm in the city.

"Public safety is our priority. We want to reduce the chances of people becoming crime victims, or from getting a criminal record by assaulting someone or driving while under the influence of alcohol."

Newspaper article – Dominion Post 2nd April 2005.

Secret 'spotters' spy on drinkers

NE NICHOLS

UNDERCOVER university researchers are being planted in Wellington bars to spy on patrons.

It is part of a police initiative targeting drunks — fuelling calls of police entrapment from some hotel proprietors.

But police are defending the project and deny that the "spotters" snitch on bar owners who breach liquor laws.

Wellington liquor licensing sergeant Grant Verner said the alcohol intervention project was started in November. Funded by ACC, it aimed to reduce crime and alcohol-related injuries in the inner city through more police visits to Wellington bars.

Researchers observed the behaviour of drinkers before and after police entered a premises and later compared notes on the effectiveness of police visits. They did not give police information on liquor licence breaches, Mr Verner said.

"We're not trying to catch them [bar owners] out. We're trying to give them as much information as we can.

"Some bars are trying to make out that we're jumping on people that are having a great night. That's just not the case. We're trying to make the town safer."

But Hummingbird Bar and Cafe co-owner John Coleman said police had not discussed with him directly the tactic of using spotters and he felt they were trying to unfairly entrap Wellington bar proprietors.

"They just look like you and me. It's only through leaks that I'm aware of it. Why wouldn't you consult with the people at the coalface?

"I just think there's no discussion here. It's basically entrapment."

Mr Coleman supported moves to reduce crime and hospitalisations, but said patrons were shocked to learn of the "clandestine" police operation.

Hospitality Association chief executive Bruce Robertson said it had serious misgivings about untrained researchers making judgment calls on the intoxication of patrons.

There had been little consultation with industry, and bar owners were unlikely to take the research seriously in June when it was reported back.

Some proprietors had also raised concerns about intimidating police behaviour during the visits when customers were "interrogated" about how much they had drunk, he said.

"It's seen as being heavy-handed and a misuse of [police] resources."

A researcher involved in the project refused to give further details, saying publicity could jeopardise the research's credibility.

Metromag article – Wellington police staff newsletter February 2005

Research study into alcohol and violence

An ACC funded research study into the links between alcohol, violence and injury in Wellington City may already be leading to some improvement in safe serving practices amongst bar staff and managers.

Dr Murray Sim is leading a team of researchers who are halfway through their research with a final report due in May/June.

The research is looking to see if joint police, district licensing agency and regional public health strategies are making a difference to the way bars are run, patron intoxication levels and the consequence on violence and disorder in the city.

Drawing on data held by Sergeant Grant Verner, who holds the licensing portfolio, the research focuses on known "problem" licensed premises. A special licensing team under Sergeant Martin Todd spent six weeks before Christmas working Wednesday to Saturdays regularly visiting bars around town.

The structured visits – management were made aware of the police focus on intoxication – looked for breaches of the Sale of Liquor Act including underage drinkers and intoxicated patrons.

Researchers are now analysing what happened during the high visibility period, and the behaviours that resulted after this intervention. The licensing team will begin another six-week period shortly as part of the research.

Monitoring serving practices before, during and after the police visits is part of the study. The interventions, and what took place before and afterwards, will then be compared with data from the last few years.

...continued on page 3...

(Continued from page 2)

Murray says he's reasonably encouraged by the results to date, however he's reluctant to say too much until the full data has been analysed.

"Preliminary results indicate we have experienced a relatively low level of alcohol related crime during the period covered by the first high visibility visits," he says. "We also see some signs of change in the way managers and bar staff are running their premises."

Murray says the research will prove valuable for police from both a resourcing and tactical information perspective. He believes there are further opportunities to tie in data from the study with measurement of health related impacts, such as hospital admission data.

"We will also be looking at displacement issues to see if the focus on licensed premises has shifted alcohol related harm and injury from the central city to other areas."

Ten One article – New Zealand police magazine October 2004

Calling time on drunkenness in bars

Over the next six months, Wellington police will be taking part in a study to look at the impact of proactive policing of pubs and clubs ...

THE ACCIDENT Compensation Corporation is funding a research project to assess enforcement of the Sale of Liquor Act, with a particular focus on policing intoxication on licensed premises.

The project is set to take place between November 2004 and April 2005, targeting licensed premises in inner city Wellington.

During the study, a special Liquor Policing Unit will focus on serving practices in high-risk establishments. Independent researchers will monitor the impact of heightened enforcement activity on these 'problem' premises across a range of indicators.

This will include assessing any reduction in alcohol-related incidents, such as disorderly behaviour and violent offending, as well as impacts on other types of alcohol related harm.

Lead researcher, Dr Murray Sim, says the project aims to provide empirical evidence that an enhanced liquor policing focus can make a difference.

"Basically, the study will try to answer the 'what if?' question – what happens to levels of alcohol-related harm in a community if police target their enforcement effort in particular ways over a sustained period of time? The hope is that by running a carefully controlled trial, the study will demonstrate conclusively that an investment in proactive policing can pay real dividends downstream.

"The logic behind this approach is sound; what we're trying to do is get some solid numbers behind it," says Murray.

Wellington police strongly support the heightened enforcement campaign, which is a critical part of the research project.

Area Commander, Inspector Marty Grenfell, says local police already use a number of strategies to target problematic licensed premises, including use of the Last Drink Survey, a system of collecting intel information from 3Hs (using specific licensed premise visit forms), and a fast track, multi-agency process to follow up any apparent pattern of breaches of the Sale of Liquor Act (known as the KEG, or Ko-ordinated Enforcement Group).

"Spearheaded by the work of our specialist Liquor Licensing Sergeant, Grant Verner, we're doing well at maintaining an up-to-date profile of local trouble spots, which is used to target enforcement visits to specific bars," says Marty.

"With the benefit of this new research project, however, we are going to take things to the next level, and really hone in on preventing intoxication on licensed premises.

"If we can reinforce to bar managers and licensees the importance of preventing on-premises drunkenness, we're confident we will see fewer problems caused by alcohol-affected patrons, which in turn will contribute to our overall crime and crash reduction goals."

Results from the Wellington study will be reported in a future edition of Ten-One.

The Ko-ordinated Enforcement Group (KEG) group visiting a licensed premises in the city in October last year. Mike Kemp (left) from the District Licensing Agency talked with a staff member from Coyote Street Bar and Restaurant. With him were acting Sergeant Steve Cavanagh and Ray Matthews from Regional Public Health.

'If we can reinforce to bar managers and licensees the importance of preventing on-premises drunkenness, we're confident we will see fewer problems caused by alcohol-affected patrons'

PHOTO: ROB LEE

Lead researcher, Dr Murray Sim and research assistant, Elizabeth Morgan – planning the measurements to test the effectiveness of police enforcement visits to Wellington bars and clubs.

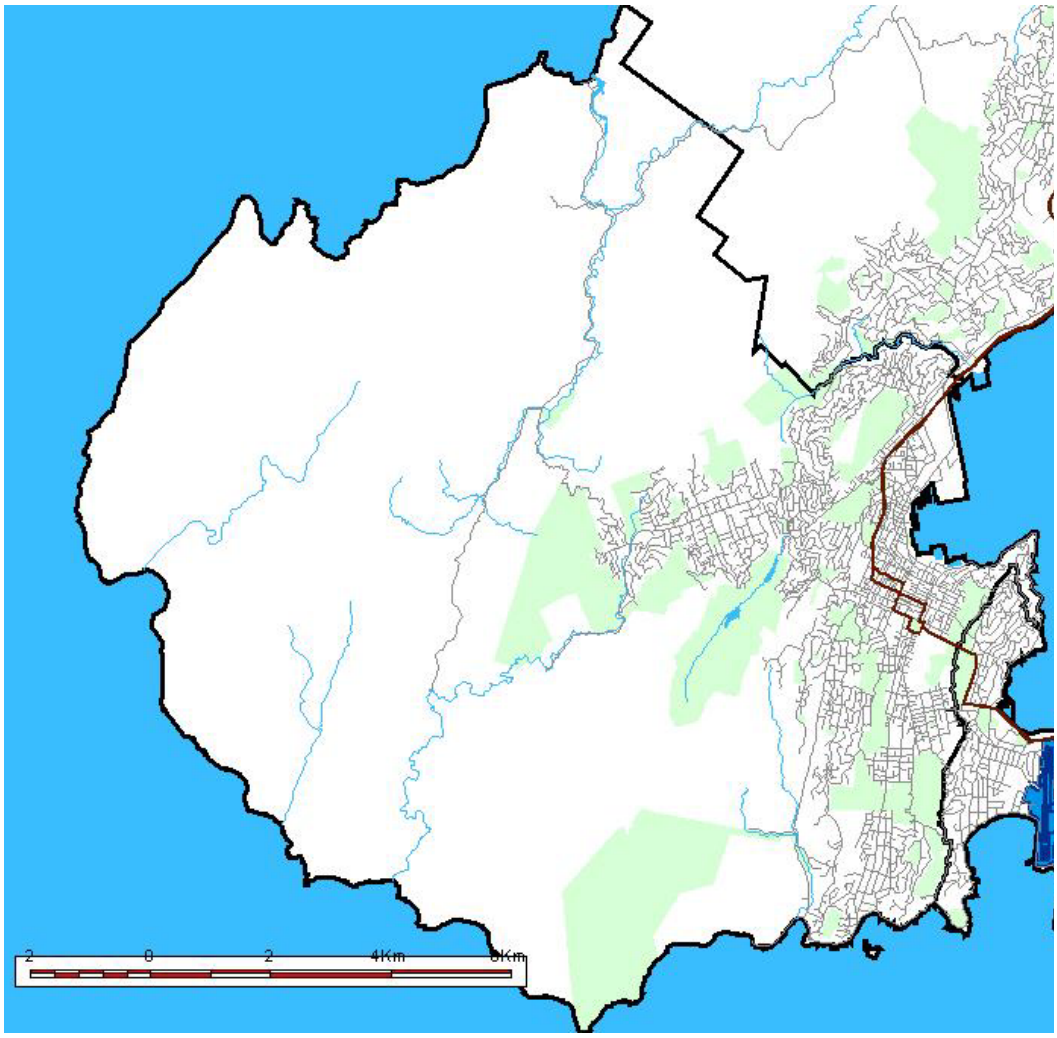
List of streets in the central business district

The following street names, which lie within the central business district, were used to identify offences or incidents (from location information recorded in text on Police records) occurring within the study area:

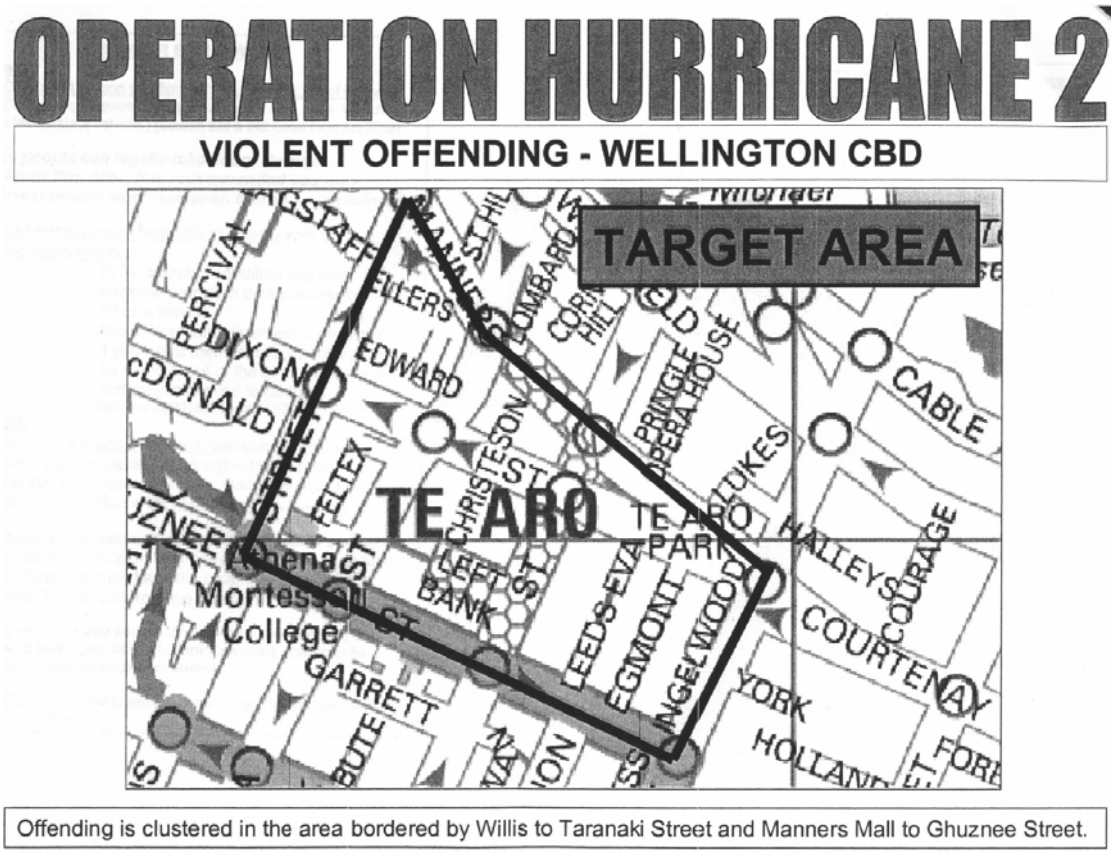
Abel Smith
Adelaide
Aitken
Albany
Alfred
Allen
Allenby
Alpha
Anderson
Aotea
Argyle
Arlington
Armour
Arthur
Ascot
Athol
Aurora
Austin
Balance
Ballantrae
Barker
Barnett
Batham
Belfast
Bidwill
Blair
Bolton
Bond
Bosworth
Boulcott
Bowen
Brandon
Brook
Brooklyn
Broomhedge
Brougham
Brown
Buckle
Buller
Bunny
Bute
Cable
Cambridge
Caroline
Carrington
Chaffers
Chews
Christeson
Church
Civic
Claremont
College
Collina
Coombe
Cornhill
Courage
Courtenay
Cuba
Customhouse
Dalmuir
Derby
Dixon
Doctors
Dominion
Douglas
Drummond
Dufferin
Duke
Dunlop
Earls
Ebor
Eccleston
Edgehill
Edward
Egmont
Elizabeth
Ellers
Ellice
Elmira
Eva
Everton
Fallowfield
Farmers
Featherston
Feltex
Fifeshire
Finlay
Fitzherbert
Flagstaff
Footscray
Forresters
Francis
Freerick
Furness
Garrett
Ghuznee
Gilmer
Girton
Glenbervie
Glencoe
Grey
Guildford
Guthrie
Haining
Halleys
Halswell
Hania
Hankey
Hanson
Hargreaves
Harris
Hawker
Hawkestone
Hayward
Herd
Hill
Hobson
Holland
Home
Hood
Hospital
Howard
Hugh
Hunter
Inglewood
Inverlochy
Jacobs
Jervois
Jessie
Johnston

Kate Sheppard
Kelvin
Kennedy
Kensington
Kent
King
Knigges
Kumutoto
Lambton
Lawson
Leeds
Levy
Lipman
Little Hawkestone
Little Palmer
Little Pipitea
Lombard
Lorne
Lukes
Lynn
MacDonald
Maginity
Majoribanks
Maning
Manners
Marion
Martin
Masons
May
McAlpine
McFarlane
McIntyres
Mercer
Moeller
Moir
Molesworth
Moncrieff
Moturoa
Mowbray
Mulgrave
Murphy
Museum
Myrtle
Nairn
Oak Hopper
Oak Park
Oakpark
Opera House
O'Reily
Oriental
Oxford
Palmer
Panama
Papawai
Parliament
Pat Lawlor
Paterson
Percival
Pipitea
Pirie
Plimmers
Porritt
Port
Portland
Post Office
Prince
Pringle
Queen
Queens
Ranfurly
Rixon
Rolleston
Rosina Fell
Rossmoor
Roxburgh
Rudgby
Sages
Salisbury
Scarborough
Selwyn
Shannon
Shell
Smith
St Hill
Stafford
Staunton
Stout
Sussex
Swab
Sydney
Tainui
Taranaki
Tasman
Tennyson
Terrace
The Terrace
Thompson
Thorndon
Tinakori
Tonks
Torrens
Tory
Tui
Turnbull
Tutchen
Victoria
Vivian
Vogel
Wakefield
Wallace
Walter
Waring Taylor
Waterloo
Watson
Webb
Westbourne
Whitmore
Wigan
Willeston
Willis
Wingfield
Woodward
Wright
Yale
York
Youngs

Map of area covered by Wellington Police scene station



Area targeted by Operation Hurricane



Weekly alignment of baseline data

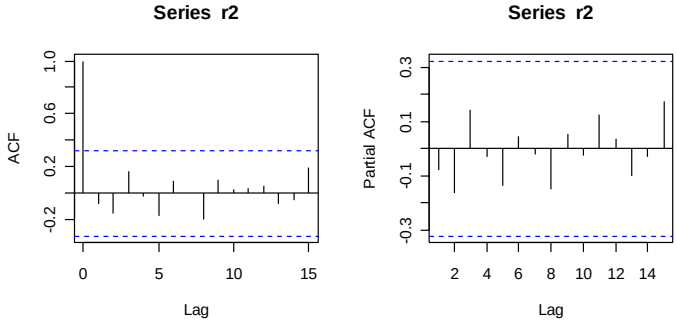
The following table shows how equivalent weeks were aligned across years:

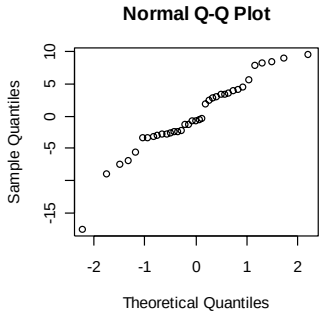
Comparable Weeks: beginning Monday

28/06/99	26/06/00	2/07/01	1/07/02	30/06/03	28/06/04
5/07/99	3/07/00	9/07/01	8/07/02	7/07/03	5/07/04
12/07/99	10/07/00	16/07/01	15/07/02	14/07/03	12/07/04
19/07/99	17/07/00	23/07/01	22/07/02	21/07/03	19/07/04
26/07/99	24/07/00	30/07/01	29/07/02	28/07/03	26/07/04
2/08/99	31/07/00	6/08/01	5/08/02	4/08/03	2/08/04
9/08/99	7/08/00	13/08/01	12/08/02	11/08/03	9/08/04
16/08/99	14/08/00	20/08/01	19/08/02	18/08/03	16/08/04
23/08/99	21/08/00	27/08/01	26/08/02	25/08/03	23/08/04
30/08/99	28/08/00	3/09/01	2/09/02	1/09/03	30/08/04
6/09/99	4/09/00	10/09/01	9/09/02	8/09/03	6/09/04
13/09/99	11/09/00	17/09/01	16/09/02	15/09/03	13/09/04
20/09/99	18/09/00	24/09/01	23/09/02	22/09/03	20/09/04
27/09/99	25/09/00	1/10/01	30/09/02	29/09/03	27/09/04
4/10/99	2/10/00	8/10/01	7/10/02	6/10/03	4/10/04
11/10/99	9/10/00	15/10/01	14/10/02	13/10/03	11/10/04
18/10/99	16/10/00	22/10/01	21/10/02	20/10/03	18/10/04
25/10/99	23/10/00	29/10/01	28/10/02	27/10/03	25/10/04
1/11/99	30/10/00	5/11/01	4/11/02	3/11/03	1/11/04
8/11/99	6/11/00	12/11/01	11/11/02	10/11/03	8/11/04
15/11/99	13/11/00	19/11/01	18/11/02	17/11/03	15/11/04
22/11/99	20/11/00	26/11/01	25/11/02	24/11/03	22/11/04
29/11/99	27/11/00	3/12/01	2/12/02	1/12/03	29/11/04
6/12/99	4/12/00	10/12/01	9/12/02	8/12/03	6/12/04
13/12/99	11/12/00	17/12/01	16/12/02	15/12/03	13/12/04
20/12/99	18/12/00	24/12/01	23/12/02	22/12/03	20/12/04
27/12/99	25/12/00	31/12/01	30/12/02	29/12/03	27/12/04
3/01/00	1/01/01	7/01/02	6/01/03	5/01/04	3/01/05
10/01/00	8/01/01	14/01/02	13/01/03	12/01/04	10/01/05
17/01/00	15/01/01	21/01/02	20/01/03	19/01/04	17/01/05
24/01/00	22/01/01	28/01/02	27/01/03	26/01/04	24/01/05
31/01/00	29/01/01	4/02/02	3/02/03	2/02/04	31/01/05
7/02/00	5/02/01	11/02/02	10/02/03	9/02/04	7/02/05
14/02/00	12/02/01	18/02/02	17/02/03	16/02/04	14/02/05
21/02/00	19/02/01	25/02/02	24/02/03	23/02/04	21/02/05
28/02/00	26/02/01	4/03/02	3/03/03	1/03/04	28/02/05
6/03/00	5/03/01	11/03/02	10/03/03	8/03/04	7/03/05
13/03/00	12/03/01	18/03/02	17/03/03	15/03/04	14/03/05
20/03/00	19/03/01	25/03/02	24/03/03	22/03/04	21/03/05
27/03/00	26/03/01	1/04/02	31/03/03	29/03/04	28/03/05
3/04/00	2/04/01	8/04/02	7/04/03	5/04/04	4/04/05
10/04/00	9/04/01	15/04/02	14/04/03	12/04/04	11/04/05
17/04/00	16/04/01	22/04/02	21/04/03	19/04/04	18/04/05
24/04/00	23/04/01	29/04/02	28/04/03	26/04/04	25/04/05
1/05/00	30/04/01	6/05/02	5/05/03	3/05/04	2/05/05
8/05/00	7/05/01	13/05/02	12/05/03	10/05/04	9/05/05
15/05/00	14/05/01	20/05/02	19/05/03	17/05/04	16/05/05
22/05/00	21/05/01	27/05/02	26/05/03	24/05/04	23/05/05
29/05/00	28/05/01	3/06/02	2/06/03	31/05/04	30/05/05
5/06/00	4/06/01	10/06/02	9/06/03	7/06/04	6/06/05
12/06/00	11/06/01	17/06/02	16/06/03	14/06/04	13/06/05
19/06/00	18/06/01	24/06/02	23/06/03	21/06/04	20/06/05

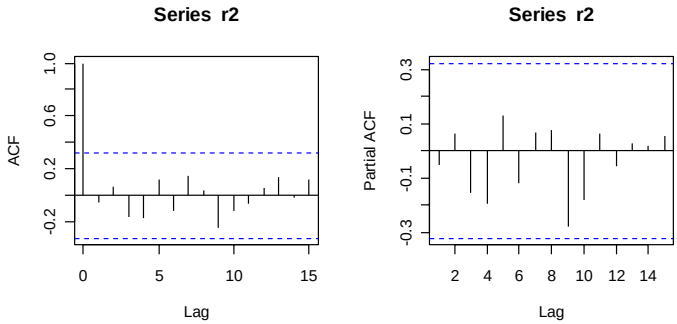
Plots of autocorrelation, partial autocorrelation and normality

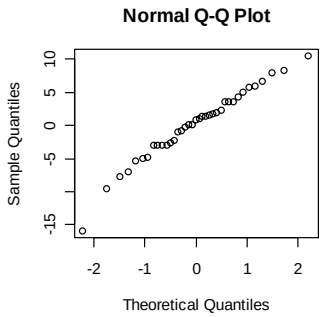
Violence (police recorded crime statistics)



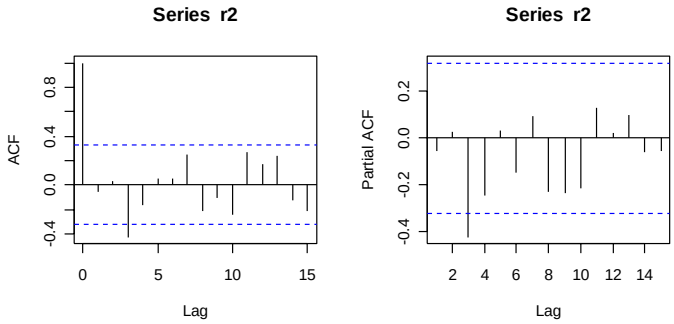


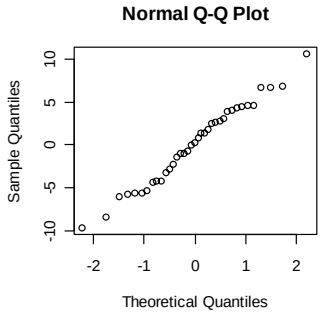
Disorder (police recorded crime statistics)



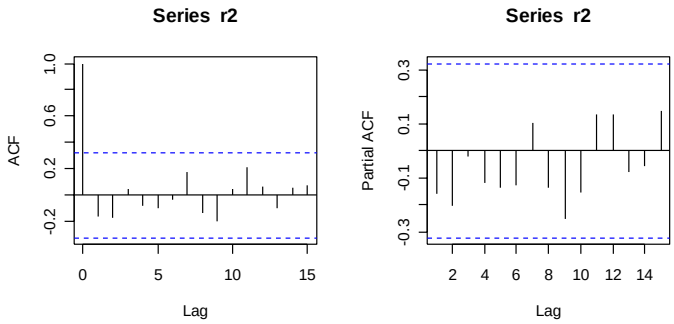


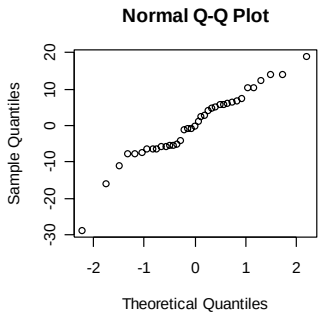
Property Damage (police recorded crime statistics)



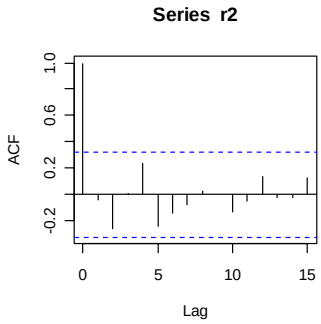


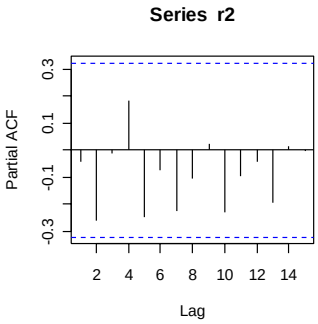
Combined Violence, Disorder, Sexual Attacks, Property Damage (police recorded crime statistics)

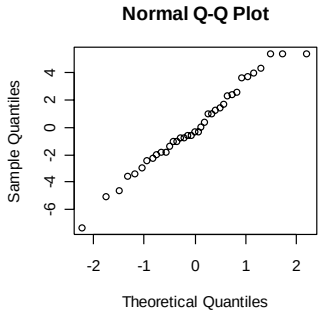




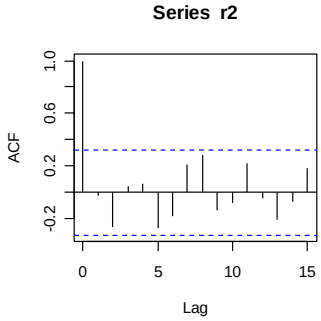
Intentional Injury by Others (ambulance attendance statistics)

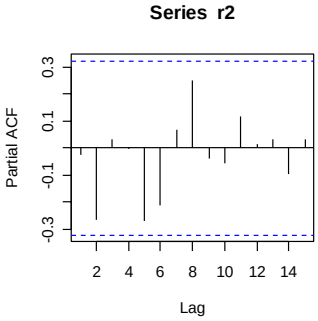


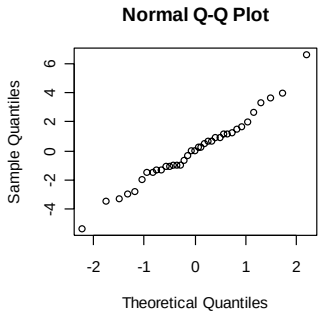




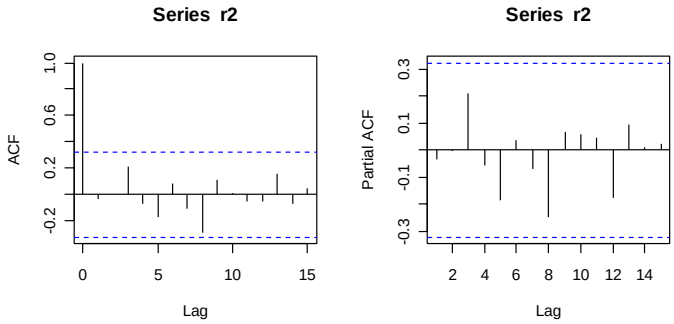
Intoxication (ambulance attendance statistics)

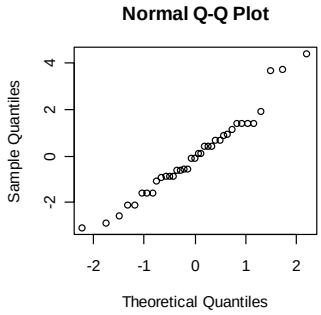




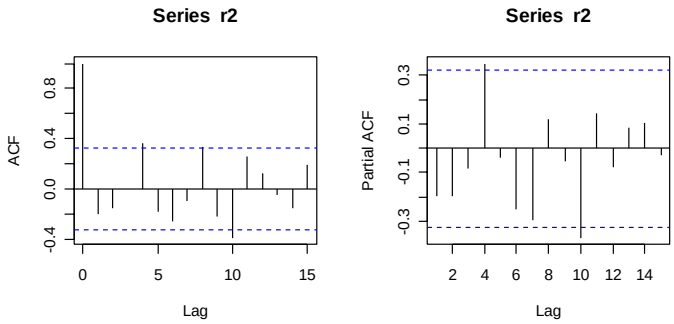


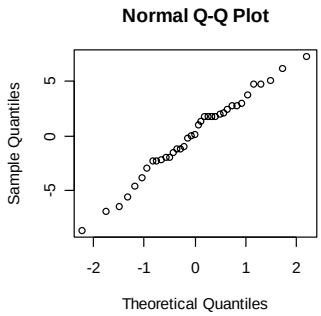
Other accidents (ambulance attendance statistics)





Combined intentional injury by others, intoxication, and other accidents (ambulance attendance statistics)





Wellington's public event calendar during 2004/2005

These calendar shows, during the period of the research, the large events and public holiday's that may have impacted on the number of people in the city and on crime and incidents occurring in the city.

Week beginning Monday		Intoxication Intervention	Public Holiday	Sporting Event	Large Concerts	Other major events
1	28 Jun					
2	05 Jul					
3	12 Jul			International Rugby		
4	19 Jul					
5	26 Jul					
6	02 Aug					
7	09 Aug			NPC Rugby		
8	16 Aug					
9	23 Aug					
10	30 Aug			NPC Rugby		
11	06 Sep			NPC Rugby		
12	13 Sep					
13	20 Sep			NPC Rugby		
14	27 Sep			NPC Rugby		
15	04 Oct					
16	11 Oct			NPC Rugby		
17	18 Oct			NPC Rugby		
18	25 Oct		Mon (Labour)			
19	01 Nov	Begin Fri				SKY Show -Guy Fawkes
20	08 Nov					
21	15 Nov					
22	22 Nov					
23	29 Nov				Stadium Concert (Carols)	
24	06 Dec	End Sun				
25	13 Dec					
26	20 Dec					
27	27 Dec		Mon/Tue (Xmas) Fri (New Yr Eve)			The Big Night Out
28	03 Jan					
29	10 Jan					
30	17 Jan					
31	24 Jan		Mon (Wgtn An.)	ODI Cricket		
32	31 Jan			7's Rugby		Chinese New Year Festival/Fireworks
33	07 Feb					
34	14 Feb			ODI Cricket		
35	21 Feb					Cuba Street Carnival
36	28 Feb	Begin Thur		ODI Cricket, Cycling	Stadium Concert (Neil Diamond)	
37	07 Mar					Stadium Show (Crusty Demons)
38	14 Mar			S12 Rugby, Netball, Test Cricket		
39	21 Mar		Fri (Easter)	Test Cricket		
40	28 Mar		Mon (Easter)	S12 Rugby		
41	04 Apr			S12 Rugby		
42	11 Apr	End Sun		Test Cricket		
43	18 Apr			S12 Rugby		
44	25 Apr		Mon (ANZAC)	S12 Rugby		
45	02 May					
46	09 May					
47	16 May					
48	23 May					
49	30 May					
50	06 Jun					
51	13 Jun			International Rugby		
52	20 Jun					

2004

2005