# The impact of the Licensing Act 2003 on levels of crime and disorder: evaluation methods

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# Appendix B: Technical report

## Summary

The evaluation of the impact of the Licensing Act 2003 on levels of crime and disorder had several strands to it, including information from both national and local sources. A central element was a series of detailed case studies conducted in five areas. Work on the case studies was carried out by various independent researchers and by Home Office researchers, and included the following:

- detailed spatial and temporal analysis of time- and location-stamped recorded crime data, mounted by the Applied Criminology Centre (ACC), University of Huddersfield;

- post-implementation qualitative interviews with a limited number of representatives from licensed premises and observation of licensed premises, mounted by the ACC;

- analysis of 'before and after' health service data, mounted by the ACC;

- 'before and after' telephone surveys of residents carried out by the British Market Research Bureau (BMRB);

- 'before and after' in-depth qualitative interviews with licensees and representatives from other night-time economy businesses which were located in the main night time economy areas, carried out by Cragg Ross Dawson;

- 'before and after' in-depth qualitative interviews by researchers from the Home Office with representatives from the responsible authorities designated under the Act, the licensing authority, the Crime and Disorder Reduction Partnership (CDRP), the Drugs and Alcohol Action Team (DAAT) and the town centre manager; and

- additional data from police and health authorities assembled by Home Office researchers.

## Other data sources

The British Crime Survey (BCS), which is a national, large-scale survey of victimisation, provided another strand to the evaluation. A set of questions were included in the 2004/05,
2005/06 and 2006/07 surveys, covering people's experience of, and attitudes to, the night-time economy (referred to hereafter as the BCS NTE module). The main BCS also permits quite fine-grained analysis of crime trends, broken down by time and location – although it is too early to mount analysis of this sort in relation to the Act. The Home Office also carried out a national telephone survey of police licensing officers in 26 of the 43 police forces in England and Wales six months after the changes were implemented.

The evaluation has also drawn on some important published sources. One of these is a survey of 30 police forces, covering violent crime, disorder and criminal damage for the period from October 2004 until November 2006 (Babb, 2007); it provides the most comprehensive analysis of relevant statistics of recorded crime, to set beside BCS estimates. Another is a survey of 33 Accident & Emergency hospital departments across the country (Sivarajasingam *et al.*, 2007). Thirdly there are Department for Transport statistics on injuries and deaths caused by drunken driving. Fourth, there is a national survey of local authorities mounted for the Alcohol Education and Research Council (AERC) (Foster *et al.*, 2008). We have also drawn on HM Revenue and Customs statistics collated by the British Beer and Pub Association (BBPA, 2007).

The evaluation has also drawn on various independent local evaluations. Two of these were conducted by Home Office researchers in the Government Office for Yorkshire and Humber and in the Government Office for the East of England (Pike *et al.*, 2008). There have also been analyses of local heath authority data, and interview studies with local authority and health staff (e.g. Newton *et al.*, 2007).

## Production of the main report and overall findings

Finally, the Home Office commissioned the Institute for Criminal Policy Research (ICPR), King's College London to carry out a review of the relevant literature, and to pull together and summarise the findings of the various strands of the evaluation. The summary report of the evaluation (Hough *et al.*, 2008) is the result. That report drew on all material that appeared to be relevant, including work mounted independently of the Government.

# 1:  Introduction

The Licensing Act 2003 came into effect on 24 November 2005. Responsibility for the legislation falls to the Department for Culture, Media and Sport (DCMS) – where the topic is the responsibility of the Licensing Minister. The DCMS had its own programme of monitoring and evaluation, including a ministerial monitoring group and detailed examination of the experience of ten 'Scrutiny Councils[1]'. The Home Office role relates largely to the problems of crime and disorder associated with alcohol, and in 2005 the Home Office put into place a programme for evaluating the Act's impact on crime and disorder. The evaluation strategy was to assemble a mosaic of information, some of it national and some of it local, built around five detailed case studies. A report of the key findings (Hough *et al*., 2008) presents findings that relate to the first year under the new arrangements. This technical annex describes the data analysis techniques and methods used to measure the impact of the Act on crime and disorder. The evaluation had several strands to it.

## 1.      The case study sites

A central element was a series of detailed case studies conducted in a range of cities and towns.

- Blackpool Unitary Authority (UA);

- Birmingham City Centre (police force area F1);

- Croydon Borough;

- Guildford Borough; and

- Nottingham Unitary Authority.

Three of these are also DCMS Scrutiny Councils. Work on the case studies was carried out by various researchers and also by Home Office researchers, and included the following:

- detailed spatial and temporal analysis of time-stamped recorded crime data, mounted by the ACC;

- post-implementation qualitative interviews with a limited number of representatives from licensed premises and pre and post observation in a small number of licensed premises, mounted by the ACC;

- analysis of health service data, mounted by the ACC;

- 'before and after' telephone surveys of residents carried out by BMRB;

- 'before and after' in-depth qualitative interviews with licensees and representatives from other night time economy businesses which were located in the main night time economy areas, carried out by Cragg Ross Dawson;

- 'before and after' in-depth qualitative interviews by researchers from the Home Office with representatives from the responsible authorities designated under the Act, the licensing authority and the CDRP/DAAT and the town centre manager; and

- additional data from police and health authorities assembled by Home Office researchers.

### *Selection of case study areas*
The Home Office selected these areas for a number of reasons. Firstly, areas were selected that spanned the broad profile of violent crime in England, taking different measures of violent crime into account and based on discussions with senior officers in police forces. All of these measures indicate that the nature and intensity of violent crime significantly differ between the chosen areas.

The selection of case study areas also provided a good mix of urban/rural area types when compared against the Office for National Statistics (ONS) classifications of local authority districts: two cities, two smaller towns (one market town surrounded by a significantly rural population and one seasonal seaside resort), and one London borough. A decision was made not to select any areas that were primarily rural, based on Department for Environment Food and Rural Affairs (Defra) classifications, to avoid to undertaking focused case study work in sparsely populated rural areas, where the volume of crime data is low and it is unlikely that any discernible effect on crime levels would be detected.

The final basis for choosing areas was to include those prepared to be involved with the evaluation and provide crime and disorder data on a monthly basis between 2004 and 2006. Birmingham police force area F1 was used as it was agreed, with the police, to supply crime data for this area.

Reports providing detailed results from the temporal and spatial analysis of recorded crime data conducted in the five case study areas were produced by the ACC (Newton *et al*., 2008a-g).

## 2.      Other sources of information

### *a. The British Crime Survey*
The British Crime Survey (BCS), which is a national, large-scale survey of victimisation, provided another strand to the evaluation. A set of questions were included in 2004/05, 2005/06 and 2006/07, covering people's experience of, and attitudes to, the night time economy (referred to hereafter as the BCS NTE module). Brief methodological details are provided in this report, but the interested reader is directed for more information to the BCS technical reports (eg. Grant *et al*., 2007).

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1   See http://www.culture.gov.uk/what_we_do/Alcohol_entertainment/
monitoring_and_evaluation/

### b. The Home Office telephone survey of licensing officers

The Home Office also carried out a national phone survey of police licensing officers six months after the changes were implemented. Officers from 26 of the 43 police forces in England and Wales took part. As there were two respondents in the Metropolitan Police Service, the sample totalled 27. The 26 forces accounted for about two thirds of crime in England and Wales in 2005/06.

### c. Other national published sources

The evaluation has also drawn on other published sources. Perhaps the most important of these is a survey of 30 police forces, covering violent crime, disorder and criminal damage for the period from October 2004 until November 2006 (Babb, 2007); it provides the most comprehensive analysis of relevant statistics of recorded crime, to set beside BCS estimates. Another is a survey of 33 Accident & Emergency (A&E) hospital departments across the country (Sivarajasingam et al., 2007). A third is a survey of local authorities mounted for the Alcohol Education and Research Council (Foster et al., 2008). The researchers have also drawn on HM Revenue and Customs statistics collated by the British Beer and Pub Assocation (BBPA), (2007).

The evaluation also draws on various independent local evaluations. Two of these were conducted by researchers in the East of England and Yorkshire and Humber Government Offices which assessed the impact of the Act six months post implementation (Pike et al., 2008). There is also an evaluation of the Act's impact in Lancashire carried out by Liverpool John Moores University (Morleo et al., 2007). There have also been analyses of local heath authority data, and interview studies with local authority and health staff (e.g. Newton et al., 2007; Bellis (2007); London Ambulance Service (2007)).

This report does not attempt to summarise the methods used by studies whose results are already in the public domain. The interested reader is referred to the reports as referenced.

## The shape of this report

Chapter 2 of this report sets out the methods used for the temporal and spatial analysis of recorded crime data which was conducted by the ACC. There is a more detailed technical report on this work (Newton et al., 2008g).

Chapter 3 describes the methods used in other elements of the work in the five case study sites. Again it draws heavily on the technical reports prepared for the Home Office by the BMRB and Cragg Ross Dawson. It covers:

- a 'before and after' telephone survey conducted with residents in each of the case study areas which was carried out by BMRB;

- 'before and after' qualitative semi-structured in-depth interviews with licensees and other representatives from the night time economy carried out by Cragg Ross Dawson;

- 'before and after' in-depth qualitative interviews by researchers from the Home Office with responsible authorities and other local officials;

- additional data from police and health authorities assembled by Home Office researchers;

- the BCS Night Time Econmy module; and

- the Home Office survey of police licensing officers.

# 2: Temporal and spatial analysis of recorded crime in the five case study areas

## Research aims

The overall aims of the quantitative research and analysis were to provide a baseline indicator of levels of crime and disorder in and around licensed premises in each of the five case study areas, and to examine the impact of the Act on patterns of crime and disorder in and around licensed premises. This analysis was undertaken by researchers at the ACC.

A number of specific research questions were formulated for this research.

- What patterns of crime and disorder exist in and around licensed premises?

- What other local factors may explain the prevalence of crime and disorder in and around licensed premises?

- Does the granting of extended opening hours for licensed premises lead to a change in crime and disorder in these licensed premises?

- Have overall levels of crime and disorder within town and city centres changed following the Act?

- Have the peaks of crime and disorder displaced to later or earlier periods?

- Has the profile of crime and disorder in and around licensed premises and associated hot spots changed in relation to new licensing hours?

- Are there any unintended consequences of the Act? For example, geographical displacement or diffusion of benefits of crime to surrounding areas.

## Research approach

In order to answer the research questions detailed above, a number of research designs were considered, though it should be noted that it was not possible to define a control area which had not been affected by the introduction of the Act. It had originally been hoped to prospectively match licensed premises which applied for and received extended hours with those premises which did not. However, it emerged that getting pairs of premises that were genuinely matched on all relevant variables would be very hard, partly because similar premises tended to make similar licensing applications and crucially because the data which would be required for matching were not available during the data collection period.

As it was not possible to define a control area or match premises, a time series analysis which used a multi-method and multi-analysis approach was adopted.

## Levels of analysis

The quantitative analysis used in this research examines crime and disorder over the baseline and post-implementation periods at three geographical scales. These are:

- the macro level (aggregated data for the entire case study area);

- the meso level (aggregated data near to licensed premises);

- the micro level (data aggregated to inside or directly outside licensed premises).

## Timescale

This research examined a two-year baseline period before the introduction of the Act (23 November 2003 to 23 November 2005) and a post-implementation period (24 November 2005 to 24 November 2006). This enabled a two-year baseline and a full 12 months of post-implementation data to be examined.

## Data sources

A number of quantitative crime analysis methods were adopted for this research. The data sources used were as follows.

- Police recorded crime data (offence data).

- Police calls for service data (disorder incidents only).

- Licensed premises data.

- Accident and emergency (A&E) data.

- Ambulance call-out data.

- Ordnance Survey AddressPoint®.

- Ordnance Survey 1:10,000 scale raster.

- UKBORDERS digital boundaries.

- Office for National Statistics (ONS) mid-2005 population estimates. [2]

- ACORN 2006 population estimates.[3]

- Penalty Notices for Disorder (PNDs).

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2   Mid-2005 estimates was considered the most appropriate population estimates to use.
3   This was the most up-to-date information available that was coterminous with the case study boundary.

## Indirect measure of alcohol-related crime

In an ideal world, the evaluation would have made use of the system of flagging recorded crimes which are alcohol-related. However, at the time of the evaluation alcohol flagging was not being carried out in a way that was reliable and consistent within and between police forces. The time of the incident was used as a proxy measure, on the assumption that alcohol-related crime had clear temporal correlates.

## Licensing hours data

Discussions with local authorities at the planning stage suggested that detailed licensing information would be available in electronic format. As it turned out, local authorities had to process a large volume of licensing applications in a very short time, and these workload pressures meant that data were not stored electronically. This had a knock-on effect for the evaluation: due to the difficulties in obtaining accurate information on licensed premises from the licensing authorities, this research project only examines crime and disorder around three types of licensed premises, namely pubs, bars and night clubs. It is acknowledged that there are limitations to this

as premises such as off-licences, supermarkets and restaurants are excluded. The quality of the data which was supplied also limited the amount of anaylsis which could be conducted.

Table 2.1 details the number of premises with suitable data for the purposes of analysis, and Table 2.2 summarises the data supplied for this research and some of its limitations.

## Crime data analysis

This section describes the different quantitative analysis techniques used to examine crime and disorder within the case study areas, particularly focusing upon areas in and around licensed premises.

### Description of the data

Police recorded crime data were supplied by the local police forces to the research team for violence against the person, criminal damage and sexual offences. The individual offence types subsumed within these three categories are listed in Annex 1[4]. The data included:

- date and time of offence (reported and committed);

- offence location (full address including postcode);

- grid reference;

- *modus operandi* details (short summary of offence); and

- victim's age and gender.

### Table 2.1 Number of licensed premises in each case study area

|  | Number of licensed premises[1] | Number of pubs and bars in case study area[2] | Number of clubs in case study area[2] |
|---|---|---|---|
| Birmingham | 2,726 | 179 | 15 |
| Blackpool | 1,526 | 170 | 23 |
| Croydon | 1,199 | 226 | 9 |
| Guildford | 531 | 100 | 2 |
| Nottingham | 1,159 | 260 | 20 |

Notes
[1] This is the number of premises supplied by the licensing authority and not necessarily the number of premises that are situated inside the case study area.
[2] This includes premises with an address that could be accurately geo-coded only.

4   The number of recorded sexual offences in each of the case study areas was small and this prohibited a robust assessment of change before and after the implementation of the Act. Therefore the analysis relating to these offences has not been included in the main research report.

### Table 2.2 Licensed premises data supplied

|  | Format (note all supplied as electronic) | Address | Geo-coded | Current opening hours | Former opening hours | Applied for extended hours | Capacity | Premise type |
|---|---|---|---|---|---|---|---|---|
| Birmingham | Individual records | Partial | ✗ | ✔ | ✗ | ✗ | ✗ | ✔ |
| Blackpool | Single Database | Partial | ✗ | ✔ | ✔ | ✔ | ✔ | ✔ |
| Croydon | Individual records | Partial | ✗ | ✔ | ✗ | ✗ | ✗ | ✗ |
| Guildford | Single Database | Partial | Partial | ✔ | ✗ | ✗ | ✗ | ✔ |
| Nottingham | Single Database | Partial | ✗ | ✔ | ✗ | ✗ | ✗ | ✔ |

Where possible the police were asked to flag:

- if the offence could be attributed to a licensed premise;

- the name of the licensed premise;

- if alcohol was considered to be involved in the offence; and

- if the offence was considered to be domestic violence.

At the time of the evaluation definitions of alcohol-related crime varied within and across police forces. So too did the consistency with which incidents were flagged. Similar problems are to be found in the flagging of incidents considered to be domestic violence. These problems limited the analysis that could be done using these flags.

Table 2.3 shows the percentage of recorded violence against the person offences with alcohol and domestic violence flags for the baseline and post-implementation periods. The data suggest wide variability in the use of these codes between the five areas. The proportion of both alcohol and domestic violence flagged cases showed little variation between baseline and post-implementation.

## Methods

A wide range of analyses was conducted to identify any differences that could be found between the 24 months prior to the implementation of the Act and the 12 months after. These included analysis of:

- distribution of offences (daily, weekly, monthly and by time of day);

- monthly crime rates;

- percentage change in crime rates, by month and by time of day;

- proportional change by time of day;

- victim profiles;

- 'alcohol' and 'domestic violence' flags;

- geographic patterns, using GIS analysis;

- hot spot analysis;

- crime ratios, comparing areas with high densities of pubs and clubs against other areas;

- Resource Targeting Tables; [5]

- additional opening hours applied for (estimated for all premises); and,

- additional opening hours used (sample premises visited).

### Statistical significance tests
The aim here was to see if the week-by-week levels of crime showed statistically significant differences when six-month periods were compared against each other.

T- tests were run on data-sets for recorded violence against the person, criminal damage, and calls for disorder in each of the five case study areas. To guard against spurious effects reflecting seasonal variations, the two six-month periods in the period after implementation were compared only to the equivalent six-month periods in the two baseline years. Comparisons were also made for matching six-month periods for baseline years.

### Serious and other violence against the person
The five individual case studies examined violence against the person offences in detail at the macro level (entire case study area), meso level (near licensed premises) and micro level (inside or directly outside licensed premises). However, changes to the recording process of more serious violence against the person offences (for example 'threats to kill') since April 2005 may influence the results of this analysis. Additionally, lower level offences including other offences against the person (less serious violence) are likely to be influenced by police activity and the use of PNDs - more so than more serious violence. For this reason the average baseline and post

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5   A Resource Targeting Table (RTT) is an innovative technique for identifying how much of a problem (crime) is concentrated in varying proportions of licensed premises. For the purpose of this analysis, violence against the person offences were examined, and the licensed premise flag was used to assign individual crime offences to an individual licensed premise. The technique allows one to say what proportion of premises contributes to what proportion of recorded violent offences.

**Table 2.3   Percentage of recorded violence against the person offences with alcohol and domestic violence flags (baseline and post implementation periods)**

| Case study area | Percentage of offences with alcohol flag (baseline) | Percentage of offences with alcohol flag (post-implementation) | Percentage of offences with domestic violence flag (baseline) | Percentage of offences with domestic violence flag (post-implementation) |
|---|---|---|---|---|
| Blackpool | 43 | 43 | 16 | 14 |
| Birmingham | 7 | 3 | 7 | 5 |
| Croydon | missing data | missing data | 27 | 24 |
| Guildford | 45 | 44 | 16 | 19 |
| Nottingham | 13 | 12 | 16 | 16 |

implementation violence against the person offences were separated into more serious and other violence against the person offences. It should, however, be noted that the number of recorded more serious violence against the person cases was small – which limits the amount of analysis that can be conducted and the reliability of the findings – and, therefore, these analyses are not presented in the report which presents the key findings from the evaluation.

Analysis of serious violent offences (see Table 2.4 for a list of the offence categories included in serious violent offences analysis) indicates that serious violent offences comprised only a small part of all violence against the person. Indeed, for all five areas they represented less than 3.5 per cent of all violence against the person offences.

Overall across all five study areas there were 650 serious violent offences recorded in the post-implementation period compared to 782 in the average baseline period (a reduction of 17%). The majority of these were either threat or conspiracy to murder, wounding or other act endangering life. It is important to note that changes in the recording of serious violence against the person offences, particularly threat or conspiracy to murder have changed and are likely to influence these reductions (see http://www.homeoffice.gov.uk/rds/pdfs06/hosb1206.pdf).

Findings from the analysis of changes in serious violent crime in each of the five cases studies areas shows a mixed picture. In two of the case study areas there were small increases between the baseline average to post implementation periods; from 40 to 44 offences (an increase of 9%) in Guildford and from 114 to 125 (an increase of 10%) in Birmingham. There were small reductions in Blackpool from 188 offences to 176 (a decrease of 6%), and larger reductions in Croydon from 207 to 114 (a decrease of 45%) and Nottingham from 233 to 191 offences (a decreease of 18%).

### Weekday and weekend comparisons
In addition to the day of week and time of day analysis carried out at each case study area, it was deemed necessary to examine crime by weekday and weekends. One of the reasons for this

was that the results of the fieldwork conducted by the ACC (and that of Cragg Ross Dawson) suggested that premises tended to extend their hours more at the weekends. Thus analysis by individual days of the week and by time of day may not be sensitive to any difference in night time offences between weekday and weekend offences.

Two methods were employed here. The first was to examine monthly crime counts (for all violence against the person, criminal damage and calls for disorder) for the average baseline and post implementation periods (separated by weekday and weekend offences). The second was also to examine all these offences by time of day. For the purposes of this analysis weekends were considered as between 1am Friday morning to midnight Sunday and weekday offences 1am Monday to midnight Thursday.

### Synthesis maps
In order to examine change between baseline and post-implementation time periods, the kernel density estimate (KDE) hot spot maps produced for violence against the person and criminal damage were used to produce synthesis maps (these are not shown in the main report). For more detail on the construction of KDE hot spot maps see the ACC technical report (Newton et al., 2008g). The advantages of these synthesis maps are that changes in the spatial and temporal distributions of crime can be examined on a single map.

## Disorder data analysis

Police 'calls for service' records (disorder incidents only) were supplied for all five case study areas. These are logs of calls made by the public for police assistance. The following fields were supplied for all five areas.

- Date of incident.

- Time of incident.

- Incident code.

- Incident location (full address including postcode).

- Easting and northing (grid reference).

For each of the five case study areas, disorder codes were extracted from the calls data. The codes used by each of the five police areas were not standardised across each area, so care should be taken when comparing results between the five areas.

### Methods
As with the crime data, several methodologies were used to analyse the disorder data.

- Distribution of incidents (daily, weekly, monthly and by time of day).

- Monthly incident rates.

| Table 2.4 | Offence codes used for 'serious' violence against the person offences. |
|---|---|
| 1 | Murder |
| 2 | Attempted murder |
| 3 | Threat or conspiracy to murder |
| 4.1 | Manslaughter |
| 4.2 | Infanticide |
| 4.3 | Child destruction |
| 4.4/6 | Causing death by dangerous or careless driving (inc. under influence) |
| 4.7 | Cause/allow death of child or vulnerable person |
| 5 | Wounding or other act endangering life |
| 6 | Endangering railway passenger |
| 37.1 | Causing death by aggravated vehicle taking |

- Percentage change, by month.

- Proportional change.

- GIS analysis.

- Incident ratios.

## Health data analysis

For each of the five case study areas, data were requested on recorded assaults and deliberate injuries from both the ambulance service, and accident and emergency departments of local hospitals. The analysis of these data was undertaken by the ACC.

These data are used to supplement the information provided on violence against the person from police recorded crime records. One of the advantages of using this 'health' data is that violence against the person (particularly more serious offences) may be reflected here. Combining health and crime data on violence and assaults in this way increases the robustness of the findings.

There is, however, some evidence that these health data are inconsistently collated across sites and over time, and they need to be interpreted cautiously (cf Patton *et al.*, 2007).

### Requested data
#### A&E data
Statistics were requested by the Home Office from one hospital A&E department per case study area. The hospital selected (if there was more than one) was the one that was most likely to receive attendances/admissions from the city/town centre. Data was requested for attendances on weekend nights (defined as 10pm Friday to 5am Saturday and 10pm Saturday to 5am Sunday), for those people aged between 17 and 35 years, for all presenting symptoms. It was decided, after seeking expert advice, to limit data collection to these specific days, times and ages as the best available proxy measure of alcohol-related attendances.

Data were requested for all presenting symptoms as A&E departments have slightly different recording systems and not all departments routinely record whether the patient was drunk/had consumed alcohol prior to attending or whether an injury was the result of an assault or an accident. The following data was requested.

- Age of patient.

- Sex of patient.

- Date of attendance.

- Time of attendance.

Additionally, it was requested that attendances related to assault were flagged (if this was possible given the individual recording systems).

### Ambulance data
Ambulance data were requested from one ambulance station per case study area. The station selected (if there was more than one) was the one that was most likely to receive call-outs from the city centre. The requested data were for recorded call-outs on weekend nights (defined as above), for those people aged between 17 and 35 years, and for all presenting symptoms. The rationale for this is the same as the A&E data.

### Description of the health data
It was not possible to obtain both accident and emergency data and ambulance data for all five case study areas. Thus, of the data that were received, the data sets shown in Table 2.5 were considered suitable for the purposes of this research.

**Table 2.5  Data supplied on assaults and deliberate injuries**

| Case study area | Ambulance data | Accident and emergency data |
|---|---|---|
| Blackpool | | ✔ |
| Birmingham | ✔ | |
| Croydon | ✔ | |
| Guildford | | ✔ |
| Nottingham[1] | ✔ | |

[1]  Nottingham's accident and emergency data could not be used in the analysis because of inconsistencies in the data. See ACC full report.

### Methods
A range of methods were used in the incident data analysis.

- Distribution of incidents by month and year.

- Percentage change, by month.

- Distribution of incidents by time of day.

- Victim profile.

## Qualitative analysis

The quantitative analysis used in this research was supplemented by a very limited amount of qualitative fieldwork at each of the five case study areas which was undertaken mainly by students employed by the ACC[6]. The work was used to complement the more extensive and robust qualitative work undertaken by Cragg Ross Dawson.

There were two main methods: participant observation and semi-structured interviews. The purpose of this was to gain additional contextual information in each of the five case study areas. This included:

- changes in the 'styles' of establishments;

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6  Further details are available in Newton *et al.* (2008g).

- changes in the age of clientele;

- introduction of new safety measures;

- new staff training programmes;

- changes in consumer drinking patterns;

- changes in target populations;

- introduction/development of new community safety initiatives;

- changes to the nature of policing (style, organisation, new initiatives, resources and priorities); and

- cultural changes post implementation (for example to a 'continental cafe culture' for example); and

- information about the actual usage of additional hours granted post implementation.

## Timescale

The fieldwork section of this project consisted of three phases. These were as follows.

- Phase 1 - November 2005 (baseline period).

- Phase 2 - January to March 2006 (approximately two months into the post implementation period).

- Phase 3 - January 2007 (approximately twelve months into the post implementation period).

Observation took place during all three phases, and semi-structured interviews took place during the second and third phase visits. Two researchers were employed at each study area to conduct this fieldwork. Table 2.6 provides details.

Premises were selected for this part of the study based upon information from the relevant police forces who were asked to identify the 15 licensed premises with the highest levels of violence against the person offences. An additional step in selecting premises was to omit from the search criteria any premises that had been visited by Cragg-Ross Dawson.

## Observation

Observation was carried out at each of the five case study areas during each of the three phases of fieldwork. This observational work was carried out in the key drinking areas in each case study area (the general area outside premises) and inside a number of premises. Premises were selected for a number of reasons including previous crime rates, location (to sample premises from all key drinking areas) and on the basis of discussions with local police forces so as not to compromise fieldworker safety.

**Table 2.6  Number of venues observed (O) and number qualitative interviews conducted (QI) by case study area**

| Area | Phase 1 baseline November 2005 | | Phase 2 post implementation January to March 2006 | | Phase 3 post implementation January 2007 | |
|---|---|---|---|---|---|---|
| | O[1] | QI | O | QI | O | QI |
| Birmingham | 25 | 0 | 9 | 11 (from 9 premises) four licensees, two managers, four door supervisors, one members of bar staff | 9 | 9 (from 9 premises) three licensees/managers, three bar staff and three door supervisors |
| Blackpool | 31 | 0 | 11 | 14 (from 11 premises) three managers, four licensees, three door supervisors, four members of bar staff | 14 | 15 (from 14 premises) five managers, three licensees, five door supervisors, two members of bar staff |
| Croydon | 17 | 0 | 11 | 12 (from 11 premises) three managers, three licensees, four door supervisors, two members of bar staff | 12 | 13 (from 12 premises) three managers, six licensees, three door supervisors, one member of bar staff |
| Guildford | 22 | 0 | 11 | 12 (from 11 premises) two managers, five licensees, three door supervisors, two members bar staff | 11 | 12 (from 11 premises) six mangers/licensees, six door supervisors |
| Nottingham | 25 | 0 | 13 | 13 (from 13 premises) four managers, three licensees, two door supervisors, four members bar staff | 7 | 7 (from 7 premises) four bar managers, two licensees, one member of bar staff |

O = Observation
QI = Qualitative (semi-structured) interviews
[1] In phase one detailed notes of participant observations were not made at all venues visited.

## Qualitative interviews

A small number of semi-structured interviews were conducted at a number of venues in each of the case study areas, at differing points in time post-implementation of the Act. Ideally, interviews should have been conducted before and after the implementation of the Act. The purpose of these was to supplement the findings of the quantitative analysis.

## Post-implementation phase 2 interviews

A small number of interviews were carried out at each of the case study areas in the post-implementation period (between December and March 2006). Any premises that had been visited by Cragg-Ross Dawson were omitted.

## Post-implementation phase 3 interviews

A very small number of interviews took place in January 2007, just over 12 months after the Act was implemented. The premises were selected on the basis of ranking highly in levels of recorded violence. Any premises that had been visited by Cragg-Ross Dawson were omitted.

# 3:  Other elements of the evaluation

Whilst the spatial and temporal analysis of recorded crime data which was undertaken by the ACC provided the backbone of the five case studies, there were three other significant components, which aimed to complement the quantitative analysis.

- 'Before and after' telephone surveys of residents carried out by BMRB.

- 'Before and after' qualitative interviews with licensees and representatives of night time economy businesses carried out by Cragg Ross Dawson.

- 'Before and after' in-depth qualitative interviews by researchers from the Home Office with local officials.

- Additional data from police and health authorities assembled by Home Office researchers.

## The telephone surveys in the case study sites

The BMRB carried out surveys using computer-assisted telephone interviewing (CATI) in each case study site before and after the changes to the licensing arrangement. The aim was to identify:

- changes in frequency and patterns of usage of the night-time economy in the town/city centre;

- changes in attitudes and experiences of alcohol-related disorder in the town/city centre and the respondent's own neighbourhood; and

- respondents' expectations and knowledge of the Licensing Act.

Fieldwork for the 'pre' survey was conducted between February and June 2005 before the changes had taken place; the 'post' survey was carried out between February and May 2006.

The sampling universe was defined as being aged 16 and over in specified postcode districts in each site. The postcode districts were selected by the Home Office to yield respondents who lived in the town/city centres and those most likely to use the centres. The aim was to achieve a representative sample of the adult population, with a booster sample of those aged from 18 to 30, to ensure that there were enough numbers for analysis of people who visited bars, pubs and clubs on a regular basis. The aim was to achieve 720 interviews per site, of which a quarter would be the booster sample.

The sampling frame used for the survey was that held by Survey Sampling International (SSI), supplemented by other sources. Random Digit Dial (RDD) sampling was used to provide a sample of the residential population, with both listed and unlisted phone numbers represented, drawn from all available numbers in all known exchange codes in the five urban centres. SSI then drew the initial sample of numbers in each area, screening out inactive and business numbers.

The way in which RDD samples for local areas are selected means that many selected numbers fall outside the area (because the nodes cover large areas). These – which totalled 60 per cent of the sample – had to be screened out at the start of each telephone call and were removed from the sample. Once this had been done, a respondent was selected randomly from all eligible members of the household. If this person refused to take part, no substitution was permitted.

Sample sizes were 3,495 (pre) and 3,760 (post) across the five sites. The final samples were weighted to improve representativeness. Table 3.1 gives details of site sample sizes.

Response rates for RDD surveys are usually based on telephone numbers that have answered and been positively identified as eligible private households (or are assumed to be eligible, as discussed above), with non-contacts excluded as out of scope. This is the basis on which BMRB calculated response rates for this study. On this basis, the response rates for the 'pre' and 'post' surveys were 45 per cent and 38 per cent respectively. Some non-contacts will inevitably have been eligible for the survey – for example those who were on holiday for the fieldwork period. Thus true response rates will have been a little lower than those reported.

Data were weighted, with two weights being applied. One was to correct for unequal probabilities of an individual being selected to take part in the survey, and the other was a form of calibration weighting, correcting for non-response, to ensure

## Table 3.1  Interviews achieved on core and boost survey by site

| Urban centre | Number of interviews completed | | |
|---|---|---|---|
|  | Core survey | Boost survey | Total |
| Birmingham | 497/542 | 156/178 | 653/720 |
| Blackpool | 550/623 | 152/138 | 702/761 |
| Croydon | 548/603 | 142/204 | 690/807 |
| Guildford | 643/550 | 158/168 | 801/718 |
| Nottingham | 500/583 | 149/171 | 649/754 |

Note: shows both 'pre' and 'post' numbers, with 'pre' shown first.

that the (weighted) demographic profile of the achieved sample matched that of the population in each area. In mounting tests of statistical significance, a design factor of 1.5 was assumed. In running statistical significance tests, a five per cent threshold was applied unless otherwise stated.

## The qualitative interviews with representatives from night time economy businesses in case study sites

These were a series of face-to-face qualitative interviews carried out before and after the implementation of the Act with people working in the night time economy and was undertaken by a research agency, called Cragg Ross Dawson, which specialises in conducting qualitative research. The aim of this component of the research was to supplement the BMRB residents' survey by exploring the views and experiences of businesses operating in the night-time economy.

The findings from this work are drawn upon heavily in the main report as it was carried out in a similar and systematic way both before and after the introduction of the Act. This work is regarded as the most robust qualitative findings with regard to the perceptions of night time economy businesses.

In total, 75 interviews were conducted in the 'pre' period with licensees and business owners – 15 in each of the five areas within parts of the town and cities centred which had been identified by the police as being the prime night time economy areas and the areas where most of the alcohol related crime took place. In the 'post' period, 105 interviews were carried out, 21 in each area. Respondents included a range of people working in pubs, clubs, wine bars and restaurants, as well as off-licences, takeaways and taxi firms. Interviews lasted between 30 and 75 minutes, depending on respondents' knowledge. All were asked about their experience of, and attitudes to, problems associated with the night-time economy. Among on-licensees, the research was also required to collect details about intentions (pre) and practice (post) in relation to opening hours, and more generally about managing the premises.

The interviews were audio recorded, in accordance with the Market Research Society's Code of Conduct, and respondents were offered an incentive of £30 for their time. The interview data were coded into the main themes covered by the topic guides and other key themes that emerged from the interviews. Within these themes, data were recategorised into smaller specific sub-themes for more detailed examination.

## Qualitative interviews with licensing authorities and responsible authorities in the case study sites

Interviews were conducted with key individuals involved in the administration and implementation of the Licensing Act, by Home Office researchers, before and after the implementation of the Act, in each of the five areas.

The first round of interviews was conducted between September 2005 and January 2006. They involved up to 12 interviews in each area, with representatives from the Licensing Authority, each of the Responsible Authorities (RAs), including the police, the Licensing Solicitors, representatives from the CDRP/ DAAT and Town/City Centre Managers.

Post-implementation follow-up interviews were conducted between November 2006 and February 2007. Due to resource constraints, it was not possible to conduct post-implementation follow-up interviews with representatives from each of these authorities/ organisations. As a result it was decided to focus only on those authorities/organisations which had the greatest involvement in implementing and enforcing the Act and monitoring its impact on crime, disorder and the night-time economy more generally.

It was, therefore, decided to conduct four interviews in each case study area, with representatives from:

- the Licensing Authority (LA);

- the police;

- the CDRP and/or DAAT; and

- the Town/City Centre Manager.

In total, 18 interviews were conducted (with 23 participants): four in Birmingham, Blackpool and Nottingham; and three in Guildford and Croydon. Thirteen interviews involved individuals who had also been involved in the baseline interviews in atumn 2005.

All interviews were conducted face-to-face by a researcher from the Home Office Research Development and Statistics Directorate (RDS). Each interview was tape recorded (on permission of the interviewee). For confidentiality reasons, participants were assured that no comments made in the interviews would be attributable to them in the final report. Interviews were semi-structured and covered a range of the following issues (depending on the interviewee's role).

- Implementation of the Act.

- Impact of the Act.

- Management of the night-time economy.

- Enforcement of the Act.

- Advantages/disadvantages of the Act.

All interviews were transcribed verbatim. The transcripts were transferred into NVivo (software used to organise and analyse complex qualitative data). The interview data were coded into the main themes covered by the topic guides and other key themes that emerged from the interviews. Within these themes findings were then re-categorised into smaller specific sub-themes for more detailed examination.

## The British Crime Survey (BCS) Night Time Economy (NTE) module

The BCS is a large national survey of people aged 16 or over living in England and Wales. The main purpose of the BCS is to derive a survey-based measure of crime, but the questionnaire is designed to be flexible, and once the questions about victimisation have been asked, respondents are asked a range of additional questions. A suite of specially designed questions on attitudes towards, and experience of, the night time economy was included in BCS questionnaires for three years: 2004/05, 2005/06 and 2006/07. There were additional questions asked about drug and alcohol use.

In 2004/05, the total BCS sample consisted of 45,120 respondents. Of the total achieved sample, 10,903 respondents answered questions from the night time economy module, and 6,801 respondents aged from 16 to 30 completed the Drugs and Drinking Self-Completion Module. Interviews were carried out between April 2004 and March 2005.

In 2005/06, the sample consisted of 47,769 respondents: 11,870 respondents answered questions from the NTE module, and 7,088 respondents aged from 16 to 30 completed the Drugs and Drinking Self-Completion Module. Interviews were carried out between April 2005 and March 2006.

In 2006/07, the sample consisted of 47,203 respondents. Of the total achieved sample 11,633 respondents answered questions from the night time economy module, and 7,122 respondents aged 16 to 30 completed the Drugs and Drinking Self-Completion Module. Interviews were carried out between April 2006 and March 2007.

Throughout this period, the response rate for the total sample was 75 per cent. Various weights are applied to the data. There is a calibration weight, designed to ensure that the demographic profile of the sample is consistent with census data. There is a weight to take account of the fact that some police force areas are over-sampled. There is also a weight designed to take account of the fact that the probability of selection varies inversely with the size of the household. In significance testing, a design factor of 1.2 has been applied throughout. Statistical differences at the five per cent level are reported unless otherwise stated. All refusals, missing cases and 'don't know' responses have been excluded from all analyses.

## Telephone survey of police licensing officers

The aim of this strand of the evaluation was to establish the views of police licensing officers on the Act's implementation and enforcement and their perceptions of the impact of the Act on levels of crime and disorder in their force area. The interviews were conducted and the data were analysed by Home Office researchers.

### Methods

Structured telephone interviews were conducted with one[7] representative from 26 (60%) of the 43 police forces in England and Wales between May and July 2006 (six to eight months post-implementation). The participating forces, which accounted for 67% of all recorded crime in England and Wales in 2005/06, were as follows.

| | |
|---|---|
| Avon and Somerset Constabulary | Cheshire Constabulary |
| City of London Police | Cleveland Police |
| Cumbria Constabulary | Dorset Police |
| Durham Constabulary | Essex Police |
| Greater Manchester Police | Gwent Police |
| Hertfordshire Constabulary | Humberside Police |
| Kent Police | Lancashire Constabulary |
| Leicestershire Constabulary | Merseyside Police |
| Metropolitan Police | Northamptonshire Police |
| Northumbria Police | North Wales Police |
| North Yorkshire Police | Nottinghamshire Police |
| South Wales Police | South Yorkshire Police |
| Thames Valley Police | Warwickshire Police |

The interviewee from each force was generally a sergeant or inspector with responsibility for licensing issues in one division or Basic Command Unit (BCU). All forces were approached to participate in an interview and the sample represents those forces who agreed to take part. Responses in the interviews were based on officers' perceptions of licensing issues in their particular division or BCU. Four interviewees provided a force-wide perspective.[8]

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7   Two officers from the Metropolitan Police were interviewed.
8   Greater Manchester, Gwent, The Metropolitan Police and Thames Valley.

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