

New Deal for Communities

The National Evaluation

Research Reports

Crime Incidence, Prevalence and Concentration in NDCs: Implications for Practice

Research Report 45

The Neighbourhood Renewal Unit within the Office of the Deputy Prime Minister is currently sponsoring the 2002-2005 national evaluation of New Deal for Communities. This evaluation is being undertaken by a consortium of organisations co-ordinated by the Centre for Regional Economic and Social Research at Sheffield Hallam University. The views expressed in this report do not necessarily reflect those of the NRU/ODPM.

Those wishing to know more about the evaluation should consult the evaluation's web site in the first instance <http://ndcevaluation.adc.shu.ac.uk/ndcevaluation/h>



Sheffield
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**Crime Incidence, Prevalence and
Concentration in NDCs:
Implications for Practice**

Research Report 45

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Executive Summary

Analysis of Crime Trends

This report introduces three different crime counts that are essential to fully understand crime levels:

- Crime prevalence refers to the proportion of people (or targets, e.g. households, properties or cars) in an area who are victimised.
- Crime concentration refers to the number of victimisations per victim (or victimised place).
- Crime incidence is a product of crime prevalence and crime concentration it refers to the number of crimes that have occurred in a given area. Incidence is usually expressed as a rate per head of population.

Results from the household survey demonstrated that in 2002:

- **Prevalence:** A third of NDC survey respondents had been victims of crime in the previous 12 months (excluding vehicle crime).
- **Concentration:** Victims in the survey experienced an average of 3.9 crimes each (excluding vehicle crime).
- **Incidence:** There was an average of 1.3 crimes per person interviewed (excluding vehicle crime).

NDC respondents were more likely than those in the British Crime Survey (BCS) to experience crime, and once they have been victimised they are likely to suffer more crimes on average than victims in the BCS.

The 2004 survey provides evidence of substantial reductions in crime incidence and prevalence for all types of crime included in the survey and reduction in concentration for most types of crime.

The contribution of prevalence and concentration to crime levels was explored for different crime types. The classification of high/low prevalence and concentration is only in comparison to other NDCs on that crime category. All areas have high prevalence and high concentration compared to national figures.

Crimes such as theft from the person tended to have a higher number of victims with lower crimes per victim. Other crimes had lower numbers of victims with a high concentration of crimes per victim, most notably assault and racial abuse.

However the mix of crime concentration and prevalence varied in different NDCs. Analysis demonstrated how areas with similar levels of crime incidence had contrasting levels of prevalence and concentration.

The importance of analysing all three crime counts was stressed, the pitfalls of not doing so include:

- Analysis of prevalence in isolation from other crime counts can underestimate the real level of crime.
- Analysis of incidence and prevalence without attention to concentration would miss any repeat victimisation suffered by victims.
- Crime can appear static when incidence levels remain unchanged. However there may be an unidentified shift from prevalence to concentration or visa versa.

An accurate picture of crime trends can only be achieved by analysing all three crime counts. An accurate picture in turn enables an informed choice of crime reduction strategies.

Implications for Practice

- Interventions to reduce crime should take a different form depending upon the degree to which high crime is the result of prevalence or concentration.
- Performance indicators should include both prevalence and concentration. Regular audits of crime trends should also report on these counts in addition to crime incidence.
- Successful crime reduction strategies will be those that are tailored to the distribution of crime in an area, be that high prevalence, high concentration or a mixture of both.
- The important difference between the two sets of strategy is the level of coverage and the targeting of resources.
- High levels of concentration point to victim based targeting that focuses resources at the most vulnerable. In areas of high prevalence the focus should be wider with area based initiatives.
- Tackling concentration requires the identification of repeat victims, this process can be enhanced by:
 - Improvements in data recording standards. This should include both technical solutions and a focus on training staff in the importance of accurate records.
 - Encouraging victims to report crime, either directly to the police or by providing alternative reporting opportunities.
 - Enlisting the help of partner agencies that have contact with victims.
 - Partner agencies should be “plugged in” to services available for victims to ensure a swift response.

All agencies should work quickly, the high-risk period for revictimisation is shortly after the original offence.

1. Introduction

The survey of NDC household survey asked respondents in 2002 and 2004 how many times they had experienced a list of crimes in the previous twelve months. The responses provide a level of 'self-reported' crime for each NDC and these can be compared to national figures generated from the British Crime Survey (BCS). The 2002 NDC survey demonstrated that NDC areas have a higher level of self-reported crime than national averages for all crimes measured in both surveys. This was true at the programme level and for the individual NDCs, all of which had levels at or exceeding national levels for all crime types.

The number of crimes in a given area is referred to as the crime incidence. An area can acquire a high incidence of crime in one or both of two ways. First, a high proportion of households or individuals may be victimised. Second, properties or victims may be repeatedly targeted. The proportion of potential victims who are victimised is referred to as crime prevalence. The number of crimes per victim is referred to as crime concentration. Together crime prevalence and crime concentration produce the overall incidence of crime within an area. To use the example of burglary, in an area of 100 homes, an identical burglary incidence will arise from one house being burgled ten times (high concentration, low prevalence) or ten houses being burgled once (high prevalence, low concentration).

The crime reduction strategies appropriate to high prevalence and high concentration areas are different. In the first case, precautions should primarily be distributed (by housing providers, police and others) amongst the not-yet-victimised. In the latter, substantial effort should be allocated to the already victimised as the strongest predictor of future victimisation is prior victimisation. In order to select strategies for targeting crime reduction interventions it is important to know whether an area has a high rate of burglary because of high prevalence, high concentration or both.

Section 4 of this report will introduce the crime counts of incidence, prevalence and concentration and explore the relationships between them in NDC areas. Section 5 will explore crime changes in relation to prevalence and concentration. Finally section 6 will identify implications of prevalence and concentration levels on crime reduction strategies.

1.1. Methodology

This report analyses responses from the NDC household survey conducted by MORI/NOP in 2002 and then repeated in 2004. Survey measurements of victimisation have clear advantages over police recorded data. Only a small proportion of crime comes to police attention and methods of recording can render the process of matching multiple crimes to victims impossible. However surveys are not without limitation. Surveys are reliant upon respondent recall. Crime is a memorable event but the timing of an event may be more difficult to remember. Consequently respondents may include in their recall events that took place before the period about which they are asked. Where events occur frequently it may prove difficult to recall the exact number of events, and in many cases respondents answered "too many to remember." This introduces a degree of imprecision to calculations of crime levels that are based on survey data, as it is not possible to quantify this response.

The survey asked respondents about their experiences of 10 types of crime. These were: domestic burglary, other household thefts, theft from the person, vandalism, assault, threats, racial assault, theft of motor vehicles, theft from motor vehicles and vandalism of motor vehicles. Residents may have experienced other types of crime, however the analysis in this report is restricted to those crime types included in the survey.

Crimes such as theft from the person assault and vehicle crimes can be committed against individuals visiting or working in an area. Area based household surveys exclude these groups and only provide estimates of crimes committed against residents. Crimes against business are also excluded.

The 2002 data was available in disaggregate form at the level of individual respondent. 2004 figures were only available aggregated to the level of NDC partnerships. In the 2004 data reports of the number of victimisations greater than 6 are banded into categories i.e. 6-10, 11-15, 16-20, 21-25, 26-30 and 30+ consequently the exact number of self-reported crimes in 2004 is not available for this analysis. Where comparisons between 2002 and 2004 are made the 2002 data have been grouped into bands equivalent to those in the 2004 survey.

A review of crime prevention strategies in NDC areas has also been conducted. This is based on information available through partnership plans, reports, local evaluations and correspondence with a number of NDCs. Information is not consistently available for all NDCs, consequently this review is not systematic but provides an impression of activity in NDC areas.

2. Incidence, Prevalence and Concentration in the NDC areas

Box 1: Calculating Crime Counts

Prevalence = Number of Victims divided by Number of Potential Targets

Concentration = Number of Crimes divided by Number of Victims

Together Prevalence and Concentration produce **Crime Incidence**

Incidence = Number of Crimes in given area

2.1. Prevalence: The Risk of Victimisation

Crime prevalence refers to the proportion of people (or targets e.g. households, properties or cars) in an area who are victimised and is used to identify the risk of being a victim. It is calculated by dividing the number of victims (or targets) by the number of potential victims. The number of potential victims commonly equates to an area's population. However in many cases potential targets are more narrowly defined. For example the potential victims of vehicle crime should be restricted to the number of individuals who own or have access to a vehicle.

In 2002, approximately 40% of respondents (8154) had experienced at least one of the crimes included in the NDC household survey during the previous 12 months¹. During the same period 28% of BCS respondents had experienced some form of crime. Excluding vehicle crime around a third of NDC respondents had experienced a crime. Approximately 40% of NDC respondents with access to a vehicle had experienced vehicle crime.

Figure 1 shows the proportion of NDC survey respondents that suffered the non-vehicle crimes included in the survey at least once and compares this to the proportion of BCS respondents who were victimised. Figure 2 presents the proportion of vehicle owners who experienced a vehicle crime in the NDC and again compares these figures to the BCS. These graphs demonstrate that the risk of becoming a victim (prevalence risk) in an NDC

¹ This total treats household crimes as personal crimes, therefore it is the number of respondents who have been a victim of crime or have been resident in a household that was a victim of crime.

area was considerably greater than the risk nationally; the risk of vandalism in NDC areas was almost 5 times higher compared to the national risk. The risk of being victimised was highest for vandalism and other household theft and lowest for racial abuse. Figure 2 shows the proportion of vehicle owners who were victims of vehicle crime and demonstrates that the prevalence risk for vehicle crime is also greater in NDC areas than national comparisons. The risk is highest for vandalism to vehicles.

The prevalence of different crime types were strongly correlated suggesting that an NDC with a high number of victims of one crime type will also have high proportion of victims of other crime types. However analysis found particularly strong correlations between burglary, other theft, assault, threats and vandalism and between racial abuse and theft from the person. The different types of vehicle crimes correlated with each other but not with other crimes, with the exception of vandalism to motor vehicles which correlated with general vandalism and theft from vehicles which correlated with theft from the person

Figure 1: The Proportion of Respondents Victimised at Least Once (Prevalence)

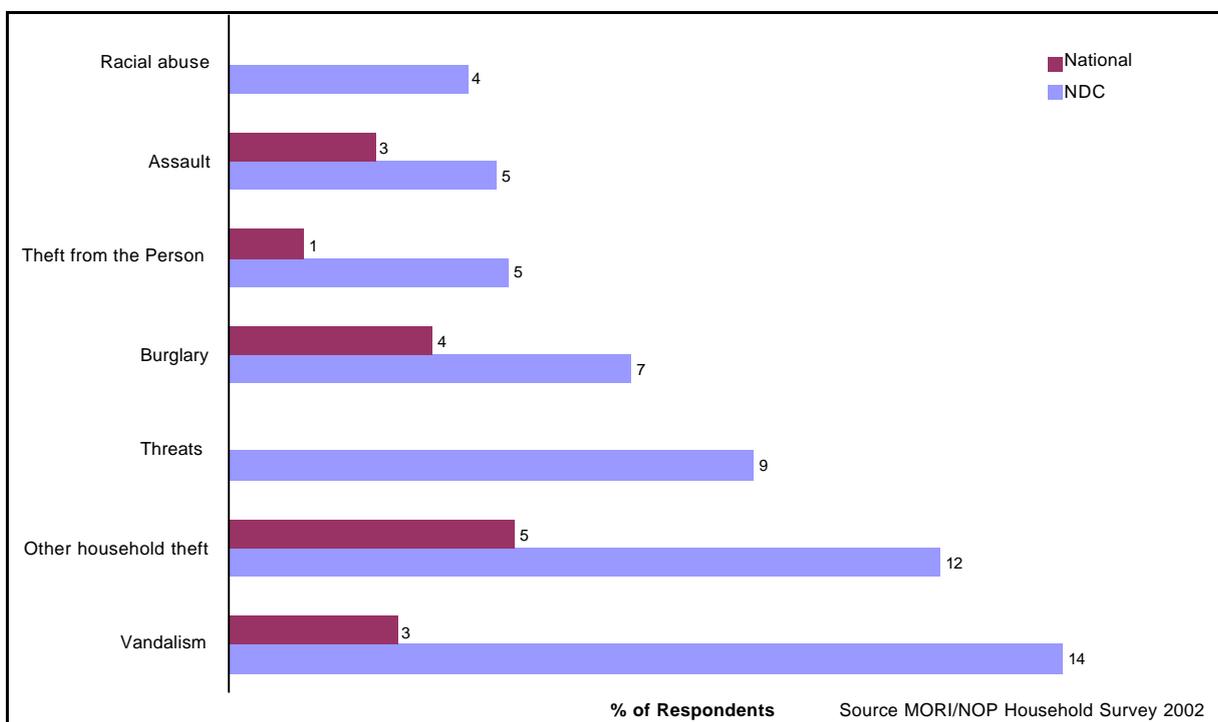
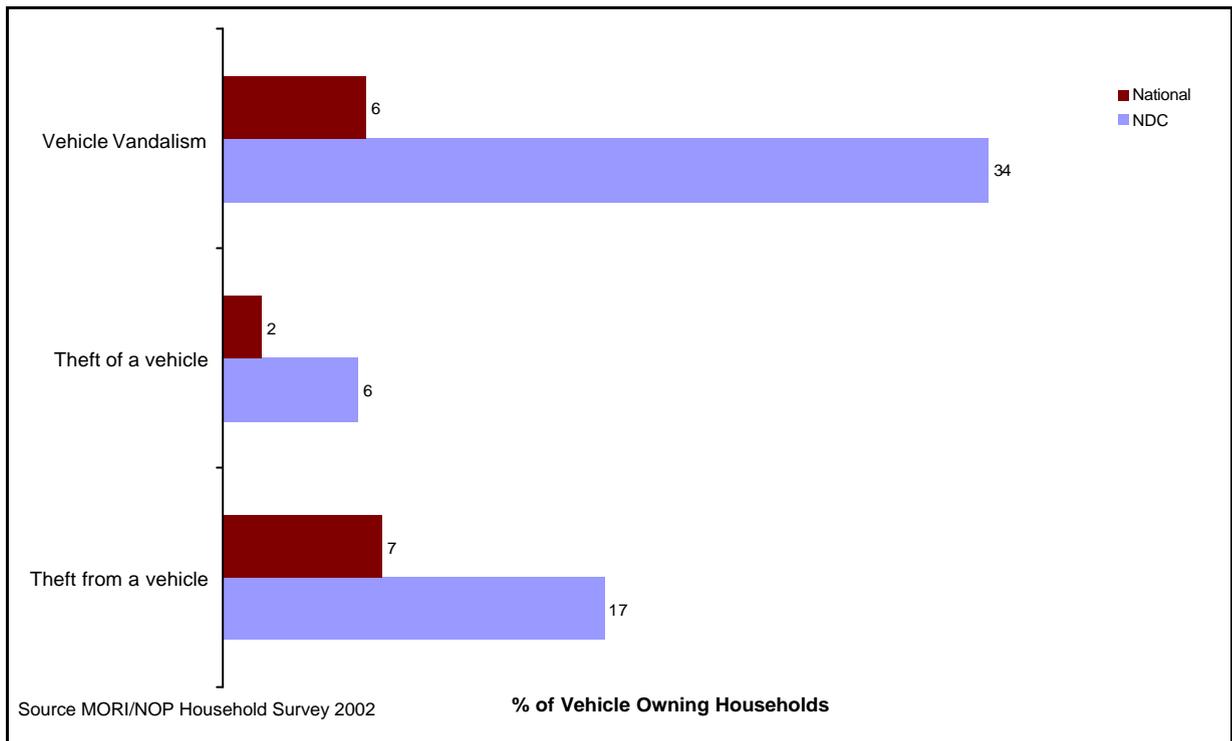


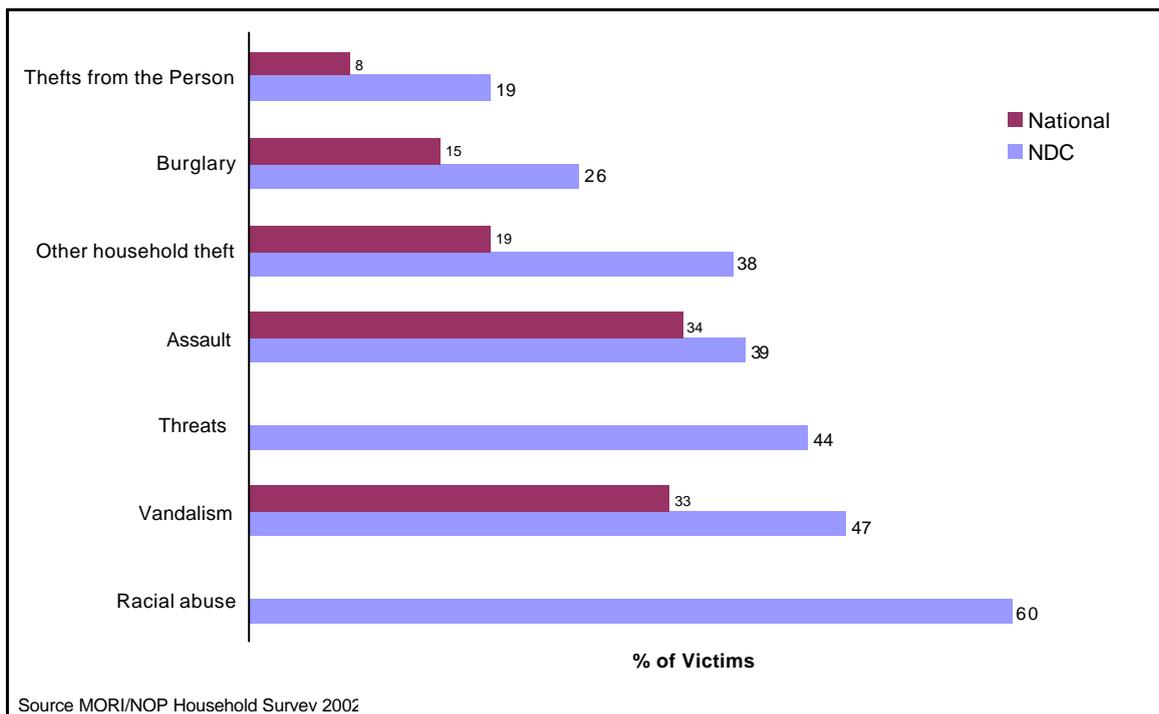
Figure 2: Proportion of Vehicle Owning Households Experiencing Vehicle Crime (Prevalence)



2.2. Concentration: Number of Crimes Per Victim

In section 4.1 it was noted that 8154 respondents had been the victim of at least one crime. However many of these victims experienced more than one crime during the 12 month period covered by the survey. Figure 3 illustrates the proportion of victims in the 2002 survey that were repeatedly victimised compared to respondents in the BCS. Figure 4 presents the same picture for vehicle crime. The graphs demonstrate that not only are a higher proportion of households or individuals victimised in NDC areas compared to national figures a higher proportion of these victims are repeatedly targeted.

Figure 3: Proportion of Victims in the Survey Victimised More Than Once (Concentration)

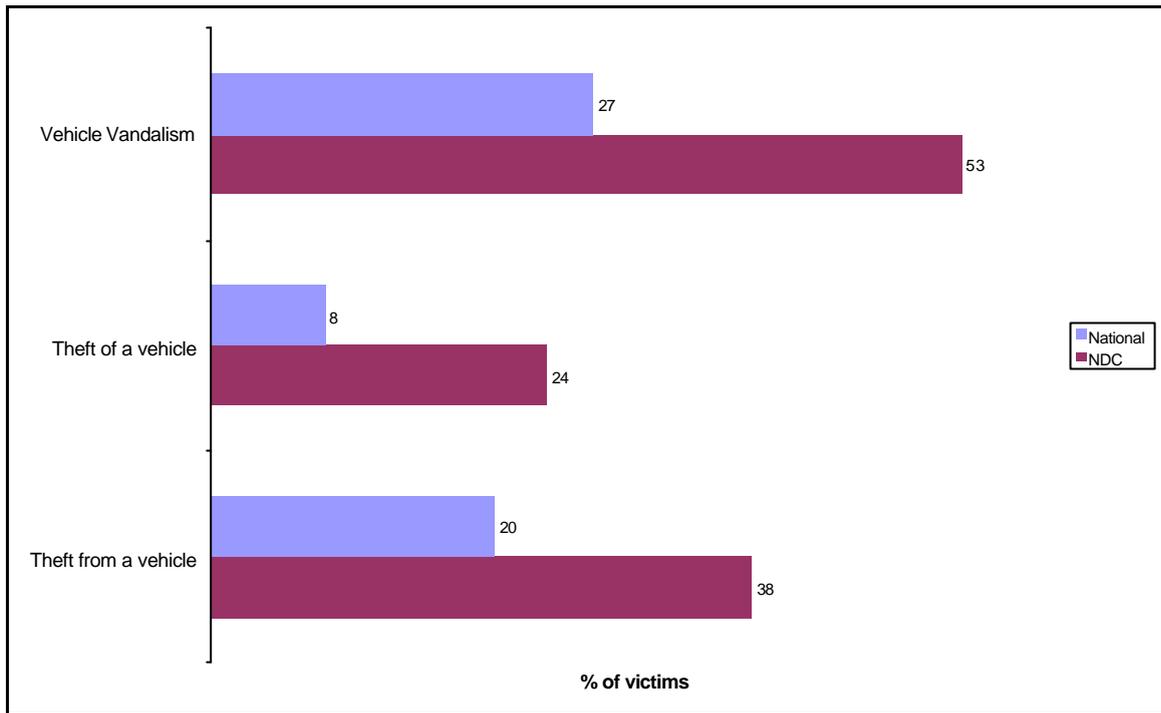


The extent of repeat victimisation can be expressed as the concentration of crimes per victim, calculated as the number of crime divided by the number of victims. The 8154 victims in the 2002 NDC survey suffered a total of 36308 crimes. This can be expressed as a concentration of 4.5 crimes per victim. In other words victims of crime in the NDC sample suffered an average of 3.5 repeat crimes each. Excluding vehicle crime the concentration of crime was 3.9.

Research has identified crime concentration as the primary reason why areas suffer much crime. Studies into crimes as diverse as domestic burglary, domestic violence, crime on industrial estates and racial attacks have found that large proportions of crime are the consequence of high levels of concentration.

Comparing Figures 3 and 4 with earlier graphs 1 and 2 we find that crimes such as vandalism have both higher prevalence and higher concentration. Crimes such as theft from the person have lower concentration and prevalence. Others have lower prevalence but a higher concentration, most notably racial abuse.

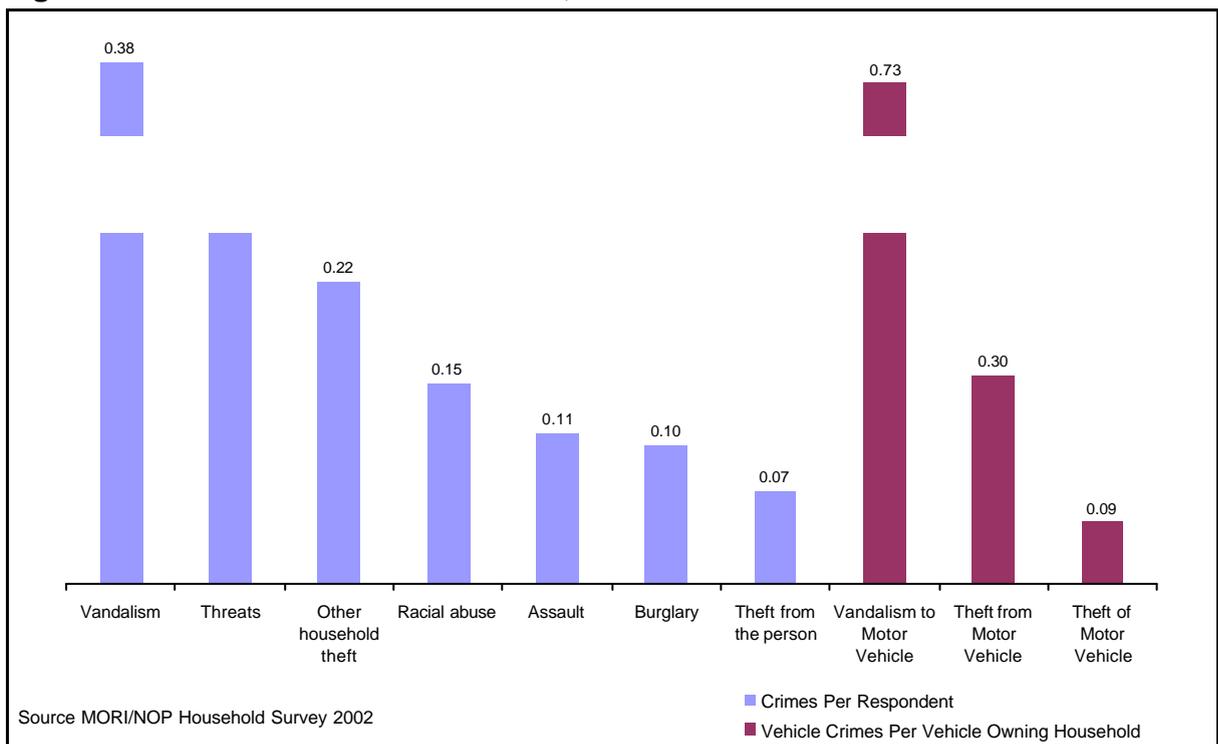
Figure 4: Proportion of Victims of Vehicle Crime who were Victimized More than Once (Concentration)



2.3. Incidence: Number of Crime Events

The number of victims and the number of crimes per victim combine to produce the overall crime incidence. Crime incidence refers to the number of crime events that have occurred in a given area. Incidence is often expressed as the number of events suffered per head of population; this allows comparisons to be made across areas with different sized populations. In this report incidence is expressed as number of crimes per respondent. Incidence is the measure typically reported in official statistics about the extent of crime.

Figure 5: Crime Incidence in NDC Areas, MORI 2002



In 2002 crime incidence (as measured by self-reported incidents) in NDC partnerships exceeded national comparators. In total the 19574 survey respondents in the 2002 NDC survey reported experiencing 36308 crimes (25741 non-vehicle crimes and 10567 vehicle crimes). Figure 5 shows the incidence of different types of crime per respondent in the survey. The largest proportion of these crimes constituted vandalism to property and threats. Burglary and assaults were the least frequently occurring crimes. Only households in possession of a vehicle were asked questions about vehicle crime therefore the incidence of these crimes are expressed per vehicle owning household. Vandalism to Motor Vehicles was the most frequently occurring vehicle crime, theft of motor vehicle the least frequently occurring.

There was a degree of variation across NDCs both in the total number of crimes occurring and in the type of crime. For instance the level of crime in Oldham was three times higher than the total for Walsall. The crime profiles for each area also varied. NDCs that ranked amongst the worst for some crimes had far lower incidence of other crimes. Southampton had amongst the highest levels of threats of violence, vandalism and car crime but levels of burglary, other thefts and assaults were low compared to other NDCs. Fulham had one of the lowest levels of crime amongst NDCs however incidents of theft from motor vehicles were high compared to other NDCs. Perhaps because all NDCs are high crime areas differences in crime profiles were marginal and on the whole most areas suffered significantly from most types of crime.

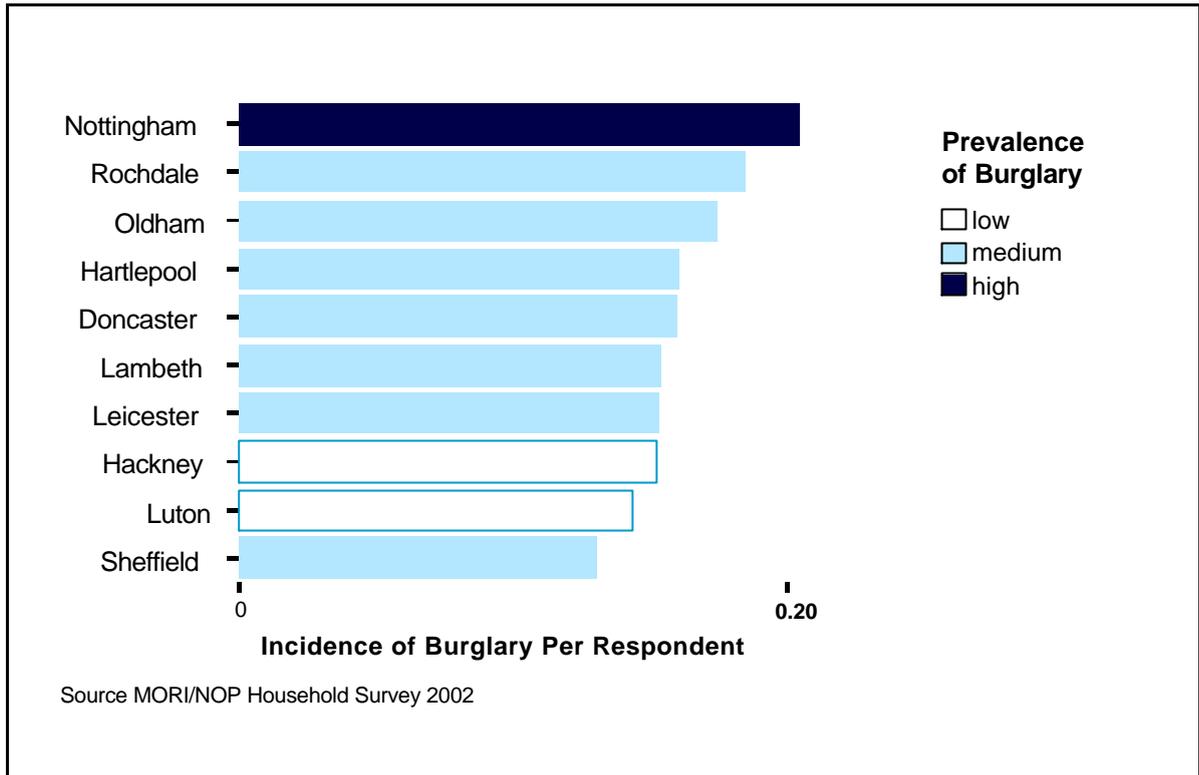
36308 crimes between 19574 respondents produces an incidence rate of 1.8 crimes per person interviewed. Excluding vehicle crimes the incidence rate was 1.3 crimes per respondent. The NDC partnerships with the highest number of self-reported crimes in the 2001 NDC survey were Oldham, Nottingham and Bristol. On average respondents in these areas experienced 2 crimes per person (excluding vehicle crimes). The NDC with the lowest number of self-reported crimes (excluding vehicle crimes) in the 2001 survey was Tower Hamlets where respondents experienced 0.7 crimes per person on average.

The disadvantage of the crime incidence statistic is that it assumes that everyone in a given population has the same risk of becoming a victim and that everyone experiences the same amount of crime. Crime is unevenly distributed across areas and across individuals. Crime prevalence and crime concentration can help to understand this distribution. Crime prevalence and incidence were very strongly correlated for most crimes. In other words the higher crime NDC areas were areas which had a greatest number of victims. This relationship was not as strong for assault and racial abuse, which suggests that concentration (repeat victimisation) is particularly important in explaining these crimes. Consequently it is important to know whether an area has a high rate of crime because of high prevalence, high incidence or both.

2.4. The relationship between prevalence and concentration

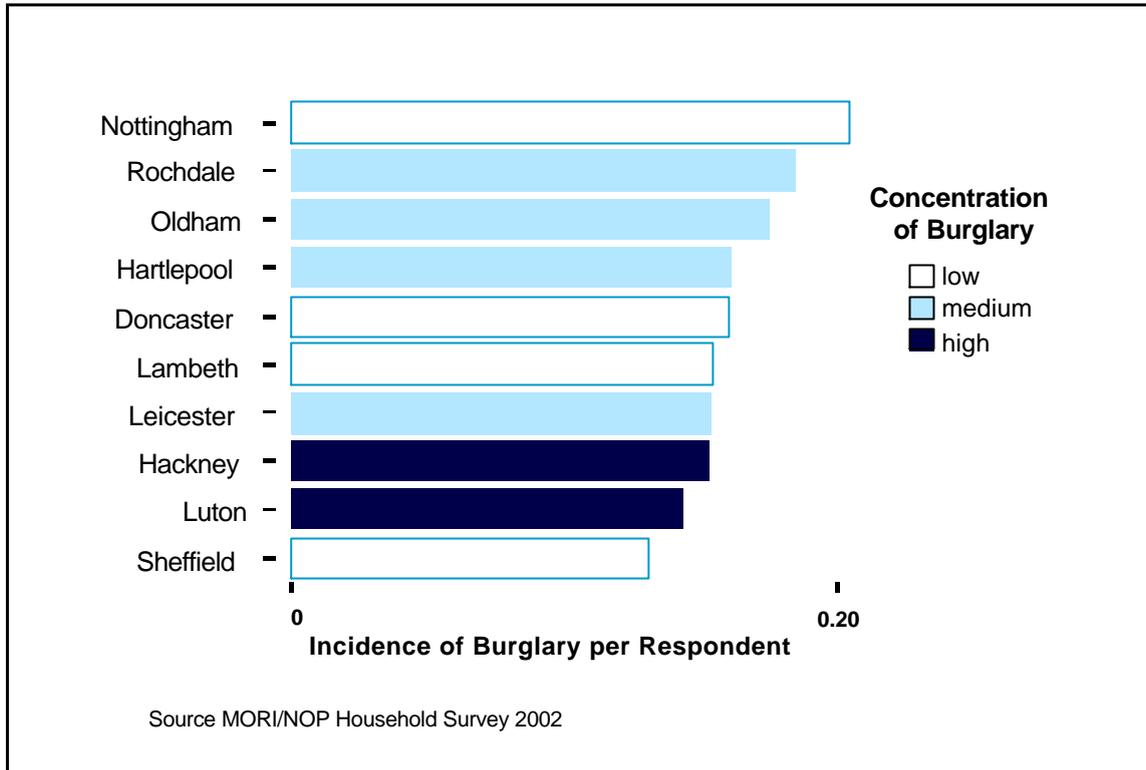
The following section explores the relationship between prevalence and concentration of crime in the NDCs areas. The following charts, Figures 6 to 9, illustrate the relationship between prevalence and concentration for different crimes included in the NDC household survey. The length of each bar represents overall crime incidence. The colour of the bars represents the level of crime prevalence (Figures 6 and 8) or concentration (Figures 7 and 9). We have already noted that levels of prevalence, concentration and incidence in NDCs areas are high compared to national rates. In relation to national comparisons few of the areas included in the survey could be regarded as having low levels of prevalence, concentration. The classification of high/low prevalence and concentration is therefore only relative to the scores of all other NDCs on that crime category.

Figure 6: Incidence of Burglary By Prevalence



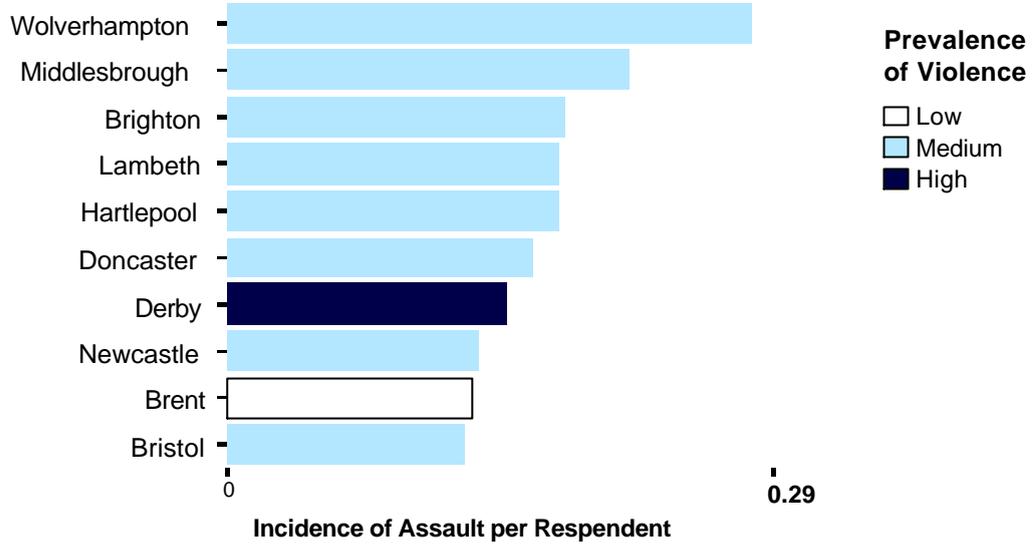
Figures 6 and 7 show the contributions that prevalence (Figure 6) and concentration (Figure 7) made to the overall incidence of burglary in the 10 NDC areas with the highest incidence of burglary. The graphs illustrate how areas with similar levels of burglary can present different profiles of concentration and prevalence. Incidence of burglary was highest in Nottingham with 0.20 burglaries per respondent. Nottingham had a high level of prevalence and a low level concentration compared to other NDCs. This suggests that the burglary problem in Nottingham NDC is attributable to a large number of victims more than a high level of repeat victimisation. Hackney and Luton both had high levels of burglary incidence but in contrast to Nottingham they had lower levels of prevalence. In these areas it is the higher degree of concentration that produced the high incidence of crime. The burglary problem in these areas is attributable to a high level of repeat victimisation rather than a large number of victims. An analysis that only includes the number of victims would underestimate the rate of burglary in Hackney.

Figure 7: Incidence of Burglary by Concentration, MORI 2002



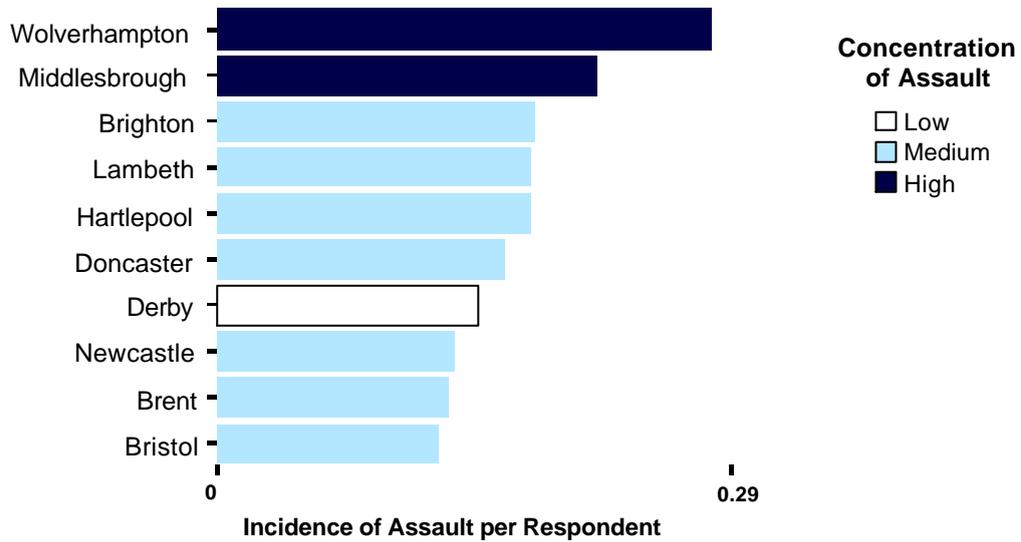
Figures 8 and 9 present the same relationships for assault for the 10 areas with the highest incidence of this crime. Wolverhampton and Middlesbrough had the highest levels of assault with 0.29 and 0.22 crimes per respondent respectively. The number of victims (prevalence) in these areas was modest (Figure 8) and the high levels of assault can be attributed to these areas having the highest levels of concentration with around 5 crimes per victim in each of these areas. In contrast Derby had a relatively low level of concentration of assaults but can still be found in the top 10 NDCs for this crime due to the highest level of prevalence i.e. the greatest number of victims. The contrasting profiles of assault in Wolverhampton, Middlesbrough and Derby highlight the importance of discovering the relationship between prevalence and concentration for any given crime problem before drawing up crime reduction strategies.

Figure 8: Incidence of Assaults by Prevalence



Source MORI/NOP Household Survey 2002

Figure 9: Incidence of Assault by Concentration



Source MORI/NOP Household Survey 2002

3. Crime Change between 2002-2004

Table 1 shows the change in prevalence, concentration and incidence by crime type between 2002 and 2004. The results from the household survey suggest there have been substantial reductions in crime across the NDC programme area. For all crime types there was a reduction in incidence and prevalence. Decreases in incidence were highest for theft of and from vehicles and lowest for racial abuse. In most cases there was a reduction in the degree of concentration. The exceptions to this rule were thefts from the person, threats and racial abuse, for these crime types the degree of concentration increased. The increase in concentration served to limit any reduction in overall incidence.

Table 1: Change in NDC Self-Reported Crime 2002-2004

	Prevalence			Concentration			Incidence		
	2002	2004	% Change	2002	2004	% Change	2002	2004	% Change
Burglary	0.07	0.05	-30	1.49	1.49	0	0.10	0.07	-30
Other Household Theft	0.12	0.10	-22	1.85	1.78	-4	0.23	0.17	-25
Theft from the Person	0.05	0.03	-33	1.38	1.45	+5	0.07	0.05	-29
Assault	0.05	0.04	-18	2.41	2.20	-9	0.12	0.09	-25
Vandalism	0.14	0.11	-21	2.62	2.47	-6	0.38	0.28	-25
Threats	0.09	0.08	-16	2.91	3.10	+6	0.26	0.23	-11
Racial Abuse	0.042	0.036	-14	3.96	4.43	+12	0.17	0.16	-3
Theft of Motor Vehicle	0.06	0.05	-24	1.56	1.40	-10	0.10	0.07	-32
Theft from Motor Vehicle	0.17	0.13	-25	1.83	1.69	-8	0.31	0.22	-31
Vandalism to Motor Vehicle	0.34	0.29	-16	2.12	2.05	-3	0.72	0.59	-18

Source: MORI/NOP Household Survey 2002/4

In total 28934 crimes were reported in the 2004 survey, 1.5 crimes per respondent a reduction from the 2002 figure. Excluding vehicle crime the number of crimes per respondent reduced from 1.3 to just over 1. In the absence of individual level data for 2004 it is not possible to produce accurate prevalence and concentration figures over all crime types. Victims of one crime may also have experienced other crime thus summing the number of victims across crime types could result in double counting.

Reductions were not consistent across NDCs. The majority of NDCs mirrored programme level reductions but a minority “bucked this trend” and experienced substantial increases in some types of crime. Understanding the relationship between concentration and prevalence is central to an understanding of why crime has increased and the implications of crime change. Examples of crime change for theft from the person and racial abuse will be used to illustrate this point. The small numbers of crimes reported in each area mean that the analysis is not statistically reliable. The purpose of the section is merely illustrative, to demonstrate the different ways in which changes in crime prevalence and crime concentration combine to influence the overall incidence of crime.

3.1. Theft from the Person

Incidence of theft from the person reduced both at the programme level and in the majority of individual NDCs. However three NDCs experienced substantial increases. For two of these areas (Sandwell and Sunderland) the increase cannot be explained by an increase in the number of victims. Sunderland had one fewer victim than in the previous survey and Sandwell had only one additional victim. For both areas, most notably in Sandwell,

increases in crime incidence were a consequence of an increase in the number of crimes per victim (an increase in concentration). Analysis of the responses from these areas confirms the level of repeat victimisation in Sandwell. Table 2 shows that 4 victims in Sandwell experienced more than 30 incidents of theft from the person. In Leicester repeat victimisation remained relatively low and in this case the increase was the result of an increase in the number of victims.

Table 2: Number of times victims of theft from the person were victimised, Sandwell and Leicester NDCs

In the last 12 months how many times was anything you were carrying stolen – out of your hands or from your pockets or from a bag or case?		
	Sandwell	Leicester
1	10	12
2	3	4
3	0	0
4	0	0
5	0	0
6-10	0	0
11-15	0	0
16-20	0	0
21-25	0	0
26-30	0	0
More than 30	4	0
Too many to remember	0	0
Concentration	7.8	1.25

Source: MORI/NOP Household Survey 2004

Figures 10 and 11 depict this example graphically. The small number of crimes inflates the percentages therefore figures have been omitted from the chart. What is important is the relative degree of change, represented by the length of the bars. The colour of the bars represents the degree to which prevalence (Figure 10) and concentration (Figure 11) has changed between 2002 and 2004 for this crime in each NDC area. The graph clearly shows that Sandwell had a substantial increase in repeat victimisation/concentration. While incidence increased substantially in Leicester there was no real increase in the level of concentration.

Figure 10: Change Incidence of Theft from the Person by Change in Prevalance

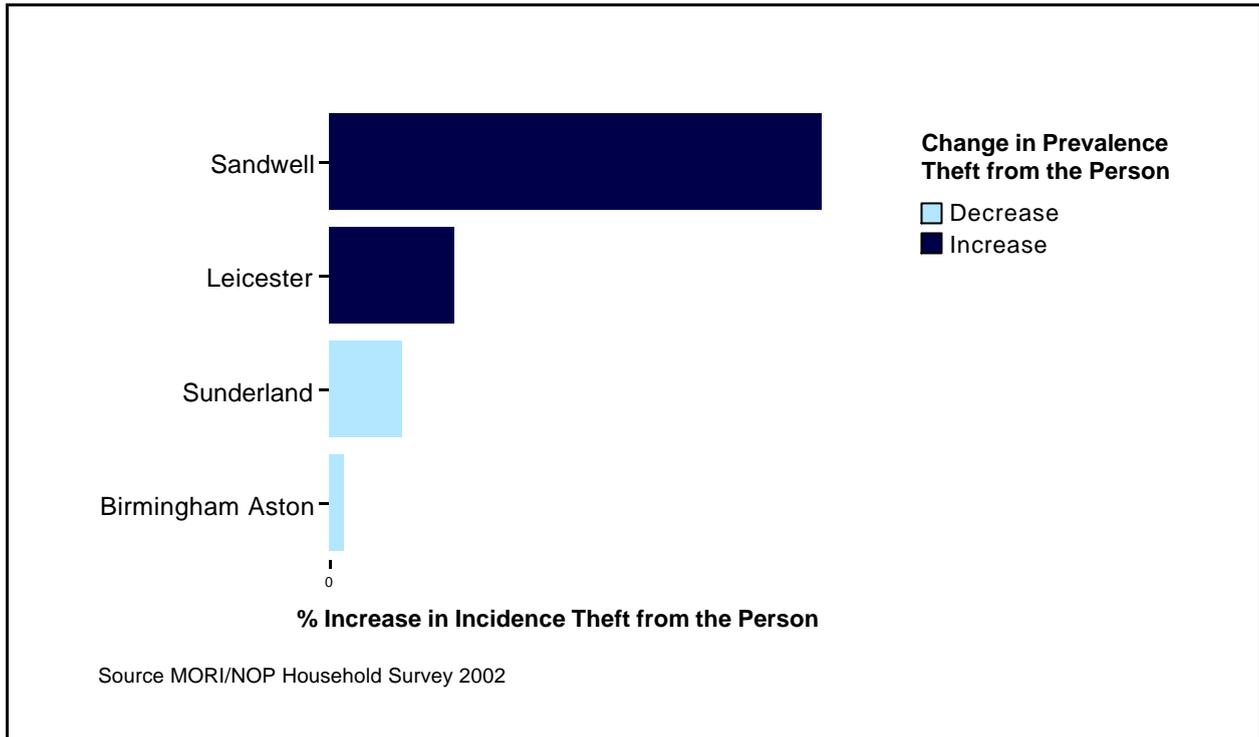
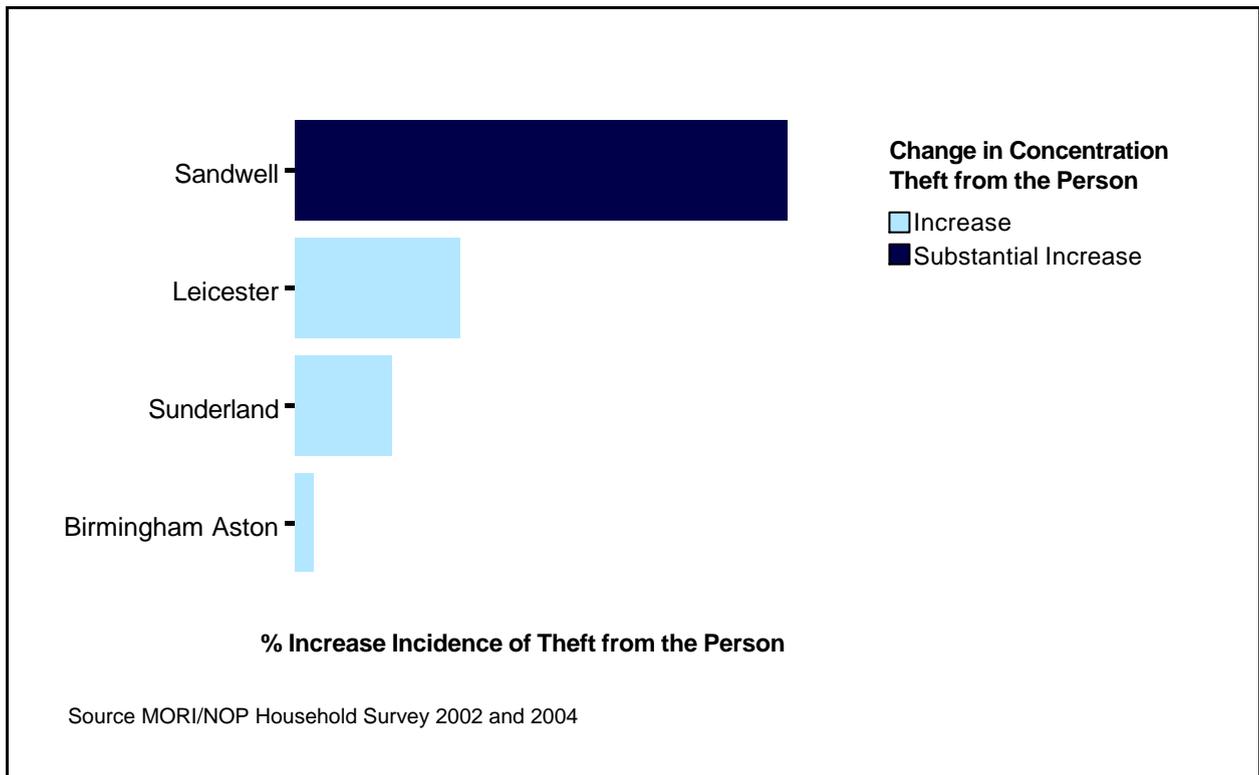


Figure 11: Percentage Change in Theft from the Person by Change in Concentration



Analysing different crime counts together provides an improved picture of crime patterns; analysing crime counts in isolation presents a number of pitfalls:

- analysis of prevalence in isolation from concentration would under-estimate the problem of theft from the person in Sandwell

- analysis of incidence without attention to concentration would miss the repeat victimisation suffered by victims of theft from the person in Sandwell

An accurate picture of crime trends enables an informed choice of crime reduction strategies. Interventions to reduce theft from the person should take a different approach in Sandwell and Sunderland than in Leicester.

3.2. Racial Abuse

According to the household survey, between 2002 and 2004 there was a 3% reduction in the incidence of racial assault. However there was variation in the direction and extent of change within individual NDCs. Figures 12 and 13 depict increases in racial abuse for NDCs selected to illustrate contrasting compositions of crime incidence. Figure 12 depicts the relationship between change in crime incidence (length of bars) and change in prevalence (colour of bars) and Figure 13 depicts the relationship between change in crime incidence and prevalence.

Figure 12: Percentage Change in Racial Abuse by Change in Prevalence

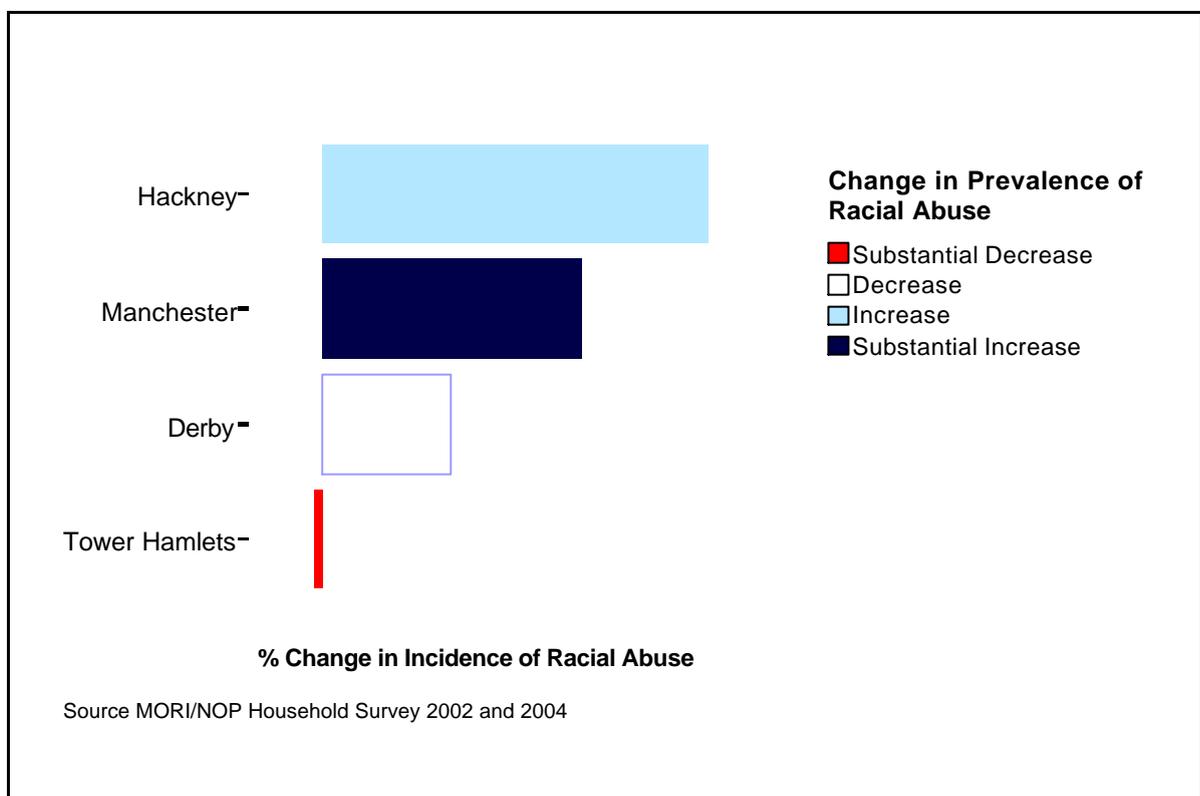
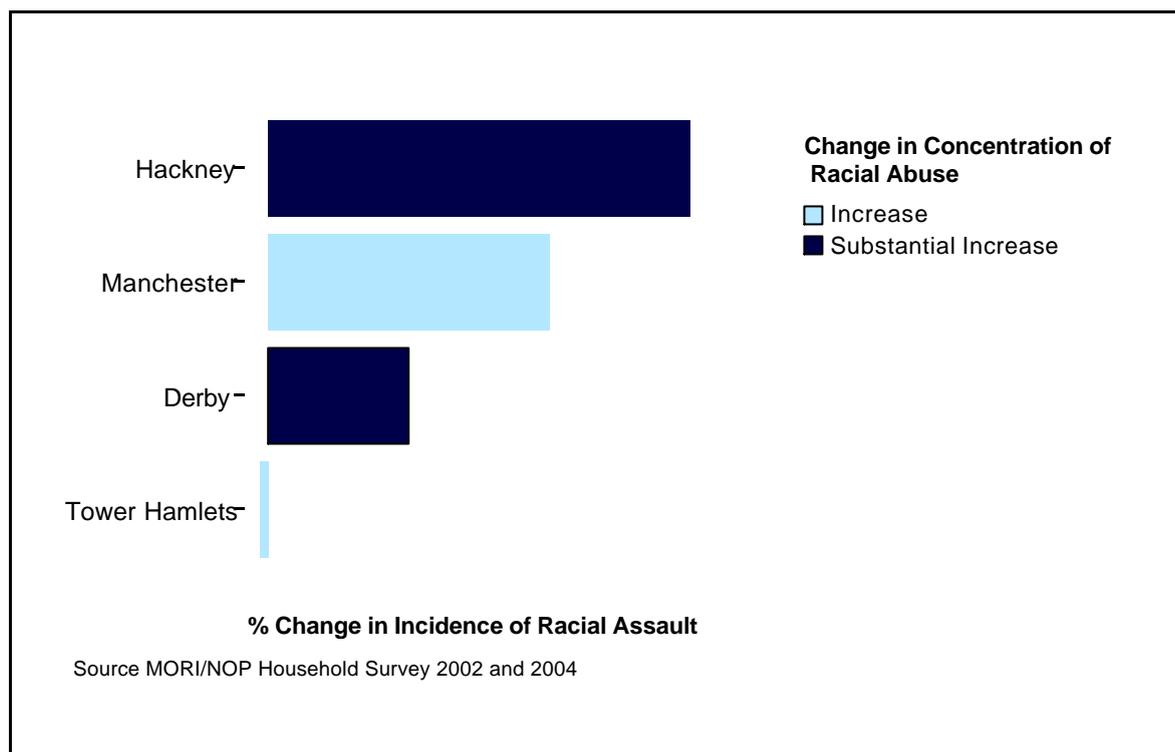


Figure 13: Percentage Change in Racial Abuse by Concentration



The greatest percentage increase in the incidence of racial abuse was reported in Hackney. Figure 12 demonstrates that this increase coincided with an increase in the number of victims; this was a small increase with an additional of 1.4 victims in 2004. Figure 13 depicts substantial increase in the concentration of racial abuse in Hackney; this was a rise of 10.3 to a total of 12.8 crimes per victim in 2004. Thus the increase in Hackney can be attributed to an increase in crime concentration. In contrast the increase in the incidence of racial abuse in Manchester is largely attributable to an increase in prevalence. The number of victims of this crime in Manchester increased by 16. There was also an increase in concentration with an extra 1.6 crimes per victim. While the increase in concentration is far lower than that found in Hackney it is still a considerable increase. In Derby prevalence of racial abuse decreased between 2002 and 2004 but incidence still increased as a result of a substantial increase in concentration. Thus although there were fewer victims in Derby a higher level of repeat victimisation resulted in an overall increase in the incidence of racial abuse. In Tower Hamlets the number of incidents of racial abuse and the number of victims both reduced. However increases in concentration increased to 9 incidents per victim representing an extremely high level of repeat victimisation. These examples further reinforce the need to consider different crime counts together:

- analysis of prevalence alone would underestimate the extent of racial abuse in Hackney
- analysis of prevalence is important to identify the increasing number of racial abuse victims in Manchester
- counts of the number of victims in Derby would suggest that racial abuse is on the decline. Analysis of concentration is essential to understand the increase of this crime here
- in Tower Hamlets analysis of incidence and prevalence alone ignores the experiences of repeat victims of racial abuse

Once again the different compositions of crime incidence in these area should point to the use of very different reduction strategies.

4. Crime Prevention Strategies - Concentration and Prevalence

The sections above have demonstrated the varying contributions that crime concentration and crime prevalence can make to the overall incidence of crime. It was argued that these contributions should guide the selection of appropriate crime reduction strategies. The interventions employed to tackle crime in conditions of high prevalence and high concentration need not be that different. It is the strategy for implementing them, specifically the targeting of resources that should be distinct. High levels of concentration point to victim based targeting that focuses resources at the most vulnerable. In areas of high prevalence the focus should be wider with area-based initiatives.

Table 2 presents a list of crime prevention strategies that are being employed within NDC areas. None of the strategies are exclusively area or victim based, but they are grouped under the category for which they are most commonly used and/or are most suited.

Table 3: Targeting Crime Reduction Interventions

Area Based	Victim Based
Neighbourhood Wardens	Target Hardening of Individual Properties
Increased Policing	Support for Victims
CCTV	Alley-gating
Education and Awareness Campaigns	Neighbourhood Watch
Streetlighting	Property Marking

Target hardening is being employed by at least 16 NDCs. This is particularly suited to the reduction of repeat victimisation of property crime. In many cases it was unclear how NDCs were focusing their target hardening efforts. In several cases it appeared that either target hardening equipment was distributed area wide or their availability was advertised and distributed on a first come first served basis. Area wide implementation of target hardening can be expensive and should implementation be unsuccessful non-hardened properties become more vulnerable. When recipients are left to select themselves for assistance there are no guarantees that vulnerable residents will come forward first, if at all, and resources may be exhausted before they are reached.

Victim focused intervention ensures that the most vulnerable individuals receive priority assistance. Target hardening is being directed towards victims of crime in a number of NDCs including Hartlepool, Bristol and Rochdale. Focusing target hardening resources on victims of crime affords a higher level of service. A graded response is commonly used, such as bronze, silver and gold. Crime concentration occurs because once victimised a person or place has a greater risk of being victimised than one that has not. The risk of revictimisation increases the more a person or place has been victimised therefore increased levels of intervention are necessary. Subsequent offences follow rapidly after the first offence. Interventions need to be put in place quickly.

Neighbourhood Watch is most often employed on an area basis but has been found to be more successful when activity is clustered in small 'cocoons' surrounding victims addresses.

Education and awareness campaigns are most commonly used as an area wide strategy including posters, newsletters, leaflets and door to door visits (all of which are conducted in at least one NDC). Awareness campaigns can also be targeted towards those most at risk

such as letters posted to the vehicles owners who left property on view in their cars (Hackney).

Increasing the presence of police or the wider policing family is a common area based strategy, which is also widely employed across NDCs. Policing and Warden teams can also be mobilised to target specific problem areas and this may be identified either as areas with high prevalence or concentration. It is desirable to adopt a response to repeat victimisation that involves some form of detection activity. This is particularly appropriate since around 80% of repeat burglary victims are likely to have been re-victimised by the same offender.

4.1. Identifying Repeat Victims

In order to target repeat victims they must first be identified and located. In victimisation surveys victims identify themselves but surveys are too expensive and time-consuming to conduct with regularity. They do provide a useful tool to identify specific crimes and/or areas on which to focus the effort to identify victims.

Police data is the most frequently used source of information used to identify repeats. This has its limitations. Chronic victims are less likely to report crimes. They may have had previous negative experience with criminal justice agencies and may be resigned to experiencing victimisation. They may also fear reprisals associated with assisting the police. Initiatives to encourage the reporting of crime and to increase the avenues through which crimes can be reported will have additional benefits in the identification of repeat victimisation. NDC initiatives showing potential to encourage reporting include Neighbourhood Wardens, Professional Witnesses (Hackney) and Community Watch (Bradford).

Searching for repeat victims amongst recorded incidents is not an easy task. Many police systems have limited searching facilities. Incomplete, incorrect and inconsistent recording of information further hinders attempts to match incidents to victims. Efforts to improve the accuracy and availability of crime data are included in NDC delivery plans. A Crime Tracking Database & Analysis System in Newham is providing a computer system to receive data both from the police and other partner agencies. The system is designed to improve the ability to sort, link and analyse data. The system has the approval of the Police Foundation.

This use of standard Geographical Information Systems, searching geographically referenced crime locations can dramatically improve the time and accuracy of identifying repeats. While geographic information held by the police is commonly of insufficient accuracy to pinpoint the individual addresses where repeat victimisation occurs they can identify geographic areas of concentration in which to target crime reduction interventions. They can also be used to identify areas in which to further investigate crime concentration at the level of the individual victim.

Other community safety partners have contact with victims. In Rochdale Victim Support manages the referral of victims to a target-hardening scheme. Referrals include both those victims known to the police and those who did not wish to report the crime. Other departments may have untapped information sources. Housing agencies receive requests to move on grounds of victimisation. Accident and Emergency Departments provide an opportunity to identify victims of violence and domestic violence. The Department of Health encourage healthcare professionals to include routine enquires about domestic violence during antenatal appointments. 30% of domestic violence cases are known to start or to intensify during pregnancy and it is hoped that providing women with the opportunity to talk will identify domestic violence in its early stages.

It is essential that staff in partner agencies are aware of the range of support and assistance available to victims to ensure that identification can be followed by a swift response. Research has shown that victims of domestic violence can be passed through up to 10 agencies before receiving the support that they need. Delays should be avoided at costs as victims are at greatest risk of repeated victimisation shortly after the initial crime.

5. Conclusion

Self reported crime victimisation in the NDC household survey was higher than in the British Crime Survey. NDC respondents were more likely to become a victim of crime and victims more likely to experience a greater number of crimes. NDC household survey results for 2004 provide evidence of substantial reductions in the incidence and prevalence of crime across all crime types and reduction in the concentration of crime across most crime types.

High crime (incidence) is the result of either a high proportion of victims, (prevalence), a proportion of crimes per victim, (concentration), or a mixture of the two. Prevalence and concentration in all of the NDC areas is high by national standards. However there is sufficient variance between NDCs on these crime counts to explore how different levels of prevalence and concentration produce high levels of crime incidence.

In the NDC areas high levels of crimes such as theft from the person and domestic burglary tended to be associated with higher prevalence. High levels of crimes such as assault and racial abuse tended to be associated with higher levels of concentration. However these patterns were not consistent across NDCs and analysis demonstrated how areas with similar levels of crime had contrasting levels of prevalence and concentration

Implications for policy and practice

- it is essential to determine whether crime levels and crime changes are the result of crime prevalence or concentration or a mixture of both
- analysis of prevalence in isolation from other crimes can underestimate the real level of crime
- analysis of incidence and prevalence without attention to concentration would miss any repeat victimisation endured by victims
- when incidence levels remain unchanged crime can appear static. However beneath this change there may be a shift from prevalence to concentration or visa versa
- analysis of all crime counts is required to fully understand any crime problem. Performance indicators should include both prevalence and concentration. Regular audits of crime trends should also report on these counts in addition to crime incidence
- successful crime reduction strategies will be those that address the distribution of crime in an area, be that high prevalence, high concentration or a mixture of both
- the difference between strategies to tackle high prevalence and strategies to tackle high concentration is not the interventions themselves; most can be adapted to suit either model. The important difference between the two sets of strategy is the level of coverage and the targeting of resources
- tackling concentration requires the identification of repeat victims, this process can be enhanced by:

- improvements in data recording standards. This should include both technical solutions and a focus on training staff in the importance of accurate records
- encouraging victims to report crime, either directly to the police or by providing alternative reporting opportunities
- enlisting the help of partner agencies that have contact with victims
- partner agencies should be “plugged in” to services available for victims to ensure a swift response
- all agencies should work quickly, the high-risk period for revictimisation is shortly after the original offence

6. Further Reading

<http://www.crimereduction.gov.uk/toolkits/atoz/index.htm>

Farrell, G., Edmunds, A., Hobbs, L. and Laycock, G. (2000) *RV Snapshot: UK policing and repeat victimisation*. <http://www.homeoffice.gov.uk/rds/crimreducpubs1.html>

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