

An aerial night view of London, showing the city lights and the River Thames. A large, dark grey hexagonal grid is overlaid on the image, with several hexagons filled with a bright blue color. The title text is positioned on the left side of the grid.

Violence in London: what we know and how to respond

A report commissioned
by the Mayor of London's
Violence Reduction Unit

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THE
BEHAVIOURAL
INSIGHTS
TEAM

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Executive Summary

In the early hours of the first day of January 2019, a man was killed while working as a security guard at a New Year's Eve party after he intervened to help a colleague involved in a struggle. In February, a man was murdered after refusing to give a stranger a cigarette in an off-licence. In March, a teenager was stabbed to death by another teenager in an alleyway. In April, a woman was found beaten to death in a flat. Her partner was charged with her murder.

These are some of the Londoners who lost their lives to violence last year. Their deaths illustrate the human consequences of violence in the capital, to the victims, those who loved them and their communities. They bring to the fore the pressing question - how can we prevent these tragic incidents from happening?

Though it plays a vital part, the criminal justice system alone cannot prevent violence and its consequences. A different approach is needed. One that seeks to understand the underlying drivers of violence, and can bring public sector agencies together with communities to address them.

The London Violence Reduction Unit (VRU) was set up in 2018 to drive this change in approach. Its goal is two-fold: firstly, to stabilise and reduce violence in the short term; secondly, to understand the underlying causes of violence and coordinate London's communities and public organisations to address those causes in the longer term.

Last year, the VRU commissioned the Behavioural Insights Team (BIT) to develop a Strategic Needs Assessment to inform its approach to violence prevention in London. Strategic Needs Assessments are typically used in health and social care to identify the current and future health needs of local populations to inform and guide the planning of services within a local authority area.

Violence encapsulates a broad and complex set of behaviours, which can be both difficult to measure and difficult to prevent. Partly as a result of this, the evidence on what works to prevent violence is thin. The VRU and its partners must confront the problem that exists now – making the best decisions they can with the available evidence – whilst at the same time they must build the evidence base to inform future decisions.

This report will help the VRU and partners achieve that. We bring together existing research and analysis to present an assessment of what we know about violence in London, highlight what we do not know and set out recommendations for how the VRU and partners should respond.

Where possible, we draw on data and empirical evidence identified through research methods that enable us to test theories and hypotheses. In doing so, we do not disregard the human experiences that are behind the data, nor the voices of experienced practitioners and London's communities. Instead, we aim to complement these with evidence of large-scale patterns and trends to help inform the VRU's activities.

Understanding violence and working out how to prevent it is difficult. There is unlikely to be any quick fix or simple answer. But drawing on evidence to complement the strength and expertise of London's communities and public services, and with the additional funding that has been provided by the Mayor of London and central government, we have an opportunity to pave the way for significant reductions in violence now and for future generations of Londoners.



Understanding violence in London

Last year, violence in London cost £3 billion. Though London is one of the safest cities in the world,¹ violence in the capital has tragic human consequences and high costs. These costs include those incurred in anticipating and responding to violence as well as the direct consequences of violence, such as losses in victims' years of life, quality of life, and economic output.

After almost a decade of decline, violence in London has increased in recent years. Police recorded data have shown significant increases in violence. For example, violence against the person offences, which include homicide and violence with and without injury, have increased by more than 60 per cent since 2014.

While this is in part driven by improvements in police recording, hospital admissions data corroborate this increase to some extent: hospital admissions for assaults with a sharp object increased by 32 per cent from 2013/2014 to 2017/18.

Of most concern is the fact that violence appears to have become more serious, as well as more frequent, likely driven by an increase in the use of knives: the proportion of attempted murders and robberies involving a knife has increased by five percentage points since 2014.

Violence in London is highly geographically concentrated. As a result, considering a London-wide picture of violence can mask significant variation. Violence in some boroughs may be low, or decreasing, but there may be specific locations within those boroughs where violence is high or increasing. Borough level – or even ward level – comparisons are often unable to detect this. Recent analysis confirms that many forms of violent crime are heavily clustered in a tiny proportion of small geographical units (or Lower Layer Super Output Areas, LSOAs), which contain a maximum of 3000 residents. (From here, we refer to LSOAs as “neighbourhoods”). This brings us to an important conclusion of this report: that smaller is better – a highly localised approach is essential for understanding and responding to violence in London.

The majority of London's neighbourhoods have not experienced increases in violence between 2013 and 2017 and violence actually decreased in many areas over this period (sometimes in close proximity to areas of high increases). Just six (i.e. fewer than 1 per cent) of all of London's neighbourhoods showed a large and increasing violent crime rate between 2013 and 2017. Given this geographic concentration of violence in the capital, it is essential that we understand the interaction between specific locations with broader demographic and attitudinal characteristics before concluding who might be at risk of violence (both as victims and perpetrators). Failing to do this will likely lead to ineffective and potentially stigmatising targeting.

Neighbourhoods that have suffered high levels of violence are also likely to have higher levels of deprivation. It is not possible to say for certain what explains the concentration of violence in London, but deprivation appears to be an important part of the story. Income deprivation is the strongest predictor of high violence in a specific neighbourhood. Deprivation, poor community cohesion, and weak trust between neighbours may set the conditions for gangs to prosper. As forthcoming research from the London School of Economics (LSE) shows, gangs tend to 'form' in areas of London where there are higher levels of deprivation, higher proportions of migrants, lower house prices, and lower average education levels. In addition, the deprivation of certain London neighbourhoods and their vulnerability to gangs appears to be deep seated. Just over half of all the poorest neighbourhoods in London were also the poorest over a hundred years ago and gang territories identified today map on well to streets identified as poor in 1900.

¹ In 2018/19 London's homicide rate was lower than that of other cities with which it is often compared, including New York and Glasgow.

However, levels of community cohesion and social trust have a protective impact against violence.

Though income deprivation is the strongest predictor of neighbourhood vulnerability to violence, the relationship between neighbourhood deprivation and violence is not consistent. Neighbourhoods that do not have levels of high violence exist in highly deprived areas and, indeed, a smaller number of high-violence neighbourhoods exist in areas that are not deprived. We cannot be certain about what explains the resilience against violence of some London neighbourhoods but community cohesion and social trust seem to be protective factors. Evidence suggests that when neighbours know and trust each other, and share common expectations for their neighbourhood, they are more likely to take greater collective responsibility over public safety in their area. This can translate into actions like confronting people who are visibly disturbing public spaces. In addition, neighbourhoods with greater collective efficacy may be more likely to organise themselves to work with the police and other agencies to prevent violence.

The 2008 recession, along with subsequent reductions in public spending, is likely to have increased the vulnerability of some London neighbourhoods to violence. It is not possible to determine a causal link between the effects of the 2008 recession and rates of violence in London. However, based on past research and current data, we think it is very likely that reduced opportunities, declining real wages and reductions in public spending have increased the vulnerability of some of London's most deprived communities to violence.

Research shows that the recessions are linked to increased crime rates due to fewer labour market opportunities, greater stress due to financial worry, and more leisure time. In addition to these direct effects, it is likely that reductions in funding for public services since 2010 and associated increases in caseloads, have made it more difficult to identify and seize opportunities to prevent violence. To illustrate, between 2011/12 and 2018/19, 46 per cent of funding from London council youth services was withdrawn. Analysis by the London School of Economics shows a correlation between large reductions in funding for boroughs and increases in the knife crime rate.

Finally, reductions in police and wider criminal justice capacity are likely to have made it more difficult to disrupt and deter violence. The number of front-line staff in the Metropolitan Police Service (MPS) fell by 10 per cent from 2010, while the number of civil support staff fell by 37 per cent. Over the same period, reductions in funding for the wider public sector led to an increase in so-called non-crime demand to the police, meaning that officers' time was stretched even more. This has made it more difficult for the MPS to invest time to build relationships and carry out preventative work in neighbourhoods vulnerable to violence.

The most important indicators of the ability of the police (and wider criminal justice system) to apprehend and punish violent offenders tell the same tale. Since 2010, sanction detection rates for knife crime have halved from 27 per cent in March 2014 to just 13 per cent in March 2019; homicide detection rates have fallen; and charge rates for violent offences have almost halved from around 15 per cent in 2014/15 to around 8 per cent in 2018/19. To compound this, the public's perception that the police and other agencies can protect them has worsened. Coupled with perceptions of rising violence, these perceptions can themselves increase the risk of violence further: a lack of trust in the police and criminal justice system can lead victims to become perpetrators as they seek revenge, carry a weapon, or seek protection from others as opposed to the police.

The effect of these changes in labour market conditions and public sector safety nets may have been compounded by changes in drug markets. There is evidence that over the same period the street drug market has become both more lucrative (due to increases in the supply and purity of cocaine) and more competitive (due to greater competition from online suppliers of narcotics). This combination of a more lucrative yet smaller street market may have driven violence by increasing the competition between organised criminal groups. It may also have driven the rise of county lines, the term used for drug gangs from big cities expanding their operations to smaller towns. County lines enterprises often rely on violence to drive out local leaders and the exploitation of vulnerable people as couriers for drugs.

Responding to violence in London

So how should the VRU and partners respond to violence in the capital? To answer this question, we first set out how the VRU can optimise its efforts to stabilise and reduce violence in the immediate term. We then present a framework for driving long-term reductions in violence.

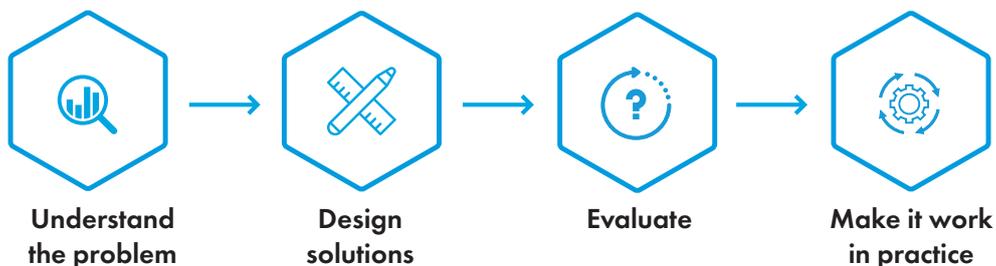
Conduct street and neighbourhood level analysis to identify severe vulnerability and target resources for maximum impact. The most effective way the VRU and partners can target resources and funding in the short term is by focussing on those neighbourhoods where violence is highest. In practice, this means targeting, for example, the top five or ten per cent of neighbourhoods vulnerable to violence; carrying out analysis using the smallest units possible, such as street segments; and using coordinate-level data to explore patterns in violence within these neighbourhoods, including identifying specific times when risk is high, such as the end of the school day.

Once neighbourhoods have been identified, the VRU should work with the police, local partners and communities to develop bespoke strategies for preventing violence and helping people feel safe. This could be achieved by deploying police officers to specific locations such as schools or bus stops at certain times; or making changes to the physical environment, for example through improvements in street lighting. An important part of this short term response should be to build the trust of those with low levels of trust and confidence in institutions, particularly in the police.

Drive a culture of iterative research and experimentation to bring about long-term reductions in violence. As this report will show, based on existing data and research there is still a lot it is not possible to know about violence in London: our understanding of the problem is incomplete, as is our knowledge of what will work to prevent it.

As a result, to bring about sustainable reductions, the VRU should drive a culture of iterative research and experimentation. In practice, this means collecting and using data to understand violence and its causes; building evidence to develop responses; and evaluating violence prevention approaches to establish what works and for whom. It also means being willing to find out that some approaches do not work; and having the courage to try things that might fail. If the VRU and partners successfully drive this change in approach, they can bring about a step-change in violence prevention in London. Below we present a framework for achieving this.

Figure 1. A framework for driving long term reductions in violence





Understand the problem

Improve our ability to measure, understand, monitor and anticipate violence. With a more precise understanding of violence, the VRU and partners are more likely to be able to respond effectively. However, our understanding of the frequency of violence, why it happens and to whom is significantly limited by what data is available, and how reliable that data is. For example, data limitations make it difficult to assess prevalence and trends in domestic abuse in London. As a result, plugging gaps in data collection and improving the accuracy of data that is collected must be an early priority for the VRU. To achieve this, the VRU should compile data sources into an easy to use, publicly available set of metrics. In doing so, it should:

1. Ensure that the metrics monitor the harm which is a consequence of violence, as opposed to only the frequency of violence;
2. Ensure that the metrics address gaps arising from under reporting (and gaps in measurement) by drawing on a wide range of data sources;
3. Ensure that the metrics capture the consequences of repeat victimisation and the unequal distribution of violence and harm across the population;
4. Work with partners to improve the accuracy of data that is recorded;
5. Ensure the metrics monitor Londoners' concerns about violence;
6. Track the correlates of violence (for example through more sensitive measures of drug consumption).

Commission research on the neighbourhood and situational drivers of violence in London. This report will highlight many unanswered questions. For example, why are some deprived neighbourhoods more vulnerable to violence than others; or what proportion of violent incidents are premeditated rather than impulsive? By commissioning research to shore up the hypotheses and facilitate answers to unanswered questions, the VRU can ensure its partners have access to the best evidence possible in designing responses. We identify two early research priorities for the VRU, based on where the gaps are greatest. The first is investigating the neighbourhood level risk and protective factors for violence in London. The second involves using unpublished data to understand the situational (immediate or catalysing) causes of violence (i.e. understanding the motives for violence, the contexts in which they happen, and the behaviours that precede them).

Use advanced analytical models to identify predictors of risk and intervention opportunities. The VRU and its partners have access to large swathes of administrative data, which present a good opportunity for identifying behaviours or combinations of risk factors which predict violence (as opposed to simply being associated with it). By drawing on advanced analytical techniques such as algorithmic analyses and natural language processing, the VRU can micro target resources where risk is highest and bolster the 'safety net' around those most vulnerable to violence. In particular, we recommend early analytical projects focus on: going missing and violence; the use of social networks for predicting violence; analysing social media sentiment to predict threat online; and exclusions and violence.

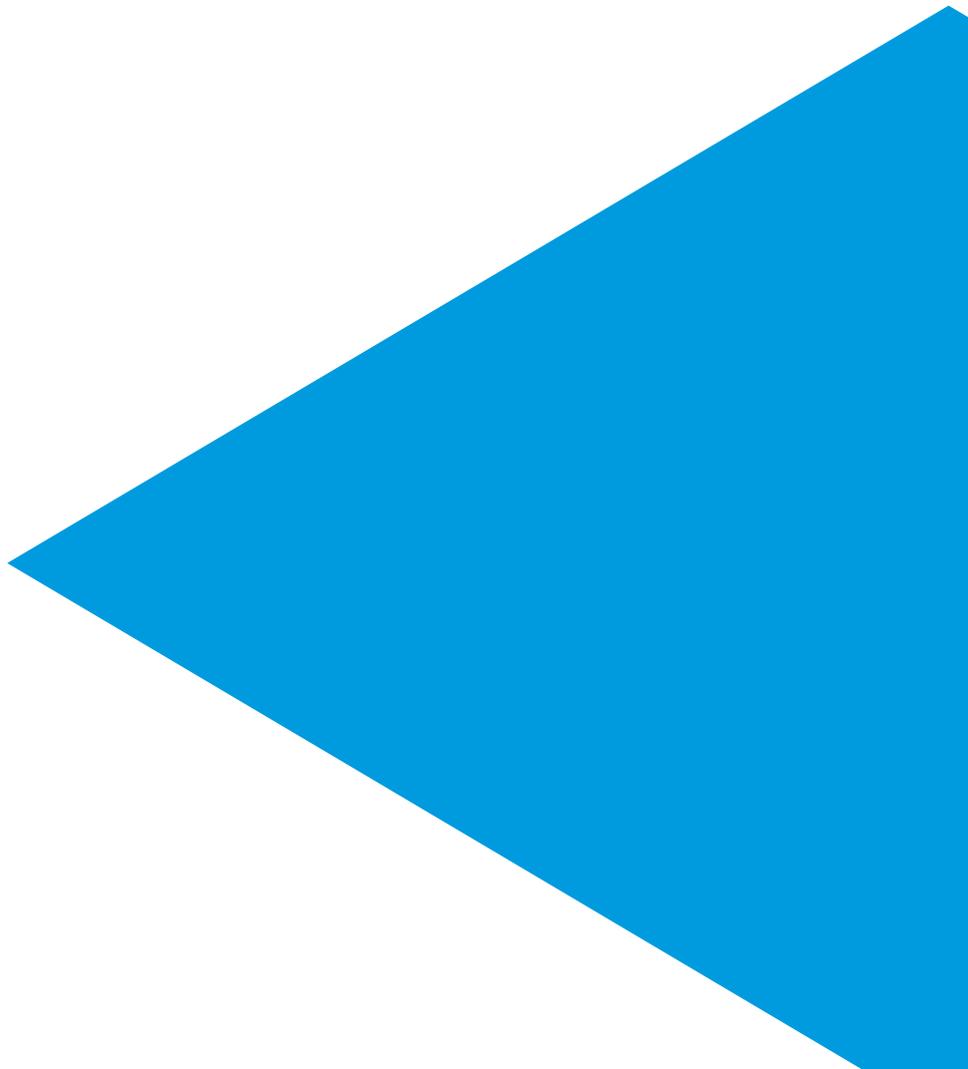


Design solutions

Design solutions drawing on evidence of what works. Drawing on what works to prevent violence is easier said than done due to the limitations of the evidence base on violence prevention. That said, the VRU and partners should not be constrained by the limitations of the evidence base (i.e. they should not take its limitations as a barrier to innovation – simply because an approach has not previously been evaluated, that does not mean it won't work). Instead, they should be informed by it, incorporating insights about what has previously been effective and why into new or existing programmes, and making commissioning decisions based on a good understanding of what we do and do not know. To support this, we have carried out a rapid review of the evidence on violence prevention approaches, which we present in the final chapter of this report.

Work with communities to adapt evidence for the local context. Simply 'lifting and shifting' approaches that have worked elsewhere is unlikely to be effective as the nature and underlying drivers of violence will vary from place to place and the effectiveness of an approach will depend on what is already in place. As a result, the VRU and partners should translate evidence, scrutinising whether what has worked elsewhere addressed equivalent underlying problems and working with communities to adapt approaches for local needs.

Ensure interventions reach those who need them. Even the best-designed programmes and services will not succeed if those who most need them do not want to, or cannot access them. To mitigate this risk, the VRU and partners should identify obstacles to accessing services and remove them so that services can be accessed by those who need them. These obstacles may be structural (for example a lack of time or money to engage) or behavioural and psychological (for example people who have been let down by services in the past may not want to engage with them again). By understanding the needs and perspectives of those who interventions seek to engage, and designing approaches based on this, the VRU and partners can increase the likely impact of preventative interventions.





Evaluate

Take a pragmatic approach to evaluation in the immediate term. Without evaluation, the VRU and partners will not know which parts of their approach work, nor how much and where resources should be invested as a result. There are currently hundreds of violence prevention interventions and approaches being delivered across London, of which the vast majority are not being rigorously evaluated. It is not realistic to expect there will be high quality evaluations to measure impacts on violence for each of these interventions overnight. Instead, the VRU will need to work with partners to incrementally build these programmes up so they are ready for evaluation. This should include working with partners to establish whether programmes are reaching those who are at risk of violence; and measuring their impact on vulnerability to violence (based on risk factors or outcomes associated with violence, identified through academic research). The VRU can then work with those programmes or approaches that are most promising and prepare them for more rigorous evaluation.

Generate a pipeline of interventions that can be more rigorously evaluated in the medium to long-term. In the medium term, the VRU should work with partners to foster a pipeline of interventions that can be more rigorously evaluated by the Youth Endowment Fund (YEF), a ten year, £200 million fund, established by the Government in 2019. To achieve this, the VRU should bring together the knowledge and local experience of its partners and London's civil society, provide them with evidence to complement their understanding; and build relationships between intervention providers and researchers.



Make it work in practice

Provide the resources, incentives and connections to drive iterative research and experimentation. While direct responsibility for many of the recommendations we present above sits with the VRU's partners, the VRU itself, through its convening, enabling and funding power has a critical role to play in providing the resources, incentives and connections to make them happen. In particular, the VRU can play an essential role in brokering data sharing agreements between partners; it can provide partners with analytical and research capability they need; and it can incentivise the use of evidence and evaluation through its funding arrangements.

Make multi-agency working as easy as possible. The VRU, as a new body independent from London's statutory agencies and councils, can play an enabling role in driving effective partnership working. To achieve this it can help to remove the barriers to partnership working (such as lack of shared space for meeting and different working patterns); take steps to break down cultural differences and increase cohesion across agency boundaries; and embed feedback loops to sustain multi-agency partnerships (for example feeding back how data collected in one organisation is used by another to prevent violence).





1. Introduction

Last year, the VRU commissioned two reports to help shape its approach to violence prevention in the capital. It asked BIT to develop this Strategic Needs Assessment for violence in London and the Social Care Institute for Excellence (SCIE) to conduct an analysis of statutory reviews of homicides and violent incidents to identify key causes and common patterns in homicides and harmful incidents in London. (Statutory reviews take place after certain types of homicides or harmful incidents). The two reports, which have been published in parallel, are intended to help the VRU and partners understand why violence happens and how it might be prevented.

The findings we present in this Strategic Needs Assessment are the culmination of six months of research, in which we have conducted interviews with academics, experts and VRU stakeholders to identify lines of inquiry; reviewed and synthesised published analysis and data to understand the nature of violence in London; and conducted a rapid evidence review on existing violence prevention approaches.²

How we define violence in this report

Violence, according to the World Health Organization (WHO), is: “the intentional use of physical force or power, threatened or actual, against oneself, another person, or against a group or community that either results in or has a high likelihood of resulting in injury, death, psychological harm, maldevelopment, or deprivation”.¹

The focus of this report, agreed with the VRU, is specifically on interpersonal forms of violence between family members, intimate partners, friends, acquaintances and strangers, including youth violence, intimate partner violence and sexual violence.³ We agreed that this would include the following offences: all violence against the person offences (homicide, violence with injury, and violence without injury); sexual assaults (rape and other sexual offences); and robbery. Note that though they are specific forms of violence that are frequently referred to, domestic abuse, gang violence and knife crime are not specific offence types and so are not demarcated in offence data. Instead, any violent offence can be ‘flagged’ as domestic, gang-related or knife-enabled. We excluded modern slavery and terrorism offences, along with offences pertaining to deprivation and neglect.

How we measure violence and interpret trends

Understanding violence and interpreting trends is challenging for a number of reasons. Violence is a behaviour that is often witnessed only by those involved, which makes it difficult to observe and measure. In this report, we primarily use recorded crime to measure violence. However, this has limitations because what constitutes an act of violence (in the eyes of the law, victims and perpetrators) changes over time. For example, victims of sexual violence may be more likely to recognise that they have suffered an act of violence due to changing social attitudes. As a result, the patterns we see in the data may at times reflect changes in attitudes towards certain behaviours as opposed to changes in the underlying prevalence of those behaviours.

In addition, some of the most serious forms of violent offences, such as homicide and firearms offences, are in statistical terms infrequent in England and Wales. When numbers are small, what look like changes in trend are more likely to be due to random variation. As a result we can be less confident in the patterns we see in the data for categories of violence where the base-rate is low.

Finally, all available measures of violence have their specific limitations. Below, we summarise the three main sources we draw on to form our assessment of violence in this report, along with their limitations. Throughout this report, we try to triangulate data sources wherever possible and highlight any caveats to assist the reader’s interpretation.

² Full details of our methodology are in the Appendix.

³ This does not include child maltreatment and elder abuse, which are distinct from other forms of interpersonal violence and require bespoke responses.

Table 1. Data sources used in this report and their limitations

Source	Description	Limitations
The Crime Survey for England and Wales (CSEW)	<p>A face-to-face victimisation survey that asks people about their experiences of a selected range of offences in the 12 months prior to the interview.</p> <p>It is considered to provide a reliable estimate of trends as a consistent methodology has been used to measure these crimes since it began in 1981.</p>	<p>Not all violent crimes are covered by the CSEW. The survey does not cover homicide as it is based on the responses of victims.</p> <p>The CSEW is also not well suited to measuring crimes that occur in relatively low volumes, for example, higher-harm violent crimes like gun and knife crime.</p> <p>Certain types of violence (such as domestic violence) may be under-reported in the survey because respondents may be inhibited from answering openly.</p> <p>The way respondents are identified may also limit the generalisability of the findings (e.g. the survey only includes those living in private households).⁴</p>
Police recorded crime	<p>Incidents reported or identified by the police where there is an identified victim and, on the balance of probability, the circumstances as reported amount to a crime defined by law and there is no credible evidence to the contrary.</p> <p>Police recorded crime is considered a better source of data for high-harm low- violent crimes that are not well measured by the CSEW due to their infrequency.</p>	<p>Police recorded crime statistics are affected by changes in police activity (for example, an increase in stop and search may lead to an increase in knife-possession offences).</p> <p>This measure cannot provide a full count of crime as not all crimes are reported to the police.</p> <p>A renewed focus on the quality of crime recording by the police since 2014 is thought to have led to a greater proportion of reported crimes being recorded by the police, which means we must be cautious in drawing conclusions about trends we see in that data since 2014.</p>
Hospital admissions, London Ambulance Service (LAS) or Helicopter (HEMS) data	<p>Incidents recorded by the NHS.</p> <p>These are not affected by changes in police activity or changes in recording practices. They also capture incidents of violence that are not reported to the police but for which the victim seeks treatment.</p>	<p>Hospital admissions are likely to capture more serious offences, as for the large majority of some violent offences recorded by the police the victim does not require hospital treatment.ⁱⁱ</p> <p>This data also excludes some victims who may have needed/ received treatment, e.g. they may have been seen at a walk-in clinic, or pharmacy.</p>

⁴ This means that the results may be skewed, as these individuals may be those who are most vulnerable to victimisation (e.g. those without a fixed abode). Additionally, approximately 16 per cent of responses are 'refusals' whereby the person selected for interview refuses to take part. Crime Survey for England and Wales (2018) Technical Report 2016/17. Office for National Statistics

2. Understanding violence in London

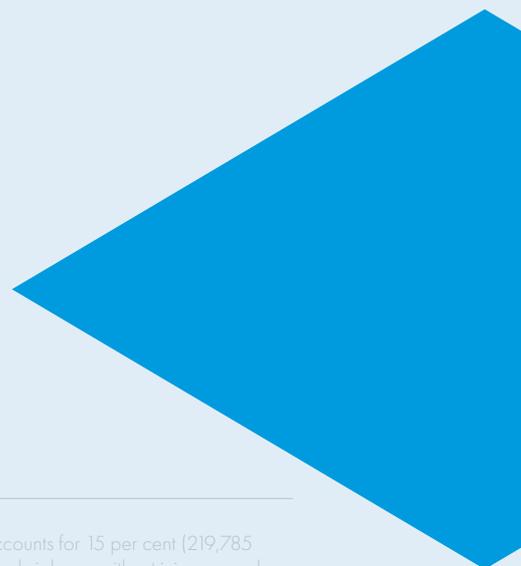
In this chapter, we set out an assessment of violence in London. We begin with what we know about the scale and nature of violence in the capital before turning to the likely drivers of these findings.

2.1 What do we know about violence in London?

In general violence in London is proportionate to the city's share of the population, but the robbery rate is disproportionately high

Table 2 and Figure 2 show that violence against the person offences are the most prevalent forms of violence in London and also account for the largest proportion of the overall cost of violence (violence with injury and violence without injury cost £1.2 billion and £550 million respectively).⁵

The rate of overall violence in London is proportionate to its population (London accounts for 15 per cent of the population and 15 per cent of all violent offences in England and Wales).⁶ The exception to this is London's robbery rate, which is four times that of the rest of England and Wales (London accounts up to 40 per cent of all robberies). This is likely driven in part by the large numbers of people travelling into and around this large metropolitan area on a daily basis (around two million people travel into London every day, with the day-time population increasing to over ten million).⁷ This larger supply of potential victims, potentially carrying more valuable possessions, is likely to be an important factor in explaining the higher rates of street-based acquisitive violence in the capital. Greater Manchester,⁸ another large metropolitan area, has a similarly high robbery rate, which supports this hypothesis (Figure 3).⁹



⁵ See Table 3 in the appendix for detail on how these costs were calculated.

⁶ London accounts for approximately 15 per cent of the population of England and Wales and similarly accounts for 15 per cent (219,785 out of 1,474,008) of all violent offences in England and Wales (including homicides, violence with injury, and violence without injury, sexual offences and robberies).

⁷ Based on 2014, which is the latest data available. Taken from the London Data Store Daytime Population of London.

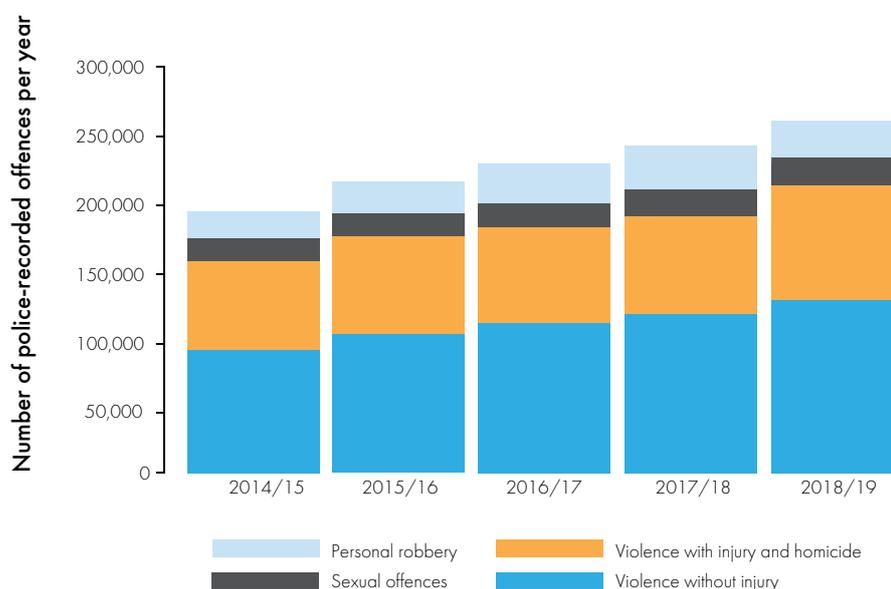
⁸ Greater Manchester has a population of 2.8 million people and is the third largest city in England and Wales after Birmingham. It is most comparable to London in the sense that the police force is coterminous with the city (albeit London is also policed by City of London Police).

⁹ Given that metropolitan areas have a greater number of people travelling for different purposes, e.g. work, school, socialising, it is perhaps unsurprising that such street-based offences are disproportionately concentrated in these locations.

Table 2. Rates and costs of violence in London. City of London Police, Metropolitan Police and Office for National Statistics

Violence type	Sub-type	2013/14 rate per 100,000	2018/19 rate per 100,000	Change in rate since 2014	Knife-enabled proportion of offences (2018/19)	Cost (2018/19) (£). ⁱⁱⁱ
Violence against the person	Homicide	1.32	1.37	4%	56%	420,512,008
	Violence with injury	709	887	25%	7% ^b	1,187,582,528
	Violence without injury ^a	844	1,563	85%	17% ^b	553,549,246 ^c
Sexual assaults	Rape ^d	50	93	85%	1.1%	355,464,342
	Other sexual offences ^d	83	136	64%		86,271,813
Robbery	Personal robbery ^d	313	355	13%	25%	391,264,213

Figure 2. Police recorded violence in London, 2014/15 to 2018/19. Source: Metropolitan Police Service.¹⁰



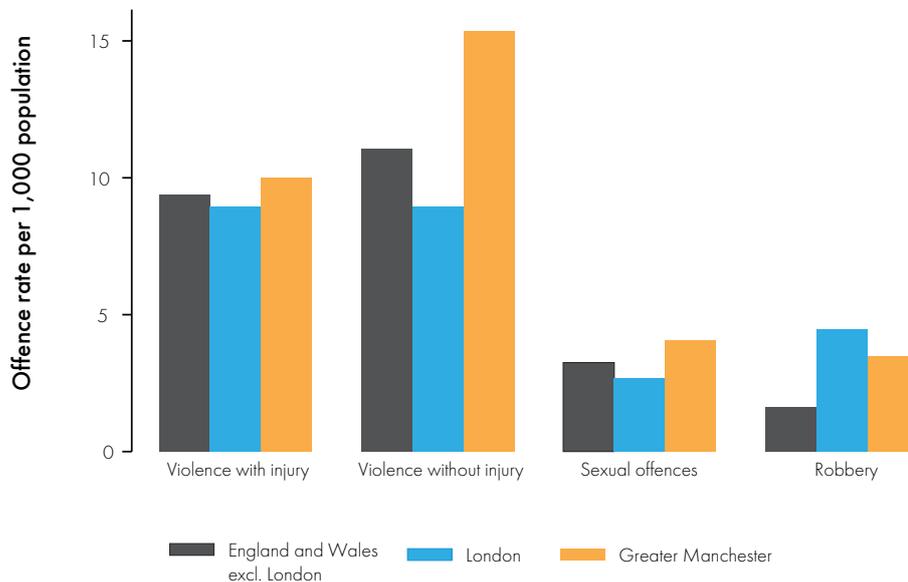
a. Includes stalking and harassment in both 2013/14 and 2018/19. Stalking and harassment was split out of violence without injury from 2017 onwards, but we include it in both years for consistency.

b. For violence with injury, we use data on the proportion of ‘assaults with injury and assault with intent to cause serious harm’ involving knives, while for violence without injury we used the proportion of ‘threats to kill’. More precise measures of knife-enabled violence with and without injury are not available from the ONS.

c. Cost does not include stalking and harassment, since the unit costs available for violence without injury are unlikely to be representative of the current extent of (reported) stalking and harassment, given its rapid rise since the inputs to unit costs were collected.

d. London-wide rates for rape, other sexual offences and personal robbery are estimated by combining data sourced from the Metropolitan Police and the City of London Police.

¹⁰ ‘Violence without injury’ as reported by the Metropolitan Police includes stalking and harassment. Stalking and harassment has increased rapidly over recent years, partly due to an expansion in coverage and an improvement in recording.

Figure 3. Police recorded rates of violence per 1,000, March 2018-2019. Source: ONS¹¹

In line with trends in England and Wales violence in London has increased since 2014

From the early 1990s onwards, in a period often referred to as “the great crime decline” many forms of crime, including violence, fell across Europe, North America and Australasia. In England and Wales victimisation rates, as measured by the Crime Survey for England and Wales (CSEW), fell from 4.7 per cent of adults reporting being a victim of violent crime in 1995, to 1.7 per cent 2017 - 18.^{12 iv}

However, in recent years, police recorded data has shown increases in less frequent forms of violence, which the CSEW is less apt to measure. For example, police recorded violence against the person offences in England and Wales increased by more than 150 per cent from 2013/14 to 2018/19.¹³

These striking percentage increases in some forms of police recorded violence are in part due to improvements to police recording over the same period. In 2013 and 2014, following concerns that true crime levels were not represented in statistics recorded by the police, all police forces in England and Wales were inspected to determine whether their crime data could be trusted. This inspection found that more than 800,000 crimes were unrecorded each year, with violence against the person and sexual offences in particular under-recorded. As a result, since 2014, police forces have made significant improvements to their recording practices.^v This makes it difficult to know if increases in police recorded violence since 2014 are driven by increases in the underlying prevalence of violence and are simply the result of improved recording.

As a result, we must look to other data sources to triangulate police recorded crime. In doing so, we see evidence of a genuine increase in the underlying prevalence of some forms of violence in London. This increase is significantly less marked than the increase in police recorded violence alone, but there are some concerning trends: increases in the severity, as well as the frequency of recorded violence (including robbery) and increases in the use of knives. We discuss these trends in detail below, reporting all changes since 2014, as the pre-2014 police recorded data is not reliable.

¹¹ The figure excludes homicides due to their low frequency.

¹² ONS have explored the impact of repeat victimisation on these figures but found that repeat victimisation does not change the number of victims. See ONS, 2019, Improving victimisation estimates derived from the Crime Survey for England and Wales.

¹³ VAP offences include homicide, death or serious injury through unlawful driving, violence with injury, violence without injury, and stalking and harassment.

Violence against the person has increased in harm and severity, in line with trends in England and Wales

Police recorded violence against the person offences in London have become both more prevalent and more serious (see Figures 4 and 5).

Firstly, the rate of increase is greater than the previous rate of under-recording. Secondly, we see an increase in hospital admissions due to assaults with sharp objects, which confirms increases in the use of knives. (From 2013/2014 to 2017/18 hospital admissions for assaults with a sharp object increased by 32 per cent and there was also an increase in ambulance calls to violence. See Figures 6 and 8). Finally, homicides, which are reliably recorded due to their severity, have also increased by 4 per cent over this period.

Figure 4. Violence against the person offence rate per 1,000 population, 2002/03 - 2018/19. Source: ONS Experimental Statistics using Home Office Police Recorded Crime Data^{vi}

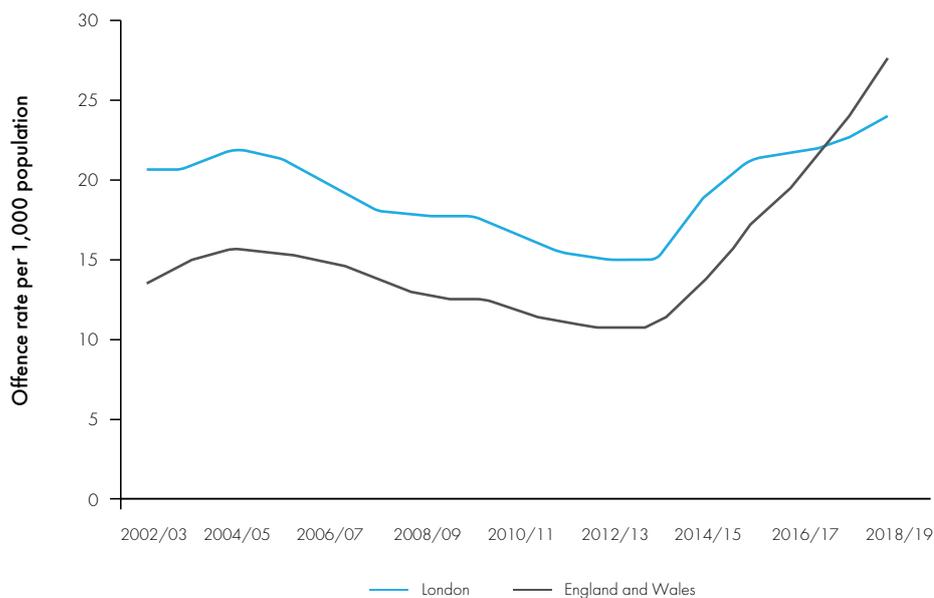
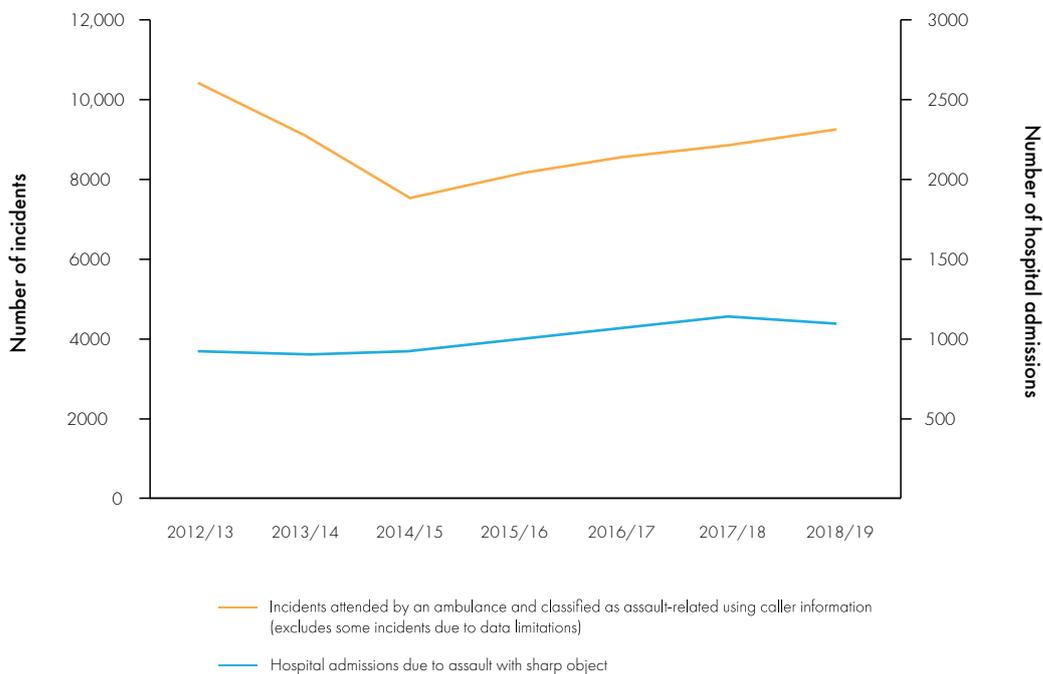


Figure 5. Violence against the person Crime Severity Score,¹⁴ 2002/03 - 2018/19. Source: ONS^{vii}



Figure 6. Ambulance calls to violence and hospital admissions for assault with a sharp object, London 2012/13 - 2018/19. Sources: Greater London Authority; NHS Digital¹⁵



14 The Crime Severity Score is a measure of crime harm, calculated using average sentencing lengths. One limitation with the Crime Severity Score is that it may reflect attitudes towards sentencing rather than actual changes in seriousness of crimes. However, these trends are supported by other sources of data, e.g. hospital admissions.

15 London ambulance data has been updated since the first release of this report on 30 January 2020 due to a change in how incidents of violence attended by an ambulance are categorised. Due to data limitations, the data presented now excludes incidents categorised using paramedic information and is based only on incidents categorised using information from the caller.

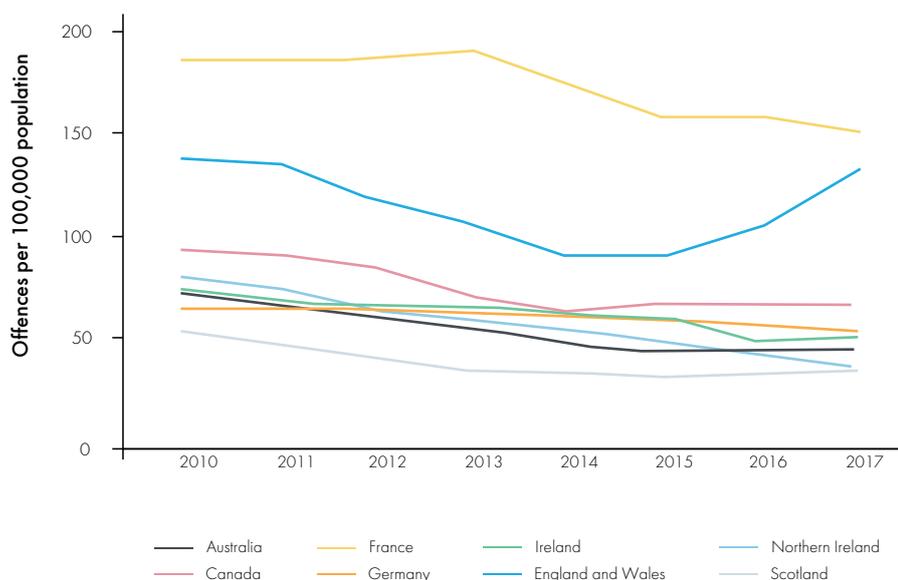
Robberies have increased and become more serious due to an increase in the use of weapons

In line with increases in England and Wales, the robbery rate in London has increased by 13 per cent since 2014. The increases in robbery recorded are likely to reflect genuine rises in the underlying prevalence of robbery as the impact of changes in police recording practices are likely to be less pronounced than for other crime-types.¹⁶

In England and Wales, there has also been an increase in the proportion of robberies that are knife-enabled, though this may be driven by improvements in the way knife-enabled offences are recorded.^{viii} There is a similar trend in London, where the proportion of robberies involving a knife has increased by five percentage points since 2014.

England and Wales appears to be an exception when it comes to the upward trend in robberies: it is the only jurisdiction out of six comparable regions in which robberies rose between March 2013/14 and 2018/19, see Figure 7.^{17 18 19} This suggests that to understand changes in robbery, we need to explore drivers of violence that have affected England and Wales as a whole, such as macroeconomic changes or reductions in public spending. We turn to this later in this section.

Figure 7. Robbery rates in selected comparable countries. Source: UNODC, World Bank and ONS^x



¹⁶ This increase is likely to reflect some real change in these crimes. Recording improvements are likely to have contributed, but the impact is thought to be less pronounced than for some other crime types. See ONS, 2019, Crime in England and Wales: year ending March 2019.

¹⁷ Specifically, US, Canada, Australia, Germany, France and Scotland - regions with which England and Wales are often compared. For example, see Home Office, 2018, Serious Violence Strategy.

¹⁸ Robbery had an increase of 71 per cent, from 50,153 to 85,736 offences.

¹⁹ The United Nations Office on Drugs and Crime (UNODC) form these estimates using nationally recorded police data. To ensure consistency across datasets, the UNODC define serious assaults as 'Intentional or reckless application of serious physical force inflicted upon the body of a person resulting in serious bodily injury', while robberies are defined as 'Unlawfully taking or obtaining property with the use of force or threat of force against a person with intent to permanently or temporarily withhold it from a person or organization'. See UNODC (2015). 'International Classification of crime for statistical purposes'.

There has been an increase in the use of knives and Londoners' concerns about knife crime have risen in line with this

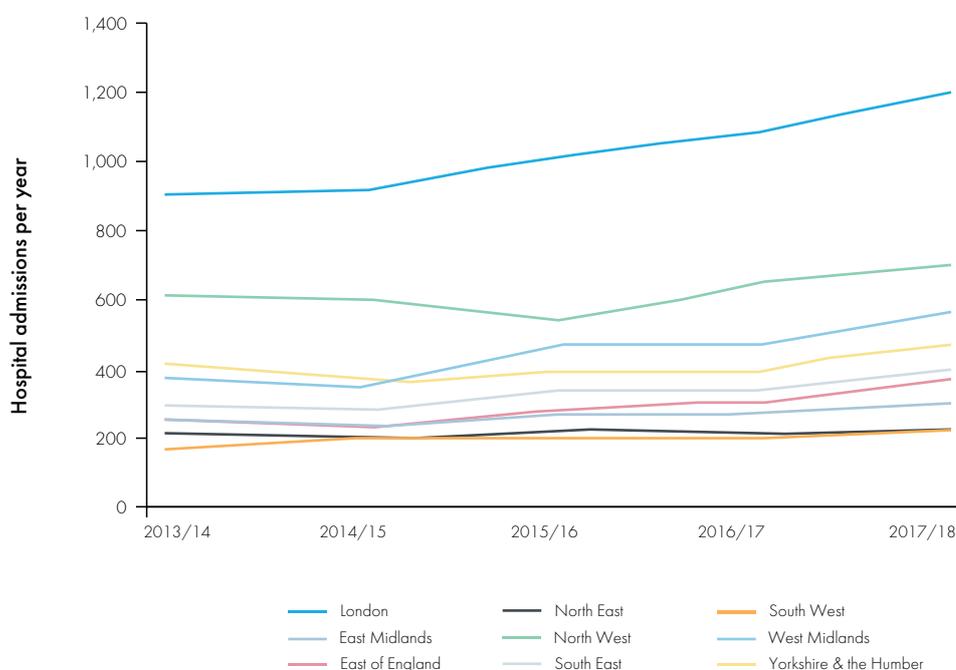
In England and Wales, knife and sharp instrument offences have increased by around 40 per cent since the year ending March 2011.^{20 21} Police recorded data on knife-enabled offences is unreliable due to inconsistencies in the way forces have recorded these over the period, but hospital admissions data suggest that at least 10 per cent of this rise in England and Wales is genuine: admissions for assault by sharp object increased by 13 per cent (4,490 admissions to 5,069) between 2011/12 and 2018/19.²² As Figure 8 shows, London is a major contributor to this trend.

There is evidence that the rise in knife-enabled crime is driven by the increasing use of knives in robberies. In England and Wales, knife enabled robberies increased by more than 30 per cent from March 2014 to March 2018.²³ In London, the proportion of robberies and attempted murders involving a knife has increased by five percentage points since 2014, while the use of knives in other violent offences has remained roughly stable.

In line with this, Londoners' concerns that knife crime is a problem in their area have increased over the same period. Based on data from the Public Attitudes Survey (PAS),²² the proportion of Londoners reporting that they feel knife crime is a problem in their local area has increased by around 5 percentage points across London as a whole since 2014 (from 23 per cent in 2014/15 to 28.6 per cent in 2018/19).

This London-wide average masks local variation in Londoners' concerns about knife crime. For example, there was a 9 percentage point increase in Barking and Dagenham (from 24 per cent in 2014/15 to 33 per cent in 2018/19), compared with Ealing where the percentage of residents who feel knife crime is a problem in their area has remained roughly stable (at around 25 per cent). In addition the three-year comparison changes within the period. To illustrate, in Lambeth, concerns fell from 52 per cent in 2014/15 to 26 per cent in 2016/17, before increasing again to 42 per cent in 2018/2019.

Figure 8. Annual counts of hospital admissions for sharp objects for England and Wales, 2012-2019. Source: NHS Digital



20 An offence is recorded as involving a knife or sharp instrument when the weapon is present during the offence or the threat is believed to be real. The weapon does not necessarily have to be used. Offences of "possession of an article with a blade or point" are covered separately by a specific recorded crime category.

21 Firearm offences increased by 11 per cent (from 6,022 to 6,684) between 2011/12 and 2018/19. However, it is unclear to what extent this increase has been driven by improvements in recording, and given the relatively low volumes, we focus on knife-enabled violence. ONS (2019) Crime in England and Wales: year ending March 2019.

22 The PAS is a quarterly public perceptions survey in London, based on a random sample of respondents at pre-selected addresses with a total of 3,200 Londoners normally interviewed face-to-face each quarter to yield an annual sample of 12,800 interviews. The survey is designed to achieve 100 interviews each quarter in the 32 London boroughs (excluding the City of London) in order to provide a borough-level sample of 400 interviews in any 12-month rolling period.

Increases in police recorded sexual offences are likely to be due to improved recording

There has been a 73 per cent increase in the rate of police recorded sexual assaults in London since 2014. However, analysis by the Mayor's Office for Policing and Crime (MOPAC) suggests the increases in sexual offences in London is likely to be driven in large part by improved recording of these offences since 2014. Along with violence against the person offences, sexual offences were among the most under-recorded, with 26 per cent not recorded.^{xii}

Data limitations make it difficult to assess prevalence and trends in domestic abuse in London

It is difficult to assess the extent of domestic abuse and understand trends using police recorded data for two reasons. Firstly, domestic abuse is frequently under-reported as victims are often not willing to come forward, which means many instances of domestic abuse cannot be captured by the police. Secondly, there is not a specific offence of domestic abuse; instead, offences are 'flagged' as domestic when recorded. Inconsistencies in how this is done mean it is not possible to identify the proportion of violence in London that is domestic.

Police recorded data shows a 19 per cent increase in domestic violence with injury compared to 2014, which suggests that there may have been an increase in more serious forms of domestic abuse over this period.²³ However, due to the limitations described, we cannot be confident this trend reflects a true increase.

To address the limitations of police recorded data, MOPAC analysed CSEW data for London and found that approximately four in 100 adults aged between 16 and 59 experienced some form of domestic abuse in the previous year. This analysis showed London had a lower proportion of females reporting having been a victim of all forms of domestic abuse once or more in the previous year compared to England and Wales.²⁴ However, small sample sizes in CSEW data mean that it is difficult to detect robust patterns at a London level, so we cannot be completely confident in these findings.²⁵

Violence is highly concentrated and fewer than 1 per cent of neighbourhoods have had a large and increasing crime rate between 2013 and 2017²⁶

London is one of the biggest cities in the world, covering 1,572 km² and home to over nine million people.²⁷ There are 32 boroughs of varying sizes (in addition to the City of London), some of which are the size of medium sized cities in their own right. The combined population of Barnet (397,049) and Croydon (391,296) is larger than cities that London is sometimes compared with (for example, the population of Glasgow is 626,410). In addition, the characteristics of London's communities vary significantly. For example, the population per hectare ranges from 160 people per hectare in Tower Hamlets, down to 22 in Bromley; and the proportion of households who own their house outright ranges from 36 per cent in Bexley to 11 per cent in Hackney.^{xiii}

Given the scale and diversity of the capital, it is not surprising that London-wide conclusions on levels and trends of violence mask significant variation within London. At borough level combined rates of violence against the person, sexual offences and robbery range from just under 2,000 per 100,000 people in Richmond-upon-Thames, to almost 4,000 in Hammersmith and Fulham. Violence rates also vary significantly within boroughs. Recent research using data from small geographical units (Lower Layer Super Output Areas, LSOAs), which on average contain approximately 1,500 residents, found that over two thirds (69 per cent) of knife-enabled (KE) homicides in 2017/2018 occurred in just 1.4 per cent (67) out of all 4,835 LSOAs.^{xiv} From here, we refer to LSOAs as "neighbourhoods."

23 The rate of domestic abuse homicides is relatively low in statistical terms (ranging between a low of 10 and a high of 30 per year between 2011 and 2019), meaning that the data is subject to statistical fluctuations and is a poor indicator of wider trends.

24 It is not possible to make comparisons with other cities using CSEW data because these are not reported in publicly available data.

25 The total sample size of the CSEW is 35,000.

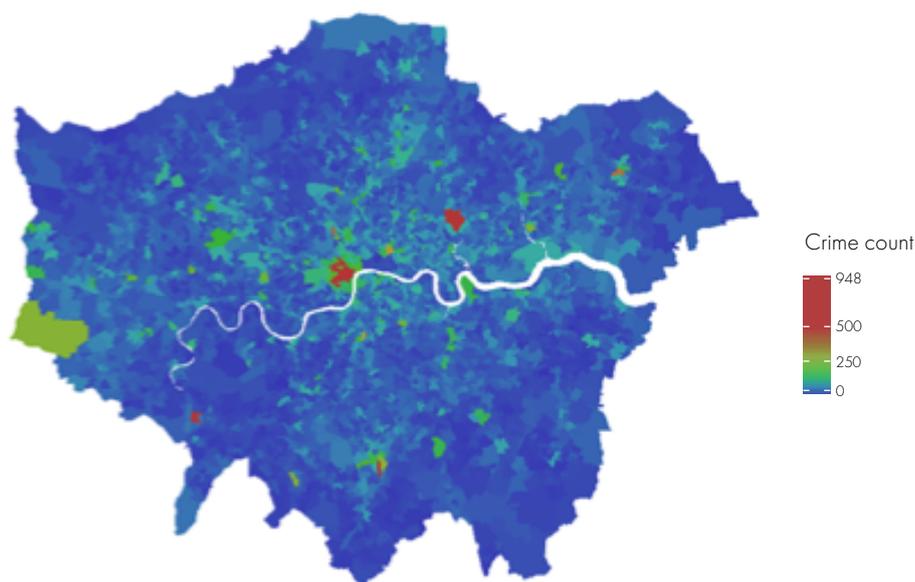
26 Neighbourhoods vulnerable to violence are defined by Sutherland et al. (2020) as neighbourhoods that have levels of violence significantly above average, specifically those in the 75th percentile or higher compared to the rest of London in a given year.

27 Specifically, the population in 2018 was 9,006,352, see London Datastore, 2019.

Building on this, forthcoming analysis for the College of Policing shows that many forms of violent crime are heavily clustered in a very small proportion of neighbourhoods (e.g. Figure 9, below);²⁸ and the majority of London's neighbourhoods have not experienced increases in violence since 2014. Violence overall increased in a very small number of neighbourhoods between 2013 and 2017; and actually decreased in many areas (sometimes in close proximity to areas of high increases). Just six (0.12 per cent) of neighbourhoods had a large and increasing violent crime rate between 2013 and 2017 (three in Lambeth, one in Wandsworth, one in Haringey, and one in Barking & Dagenham). Three other groups of high violence LSOAs had relatively high violent crime rates across the same period, and three others had comparatively higher increases over time. As Figures 9 and 10 show, these LSOAs or neighbourhoods are quite geographically dispersed, which suggests violence is very localised. It is possible that since the analysis was conducted, that the LSOAs most affected may have altered. However, the geographic concentration of violence that this analysis shows brings us to a key conclusion of this report: that smaller is better – a highly localised approach is essential for understanding violence in London.^{29 30}

As a result, drawing on demographic characteristics to identify cohorts who might be at risk of violence (both as victims and perpetrators) without exploring how these characteristics interact with geographic locations is likely to be misleading. For example, recent analysis found that young black men were disproportionately likely to be affected by violence in London (both as victims and perpetrators). However, this analysis did not consider whether young black men were also disproportionately likely to live or spend time in high violence neighbourhoods. As a result, targeting young black men across London is likely to be ineffective and stigmatising. This is supported by recent research that used CSEW data to show that, in England and Wales, more than any demographic characteristics, area level deprivation was a key risk factor for violence victimisation.^{xv}

Figure 9. Violent crime in London, 2017. Source: Sutherland et al (forthcoming)

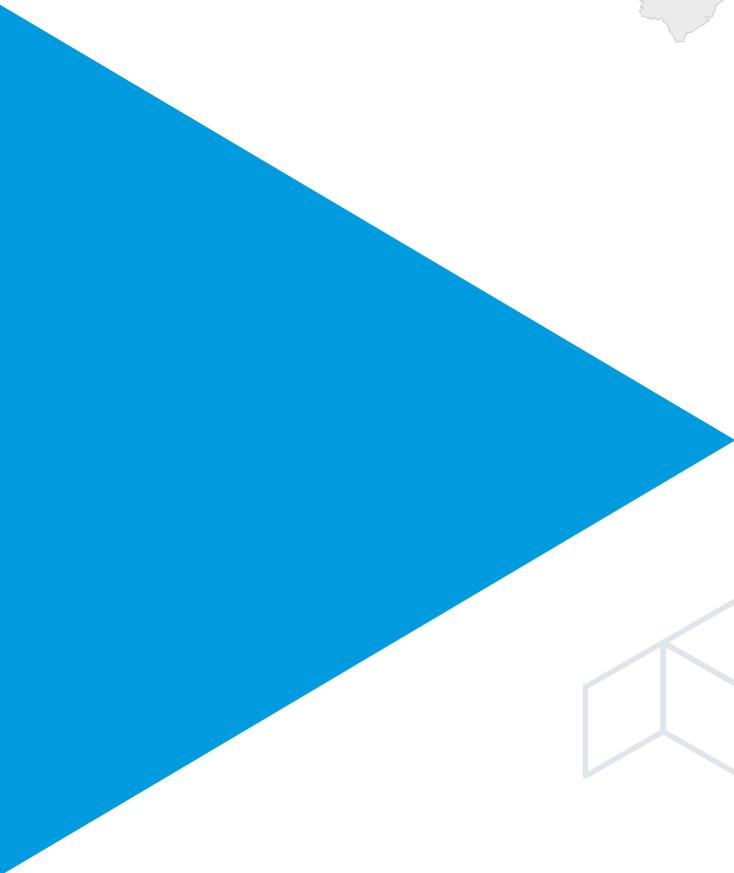
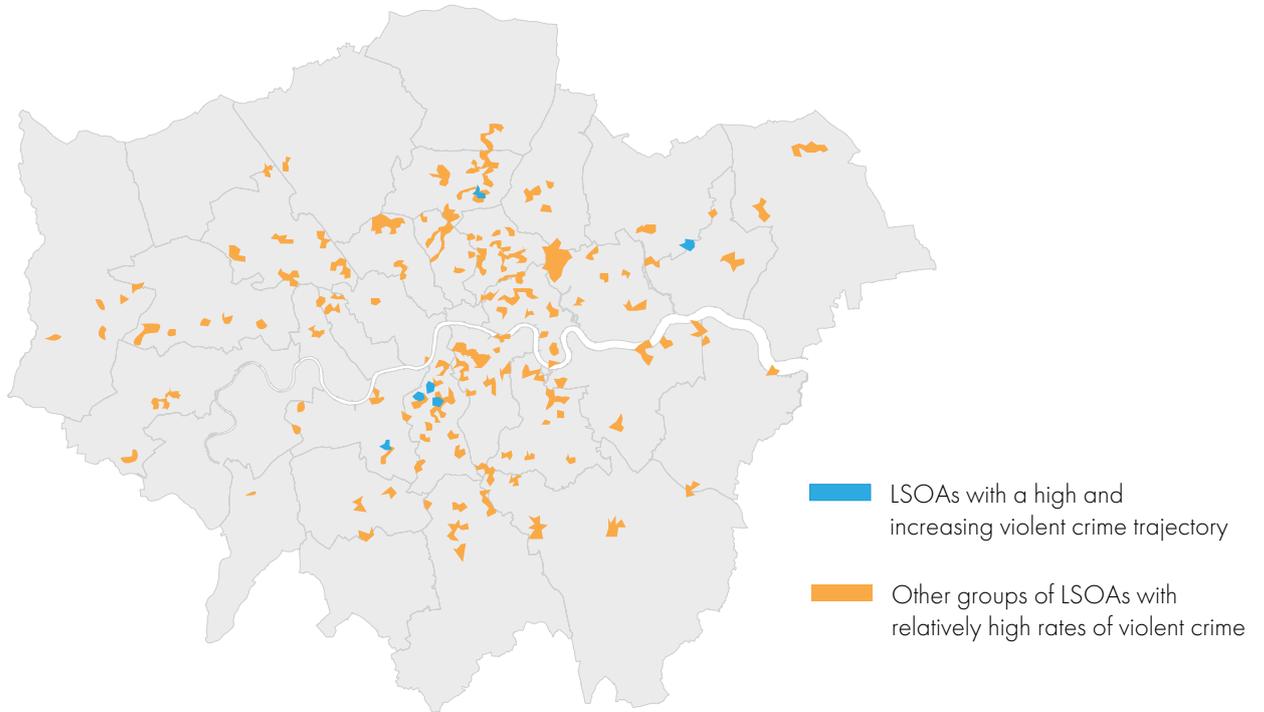


28 Sutherland et al (forthcoming) defines violence as all notifiable offences that are violent or aggressive in nature, including: Violence with Injury, Violence without Injury, Aggravated Vehicle Taking, Firearm Offences (other), Knife Offences (other), Possession of Article with Blade or Point, Rape, Robbery of Business Property, Robbery of Personal Property, Violent Disorder, and Domestic Abuse.

29 These groups are LSOAs that share similar distribution of offences over time, derived using Group Based Trajectory Modelling (GBTM) Sutherland et al (forthcoming).

30 These trends are consistent when also looking at rates per 1,000 of the working population based on the 2011 census estimate for each LSOA (as opposed to the resident population). The working population is preferable to resident population because most (recorded) violent crime tends to occur outside of the home, and there are a number of areas in London that experience considerably higher daily footfall than the number of resident properties (for example in the West End).

Figure 10. Map of high violent crime trajectories (Blue = LSOAs with a high and increasing violent crime trajectory; Red = other groups of LSOAs with relatively high rates of violent crime).³¹ Sutherland et al (forthcoming)



³¹ These vulnerable groups are clusters of LSOAs with similar distributions of offences over time, identified using Group Based Trajectory Models analyses. Sutherland et al (forthcoming).

2.2 What drives violence in London?

Violence is most concentrated in areas with high and entrenched deprivation

Why do particular neighbourhoods in London experience higher rates of violence? We do not know for certain, but deprivation appears to be part of the explanation. Past research shows that poverty and violence are strongly correlated. For example, a longitudinal study of 4,300 young people in Edinburgh found that those from low socio-economic status households had 1.5 times greater odds of involvement in violence, as either the victim or perpetrator, than those from more affluent family backgrounds.^{32 33 xvi}

There is evidence of a link between area-level poverty and violence in London: three-quarters of the boroughs in London with the highest levels of violent offending are also in the top ten most deprived, and have higher proportions of children under 20 living in poverty than the London average.^{xvii} Recent analysis by the Greater London Authority (GLA) shows rates of youth violence are highest in boroughs that are deprived in multiple ways, including: high long-term unemployment; low educational attainment; high numbers of residents on Universal Credit; high numbers of mortgage non-payment claims; more people earning below the minimum wage; and higher estimates of rough sleepers.^{34 35 36 37 xviii} This relationship between area-level deprivation and violence holds across different types of violence. MOPAC have identified that six in ten of the highest volume wards for domestic abuse offences are also 'most vulnerable' wards as measured by the Vulnerable Localities Profile (VLP).^{xix 38}

At LSOA level, neighbourhoods with high rates of violence tend to be deprived in multiple ways. Though income deprivation is the strongest predictor of high violence in a specific neighbourhood, high violence neighbourhoods also suffer greater barriers to housing and services, greater health problems, and worse living environments (such as poorer housing quality and lower air quality).^{xx 39 40}

Social cohesion and trust are likely to protect neighbourhoods from violence

The relationship between neighbourhood deprivation and violence is not consistent. There are some places that buck the trend described above: there are neighbourhoods that do not have levels of high violence in highly deprived areas and a smaller number of high violence neighbourhoods in areas that are not deprived. Though it is not certain what explains the resilience of some London neighbourhoods to violence, community cohesion and social trust are likely to be important protective factors.

Research from the United States (US) has shown that collective efficacy, defined as social cohesion between residents in an area and their willingness to intervene for the good of the neighbourhood, can protect against neighbourhood vulnerability to violence. Put simply, when neighbours know and trust each other and share common expectations for their neighbourhood, they may take greater collective responsibility over public safety in their area. This can translate into actions, such as intervening to discourage teenagers from congregating in a way that might lead to arguments or confronting people who are visibly disturbing public spaces. By being able to organise themselves effectively, neighbourhoods with higher collective efficacy may also be able work with the police and other agencies to prevent violence in their area (for example, through extra neighbourhood patrols, or the demolition of public buildings that attract disorder).^{xxi} As a result, past research has shown that where collective efficacy is high, neighbourhoods are less likely to have high rates of violence, even if they are economically deprived.

32 Socio-economic status was calculated based on respondents' descriptions of their caregiver's occupations, coded using the Registrar General Social Classification Scheme. Respondents were divided into two broad social class groupings according to whether their caregiver's occupation was classed as 'non-manual' or 'manual or unemployed'.

33 Poverty was a significant predictor of violence when controlling for gender and family structure at age 13.

34 As measured by the Index of Multiple Deprivation (IMD).

35 Educational attainment measured by GCSE pass rates.

36 UC claimants measured by the rate of Job Seekers Allowance claims of one year or more.

37 Other correlates at the community level included the proportion of children living in out of work benefit claimant households, the rate of conception in mothers under the age of 18, the rate of children in need, and the proportion of dependent children living in low-income households.

38 The VLP integrates data collected at the neighbourhood level to form an overall composite index value of vulnerability for a locality. It is calculated using six variables (measured at the same geographical units), including: counts of burglary dwelling; counts of criminal damage to a dwelling; income deprivation score; employment deprivation score; count of 15-24 year olds; and educational attainment.

39 Based on Index of Multiple Deprivation (IMD) Living environment scores. This measures the quality of the local environment, and includes indoors living environment (e.g. the quality of housing) and the outdoors living environment (e.g. air quality and road traffic accidents).

40 As measured by the IMD.

A 2013 study explored this in London. Unlike the findings from the US, the study did not find that high collective efficacy completely moderated the relationship between neighbourhood deprivation and violence (i.e. the effect of deprivation on violence rates did not disappear when collective efficacy was high).⁴¹ ^{xxii} However, the study did find that higher levels of collective efficacy were associated with lower levels of police recorded violence, even if they did not moderate the association between deprivation and violence entirely.^{xxiii} Recent analysis at the neighbourhood or LSOA level also points to a relationship between social cohesion and violence as it finds that high violence neighbourhoods have more transient populations (for example, they have a higher population turnover and a lower proportion of owner occupiers).

Gangs may explain the concentration of violence in some deprived neighbourhoods

Deprivation, poor community cohesion, and weak trust between neighbours may set the conditions for gangs to form in certain neighbourhoods, or attract organised criminal activity from elsewhere to those areas. There is forthcoming research from the London School of Economics (LSE) to support this theory. It shows that gangs 'form' in areas where there are higher levels of deprivation, higher proportions of migrant population, lower house prices, and lower average education level.

The LSE researchers also found that crime declines exponentially as you move further away from gang areas; and that knife crime in particular may be associated with gang presence: an additional gang in an area is associated with a higher rate of knife crime, increasing the prevalence of knife crime between 15 per cent and 35 per cent.⁴²

In addition, the deprivation of certain London neighbourhoods and their vulnerability to gangs appears to be deep seated: according to the LSE research, just over half of all the poorest neighbourhoods in London were also the poorest over a hundred years ago and gang territories today map on well to streets identified as poor in 1898 and 1900 (see Figure 11).⁴³

In general, the evidence base on the impact of gangs is limited by the fact that there are different interpretations of what constitutes a gang. For example, gangs may refer to serious organised crime groups or loosely affiliated street gangs. In addition, the police don't use gang 'flags' (indicators in crime recording systems that demarcate if a crime is associated with gang activity) consistently. This makes quantifying gang-related violence difficult. To circumvent this issue, LSE researchers have drawn on covert intelligence, media articles and social media reports to map gang activity.^{xxiv}

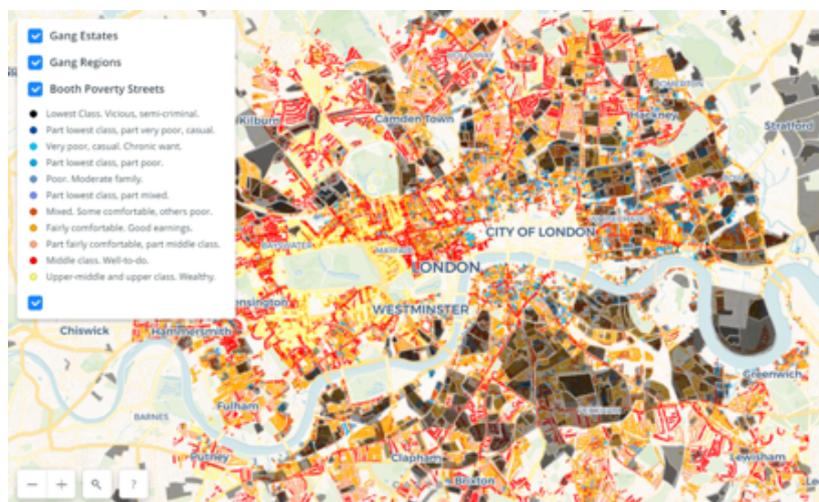
It is not clear what could explain the apparent deep-seated relationship between neighbourhood poverty, weak social cohesion and vulnerability to gangs, or why these neighbourhoods, whose populations have changed significantly over the past 100 years, should have a continued gang presence. Possible explanations include features of the built environment, access to (or a lack of) transport links, persistent under-investment in services in these areas, or the availability of cheap accommodation, which attracts vulnerable residents. To our knowledge, these hypotheses have not yet been explored empirically and merit further research.

41 The researchers behind the study suggested this might be due to limitations in their ability to measure collective efficacy at a level that was granular enough, given that in London neighbourhoods vary significantly in very close proximity to one another. The US research has largely focussed on Chicago, where neighbourhoods are both highly segregated from one another and homogenous, but in London different micro communities with varying levels of collective efficacy live in close proximity to one another (for example, different parts of the same housing estate may have very different levels of collective efficacy).

42 Kirchmaier et al focus street gangs, identified through covert intelligence corroborated by social media and online reports

43 This is not unique to London. Crime (in particular violence) is continually highly concentrated in places, even in spite of full population turnover. E.g. see Lee, Y., Eck, J. E., SooHyun, O., & Martinez, N. N. (2017). How concentrated is crime at places? A systematic review from 1970 to 2015. *Crime Science*, 6(1), 6.

Figure 11. Booth poverty map, overlaid with gang estates and regions, Source: Kirchmaier et al. (forthcoming)



Alcohol and the Night-Time Economy are likely to be important drivers of violence in some London neighbourhoods

Research indicates that alcohol increases the likelihood of violence. This may be because alcohol affects cognitive and physical functioning in a way that increases aggression; because it influences social expectations and gives people the license to behave aggressively; or because crowded and poorly managed settings in which alcohol is often consumed licence or enable aggressive behaviours.^{xxv} By impeding their cognitive and physical functioning, alcohol consumption can also increase the vulnerability of potential victims.^{xxvi} At a neighbourhood level, studies have shown that the availability of alcohol, measured in terms of outlet density, is strongly associated with violence.^{xxvii}

Public violence is particularly likely to be driven by alcohol; the fact that the majority of violent incidents in England and Wales that occurred over the weekend and at night (62 per cent and 61 per cent respectively) involved alcohol supports this.^{xxviii} Alcohol use is likely to affect a broader range of violent behaviours. In England and Wales, in the latest data captured by the CSEW, victims of violence believed the perpetrator to be under the influence of alcohol in 39 per cent of incidents, and past research has shown a link between alcohol use, especially heavy drinking, and domestic abuse.^{xxix}

We did not find recent research examining the effect of alcohol on violence in London. However, 2016 analysis by the GLA found a correlation between the night-time economy, crime and alcohol.^{xxx} In addition, more recent analysis from the GLA shows a high proportion of serious youth violence in Westminster involves victims and perpetrators who are not 'local' to the borough, which suggests that the night-time economy is likely to be an important driver of serious violence in Westminster.^{44 xxxi}

The impact of alcohol consumption on violence has been largely missing from the public discourse on increases in violence in recent years but there is evidence to suggest that it is likely an important driver of violence in London and should be investigated further.

44 While Westminster has the highest victimisation rate for people under the age of 25, almost half of all victims and perpetrators of serious youth violence in Westminster are not from Westminster (56 per cent of victims in Westminster are local to the offence borough compared to, for example, 78 per cent in Croydon; and 46 per cent of offenders in Westminster are local to the offence borough compared to, for example, 79 per cent in Croydon).

Those involved in violence are likely to be vulnerable in multiple, interrelated ways and many may have experienced past victimisation and trauma

The previous sections explored the differences between neighbourhoods that might explain violence. However, we also need to understand individual vulnerability to violence (i.e. not everyone in high violence neighbourhoods is violent - why?).

There has been significant focus in recent years on the link between past abuse, victimisation and trauma, often referred to as “Adverse Childhood Experiences” or ACEs and vulnerability to violence. There is some evidence that ACEs, such as the death of a parent or close friend, household criminality, exposure to domestic abuse, substance misuse or bullying, and difficulties with health, communication or learning can increase vulnerability to violence. For example, a longitudinal study in Switzerland found that prior victimisation influenced the appraisal of decision-making situations that, in turn, predicted subsequent self-reported violent offending;^{xxxii} a study in the US found that being the victim or witness of a traumatic incident before the age of 12 was significantly correlated with involvement in violence in adolescence or young adulthood.^{xxxiii}

When information from multiple reviews was combined, children with four or more ACEs were around eight times more likely to be involved in violence than their peers.^{xxxiv} The findings from the research on ACEs are consistent with evidence of a considerable overlap between victims and offenders of serious violence. For example, data from the Millennium Cohort showed that 81 per cent of weapon carriers/users reported experiencing victimisation.^{xxxv}

Despite this, it is important to note that there are limitations to the research on ACEs. Studies typically rely on self-reported, retrospective data, as adults are usually asked about adverse experiences they may have suffered in childhood. These questions are vulnerable to recall bias, as it is difficult for people to abstract from their experience of the present when taking a perspective on the past. For example, those who have suffered worse outcomes may be more likely to recall adversity during childhood than those with similar experiences whose present situation is better. To address this, more recent studies use ‘prospective data collection’, which involves identifying a cohort of children and asking them questions about their experiences as they grow up, but this also has limitations as parents or teachers are usually required to provide responses about the child’s experiences up until the age of eight.^{45 xxxvi}

In addition, researchers have warned against the use of ACEs as an individual-level diagnostic and targeting tool. There are people who have suffered adverse experiences that do not go on to be involved in violence and people who have not suffered adverse experiences who do: as a result using ACEs to determine an elevated risk at the individual-level is likely to be unnecessarily distressing and stigmatising for those who have suffered these experiences.

Research on individual vulnerabilities is much broader than ACEs alone. Many longitudinal studies, which follow groups of people over the course of their lives, usually starting in childhood or adolescence, identify correlations between various risk factors and violence. In particular, weak parental supervision and lack of school engagement are consistently identified as risk factors associated with violence;^{xxxvii} and a recent systematic review found that factors positively associated with gang membership include lack of supervision (such as lack of parental monitoring and negative family environments) and exposure to criminogenic environments (for example, through exposure to violence at school, socialising with at risk peers).^{46 xxxviii} This is supported by recent GLA analysis, which found strong correlations between the proportion of victims of serious youth violence and educational attainment. Other individual-level risk factors identified in the literature include low self-esteem, poor ability to control behaviour, and high-daring or sensation seeking.^{xxxix}

Risk factors can be cumulative in impact and interact in different ways to affect vulnerability to violence. They can also be moderated by various protective factors. For example, research has shown that high intelligence protects against involvement in crime for high risk individuals; that good school attainment and parental interest in education can protect against involvement in crime; and that having a high family income can protect against the negative consequences of having a parent in prison.^{xl}

45 Before this age children are considered too young to respond themselves. In addition, researchers argue it is often not appropriate to ask children questions about distressing experiences such as experience of violence or abuse, which may lead to the omission of these questions and an under-reporting of the prevalence of these experiences in findings. Thirdly, children may themselves not recognise the adversity of the experiences they have experienced until later in life.

46 School type and school performance were not correlated with gang membership.

In the case study below, taken from a Serious Case Review of the homicide of a child in a London borough, the compound effect of multiple risk factors and childhood adversity is very apparent. However, our understanding of the interaction between risk factors and their compound effect on risk of violence, along with the protective factors that moderate them, is limited and warrants further research.

Case study: Peer violence between young people aged 10-25 - Child AX

Child AX was a young man of African Caribbean heritage who was killed aged 17 in an altercation with three other young men. The police investigation suggested that AX had been the initial aggressor and had been killed by the youths in self-defence. It is unclear whether they were known to him before this, although there was an indication that they may have had a gang affiliation, due to sustaining a further superficial wound which could have been inflicted as a signifier of a gang-related attack.

In the run-up to the incident, AX had been involved in increasingly frequent and serious criminality, including being wanted for attempted murder, and on bail for a sexual assault. He had also decided to leave his family home and was housed by the local authority, but then had been evicted from his independent accommodation, and had since been living at multiple addresses. At the time of his death he had left his current address and was missing from care - staying at a friend's accommodation - the review proposes that this may have been in order to avoid police.

Child AX was brought up by his mother, who was also caring for her disabled younger brother, who was close in age to AX, after the death of Child AX's grandmother. Child AX's mother suffered from depression and 'exhaustion' as a result of her caring responsibilities, as well as financially supporting her family, at one point working six days a week. The review suggested that Child AX suffered physical and emotional neglect as a child. AX's uncle was domestically violent towards his mother, and occasionally abusive to him, which resulted in the family moving to a domestic abuse refuge and AX changing schools. The review found that AX was offered interventions from CAMHS and attended two sessions; however, AX's mother stopped attending.

The review describes how Child AX's teacher said as a young child he was very able and engaged but was someone who 'struggled to contain his emotions and appeared overwhelmed by distress about his family circumstances. This would manifest in emotional or angry outbursts'. As he grew older this escalated to persistent non-attendance at school, low level offending such as graffiti, followed by much more serious offences, including robbery, sexual assault, serious assault and suspected attempted murder. AX was known to use cannabis and became well known as someone who sold cannabis at his school. He is suspected to have been affiliated with a gang, and was on the London Gangs Matrix.



2.3 Why has violence increased in the last five years?

The 2008 recession and subsequent reductions in public spending, may have increased the vulnerability of some London neighbourhoods and cohorts to violence

In the absence of a counterfactual, and given there are many factors that drive violence, it is not possible to determine a causal link between the effects of the 2008 recession and rates of violence in London. However, based on past research and current data, we think it is very likely that reduced opportunities, declining real wages, and reductions in public spending have increased the vulnerability of some of London's most deprived communities to violence.^{xii}

There is growing evidence that recessions are linked to increased crime rates. For example, one study using a range of data from the UK and the US found that young people who leave school in the midst of recessions are significantly more likely to commit crime over the course of their life than those graduating into strong labour markets.^{xiii} The study found that there were strong persistent effects of unemployment on subsequent criminal convictions for violence, which became more significant over time.⁴⁷

Another study in the UK found that young men who entered the job market immediately following the 1981 recession experienced an increased risk of homicide victimisation that was still apparent in the late 1990s.^{xiii} Researchers hypothesise that this is linked to adverse effects of unemployment that have a cumulative impact (such as more leisure time, loss of income, financial stress, lower self-esteem).^{xiv} The research suggests that these effects had a disproportionate impact on those who were worse off in society: homicide risk fell for those living in the richest neighbourhoods, while those living in the poorest neighbourhoods saw their homicide risk rise sixfold.

At surface level, the 2008 recession did not hit London as hard as other parts of the country. For example, in the 13 quarters following the start of the financial crisis in autumn 2007, net employment increased by 0.2 per cent in London while the rest of the UK suffered a 2.5 per cent loss. However, if we look beneath these high-level figures, we see that while those in professional and private sector jobs were least affected by the recession, there were substantial job losses in secretarial occupations, construction and elementary trades.^{xv} In addition, the 2008 recession reduced employment opportunities and wages, particularly for those leaving education post-2008.^{xvi}

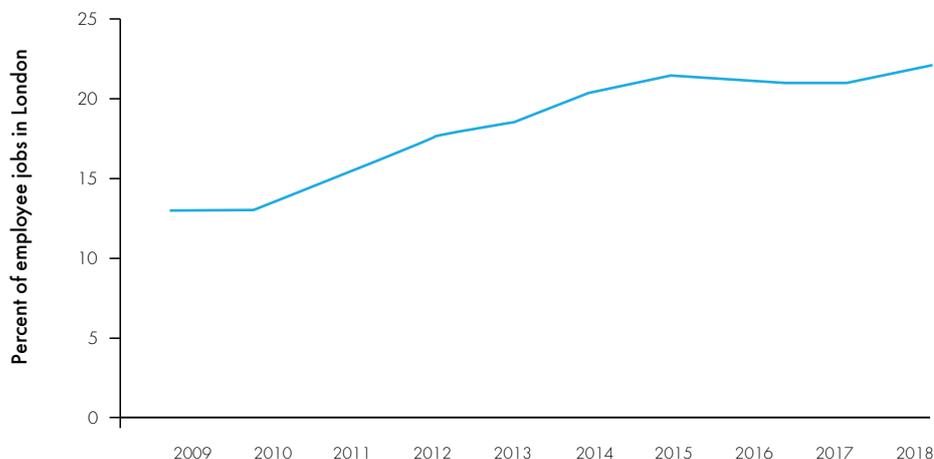
There is also evidence that inequality has increased, with reductions in public spending disproportionately impacting some of the poorest cohorts.^{xvii} Finally, wages have not recovered since the recession to reflect the cost of living. The proportion of people earning below the London Living Wage in London has increased since 2010 (Figure 12). This increase is in part due to the increases in the London Living Wage over this period - from £7.45 to £10.20 but given the London Living Wage is set to reflect costs of living, this increase still reflects an increasing proportion of Londoners without enough income to afford the cost of living in London.⁴⁸

47 The study looked specifically at violence against the person, robbery and sexual assaults.

48 The Living Wage Foundation works with the Resolution Foundation to calculate the rates of the 'real Living Wage' and the London Living Wage annually which is based from a basket of Minimum Income Standard goods as well as costs relating to housing, council tax, childcare, and transport. Note that this is different from the statutory National Living Wage, which is set by the government on advice from the Low Pay Commission and does not have a London weighting.



Figure 12. Proportion of Londoners earning less than the London Living Wage. Source: Office for National Statistics



Increased competition in drug markets may have driven increases in violence

There is strong evidence that drug markets are linked to rates of violence. Evidence from the US suggests that the crack cocaine epidemic in the 1980s and 1990s led to increases in homicides and robberies.^{xlviii} Drug-related cases also seem to be one of the driving factors in recent homicide increases in the US.^{xlix} The key mechanisms that link drug markets and violence are hypothesised to be increased competition between gangs and victimisation of vulnerable young people groomed by gangs, although there is little available evidence to explore these relationships further.¹

We do not have data to explore changes in drug supply and demand at a London level. However, the Home Office Serious Violence Strategy points towards a surge in coca cultivation in Colombia since 2013 as an important factor in understanding increasing rates of violence in England and Wales. A partial agreement on the issue of illicit drugs was one achievement of the peace process between the Colombian government and the FARC, which started in 2012. The announcement of this agreement created the possibility that coca farmers would be paid to substitute their crops away from coca once the peace deal was enacted. Recent research shows that this likely created perverse incentives, with farmers increasing their coca cultivation in the short term in order to qualify for a larger financial payment to substitute their crops later. Since 2013, there has been a fourfold increase in coca cultivation in Colombia.² The increase in cultivation has driven a global increase in purity. Between 2013 and 2016, crack cocaine purity in England rose from 36 per cent to 71 per cent.

Increases in purity may make substances more addictive and so can increase demand, or the amount that users are willing to pay. There is some evidence that the demand for drugs has increased. Taking the demand for drug treatment services as a rough proxy for drug use, the Home Office Serious Violence Strategy identified a 14 per cent increase in the number of people presenting to treatment services with crack cocaine problems between 2015/16 and 2016/17.^{lii} Data from the CSEW also reveals increases since 2012/13 in the number of young people (16-24) reporting having taken any drug in the last year.⁴⁹ More specifically, the data also shows a sharp increase from 2012/13 in the proportion of 16-24 year olds reporting use of powder cocaine in the last year).

While the lucrateness of the drug market has increased, the nature of the market has changed, as global trends show an increase in the use of the Darknet to trade drugs.^{liii} Though it is still representing a small part of the overall market for drugs, the online market for drug sales has increased in recent years.^{liiv} It is plausible that the expansion of the online market has increased competition between gangs selling drugs on the streets as the street market has become smaller, with more people purchasing online (however there is no direct evidence to confirm this).

⁴⁹ NHS data also suggests that there were increases in the number of under 16s reporting that they had taken drugs in the last year, with a 14.6 per cent increase in 2014 compared to 2013, a 24.3 per cent increase in 2016 and 23.7 per cent in 2018. See: NHS (2018) smoking, drinking and drug use among young people in England 2018.

This combination of a more lucrative yet smaller market may drive violence by increasing the competition between organised criminal groups. It may also have driven the rise of county lines, the term used when drug gangs from big cities expand their operations to smaller towns, often using violence to drive out local leaders and using vulnerable people as couriers for drugs.^{lv} Violence is a key feature of these networks, which are reliant on control through debt bondage, and sanctions against runners, dealers and users, and conflicts between groups for new markets.^{lvi}

Reductions in funding for public services are likely to have made it more difficult to identify and seize opportunities to prevent violence

From 2010, there were significant reductions in public spending in England and Wales, including London and there is some evidence that these reductions may have contributed to increases in violence in the short term. Analysis carried out by researchers at the LSE shows a correlation between the timing of reductions in funding and increases in violence and a relationship between reductions in borough budgets and increasing knife crime rates.⁵⁰

Researchers investigating the significant decline in violence over recent centuries point to the role that institutions (such as the church, state and schools) played in influencing, monitoring and regulating peoples' behaviour towards one another so that they were less likely to take measures into their own hands.⁵¹ ^{lvi} This influence and regulation can be formal (via the legal and criminal justice system) or informal (for example, if teachers mediate disagreements between young people in schools). Though there is no evidence of a causal relationship between reductions in public spending and violence, it is plausible that the reduction in the reach of institutions and organisations that influence, monitor and regulate peoples' behaviour towards one another may have led to increases in violence in the short term.

In addition, reductions in public expenditure, and associated increases in caseloads, may have made it more difficult to identify and protect young people at risk of violence. Between 2011/12 and 2018/19, 46 per cent of funding from London council youth services was removed.^{lviii} Given disinvestment in youth services, young people at risk may no longer have the same support networks and places of safety and belonging. For example, between June 2018 and 2019, 568 young people across London were referred to London's Rescue and Response (R&R) project, a programme that works with young Londoners affected by county lines,⁵² of whom 72 per cent had been reported missing at least once prior to referral, 58 per cent were under social care at the time of referral, 36 per cent had a gang link recorded by the referrer, and half (50 per cent) had a known or suspected experience of child sexual abuse or sexual violence at the time of referral. This suggests that prior opportunities to intervene with these young people had not been captured.^{lix}

Reductions in police and wider criminal justice capacity are likely to have made it more difficult to disrupt and deter violence

There is evidence from London that police presence on the streets has a direct impact on preventing immediate opportunities for violence. A study looking at the surge in police officer numbers in central London in the aftermath of the July 2005 bombings found a 34 per cent increase in hours worked by police led to an 11 per cent decrease in crime, including violent offences.^{lx} Authors of this study suggested that the decline observed was in those crimes that are susceptible to an increased police presence on the streets (specifically common assaults, aggravated bodily harm, and harassment).⁵³

As well as disrupting immediate opportunities for violence through presence on the streets, the police may deter violence by influencing offenders' perceived risk of apprehension. According to deterrence theory, crimes can be prevented when the costs of committing the crime are perceived by the offender to outweigh the benefits.^{lxi} Recent research suggests that it is the risk of apprehension that makes deterrence instrumental in preventing crime.^{lxii}

50 Kirchmaier et al. exploited variation in the timing of reductions in borough budgets, using total borough revenue data from 2010 - 2018 to look at the effect of reductions in budgets on the knife crime rate. They find a slight correlation between the timing of largest reductions (as a proportion of the original budget) and knife crime when controlling for population density, ethnicity, permanent school exclusions, benefit claimants, house prices, and points of interest (banks, halls and community centres, police stations, youth centres).

51 For example, declines in 'elite homicides' (i.e. those committed by noblemen) across Europe from the 16th century onwards have been attributed to the establishment of legal systems that were able to resolve disputes, which meant people no longer needed to take measures into their own hands.

52 The R&R project is a three-year MOPAC funded project working with young Londoners affected by county lines activity, involving identification and support for young people (up to 25) affected by county lines.

53 Note that part of the reduction in violence may have been driven by reduced footfall as a result of the bombings, with people staying away from regular routines and thereby reducing the opportunities for crime.

Between March 2010 and 2019, the number of front-line staff in the Metropolitan Police Service (MPS) fell by 10 per cent (8,000 fewer police officers and Police Community Support Officers), while the number of civil support staff fell by 37 per cent (from 14,330 to 8,968). Over the same period, reductions in funding for the wider public sector led to an increase in so called non-crime demand to the police, and there was an increase in the number of complex crimes (crimes that are difficult to investigate) reported to and recorded by the police.

As a result, since 2010, there have been reductions in indicators of the ability of the police and wider criminal justice system to apprehend and punish violent offenders. Sanction detection rates for knife crime have halved from 27 per cent in March 2014 to 13 per cent in March 2019; homicide detection rates have fallen; and charge rates for violent offences have almost halved from around 15 per cent in 2014/15 to around 8 per cent in 2018/19.⁵⁴

There have also been significant declines in stop and search since 2011/12: the rate of stop and search fell by 74 per cent between 2011/12 and 2017/18, partly driven by the introduction of the Best Use of Stop and Search scheme, which aimed to restrict the use of stop and search following the 2011 UK riots.⁵⁵ The evidence is not clear when it comes to the impact of stop and search on violence. One study looking at ten years of stop and search data in London between 2004 and 2014 found that a ten per cent increase in stop and search was associated with just a 0.01 per cent decrease in non-domestic violent crime.⁵⁵ However, this research predates improvements to police recording practices since 2014. More recent analysis from the LSE's Centre for Economic Performance suggests that reduction in stop and search - in combination with other declines in enforcement activity (for example, arrests have halved since 2010) - may have reduced the perceived risk of carrying knives, leading to an increase in their prevalence.⁵⁶

The LSE research does not establish a causal link between stop and search and weapon carrying but the hypothesis it points to is plausible. However, it does not capture the potential negative consequences in trust in police against which any immediate public protection benefits should be weighed. So it is worth conducting more research to understand these wider effects; for example by looking specifically at the impacts of Section 60 notices on trust and complaints to the police; and considering how any negative effects can be moderated.

In parallel to these changes in policing, the contraction in officer numbers has become a central component of the public discourse on violent crime. It is likely that this has affected perceptions of the police's ability to apprehend violent offenders, which in turn may have led to increases in violence.



⁵⁴ The fall in charge rates has coincided with a large rise in the proportion of offences where the victim does not support further action (from 25 per cent to 35 per cent), or where evidential difficulties resulted in a case being closed, despite the victim supporting action (from 12 per cent to 21 per cent). The Home Office suggests this decrease in charge rates may reflect the increasing volume and complexity of the investigation caseload (Home Office, Crime Outcomes in England and Wales Open Data, Year-ended March 2019 and Year-ended March 2015).

⁵⁵ The study also looked specifically at weapon-enabled non-domestic violence and ambulance incident data for calls related to 'stab/shot/weapon wounds', and found no statistically significant effects.

⁵⁶ Arrests halved from a peak of 258,384 in 2010/11 to 125,108 in 2017/18. See Police powers and procedures, England and Wales, year ending 31 March 2018.

Perceptions that public protection has weakened along with rising fear of violence may have driven further increases

People's expectations of the effectiveness of the criminal justice system and other institutions, along with their trust and confidence in those institutions, is likely to affect their decision making. For example, the evidence that lack of trust in the police and criminal justice system can lead victims to become perpetrators as they may seek revenge, carry a weapon, or seek protection from elsewhere to prevent violence, as opposed to go to the police.^{lxv}

This effect is likely to be stronger if people perceive (and fear) that the risk of violence is increasing, while the ability of institutions to address violence is reducing. When this happens, people may take measures for protection that make violence more likely. For example, the 'contagion effect' of weapon carrying has been observed in social groups and neighbourhoods^{lxvi} where the introduction of new weapons (such as knives) to a community signals an increase in the overall riskiness of the area, which increases demand for more lethal weapons among those who do not have them. As more people fear knives, more people carry knives.

As we discussed earlier in this section, the proportion of Londoners who think knife crime is a problem in their local area increased from 23 per cent to 28.6 per cent between 2014/15 and 2018/19 (with greater increases in some boroughs). Concerns about safety and perceptions of the criminal justice system's ability to deal with violence appear to be related: those who perceive knife crime to be 'not a problem at all' are almost twice as likely to say the police do a 'good job' (67 per cent) than those who perceive it to be a 'major problem' (34 per cent).^{lxvii}

Fear of violence may be driven in part by increasing media coverage of violent crime in recent years as research shows that media coverage of violent crime is associated with increased fear of being attacked,^{lxviii lxx} and media reports on increasing violence in the Guardian have more than doubled since 2012. lxx It may also be driven by peoples' first hand experiences and observations. For example, the GLA have found a strong positive correlation between the proportion of the population who were victims of Serious Youth Violence and the perception of gangs being a problem in the area.^{lxxi}



3. Responding to violence in London

In this chapter, we set out how the VRU and partners should respond to violence in the capital. We begin with recommendations to help the VRU optimise its efforts to stabilise and reduce violence in the immediate term, before presenting a framework for driving long-term reductions in violence.

3.1 Stabilise and reduce violence

Confronted with concerning increases in the severity as well as frequency of police recorded violence in London since 2014, along with increases in the use of knives, the VRU and partners want to provide immediate responses, funding, and support to affected communities. Below we set out two ways the VRU and partners can optimise the distribution of resources in the immediate term.

Target the most vulnerable neighbourhoods

In a city the size and diversity of London, the VRU cannot do everything, everywhere, at once. The main takeaway from the first part of this report is that violence in London is highly concentrated in a small number of LSOAs and less than 1 per cent of these LSOAs had a large and increasing crime rate between 2013 and 2017. As a result, place must be the primary lens for the VRU and partners in taking immediate action to stabilise violence in London. As we have shown, borough-level comparisons are likely to mask within borough variations, so smaller will be better as the VRU and partners seek to identify target areas for intervention.

To achieve this, the VRU could, for example, target the top five or 10 per cent of vulnerable neighbourhoods (LSOAs) taking into consideration both the rate and severity of violence.⁵⁷ They could also carry out analysis using the smallest units of analysis possible, such as street segments, and identify specific locations using coordinate-level data, to explore patterns in violence within these LSOAs.^{boxii}

Once locations have been identified, the VRU should work with local partners and communities to problem solve and understand why violence is high, in order to develop strategies for tackling it in those areas. This should include rapid analysis to understand how people use and experience these neighbourhoods, as the clustering of violence in narrow geographic areas is likely to be determined by who spends time in these places and why. As we discussed in the previous section, according to analysis carried out by the GLA, around half of victims and perpetrators of serious youth violence in Westminster are not from the borough,⁵⁸ which suggests that the night-time economy in and around Soho is likely to be an important driver of violence in the borough. To verify this hypothesis and others like it, the VRU could work with partners to look when (i.e. which days of the week, what times of day) violence occurs in Westminster LSOAs. In addition, the VRU could work with partners to explore the extent to which violence happens close to (or in the) home. One way of achieving this could be through mapping violent offenders' addresses (as well as of the locations where violent incidents happen).

Help people feel safer

In the previous section, we set out why reductions in police capacity since 2010 are likely to have contributed to increases in violence since 2014. While media coverage of violence in the capital has increased, the reduction in officer numbers has become a central component of the public discourse on violent crime. As a result, it is unsurprising that Londoners' concerns about knife crime have increased.

⁵⁷ Sutherland et al (forthcoming) focused their analyses on neighbourhoods that have levels of violence significantly above average (specifically those in the 75th percentile or higher compared to the rest of London in a given year).

⁵⁸ 44 per cent of victims are not from the borough and 54 per cent of offenders are not from the borough.

To prevent escalations in violence as a result of weak trust and confidence in public protection, and increasing concerns about risk of violence, the VRU and partners should help people in neighbourhoods vulnerable to violence to feel safer. While the resources for policing are not within the remit of the VRU, the VRU can support local police, statutory partners and communities to deploy their resources to best effect. This should include working with the MPS to draw on the evidence on effective policing tactics (such as hotspots policing, which we discuss later in this report); using data analytics to deploy officers to specific locations that are vulnerable to violence at specific times when risk is high, such as schools, or bus stops at the end of the school day; and working with communities to identify locations that communities themselves feel to be vulnerable.

Essential to this is building the trust of those who may typically have lower levels of trust and confidence in institutions, particularly in the police. This includes taking steps to moderate the negative effects of tactics that may damage trust. For example, increasing use of stop and search poses a risk for trust and confidence in the police, particularly among BAME groups who are disproportionately targeted.^{lxiii} The VRU and partners should bear this in mind and consider how they can mitigate this risk, for example through very precise targeting of stop and search or by incorporating the principles of procedural justice into policing interactions.^{59 lxxiv}



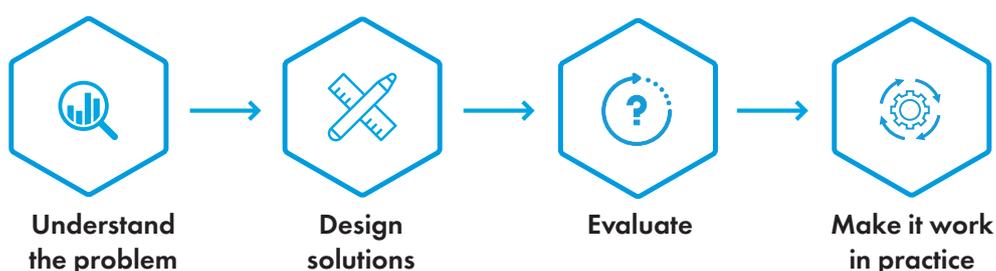
⁵⁹ Past research suggests that incorporating the principles of procedural justice may mitigate potentially adverse impacts of policing tactics such as stop and search. Procedural justice entails treating citizens in a fair, dignified and impartial manner in policing encounters, as well as encouraging citizen participation in the encounter by giving people a sense of voice or agency. One RCT in Queensland found that asking officers to follow a procedurally-just script in Random Breath Tests following traffic stops increased self-reported trust in the police.

3.2 Drive a culture of iterative research and experimentation

As the first chapter has shown, based on existing data and research there is still a lot it is not possible to know about violence in London, or how to respond to it: our understanding of the problem is incomplete, as is our knowledge of what will work to prevent it. As a result, in the medium to long term, the VRU must work with partners to address gaps in measurement and build the evidence by driving a culture of iterative research and experimentation. This is in line with the VRU's adoption of a public health approach, which like any evidence-based method, continuously tests hypotheses with empirical research findings, rather than basing decisions on theory, assumptions, tradition or convention.^{boxv}

In practice, this means collecting and using data to understand violence and its causes; building the evidence to develop responses; and evaluating violence prevention approaches to establish what works and for whom.^{boxvi boxvii} It also means being willing to find out that some approaches do not work; and having the courage to try things that might fail. If the VRU and partners successfully drive this change in approach, they can bring about a step-change in violence prevention in London and pave the way for sustainable reductions. Below we present a framework to help the VRU realise this goal.

Figure 13. A framework for driving a culture of iterative research and experimentation



Understand the problem

Improve our ability to measure, understand, monitor and anticipate violence in London

By establishing a more precise understanding of violence, the VRU and partners are more likely to be able to respond effectively. However, as the first section of this report has shown, our understanding of the frequency of violence, why it happens and to whom is significantly limited by what data is available, and how reliable that data is. Plugging the gaps in our ability to measure, understand and monitor violence must be an early priority for the VRU. To achieve this, the VRU should bring together data sources and compile these into an easy to use, publically available set of metrics, or performance framework.

Below, we set out six principles that the VRU should follow in compiling these metrics. For this to be a success, partners must support the VRU by sharing their data.

1. Monitor harm as opposed to simply the frequency of police recorded violence

Simply considering the volume of violent offences recorded by the police can be misleading because it masks the difference in the damage and harm caused by different types of violence. This may lead to incorrect resource allocation or an underestimate of the true scale of violence. To address this issue, researchers at Cambridge have developed a 'crime harm index', which weighs different offences based on their severity, drawing on sentencing guidelines to estimate the severity of different types of crime.^{lxxviii} The ONS crime severity score has been developed based on the simple principle in order to track a single measure of violence-related harm over time, across different types of violence and in different areas. The VRU should draw on these indices to monitor trends in violence.

2. Draw on a wide range of data sources to address gaps in measurement and under-reporting

There is evidence that using data from other emergency services to identify problems and inform responses can reduce serious violence. The Cardiff Model was first implemented in 2001 in recognition of the fact that a large proportion of violence goes unreported to the police. Anonymised A&E data (capturing the precise location of where and when the violence occurred, weapons used, as well as the number of assailants involved) was shared monthly and combined with police data to create hotspot maps charting the changing trends in violence. This information was used to inform the activities of a multi-agency "Violence Prevention Group". An evaluation comparing trends in violence in Cardiff with 14 'most similar' cities over an 84-month period found a significant reduction in hospital admissions due to violence (from seven to five per 100,000), where admissions increased in comparison cities. Police recorded wounding increased to a lesser extent than in comparison cities (54 to 82 per 100,000 in Cardiff, versus 54 to 114 per 100,000 in comparisons).^{lxxix} Drawing on this evidence, the VRU should draw on a wide range of data sources to understand the true scale and nature of violence in London, and inform responses. This includes:

- I. Data from other statutory partners, particularly A&E data, ambulance data and data from GPs.
- II. Data from charities and civil society groups, particularly those offering support to victims of domestic violence, which is particularly subject to under-reporting.^{lxxx}
- III. Targeted surveys in high violence neighbourhoods to build a richer picture of residents' experiences of violence in those areas.

3. Capture the consequences of repeat victimisation

The risk of violence is not evenly distributed and there are some people whose lives are irreparably damaged by frequent violence. However, the way that crime statistics are measured across a population fails to capture this inequality in the distribution of harm across different people. To illustrate, if one person is victimised five times in a month, that is counted as equal in consequence to five different people being victimised once in the same period.

Recent research has highlighted that reductions in violence since the mid-1990s often referred to as the 'great crime decline',^{lxxxi} is likely to have masked very different realities for different cohorts and communities.^{lxxxii} For example, research into the crime drop in Glasgow found a large reduction in one-off victims of property crime, but no reduction in the 'repeat' victims who experience frequent violence.^{lxxxiii} By relying uniquely on population-level measures that treat each violent incident as an independent event, and that cannot detect patterns of repeat violence and suffering among the most vulnerable, the VRU and partners may not intervene where harm is greatest. To address this, the VRU should work with partners to capture and monitor measures of repeat victimisation.





4. Work with partners to improve the accuracy of data that is recorded

Poor data quality often limits the contribution that data can offer to our understanding of the scale and nature of a problem. For example, our ability to determine conclusively what proportion of violence is gang or knife related is limited by inconsistent use of 'flags' when police record offences.

Data quality may be poor because those collecting the data do not know how it will be used and why accuracy is important, or because other demands for their time mean accurate data collection is not a priority. For example, a College of Policing report on the implementation of the Cardiff Model, highlighted that the quality of data entry often erodes over time as initial energy around the work fades with a lack of clarity about what end(s) the data may be supporting.^{lxviii}

To address this, the VRU should work with partners to improve the quality of data that is captured. Early priorities should include working with the MPS to improve consistency in the use of flags for domestic and gang violence.

5. Monitor Londoners' concerns about violence

As discussed previously in this section, the VRU and partners should take actions to help ensure people in London feel safe. In order to monitor this, the VRU should include data from the Public Attitudes Survey, which tracks Londoners' concerns about crime. To check that activities and interventions benefit all Londoners, the VRU could also make reducing inequalities in concerns about violence across different London communities a determinant of its success.

6. Track correlates of violence to help partners remain on the front foot

By monitoring the correlates of violence, the VRU and partners will be better positioned to spot and prevent violence before it occurs. For example, as discussed in the previous chapter, there is strong evidence that drug markets are linked to rates of violence. Drawing on this the VRU could create more sensitive measures of drug consumption in order to remain on the front foot with regard to drug markets.



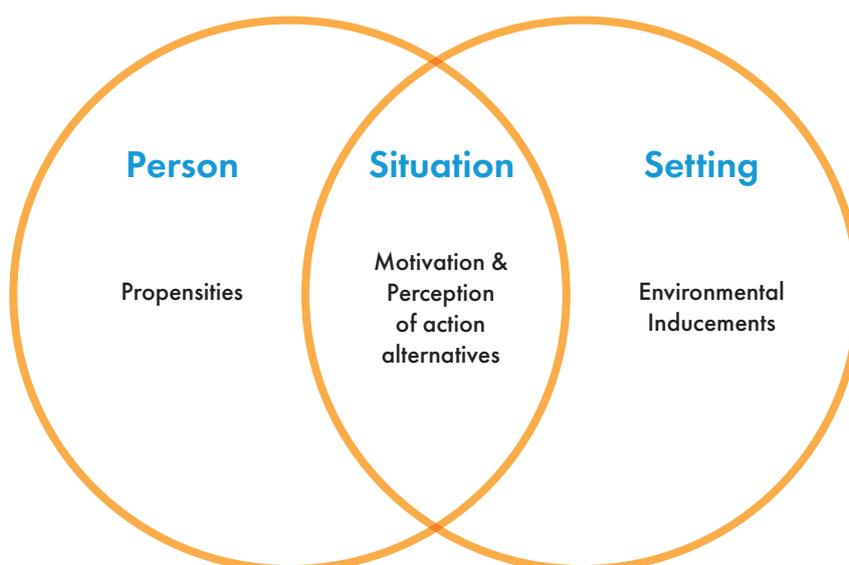
Commission research on the neighbourhood and situational drivers of violence in London

In the previous chapter of this report, we set out hypotheses for the likely risk and protective factors for violence in London. However, we also highlighted many unanswered questions. For example, why are some deprived neighbourhoods more vulnerable to violence than others? By commissioning research to shore up hypotheses and facilitate answers to unanswered questions, the VRU can ensure its partners have access to the best evidence possible in designing responses to prevent violence.

Research from criminology provides a useful theoretical framework for thinking about how to understand why violence happens and how to respond: in simple terms, violence is likely to occur when certain people interact with certain environments and there is some form of action mechanism or short-term catalyst (see Figure 14).⁶⁰

By understanding the drivers of violence at each of these three levels (place, person and situation), the VRU and partners can know how best to intervene at each of them to prevent violence.

Figure 14. A framework for understanding the causes of crime. Source: Wikström, Mann and Hardie (2018)



In the previous we presented the evidence on the individual risk factors associated with violence. For example, poor parental supervision, weak attachment to school and exposure to violence at school are associated with increases in a young person's risk of violence. Some of this evidence is based on research that was conducted many years ago and in other cities or countries. The last cohort study of young people in London was the Cambridge Study in Delinquent Development, which started in 1954 and involved a cohort of 401 males.⁶⁰ Given both London's population and environmental factors have changed significantly since this period, the VRU could refresh this research by commissioning an accelerated cohort study of young people in London.

However, we think understanding the environmental (place-based) and situational drivers of violence should be the priority for the VRU, as that is where the gaps in evidence are greatest. With this in mind, we have identified two research priorities for the VRU.

⁶⁰ The Millennium Cohort Study, which started in 2000, covers the whole of the UK: <https://cls.ucl.ac.uk/cls-studies/millennium-cohort-study/>

1. Place, neighbourhood vulnerability to violence and protective factors

In the previous section, we saw that neighbourhoods characterised by rates of high violence tend to be more deprived in multiple ways.

More than half of all the poorest neighbourhoods in London were also the poorest over a hundred years ago and gang territories today appear to map on well to streets identified as poor in 1898 and 1900.⁶¹ However, it is not clear what explains the persistence of area-level deprivation and associated violence. Possible explanations include features of the built environment, a high concentration of alcohol outlets, access to (or a lack of) transport links, persistent under-investment in services in these areas, or the availability of cheap accommodation, which attracts vulnerable residents.

In addition, the relationship between neighbourhood poverty and violence is not consistent and not all deprived neighbourhoods experience high levels of violence. We don't know exactly why this is, but social cohesion and trust among communities are likely to be important protective factors, i.e., the determinants of neighbourhood vulnerability to violence are determined by how people interact and organise themselves in those neighbourhoods, as much as (if not more than) who those people are.^{60xvii}

By better understanding these risk and protective factors at neighbourhood level, the VRU can bolster local and community responses to violence and bring about long-term reductions in harm. For example, if social trust and collective efficacy are important neighbourhood-level protective factors against violence, the VRU could work with partners to bolster community activities and active citizenship in vulnerable neighbourhoods.

To achieve this, the VRU should commission research to explore neighbourhood vulnerability to, and protective factors against, violence. This should include establishing a better understanding of what constitutes a 'neighbourhood' and how data should meaningfully be clustered (for example, clustering data based on demarcations of neighbourhoods identified through geographic boundaries such as stations, major roads or housing estates, as opposed to administrative boundaries between boroughs and wards, which rarely reflect how people experience place).

This research should investigate how people move around different neighbourhoods (for example, data analysis to determine what proportion of violence is 'local'); and carrying out detailed, highly localised, mapping of features of the environment using administrative data (such as the availability of transport links, the design of the built environment, the availability of public services).

Lastly, this research should capture and understand peoples' attitudes, experiences and interactions in different neighbourhoods. There are a number of techniques by which this could be achieved. For example, US research on neighbourhood effects drew on in-depth interviews with households and community leaders; surveys; systematic social observations to understand the 'sights, sounds and feel' of different neighbourhoods (including through videography); data on civic participation and attendance community events; and 'lost letter' experiments, which examined the rate of return for randomly dropped stamped letters to capture a measure of altruism within different communities.^{60xviii} This last component in particular could be achieved rapidly, with data on the rate of return overlaid with data on violence.

2. Situation, motives and micro-pathways to violence

This report has presented a strategic assessment of violence and its potential drivers. However, based on available data, it is not able to provide insight into the motives behind violent incidents and the events that precede them. For example, we cannot determine the proportion of homicides in which the victim and perpetrator were known to each other, the proportion of incidents of knife-enabled violence where the perpetrator was under the influence of alcohol, nor the proportion of serious violence incidents that were 'strategic' (i.e. planned a long time in advance) as opposed to impulsive. The Homicide Review published alongside this report helps to establish some of these contextual factors. However, as SCIE note, the assessment is limited by its reliance on published Serious Case Reviews (SCRs) as not all homicides are subject to an SCR.

⁶¹ This is not unique to London. Crime (in particular violence) is continually highly concentrated in places, even in spite of full population turnover. E.g. see Lee, Y., Eck, J. E., Soohyun, O., & Martinez, N. N. (2017). How concentrated is crime at places? A systematic review from 1970 to 2015. *Crime Science*, 6(1), 6.



To complement the SCIE's findings, the VRU should commission research that draws on unpublished data sources, particularly police case files for homicides and knife-enabled violence with injury and hospital injury records. This research should seek to understand the situational factors and behaviours that determine whether a violent incident occurs and provide answers to questions this report could not address, such as: in what type of places (public and private) does violence happen? What is the relationship between victims and perpetrators? What are the behaviours that precede violent incidents? This should include developing a more detailed understanding of how alcohol or other substances affects the risk of serious violence, and how this might be mediated or prevented.

A better understanding of the situational factors that catalyse violence will enable the VRU and partners to develop better-informed responses. For example, if the VRU found that the majority of violent incidents between young people were impulsive or driven by maladaptive heat of the moment automatic responses, they could work with partners to put in place interventions to reduce impulsivity. Similarly, if the VRU found that a significant proportion of serious violence incidents happened following altercations in bars or clubs, it could work with the private sector to change the way behaviour in these environments is regulated.

Outside of these three research priorities, the VRU should encourage partners to plug gaps in understanding of the drivers of certain behaviours. For example, in our research for this report, we have not come across recent research on motivations for knife carrying in London. Previous research has pointed to: fear (i.e. carrying a knife for self-defence), which may be heightened where knife offending is salient, e.g. prior victimisation; social norms and status (i.e. carrying a weapon for self-presentation or 'respect' among peers); utility (i.e. carrying a weapon to intentionally intimidate or injure others for robbery, sexual assaults etc.); and lack of trust in the police as key drivers of knife carrying. A 2018 study found that people who had a recent history of violence or drug use, who had little or no trust in the police, or had lots of peers who had been in trouble with the police, were each more than twice as likely to carry a weapon.^{xxxx} However, this study was based on survey data collected between 2004 and 2006, so may not reflect current drivers of knife use (for example, the data precedes the proliferation of social media).

To address this gap, the VRU should encourage partners developing knife-carrying interventions to investigate the drivers of knife-crime in London. This could include a review of hospital injury records for cases of assaults with sharp objects to investigate what can be established about the way knives are being used; and a review of the types of knives that are being seized by the police to determine if there is evidence of a localised "arms race" with increasingly dangerous knives being carried.



Use smarter analytical models to identify predictors of risk and intervention opportunities

As we discussed previously, it is likely that reductions in public spending since 2011, and associated increases in caseloads, have made it more difficult to identify young people at risk of violence and intervene early. This is compounded by the fact that, although there are many individual-level risk factors associated with violence, the causal relationship between these risk factors and violence is poorly understood, which limits their usefulness as a means of targeting support.

The case study taken from a Serious Case Review in the previous chapter of this report highlighted the intervention opportunities in the young victim's life that were not realised. The young man was missing from care at the time of his death; his mother had decided to stop attending Child and Adolescent Mental Health Services with him; as a child he had persistently not attended school; and he had a history of previous offending. These behaviours, such as going missing, are recorded in administrative data captured by the VRU's partners. This wealth of administrative data presents an opportunity to carry out large scale data manipulation to identify which behaviours or patterns of behaviours are predictive of violence (as opposed to simply associated with it).

To capture this opportunity, the VRU and partners can draw on advanced analytical techniques such as data science and natural language processing to predict risk and target resources where risk is highest. These models would seek to identify the factors that are predictive of violence (as opposed to specific individuals), with helping the VRU and partners intervene where risk is greatest and bolster the 'safety net' around those most vulnerable to violence. Below, we set out four rapid analysis projects for the VRU and partners.

1. Going missing and violence

The most recent publicly available data indicates that there were 11,699 children reported as missing or absent to the MPS in 2016/17.^{xc} There is a link between going missing and becoming involved in gang activity and county lines. Children and young people may go missing because they are travelling long distances to deliver drugs and may suffer further exploitation en route. They may also go missing because they are forced to pay off debts to gang members (i.e. running away to escape the problem).^{xcii} We have not seen any specific analysis that looks at what proportion of young people involved in violence had previously been reported as missing in London. By using existing administrative data to investigate this relationship, the VRU and partners can identify specific intervention opportunities. This should include looking at the predictors of risk of violence based on the characteristics of missing incidents. For example, there may be certain places from which young people go missing (such as particular care homes) that signal an elevated risk of subsequent involvement in violence. By identifying these locations the VRU and partners can target their responses.

2. Social networks and violence

Social networks can be powerful predictors of behaviour. For example, one study used eight years of data from Chicago to build a social network model based on individuals who had been arrested together and found that around 60 per cent of the 11,123 gunshot episodes in that period could be predicted by social networks.^{xciii} The VRU and partners could draw on violent arrest records to build a network model that focused on risk of future violent perpetrators and/or victims of violence. By building up this picture, it would be possible to identify patterns of violence, and relationships between victims and perpetrators, with this information used to target interventions.

3. Predicting threat through social media sentiment analysis

It is possible that social media catalyses and amplifies risk of violence, by making it easier for people to threaten or ridicule each other online and harder to de-escalate these situations due the wide visibility of these exchanges. However, there is currently little high quality evidence on this.^{xciii} We do not know, for example, what determines whether an online disagreement will lead to physical violence, nor what the triggers of this might be. Researchers at University College London (UCL) are currently analysing the comments on gang-related 'drill music' videos posted

on YouTube to examine whether there are changes in the sentiment of these comments following gang incidents.⁶² Building on this, the VRU could work with the MPS to link the social media accounts of those known to be involved in violence and conduct sentiment analysis on those accounts,^{63 xciiv} comparing them to those of similar individuals who were not involved in violence to identify the predictors of violence. This would enable the VRU and partners to determine certain language patterns that predict imminent violence, and use this to target future responses.

4. Exclusions and violence

The number of pupils in London who have been permanently excluded or had a fixed period inclusion has increased since 2013/14, from a low-point of 780 in 2013-14 to 1,090 in 2016-17 (representing 0.09 per cent of the pupil population).^{xcv 64} While there is no causal link between being excluded and going on to be involved in violence, there is evidence that those who have been excluded from school are more likely to carry or use a weapon compared with those who have not been suspended or excluded.^{65 xcvii xcviii} The VRU and partners should carry out analysis to understand the proportion of children who were excluded who go on to be involved in violence (both as victims and perpetrators). The VRU and partners could also analyse behaviour records in schools to better understand pathways to exclusion and opportunities for early interventions. In addition, they could investigate the relationship between schools with a high proportion of exclusions and violence within a geographic area.



⁶² For more information, see <https://www.ucl.ac.uk/jill-dando-institute/research/global-city-policing>.

⁶³ Sentiment analysis involves using an algorithm to measure and model language in text in order to identify the writers' attitudes or propensities. For example, the technique has been used to identify radical authors in online forums; and to analyse drill music videos.

⁶⁴ The total number of pupils with a fixed period exclusion (FPE) in London increased from 21,840 in 2013-14 to 27,705 in 2016-17. The top three reasons for PEs and FPEs are 'persistent disruptive behaviour', 'physical assault against a pupil', and 'other'.

⁶⁵ In addition, the research found that knife possession offences rarely followed shortly after exclusions, with the majority being over 90 days after.



Design solutions

Draw on evidence of what works

The VRU and partners want to draw on evidence of what works to develop responses to violence and drive adoption of effective approaches. This is easier said than done because our understanding of what works to prevent violence is limited, with four major limitations to the evidence base.

Firstly, there is a lack of Randomised Controlled Trials (RCTs) or other types of evaluation that seek to establish a robust comparison group to isolate the impact of violence prevention intervention.

Secondly, many evaluations do not measure the effects of programmes on violence. This is particularly the case for early interventions (for example, parenting programmes, or programmes that target anti-social behaviour in adolescence), which do not track participants over longer time periods.

In addition, the majority of evidence on interventions targeting violence or its risk factors comes from the US, where the context for violence is often very different to the UK. The differences are particularly stark when it comes to differing levels of social support and healthcare provision; the physical and social structures of cities and neighbourhoods; and the overall level and types of violence experienced.

Finally, while the range of potential responses to violence is very broad, ranging from improved street lighting, to home visiting in childhood, the evidence base is heavily skewed toward those types of interventions that are easier to evaluate. It is easier to measure the impact of programmes that are delivered to individuals than it is that of place-based interventions (such as changes to the built environment), or system-level changes, such as changes to discipline policy in schools or alcohol licensing regulations. Though less evaluated, these place-based or system-level changes may have the potential to deliver the greatest reductions in violence.

The VRU and partners should not be constrained by the limitations of the evidence base (i.e. they should not take its limitations as a barrier to innovation – simply because an approach has not previously been evaluated, that does not mean it won't work). Instead, they should be informed by it, incorporating insights about what has previously been effective and why into new or existing programmes, and making commissioning decisions based on a good understanding of the lay-of-the land of what we do and do not know.

To support this we conducted a rapid review of the evidence on violence prevention interventions. The findings of this review are at the end of this report. Our aim is to provide the VRU and partners with a practical guide that gives an overview of the quality as well as the availability of evidence and suggestions for how it could be applied.

Work with communities to adapt evidence for the local context

The nature and underlying drivers of violence will vary from place to place and the effectiveness of an approach will depend on what is already there. As a result, different approaches will work in different places, and evidence of what has been effective elsewhere should be one of many inputs to determining how to respond to violence.

Lessons from the past illustrate the importance of following these steps to assess and adapt evidence as opposed to simply 'lifting and shifting' from elsewhere. For example, as we discuss in detail in the findings from the rapid evidence review at the end of this report, the majority of evidence around the effectiveness of intensive therapeutic interventions aiming to reduce future violence (such as Multisystemic Therapy and Home Visiting) comes from the US. However, positive effects often disappear when these types of programmes are tested in the UK.^{xcviii xcix c 66} This is likely to be because the baseline provision in health and social support for vulnerable families is higher in the UK than in the US, so the additionality of these types of interventions is much lower.^{ci}

⁶⁶ The health outcomes measured included: smoking in pregnancy; birthweight; emergency hospital attendance and admission for the child; and subsequent pregnancy compared to usual care in the short term.

Another example illustrates the importance of working with partners and communities to make the transfer of evidence work in practice. In 2014, MOPAC sought to develop an intervention that drew on evidence from the US to tackle gang violence in the London boroughs of Lambeth, Haringey and Westminster. The intervention, called Operation Shield, was heavily resisted by stakeholders, leading ultimately to its rejection by two of the three chosen pilot councils. A MOPAC evaluation of the pilots highlighted that partners and communities should have been involved in the design of the programme much earlier.⁶⁷

Based on the above, VRU and partners should interpret and translate evidence for the local context. This should involve considering whether effective approaches addressed similar problems with similar underlying drivers, and whether they have been implemented in similar contexts. To support this, the VRU and partners should draw on the rich networks and knowledge of London's civil society and community groups to understand which services and interventions are on offer, which are actually being accessed by those who would benefit, what types of additional interventions might be useful, and how to make this work in practice.

Ensure interventions reach those who need them

Even the best-designed programmes and services will not succeed if those who would most benefit do not want to, or cannot, access them. To mitigate this risk, the VRU and partners should identify and remove the barriers to access. These barriers may be structural (for example, lack of time, lack of money, travel distance); they may also be behavioural and psychological. For example, people who have experienced trauma and adversity in their past, or felt previously let down by services, may not wish to engage with them again; or young men who have grown up in distressed and dangerous neighbourhoods may have habituated certain behaviours and tendencies that are adaptive in some context, such as low trust in outsiders and immediate escalation when threatened, but fail them in other settings, such as persisting with an employment programme or taking part in sporting activities.^{cii ciii civ}

Evidence shows that changing the way programmes are communicated or delivered based on a deeper understanding of how people are likely to respond, can significantly improve outcomes. For example, in a project to improve educational outcomes for adults in further education colleges, BIT found that prompting learners to nominate 'study supporter' – a parent, older sibling, mentor or friend – to receive regular text messages about their work increased attainment by 27 per cent. Similarly, a BIT project in Moldova showed that making it easier for patients to adhere to TB treatment by recording a video of themselves taking their medication and sending it to the clinic, as opposed to having to go to the clinic to take the medication, doubled adherence rates.

In light of the above, the VRU and partners should identify and remove barriers to access of services, or put in place interventions to overcome those barriers. This could be achieved by delivering services in a way that avoids or minimises new stress, or inadvertently resurfaces past trauma; and ensuring processes are designed with the needs and perspectives of those who are supposed to engage with them in mind (for example, removing the need for victims or offenders to repeatedly recount their past experiences to service providers).



⁶⁷ For example, one of the key features of Ceasefire in the US was 'gang call-ins' meetings, which gang members were compelled to attend, where they were told violence would not be tolerated. However, authorities in the UK did not have the legal ability to compel attendance at such meetings.



Evaluate



Take a pragmatic approach to evaluation in the immediate term

Our view is that one of the most important benefits the London VRU can deliver for current and future generations of Londoners is to contribute to the evidence on what works to prevent violence. Without evaluation, the VRU cannot know which parts of its approach work, how much and where resources should be invested. To illustrate: the Glasgow VRU, which was one of the first VRUs, adopted many initiatives to tackle violence, ranging from police-led enforcement to anti-knife crime campaigns and early years' education. The resulting decline in violence in Scotland since the early 2000s has been largely attributed to the VRU's activities. However, to our knowledge, only one of the Glasgow VRU's many initiatives was causally evaluated. This makes it difficult to know which elements of its approach were most effective and to assess the impact of the VRU as a whole, compared with wider global factors.^{68cv}

However, establishing what works to prevent violence, particularly when focussing on early intervention, is not straightforward. Violence is a complex behaviour; it is infrequent (statistically speaking) and difficult to measure and observe. In addition, the benefits of early interventions are often realised in the future.

High quality evaluations to determine the impact of early intervention programmes on violence will require a counterfactual group who do not receive the intervention (often referred to as the 'control'); and a long measurement period in order to determine what impact the intervention has on violence. There are currently hundreds of violence prevention interventions and approaches being delivered across London. The vast majority of these are not being rigorously evaluated and it is not realistic to expect there will be high quality evaluations to measure impacts on violence for every one of them overnight.

Instead, the VRU will need to work with partners to incrementally build these programmes up so they are ready for evaluation. This should include working with partners to establish whether programmes are reaching those who are at risk of violence; and measuring the impact of programmes on vulnerability to violence (based on risk factors or outcomes associated with violence, identified through academic research). The VRU can then work with those programmes or approaches that are most promising and prepare them for more rigorous evaluation.

Generate a pipeline of interventions that can be evaluated more rigorously in the medium to long-term

In the medium term, the VRU should work with partners to foster a pipeline of interventions that can be more rigorously evaluated. The Youth Endowment Fund (YEF) was established by the government in 2019 in recognition of the fact that the evidence on what works to prevent violence is limited. Following a similar model to the Education Endowment Foundation (EEF) (which has supported 145 high-potential programmes to improve education outcomes and funded high-quality independent evaluations to test the impact of these programmes since 2011), the YEF will support and evaluate promising interventions to prevent those aged 10-14 from getting caught up in crime and violence; and pay for high-quality independent evaluations. The YEF has been awarded a £200 million endowment from the Home Office to achieve this, with funding available over at least ten years. It presents a significant long-term opportunity to develop the evidence on what works to prevent violence.

In light of this opportunity, the VRU should seek to foster a pipeline of programmes that can be put forward for evaluation by the YEF. To achieve this, it should seek to bring together the deep community knowledge and local experience of its partners and London's civil society; provide them with evidence to complement their understanding of the problem interventions need to address; and build relationships between intervention providers and researchers or experts, so that approaches can be refined based on the best available evidence. The VRU could begin by identifying a shortlist of promising programmes; and working with them to prepare and develop bids into the Youth Endowment Fund. The 40 community projects recently funded by the VRU to deliver interventions, support and diversionary activities in high-crime areas could be a good starting point for this shortlist.

⁶⁸ Some researchers studying the decline in violence in Glasgow have highlighted that the impact of wider global factors may have had a greater impact on violence, this does not mean the VRU did not have an impact, rather that we cannot isolate what that impact was.



Make it work in practice

Provide the resources, incentives and connections to drive iterative research and experimentation

While direct responsibility for many of the previous recommendations will sit with the VRU's partners, the VRU, through its convening, enabling and funding power, has a critical role to play in providing the resources, incentives and connections to make them happen. We summarise three ways the VRU can do this below.

1. Broker data sharing agreements

Previous recommendations in this section pointed to the need to improve measurement and monitoring of violence; and the opportunities presented by using advanced analytical techniques to predict risk. For this to work in practice, different agencies will need to share data with one another. Data sharing often fails for the same reasons: ambiguity around what is and is not possible, a lack of a common understanding about what data will be used for, and the lack of a single individual responsible for making data sharing happen. The VRU has an important part to play in corraling partners to overcome these barriers, identify what is and is not possible, and ensure data can be used across partners to deliver the best possible responses to violence.

For example, College of Policing guidance on the Cardiff Model highlights that a named data-sharing champion is essential in maintaining partnerships, ensuring the quality of data and analytic outputs, and driving data-use. Drawing on this insight, the VRU could work with partners to assign responsibility for data sharing agreements to specific individuals. Based on our experience attempting to access data for this project, we think it is essential these specific individuals are senior within organisations and have the authority to rapidly release data.

2. Provide access to analytical and research capability

The VRU has an essential role to play in providing partners with the resources to research, analyse and evaluate. To achieve this, the VRU can provide partners with funding for analytical projects and hire dedicated analysts who can be deployed to support partners.

Fortunately London, and the UK more widely, also have some of the world's leading research institutions, including but not limited to the Cambridge Institute for Criminology, the UCL Jill Dando Institute of Security and Crime Science and the LSE's Centre for Economic Performance. The MPS and MOPAC are already funding a partnership with the Jill Dando Institute at UCL, which the VRU could build on by brokering partnerships with other universities and research institutions.

3. Commission and incentivise the use of evidence and evaluation

To ensure evidence and evaluation are at the heart of London's approach to violence prevention, the VRU could commission and fund independent evaluations. In addition, it could require programme providers to present a clear theory of change, and agree to their programme being evaluated as a condition of receiving VRU funding.

Make multi-agency working as easy as possible

SCIE's analysis of statutory reviews of homicides and violent incidents, published alongside this report, highlights the importance of effective multi-agency working to prevent violence. Across the cases SCIE reviewed, both victims and perpetrators came into contact with several services, including primary and acute health services, mental health services, children's social care, and housing services.



Evidence from past violence prevention approaches in England and Wales highlights what can be achieved when different parts of the public sector work together and with communities to prevent violence. For example, the evaluation of the Cardiff Model found a significant reduction in hospital admissions due to violence (from seven to five per 100,000). On the other hand, an inability to work across boundaries can undermine the success of violence prevention initiatives. According to MOPAC the Shield initiative was unsuccessful due to a lack of multi-agency coordination, including the inability to compel attendance at call-ins, the lack of available civil sanctions, an impractical implementation model, and difficulties in engaging local communities in the pilot.^{cvii} We set out three specific ways the VRU can encourage effective partnership working below.

1. Remove the barriers to partnership working

Investigating the barriers to effective partnership working was not within the scope of this project. However, based on past research and our experience working with agencies across the UK, we have often seen how small obstacles can inhibit collaborative working and systems leadership. Simple things, like navigating working patterns across different agencies, may make it difficult to attend multi-disciplinary meetings and work collaboratively. The national evaluation of the Troubled Families Programme found that physical colocation, local team meetings and harmonising computer and data management systems helped to strengthen multi-agency working in five case study areas over the course of the programme (specifically relationships with schools, health and the police).⁶⁹ Similarly, simple steps, like rotating regular meetings at different venues (hospitals, police stations, schools, community halls) may help to ensure that participation in the partnership is as hassle-free as possible for all partners.

2. Increase cohesion across agency boundaries

The cohesiveness of a multi-agency partnership can also be undermined by perceived and real differences between agencies, including in professional working cultures, methods of working, risk appetite, and resources. This has potential to create a blame culture, which can be a source of tension. To avoid this, the VRUs should look to reduce the perceived sense of difference across agency boundaries. This could be achieved through team building exercises that encourage staff to reflect on the similarities between them,⁷⁰ or activities such as shadowing opportunities with partners in other agencies.^{cix}

3. Embed feedback loops

Finally, effective multi-agency working is likely often to depend on staff taking actions that are, or at least were previously, outside the remit of their day-to-day brief. Providing feedback to all partners on the benefits of those actions is an important way to sustain motivation, particularly for those in administrative roles who are required to play an essential part in, for example, data collection, but may not see the benefits of their efforts. Building on these insights, the VRU could identify specific opportunities to introduce feedback, for example to frontline officers who will be expected to collect more precise or detailed data.



⁶⁹ This was evidenced by 54 per cent of Troubled Families Coordinators agreeing that all agencies had a common purpose, an increase from 43 per cent in the previous year.

⁷⁰ We found that an ice breaker exercise that primed people to think about their similarities significantly increased between participants

4. What works to prevent violence: a rapid evidence review

Below we present findings from a rapid review of the evidence on violence prevention interventions.

As we discussed in the previous chapter there are significant limitations to the evidence base on violence prevention: there are few RCTs; many evaluations, particularly of early interventions, do not measure impacts on violence; the majority of the evidence comes from the US where the context is often very different to the UK; and the evidence base is skewed towards those types of interventions it is easier to evaluate (namely programmes delivered to individuals as opposed to place-based interventions or system-level changes).

Notwithstanding these limitations, in this final chapter, we provide the VRU and partners with a practical guide that gives an overview of the quality as well as the availability of evidence base as it stands. This was not a systematic review and we did not compare the relative effectiveness of different approaches (this would be impossible as studies do not consistently report on the same outcome measures). Instead, we provide a lay of the land to capture what we do and do not know.

We group violence prevention approaches into three categories: those for which there is promising evidence; those for which there is limited evidence, but which are likely to be worth pursuing; and those for which there is mixed evidence.

We urge the reader to bear two things in mind when reading this review. Firstly, the evidence is very limited across the board, so even where we find promising evidence, we stress the need to continue to evaluate. Secondly, the evidence should be seen as an asset, not a barrier to innovation – simply because an approach has not previously been evaluated, that does not mean it won't work.



Table 3. Summary of the evidence based on violence prevention interventions

Violence prevention type	Promising evidence	Limited evidence but worth pursuing	Mixed evidence
Primary <i>Address the root causes of violence</i>	<ul style="list-style-type: none"> • Individual skills-based programmes • Parent-based training • School-based bullying programmes • Mentoring 		<ul style="list-style-type: none"> • Intensive family therapies and support programmes • Employment programmes
Secondary <i>Prevent violence before it occurs</i>	<ul style="list-style-type: none"> • Hot spots policing 	<ul style="list-style-type: none"> • Knife interventions • Situational crime prevention 	
Tertiary <i>Respond to previous violence</i>	<ul style="list-style-type: none"> • Restorative Justice • Cognitive behavioural therapy for offenders • Prison education programmes 		<ul style="list-style-type: none"> • Domestic violence perpetrator programmes • Focused deterrence strategies



Methodology

1. Scoping. The breadth of potential responses to violence ranges from changes to the physical environment, to intense therapy for individuals, to policing tactics. To capture this breadth in this review, we looked at previous summaries of the evidence base, ranging from academic and grey literature summaries to reports and meta-analyses. This led us to group intervention types into groupings that appear frequently in the evidence base.

2. Compiling evidence. To find the most recent evidence for the groupings identified in step 1, we conducted a search for the most recent systematic reviews and meta-analyses for each of these intervention types in Google Scholar and key journals. We also included individual studies of violence prevention programmes that we were aware of with strong experimental designs. In total, we identified and reviewed over 200 publications through this review.

3. Assessing quality and relevance. We investigated the individual studies included in systematic reviews and meta-analyses, considering the following:

Study design: high quality studies identify the causal impact of an intervention on outcome(s) of interest by creating or identifying a counterfactual group who do not receive the intervention (often referred to as the 'control'). Randomised controlled trials (RCTs) are considered the 'gold standard' for evaluation as random assignment of the trial population into groups eliminates any systematic differences between groups. Non-randomised (or quasi-experimental) methods can also be robust if they give a convincing rationale for why the control group is similar to the group receiving the intervention. There are screening tools (such as the Maryland Scientific Methods Scale) that can provide a high-level indication of the rigour of different evaluation methods.^{cx}

Sample size: larger sample sizes within studies or across multiple studies of the same intervention generally improve the quality of evidence. Where reviews look at the aggregate effect of an intervention across multiple studies with a sufficient sample size, they can also identify the characteristics of studies that are associated with greater effects, often referred to as moderating factors.

Outcome measures: where violence was not directly measured or reported, for example where interventions target intermediate risk or protective factors, we reviewed whether outcome measures were linked to violence through a clear logic model.

Effect size: interventions reviewed reported on outcomes ranging from self-reported involvement in bullying to violent offences. As a result, it was not meaningful to systematically compare effect sizes across interventions. Instead, we used the reported effect sizes as a useful indicator of impact. Cohen's *d* is a standardised way of reporting effect sizes by indicating the difference in the average outcomes between treatment and control groups. For example, $d=1$ means the mean outcome measure for the treatment group is one standard deviation above or below that of the control group. Generally, $d = 0.2$, 0.5 and 0.8 correspond to the lower thresholds for small, medium and large effects respectively. Context is important for interpreting these effects to understand real-world impact, so we also considered the context of an intervention, such as specific study features, outcome measures, scalability and cost.^{cx}

4.1 Approaches with promising evidence

The majority of the evaluations of the approaches below have not measured impact on violence. However, there are rigorous studies, primarily from the US, UK, Australia and Europe, that show they are effective for other outcomes, which are linked to violence via a clear logical model.

Skills-based programmes for young people

Skills-based programmes teach young people skills to address known risk factors for violence. Examples include communication skills, anger management, interpersonal problem solving and self-control. These programmes often include components of cognitive behavioural therapy (CBT) and a broader suite of approaches and skills (such as social skills development and coping strategies).

Though there is little evidence that skills-based programmes directly reduce violence, they seem to be effective in reducing behavioural problems in children in schools in the US.^{cxii} A 2010 systematic review and meta-analysis identified 34 RCTs (none from the UK, primarily from the US) on programmes aiming to improve self-control in children aged ten and under, including social skills development, cognitive coping strategies and videotape or role play training. These programmes were found to improve self-control ($d=0.28$ for teacher reports to 0.61 for self-reports) while reducing delinquency and problem behaviour ($d=0.30$) when assessed by teachers (although not parents or direct observers).^{cxiii} In addition, meta-analyses of US conflict resolution programmes, involving skills training, peer mediation and embedded curricula, (2007: 36 studies, including 20 RCTs and 16 quasi-experimental evaluations; $n=4,971$) and psychosocial interventions (2015: 66 studies, including 57 RCTs and 9 quasi-experimental evaluations; $n=11,645$) found positive impacts on antisocial behaviour ($d=0.26$ and 0.31 respectively).^{cxiv cxv}

A limitation of the evidence base on these types of programmes is that, though they often include multiple components such as mentoring, service provision and parent involvement, these different components are rarely detailed or analysed. As a result, we do not know which of these components are most important for an intervention to be effective.

Promising evidence from Chicago is that components of CBT and other skills training can be used to prevent violence. The Becoming a Man (BAM) programme aims to help young people slow their thinking and respond to stressors using CBT-based exercises. A randomised controlled trial of BAM with a large sample size of 12 to 15 year olds in Chicago ($n=2,740$) in 2009-10 found that it reduced violent crime arrests by 44 per cent. A second randomised controlled trial replicating the study with 14 and 15 year olds ($n=2,064$) in 2013-14 found it reduced total arrests by 33 per cent.^{cxvi} Based on this, the VRU and partners could integrate skills-based exercises, such as those used in BAM, into existing programmes for young people, such as after school clubs, youth clubs or summer schools.

Parent-based training

Parent-based training interventions, often delivered in community settings such as a clinic or a school, seek to improve parenting skills and parents' ability to nurture their children's development. There are a number of high-profile programmes that target parents with children presenting behavioural problems, including Triple P (developed in Australia to help parents deal with problem behaviours); Incredible Years (developed in the US and based on video vignettes and group-based role-play of parenting situations); and Parent-Child Interaction Therapy (PCIT) (developed in the US, which provides coaching to parents on specific techniques to improve interactions with their children).

Although there is limited evidence that parent training programmes directly reduce violence, there is good evidence that they reduce problem behaviours that may be associated with violence. A 2016 systematic review of 67 RCTs (seven Triple P, 22 Incredible Years, four PCIT, 34 other programmes, of which four were UK-based and the majority of other programmes were US-based) found training programmes for parents of children under the

age of five significantly reduced antisocial behaviour and offending in young people ($d=0.39$). This translates to a reduction in the proportion of participants offending from 50 per cent to under 32 per cent.⁷¹ ^{cxvii} A 2018 meta-meta-analysis (23 meta-analyses) of parent-based interventions found a similar effect size on child behavioural problems ($d=0.46$).^{cxviii}

There are two limitations to the evidence on parenting programmes. Firstly, the most frequently evaluated parent training programmes are those with large brand names such as Triple P and Incredible Years. These evaluations are often led by the programme developers, which some criminologists have suggested could lead to a conflict of interest, as the developer may be incentivised to inflate the reported effect size.^{cxix} ^{cxx} Secondly, there is limited evidence on which programme components affect outcomes, which parents benefit most, or how behaviour changes as a result of improved parenting practices. As a result, we do not have a good understanding of how these complex programmes achieve their effects, which makes replicating them difficult.

If the VRU and partners choose to offer parenting programmes to parents, we recommend they find ways of targeting this offer towards those parents (and children) who are most likely to benefit. This could include offering a parenting programme to the parents of a young person who is taken into custody, to the care-giver for a young person whose parent is imprisoned, or following the emergence of behavioural problems at school.

School-based bullying programmes

Unlike many other types of interventions with young people, bullying interventions often use a universal approach. Instead of just targeting bullies or victims of bullying (which would be stigmatising), they target interventions at the whole school population, including students, staff and even members of the community. The programmes often include anti-bullying policies, structured lessons or curricula, direct work with bullies, victims and peers (often by psychologists), teacher training (including in-person sessions and manuals or guidebooks), and parental involvement (including educational presentations or manuals).^{cxxi} One of the most prominent programmes is the Olweus Bullying Prevention Program, which involves components at four levels: the school, the classroom, the individual and the community.^{cxvii}

Though there is no evidence that bullying programmes reduce involvement in violence, there is good evidence that bullying programmes reduce bullying (and research has identified a correlational link between bullying perpetration and victimisation with future involvement in violence.)⁷² ^{cxviii} A meta-analytical review of 100 bullying prevention programme evaluations (59 RCTs, 41 quasi-experimental evaluations) from 2009 to 2016 found they reduced school bullying perpetration on average by 19-20 per cent ($d=0.15$), and victimisation by 15-16 per cent.^{cxvii} A similar meta-analysis of 24 studies (15 RCTs, nine quasi-experimental before-after evaluations) from 2000 to 2017 looking specifically at cyber-bullying found they reduced perpetration by 10-15 per cent, and victimisation by 14 per cent.^{cxv}

Again, there are limitations to this evidence base. These reviews specify studies with quantitative measures of bullying perpetration and victimisation, including self-report, teacher ratings, peer ratings and observational data. However, some of these measures might not reflect actual changes in bullying: for example, if a programme aims to raise awareness about the negative consequences of bullying, some participants may be less likely to report bullying behaviours following the intervention.^{cxvi} ^{cxvii} As is the case with parenting programmes and individual skills-based programmes, there is also limited evidence on which of the specific components of these programmes are most effective.

71 The proportion of participants offending given by the authors includes both home visiting and parent training. As the effect size is greater for parent training than home visiting ($d=0.39$ vs. 0.28), we assume the reduction would be greater for parent training alone.

72 A 2011 meta-analysis of 28 longitudinal studies showed that school bullies are 2.5 times more likely to have offended 11 years later than non-involved students ($d=0.51$), and bullying is a significant risk factor for future offending after controlling for other major childhood risk factors ($d=0.33$) (Tiofi et al. 2011).

Mentoring

Mentoring involves building a relationship between a mentor and mentee. The aim is usually to provide the mentee with a positive role model and build their knowledge and skills. For example, a mentor may provide a mentee with practical support, such as helping them to apply to jobs, and emotional support, such as boosting self-esteem or confidence.^{cxxxviii} These mentors are usually distinct from existing people who might have a presence in the mentee's life, such as their parents, teachers or other social service professionals.

There is reasonably good evidence that mentoring programmes can reduce offending. A 2013 Campbell Collaboration systematic review of 46 studies (27 RCTs, 19 quasi-experimental evaluations; five in the UK, majority US) found mentoring for high-risk youth⁷³ has modest benefits for offending ($d=0.21$, 25 studies) and academic achievement ($d=0.11$, 25 studies), with trends suggesting similar benefits for aggression ($d=0.29$, includes self, parent or teacher reports, seven studies) and drug use ($d=0.16$, six studies).^{cxxxix}

A limitation of the evidence base on mentoring is that the vast majority of studies include very little detail on what the mentoring programmes involved and how they were implemented. Factors such as how mentors were selected, what support they offered, and what they did to build a relationship with the mentee are likely to be very important in determining effectiveness. Mentoring is also often included as a component of other more comprehensive interventions, such as employment programmes or family therapies. This lack of detail and the wide range of contexts in which mentoring is used make it very difficult to identify what is effective, in which contexts, and for whom.

Hot spots policing

Hot spots policing is one the best-evidenced policing practices for reducing crime. As crime is often concentrated in small areas, hot spots policing involves targeting police attention and activities on these high-crime areas in order to increase the perceived risk of apprehension and reduce the opportunity for crime. This might include interventions such as directed patrols, proactive arrests and problem-oriented policing. Problem-oriented policing aims to change the underlying drivers of recurring crime at hot spots by tackling the specific problems that present in each local area. For example, if the police identify that shops in a particular area are being robbed frequently, they might require shop owners to clean their storefronts, or install CCTV around the area.^{cxxx}

There is good evidence that hot spots policing has a small positive impact on reducing crime. A 2019 Campbell Collaboration systematic review of 65 studies (27 RCTs, 38 quasi-experimental evaluations; four in the UK, majority US) found hot spots policing had a small, statistically significant impact on reducing crime in hot spots ($d=0.13$) as well as the surrounding areas ($d=0.09$) relative to conventional policing.^{cxxxi} However, hot spots policing appears to have a smaller impact on violent crimes ($d=0.10$) than other crime types, such as drug offences ($d=0.24$).^{cxxxii} Problem-oriented policing also appears to have a small, statistically significant impact on reducing crime and disorder relative to conventional policing ($d=0.13$).^{cxxxiii}

There are two limitations of the evidence on hot spots policing. Firstly, hot spots policing encompasses a broad range of policing activity; however, studies rarely identify the specific tactics or approaches that are effective. This is likely to be due to the range of different problems police face and the many possible responses, but also potentially due to police forces not recording these problems or their responses consistently.^{cxxxiv cxxxv} Secondly, studies often consider only the short-term impact of hot spots policing on crime and violence, without considering the longer term impact on community relations, and some hot spots approaches have historically been linked to narratives of unfair and biased police practices.^{cxxxvi}

⁷³ The authors do not define 'high risk'; however, the inclusion criteria for individual studies are often where young people have already offended or they present risk factors associated with violence.

Drawing on the above, and in light of the fact that many crimes go unreported, the VRU could work with the MPS to include data from sources such as community intelligence and Information Sharing to Tackle Violence (ISTV) data from hospitals to complement police crime data and help identify hotspots.^{cxxxvii cxxxviii} In addition, the VRU should also work with the MPS and other partners to consider how they approach policing those hot spots, building the evidence on the effectiveness of specific tactics or practices. For example, by testing daily high visibility police patrols in violent hot spots versus policing as usual.^{74 cxxxix} In addition, as previously discussed in this report, in order to maintain trust between the police and communities, the VRU could work with the MPS and other partners to ensure policing activities are transparent, developed in partnership with local communities, and following principles of procedural justice.^{75 cxl cxli}

Restorative justice

Restorative practices seek to communicate disapproval and condemnation for wrongs in a way that reintegrates people, not stigmatises them. At the heart of this is a move away from punishing those who do wrong and a move towards moralising them: encouraging them to accept what they did was wrong and reject their past behaviour on the condition that when they do so, they can be accepted back into society.^{cxlii}

These principles are operationalised within the criminal justice system in a wide range of ways, including victim-offender conferencing; family group conferencing; mediation or arbitration; community sentencing; restitution to the victim; and reparative boards. Collectively, these approaches are referred to as restorative justice. Restorative justice conferences are the most common and studied form of restorative justice in the UK criminal justice system. These use a trained facilitator for discussions between victims, offenders, and supporters for both parties. This can be a powerful way of encouraging offenders to understand the consequences of their crime and commit to reforming their behaviour in future. Restorative justice conferences can also give the victim a more active role in the justice and rehabilitation process, and more opportunity to explain the consequences of the offence on their life, than is usually possible through simple prosecution.⁷⁶ Conferences can (formally or informally) take place at various stages of the criminal justice process, from diverting offenders from prosecution through to post-sentencing in prison. For restorative justice conferences to take place, the offender must have admitted to the crime, and all parties must consent to participate. There is evidence from the US that restorative justice can be effective for reducing offending specifically for young people. A 2017 meta-analysis of 60 studies primarily from the US on programmes using restorative justice principles in juvenile justice found a moderate reduction in reoffending (official and self-reported, $d=0.23$).^{cxliii} Conferencing, mediation, and cautioning and diversion programmes in particular were found to have promising effects on reoffending outcomes, although they cautioned that the effects were smaller for studies with more rigorous evaluation methods.

In the UK, there has, in the past, been mixed evidence on the impact of several restorative justice schemes. Quasi-experimental evidence from two schemes (CONNECT and REMEDI) that focused on mediation (which also brings victims and offenders together but unlike conferencing, does not involve supporters for either) suggested that they increased the likelihood of reconviction,^{cxliv} and a 2001 Home Office report using retrospective exploratory analysis found only one of seven restorative justice schemes (of which five were post-arrest diversionary programmes) had a significant effect on reconviction rates.^{cxlv}

However, there is more promising, rigorous and recent evidence from one UK scheme that restorative justice conferences can have a small positive effect on reoffending (particularly for violence). A 2013 Campbell Collaboration systematic review of ten RCTs (of which seven evaluated the UK Justice Research Consortium [JRC] scheme) found that restorative justice conferences had a small but statistically significant effect on repeat offending ($d=0.16$) and seemed to work better for violent crimes ($d=0.20$) than other types of crimes (though this difference was not statistically significant).^{cxlvi}

⁷⁴ For example, an RCT in 2017 in Birmingham found that conducting 2.5 longer visits to hot spots reduces crime by 20 per cent when compared to five shorter visits (Johnson & Coupe, 2017).

⁷⁵ Incorporating components of procedural justice into police activity can have significant benefits on a range of policing outcomes, including citizen confidence and cooperation. (Mazerolle et al. 2013).

⁷⁶ See the Restorative Justice Council (restorativejustice.org.uk) for an overview of how RJ can be applied.

There are two limitations to the evidence on restorative justice. Firstly, the positive evidence from the JRC scheme may not be generalisable to restorative justice conferencing schemes, nor to restorative justice more broadly. Secondly, the positive evidence is based on studies with relatively small individual sample sizes (from 63 to 186).^{cxlvii}

Based on the above, the VRU and partners could consider where restorative justice could be tested throughout the criminal justice system. For example, there is early evidence that Operation Turning Point, a diversionary intervention that offers low-risk offenders a conditional deferred prosecution, often with restorative conditions (such as a letter of apology or compensation), reduced crime harm for violent offenders over two years by around 30 per cent.⁷⁷ ^{cxlviii} The VRU could also work with partners to test the use of restorative approaches outside of the criminal justice system, for example in introducing a form of restorative mediation for children who have behavioural problems in school in order to prevent exclusions.

Cognitive behavioural therapy for offenders

CBT involves helping people to identify destructive thought patterns and then create coping mechanisms. It is usually delivered by trained therapists, and often includes components of anger management, cognitive skills training and conflict resolution. It has been shown to be particularly effective at treating a range of mental health disorders but can also be used in a range of other areas, including for offenders.^{cxlix} CBT for offenders is often delivered under brand name programmes, such as: Reasoning and Rehabilitation; Moral Recognition Therapy; Aggression Replacement Training; Thinking for a Change; and Cognitive Interventions Program.

There is promising evidence that CBT can be effective on recidivism. A 2007 systematic review of 58 studies (19 RCTs, 39 quasi-experimental evaluations; five in UK, others primarily in the US) found the likelihood of reoffending was 1.53 times lower following CBT intervention ($d=0.23$). The review also found that the effectiveness of these CBT programmes was higher when they targeted higher risk offenders and when they included anger control and interpersonal problem solving components as opposed to victim impact and behaviour modification. This review looked at all types of recidivism, so we cannot tell whether this effect is true for violent crime in particular.^{cl} In addition, a 2011 study in Chicago also tested the impact of a programme incorporating a CBT-based curriculum with a large sample of high-risk juvenile arrestees in a juvenile detention centre ($n=5,728$). They found the programme reduced return rates by 21 per cent.^{cli}

Prison education programmes

Prison education programmes usually involve delivering academic or vocational curricula in prisons. In the UK, there are a range of educational schemes delivered in prisons, often through the Prisoners Education Trust (PET), which gives grants to offenders to complete distance learning courses or purchase art or hobby materials.^{clii}

There is limited evidence that prison education programmes have an impact on violence. However, there is evidence from the US that they can reduce the likelihood of reoffending. A 2018 meta-analysis of 11 studies in the US (two RCTs, nine rigorous quasi-experimental evaluations) found that inmates who participate in correctional education programmes had 28 per cent lower odds of offending than inmates who did not ($d=0.21$).^{78 79 cliii} A cost-benefit analysis suggests these programmes are also cost effective.^{cliv}

A quasi-experimental UK study conducted by the Ministry of Justice using matching found a similar effect on recidivism to that found in the US ($d=0.23$).^{clv} Apart from this evaluation, there appears to have been limited robust evidence on the effectiveness of prison education programmes in the UK.

⁷⁷ 65 per cent of these conditions in the Turning Point Intervention in West Midlands Police had some form of restorative condition.

⁷⁸ Of the 57 studies included in the analysis, these 11 were identified to have strong research designs rated at least 4 on the Maryland Scientific Methods Scale, including RCTs and quasi-experimental studies where the treatment and control groups are reasonably matched on observable characteristics.

⁷⁹ The meta-analysis includes prisoners who enrol but drop out of the programmes to estimate an overall effect of offering the programme for policymakers, to avoid potential selection bias where prisoners who complete the programme are likely to be a more motivated group.

4.2 Approaches with limited evidence that are worth pursuing

Below, we present the evidence on approaches that reflect the characteristics of violence in London but that currently have a limited evidence base. The VRU could play a leading role in building the evidence base for these interventions in London.

Situational crime prevention

Situational crime prevention aims to reduce the opportunities for crime through changes to the immediate environment.^{clvi} In particular, it focuses on reducing the prompts and opportunities for crime; reducing the perceived social pressures and permissibility of committing crime; and reducing the provocations to commit crime.^{clvii} Place-based interventions are closely linked to situational crime prevention, focusing on changes to the built or perceived environment.^{clviii} This can range from changing the layout of street barriers to reducing the availability of alcohol at certain times, to improving street lighting, to staggering bar closing times.

There are generally few RCTs or robust evaluations on situational crime prevention interventions, as environmental and place-based interventions can be particularly difficult to randomise, and they can require significant investment or buy-in across many agencies to be implemented.^{clix}

Despite this, there is some promising evidence that situational crime prevention can reduce outcomes linked to violence in certain contexts. For example, a recent review found that situational interventions specifically targeting football matches, such as mandatory transport arrangements for visiting fans and early kick-off times, can be effective on reoffending and game-day disorder.^{clx} In the US, a randomised controlled trial in New York found that provision of street lighting reduced night-time outdoor index crimes by 36 per cent.^{clxi} Although a 2008 systematic review indicates street lighting interventions have had little impact on violence in UK studies^{clxii}, the example from New York suggests the potential of this approach if implemented well. A 2015 quasi-experimental study in Philadelphia found that the introduction of a requirement to install secure doors and windows on abandoned buildings in 2011 was associated with up to a four per cent decrease in total crimes, including assaults.^{clxiii} Similarly, a 2011 quasi-experimental study in Philadelphia found gun violence was eight per cent lower near vacant land that had been 'greened' (converted into green spaces for example removing debris and planting grass or trees).^{clxiv}

There are significant opportunities for the VRU to test situational and place-based interventions, particularly given that violence in London is highly geographically concentrated. The VRU can play a central role in starting to build the evidence base of more specific place-based interventions in London.

Interventions to prevent knife carrying

Many of the interventions discussed above that target the drivers of violence generally may also have an impact on knife-enabled violence and knife carrying. However, as we have discussed previously in this report, there is evidence that there are drivers particularly relevant to knife carrying and crime, including self-defence, victim coercion, causing harm and self-presentation.^{clxv} As a result, targeting knife carrying itself could be an effective way of preventing violence (particularly as people may carry knives without intending to use them, but the mere presence of a knife increases the risk that confrontations escalate and cause greater harm as a result - known as the 'weapons effect').^{clxvi} There are a number of interventions specifically target knife carrying, from knife amnesties; community interventions; educational programmes; hospital-based counselling; media campaigns (such as #knifefree and London Needs You); and enforcement initiatives.^{clxvii} The number and range of interventions is likely to have increased in recent years given the mounting public concern and focus on knife crime (for examples, see the local programmes recently funded by the Government Anti-Knife Crime Community Fund).

Despite this, there have been no rigorous evaluations of which types of interventions to discourage knife-carrying work.^{clxviii} The VRU should focus on building this evidence base by evaluating existing knife interventions, and developing and evaluating new interventions that specifically target knife carrying and the underlying drivers of this behaviour in London. Evaluations of knife-carrying interventions are particularly important given the risk of a backfire effect as a result of social proof: the interventions themselves may cause people to think knives are more present than they actually are, prompting more people to carry knives.





4.3 Approaches with mixed evidence

In this section, we present interventions where the evidence is mixed, with studies showing mixed or null effects, or positive effects found in the US disappearing once interventions are transported to the UK. The VRU and partners should practice caution when approaching these types of interventions: examining why they have proven ineffective elsewhere, considering whether there are alternative approaches that might work better or adapting approaches before implementing them.

Intensive family therapies and support programmes

There are a range of programmes that intervene with the families of high-risk children to provide intensive therapy and wraparound services, including home visiting, Multisystemic Therapy (MST), Functional Family Therapy (FFT) and Multi-Treatment Foster Care (MTFC). Although there is some evidence from the US that these programmes can be effective, these effects often do not translate when these programmes are implemented in the UK.

Home visiting: Home visiting involves health professionals providing intensive early years support for vulnerable parents (particularly disadvantaged teen mothers) at home during pregnancy and early years to improve parenting skills, child behavioural issues and health outcomes. The largest programme in the UK is the Family Nurse Partnership (FNP), which works across 18 local catchment areas.^{clxix}

A 2013 meta-analysis of 51 US studies found home visiting programmes have a positive effect across a range of maternal and child outcomes ($d=0.20$), and appeared to be particularly for maternal life course outcomes, child cognitive outcomes, and parent behaviours and skills. However, the study does not identify the evaluation methodologies used, so we cannot determine the quality of this evidence.^{clxx}

The Home Visiting Evidence of Effectiveness (HomVEE) 2018 review identified 20 US delivery models that had good evidence from RCTs or rigorous quasi-experimental studies of a positive impact in at least one of their eight target domains.^{80 clxxi} However, only four models measured outcomes in the juvenile delinquency, family violence, and crime domain, and only two of these showed a positive impact using self-reported outcomes. These were developer-led evaluation studies for the largest home visiting programme in the US (the Family Nurse Partnership) and longitudinal studies have suggested a reduced likelihood of arrest and conviction in both adolescents and mothers over 15 years later.^{clxxii clxxiii} However, an RCT of the largest US home visiting programme being implemented in the UK (the Family Nurse Partnership) found no effect on health outcomes relative to usual NHS care, and suggested this was because of the high level of usual care provision compared to the US.^{81 clxxiv}

MST: MST is an intensive family-based intervention for young people with serious antisocial behaviour problems, delivered by full-time therapists at home or in their community. It usually lasts from 11 to 30 weeks^{clxxv}, and aims to simultaneously target different criminogenic risk factors to improve the support structures around the young person (particularly family functioning) to address their antisocial behaviour.^{clxxvi} The MST implementation process is highly manualised, where the team's adherence to the treatment principles is often tracked using a dedicated tool.^{clxxvii clxxviii}

A 2014 meta-analysis of 22 studies ($n=4,066$; one in UK, 16 in US, the remainder elsewhere) found promising evidence that MST can reduce antisocial behaviour and offending in the US ($d=0.20$). The meta-analysis includes a measure of study quality and design. However, authors do not present the number of randomised studies and suggest that the weak designs of non-randomised studies included may limit the validity of their findings. The authors also found that the intervention has been less successful outside the US.^{clxxix} A 2005 Cochrane systematic review of 21 studies from eight independent samples ($n=1,230$) found no significant effect of MST beyond treatment-as-usual on out-of-home placements, arrests or convictions.^{clxxx} In the UK, a recent 2018 randomised controlled trial in England ($n=684$) also found that MST did not reduce the likelihood of participants being in out-of-home replacement after 18 months compared to management-as-usual.^{clxxxi} The existing level of mental health support in the UK is likely to be the key reason behind this.^{clxxxii} A similar washout effect has been found when transporting MST to Sweden.^{clxxxiii}

80 The eight outcome domains are: child health; child development and school readiness; family economic self-sufficiency, linkages and referrals; maternal health; positive parenting practices; reductions in child maltreatment; and reductions in juvenile delinquency, family violence, and crime.

81 The health outcomes measured included: smoking in pregnancy; birthweight; emergency hospital attendance and admission for the child; and subsequent pregnancy compared to usual care in the short term.

FFT: FFT is a family-based approach for treating adolescent (aged 11-18) behavioural problems and substance misuse through five phases: engagement, motivation, relational assessment, behaviour change and generalisation. The intervention is delivered by trained therapists and involves 12 to 14 weekly one-hour sessions on average.

A 2017 meta-analysis of 18 studies (11 RCTs, seven quasi-experimental) found FFT had a significantly positive effect on outcomes including recidivism, family functioning and behavioural problems relative to untreated control groups (three studies, $d=0.45$) and well-defined alternative treatments (three studies, $d=0.35$), but not treatment-as-usual (five studies, $d=0.20$, not significant).^{clxxxiv} However, the studies included have relatively small sample sizes, and the lack of effect relative to treatment-as-usual was driven by a UK study ($n=111$) that the meta-analysis authors suggested had a “particularly intensive” management-as-usual control condition.^{clxxxv}

MTFC: MTFC (recently renamed Treatment Foster Care Oregon for Adolescents) is an intensive ‘wrap-around’ intervention for young people with severe behavioural issues. The young person lives with specially trained foster carers for six to 12 months while receiving an individualised daily treatment programme and proactive access to services. Family therapy is also provided to the birth parents to prepare them for when they are reunited following the treatment.

There is limited but positive evidence from two randomised controlled trials with very small samples ($n=79$ and 81) in the US that MTFC can reduce offending.^{clxxxvi clxxxvii} However, in an English randomised trial with a small sample ($n=219$), there was no evidence that treatment using MTFC-A (for adolescents) resulted in better outcomes on the Children’s Global Assessment Scale (CGAS) than treatment-as-usual (existing care placements including family foster care, residential care and residential schools).^{clxxxviii} They found a similar overall result in another English randomised controlled trial with a small sample relative to similar treatment-as-usual ($n=171$).^{clxxxix}

Employment programmes

Employment programmes involve offering employment or volunteering opportunities, often targeted at young people at-risk of becoming involved in violence.

A 2009 meta-analysis across violence interventions finds that employment programmes ($n=70$ studies) are the least effective at reducing reoffending (associated with a six per cent reduction) when compared to other programme types such as behavioural programmes or social skills training.^{cx} There is also little evidence on the impact of employment or volunteering programmes on preventing or reducing violence by young people in the UK.

However, there is some promising evidence from the US that employment programmes can be effective when combined with other support services. An RCT of the One Summer Plus programme in Chicago ($n=1,634$) found that it decreased violence by 43 per cent over 16 months following the programme (four fewer per 100 youths). Participants in the programme also received mentorship and support services, so the experimental design could not identify which aspects of the programme generated the decrease in violence.^{cxci} This suggests the VRU and partners should look at what measures should be put in place to bolster employment programmes such as the summer jobs programmes run by City Hall, in order to address the behavioural and psychological barriers that might prevent those at risk of violence from benefiting.

Focused deterrence strategies

Focused deterrence strategies (or ‘pulling levers’ programmes) use a combination of strict law enforcement, community engagement and social service provision to target consistently violent groups and individuals.^{cxcii cxciiii} The approach was pioneered in Boston by the Operation Ceasefire programme that has since been rolled out to a number of other US cities. These strategies primarily focus on increasing the offenders’ perception of the risk or certainty of sanction, however, they also aim to improve procedural justice and improve police legitimacy.^{cxciiv} Central to these strategies is that they identify a particular crime problem, then use all the tools and information available across agencies to identify key offenders and influence their criminal behaviour. There are three main types of focused deterrence strategies: i) reducing violence by gangs and criminally active groups; ii) reducing crime linked to street-level drug markets (‘drug market interventions’); and iii) reducing repeat offending of high-risk individuals.^{cxciv}

A 2018 Campbell Collaboration systematic review of 24 focused deterrence programme evaluations (all quasi-experimental evaluations; one in UK) finds they “generate noteworthy violence reduction impacts” ($d=0.38$ on overall crime). Although the authors call for more randomised controlled trials, they also acknowledge the quality of quasi-experimental evaluations has improved significantly over recent years.^{ccxvi}

However, the majority of these programmes have been implemented in the US, and have only been only piloted in two UK cities: Glasgow and London. The Community Initiative to Reduce Violence (CIRV) in Glasgow was run from 2008 to 2011, and it involved identifying gang-related youths in a disadvantaged area in Glasgow, inviting them to engage in the initiative and offering them access to personalised services and activities.^{ccxvii} The London Pathways Initiative and Shield were similar Group Violence Intervention strategies piloted in London.

The available evaluations of these pilots indicate that they did not have a significant impact on violence. The 2014 study of CIRV in Glasgow ($n=167$) found that the rate of physical violence reduction was not significantly different for those who participated in the initiative compared to a matched control group from an equally deprived area of Glasgow (52 per cent vs. 29 per cent after two years). However, the rate of weapon carrying was significantly reduced for those who participated (84 per cent vs. 40 per cent after two years).^{ccxviii} 82

MOPAC’s quasi-experimental evaluation of Shield in London using matched control gangs ($n=687$ of which 290 participated in Shield) over the pilot period also found no indication of a reduction in the level of violent offending.^{ccxix} They noted some key challenges faced in the UK context that might explain the result, including the lower existing level of serious violence than the US, the inability to compel attendance at call-ins, the lack of available civil sanctions, an impractical implementation model and difficulties in engaging local communities in the pilot.^{cc} The London Pathways Initiative, which was a precursor to Shield, did not succeed due to similar implementation difficulties.

Though these specific programmes have not translated well from the US to the UK, the foundational principle of this approach - using all available ‘levers’ to deter violence - is one that has a strong theoretical basis. The VRU and partners should look at how they can incorporate this principle into violence prevention interventions and programmes in London and, drawing on the evidence from Shield, do so in a way that ensures communities are engaged and on board.

Domestic violence perpetrator programmes

Domestic violence perpetrator programmes can include a range of components, including: group-based interventions (e.g. psychoeducational and cognitive-behavioural programmes); second responder programmes (follow-up contact with domestic violence perpetrators by social workers); individual-based interventions (e.g. anger management); and couples’ therapy. The two most common programme models used are the Duluth psychoeducational model and CBT. The Duluth model aims to challenge men’s perceived right to control their partner while promoting a more egalitarian approach to relationships. CBT, on the other hand, aims to identify the thought patterns leading to domestic violence, and create more positive thought patterns in their place through skills training and anger management.^{cc}

The evidence on domestic violence perpetrator programmes reducing re-offending is generally mixed or null. A 2004 meta-analysis of 22 programmes (primarily in the US) found a small effect on reducing reported violent reoffending with no difference in impact between different interventions.^{ccii} A 2008 Campbell Collaboration systematic review of ten psychoeducational and CBT programmes for domestic violence perpetrators in North America found no statistically significant effect in reducing repeat reoffending.^{cciii} A 2013 review of 11 evaluations also found no impact on reoffending rates from domestic violence perpetrator programmes based on the Duluth model.^{cciv}

However, there is one notable exception to this. In the UK, an RCT of Project CARA (perpetrator programme involving group-based workshops as a condition for a police caution) in Hampshire ($n=293$) found it reduced harm caused by crimes by offenders in the following year by 38 per cent, and reduced the frequency of re-arrest for domestic abuse by 21 per cent.^{ccv} Drawing on this, the VRU could consider feeding the lessons from Project CARA into existing domestic violence programmes, or replicating the CARA programme in London.

82 Northamptonshire Police is currently replicating the CIRV programme, including evaluation by the College of Policing.

Appendix

Methodology

The findings we presented in this report are the culmination of six months of research, below we summarise the activities completed to inform this research.

1. Interviews

We conducted interviews with academics, experts and the VRU's stakeholders. The purpose of these interviews was to inform the scope and direction of this research and to identify key sources of data and information. We sincerely thank all interviewees, summarised below, for their time, insights and advice.

- Professor Ben Bradford, Professor of Global City Policing, and Director of the JDI Institute for Global City Policing
- Dr. Keir Irwin-Rogers, Lecturer in Criminology, the Open University
- Professor Susan McVie, Professor of Quantitative Criminology, University of Edinburgh
- Professor Jonathan Shepherd, Emeritus Professor, Crime and Security Research Institute, Cardiff University
- Professor, Lawrence Sherman, Director, Jerry Lee Centre for Experimental Criminology, University of Cambridge
- Professor Betsy Stanko OBE, Former head of MOPAC Evidence & Insight)
- Professor Tom Kirchmaier, Visiting Senior Fellow, Centre for Economic Performance, London School of Economics
- Levin Wheller, College of Policing

In addition to the academics listed above, we interviewed representatives from the following organisations: Greater London Authority, Hackney Council for Voluntary Service, London Adults Safeguarding Board, London Borough of Hackney, London Safeguarding Children Board, Metropolitan Police Service, NHS, NHS England, National Probation Service, Victim Support, Victims Commissioner and the Youth Justice Board.

2. Data, research and analysis review

We reviewed and synthesised published analysis and data from a variety of published and unpublished sources to understand the nature of violence in London. These sources were identified through stakeholder interviews and included:

- A review of recent (last ten years) policy documents, e.g. the Home Office Serious Violence Strategy; London-specific resources, e.g. Greater London Authority (GLA) review of Serious Youth Violence; and independent reviews, e.g. Youth Violence Commission Interim Report.
- Exploration of publicly available secondary data from, e.g. MOPAC dashboards, Metropolitan Police, ONS, Home Office, NHS Digital and PHE Fingertips.
- A review of academic papers that had recently explored issues of violence in London, e.g. Sutherland et al (forthcoming), Kirchmaier et al. (2018), Massey et al (2019).

3. Rapid evidence review

We carried out a rapid evidence review of the literature on existing violence prevention approaches. To capture the range of intervention types rapidly, we focused our initial search on relevant existing summaries of responses to violence including:

- **Academic literature summaries and meta-analyses** of interventions targeting violence, crime and behavioural problems^{ccvi ccvii ccviii ccix ccx ccxi ccxii}
- **Grey literature reports**, from organisations including the UK government^{ccxiii ccxiv ccxv}; the Early Intervention Foundation^{ccxvi}; the College of Policing^{ccxvii}; the World Health Organization^{ccxviii}; NICE^{ccxix}; and the UK Faculty of Public Health^{ccxx}.
- **Existing violence intervention resources**, including the Early Intervention Foundation Guidebook, the College of Policing systematic review series and the Campbell Collaboration series;
- **Discussions with expert academics.**

Calculating the cost of violence in London

Table 4. Calculation of the total cost of violence in 2018/19. City of London Police, Heeks et al 2018, Metropolitan Police and Office for National Statistics

Violence type	Sub-type	Number of recorded offences	Unit cost (£) ^a	Total cost (£)
Violence against the person	Homicide	121	3,475,306	420,512,008
	Violence with injury	78,261	15,175	1,187,582,528
	Violence without injury (not including stalking and harassment)	86,429	6,405	553,549,246
Sexual assaults	Rape ^b	8,362	42,511	355,464,342
	Other sexual offences ^b	12,251	7,042	86,271,813
Robbery	Personal robbery ^b	32,002	12,226	391,264,213

a. Unit costs provided in Heeks et al (2018) – in 2015/16 pounds – are inflated over 3 years using annual growth in average weekly earnings of 2.6% to obtain estimates in 2018/19 pounds.

b. London-wide rates for rape, other sexual offences and personal robbery are estimated by combining data sourced from the Metropolitan Police and the City of London Police.

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Violence in London: what we know and how to respond

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Handan Wiesmann, Matthew Davies, Ollie
Sugg, Sophie Davis and Simon Ruda



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