



Developing a Serious Violence Strategy for Avon and Somerset

7 August 2019

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Foreword from the PCC

I have been working with the Constabulary on our approach to tackle Serious Violence for some time. Concerns have quite rightly been growing across the country as we hear of more tragic instances of lives being lost and in particular, young people both committing and coming to harm. In response, last year the government published its Serious Violence Strategy, which set out how it aimed for agencies to take a public health approach to tackling serious violence and challenging us all to deliver this strategy locally.

Since then, I have been clear that it is important for us to fully understand what serious violence looks like in Avon and Somerset so that we may address it effectively. We live and work in a diverse force area which is very different to, for example London. While I am undeniably keen to take swift action, I have also been determined to ensure our activity is evidence based and collaborative to give us the best opportunity to make a real difference in Avon and Somerset. It is also important that as a range of agencies we come to a common understanding about what a public health approach might look like in Avon and Somerset before tailoring our work to meet the needs of local people. As such I am delighted to now share the findings of this report commissioned by my office and funded by the Home Office.

While we may take some comfort in the findings that show that overall levels of serious violence have largely remained stable, when looking at specific areas, issues and cohorts this report should be a serious call to action for a range of agencies and communities. There are people that need our help and models that have been proven to work that we can learn from. This analysis from the Behavioural Insights Team will now allow us to capitalise on these opportunities to identify vulnerability and intervene early to prevent the harm that violence causes to individuals, communities and society as a whole.

As the foundation for my office's work with Local Authorities, Clinical Commissioning Groups, the Constabulary, voluntary sector and many more to establish Violence Reduction Units in Avon and Somerset, this report signifies an important step forward in our journey to building safer and stronger communities.

Sue Mountstevens

Police and Crime Commissioner for Avon and Somerset

August 2019

Executive Summary

Serious violence destroys lives, with repercussions that span generations. In Avon and Somerset, on average more than 1000 serious violence offences are reported to the Constabulary every month, at significant social and economic cost. Between November 2015 and March 2019, homicide and violence with injury cost Avon and Somerset nearly £765 million.^{1 2} The costs to society more broadly (through, for example, lost output or long-term physical and mental illness), though more difficult to quantify, are likely to be far greater, and longer lasting.

Tackling serious violence and breaking this destructive cycle is a priority for the Government; and particularly so given recent increases in serious violence nationally. To facilitate effective, local multi-agency responses to serious violence, the Government has allocated £35 million to PCCs in 18 local areas, including Avon and Somerset, to set up Violence Reduction Units (VRUs).

The set-up of the Avon and Somerset VRUs is an opportunity to develop and deliver a coordinated local response to serious violence that could: alleviate suffering; lead to substantial financial savings; and improve societal wellbeing and prosperity for current and future generations in Avon and Somerset.

To help to capture the potential of this opportunity, the Behavioural Insights Team (BIT) has worked with the Police and Crime Commissioner (PCC) for Avon and Somerset to develop a serious violence strategy for Avon and Somerset. In this report, we present a blueprint for developing a multi-agency approach to tackle serious violence in the local area.

We draw on our analysis of police recorded crime data to present an overview of trends in serious violence in Avon and Somerset. Then, based on a rapid review of the evidence we set out lessons Avon and Somerset can draw from other violence reduction models such as Cardiff and Glasgow. Finally, drawing on findings from interviews with stakeholders in Avon and Somerset, we set out 17 recommendations for enabling effective multi-agency working; and developing a serious violence strategy for Avon and Somerset. These are summarised on page seven.

The next steps are for the five local authority areas in Avon and Somerset, which will form the basis of five local VRUs, to consider these recommendations ahead of a

¹ Heeks, M., Reed, S., Tafisiri, M., & Prince, S. (2018), The Economic and social costs of crime, Research Report 99

² Homicide and Violence with Injury are prominent components of serious violence. However, the categorisation used in this document incorporates other offence-types. As such, we underestimate the total costs of serious violence. See Appendix A for information on calculations

meeting of the Avon and Somerset Violence Reduction Strategic group, on 10 September 2019.

We would like to thank the PCC for Avon and Somerset for partnering with us and enabling this research. We also express particular thanks to staff in the Office of the PCC, Avon and Somerset Constabulary and partner agencies, who have supported this work and facilitated our requests for data, interviews and information.

Creating the conditions for a multi-agency response

1. Introduce Information Sharing to Tackle Violence (ISTV) and use ISTV Data
2. Facilitate pooling and use of wider data sets
3. Build partnerships with universities and research organisations
4. Focus multi-agency groups on vulnerability and risk rather than offence types
5. Make multi-agency working as easy as possible

Target: define the serious violence problem

1. Identify areas with high serious violence and target resource towards them
2. Identify target groups for intervention

Explore: map relevant behaviours and the wider context

1. Investigate whether knife-carrying has become more prevalent in Avon and Somerset
2. Explore the drivers of exclusions
3. Investigate the drivers of vulnerability and connections to serious violence
4. Explore the drivers of alcohol consumption and alcohol-related violence
5. Explore the drivers of drug markets and drug-related violence

Solution: consider and design interventions

1. Map service provision and carry out a gap analysis
2. Identify and remove barriers to uptake of existing interventions
3. Identify intervention opportunities and develop new interventions

Trial: evaluate, learn and adapt

1. Evaluate new and existing violence prevention interventions

Scale: increase adoption of effective interventions

1. Facilitate knowledge transfer across the Avon and Somerset area

Introduction

Context

Serious violence destroys lives, with repercussions that span generations. For example, research suggests that having a parent in prison increases the likelihood of future involvement in crime;³ and that being exposed to violence in childhood can cause young people to develop aggressive responses that may lead them to become involved in violence in adulthood.⁴

In Avon and Somerset, on average more than 1000 serious violence offences are reported to the Constabulary every month. This brings significant economic and social costs. Between November 2015 and March 2019, homicide and violence with injury cost Avon and Somerset nearly £765 million.⁵ ⁶ £35 million of this was borne by health services, and nearly £45 million by the police.⁷ The costs to society more broadly (through, for example, lost output or long-term physical and mental illness), though more difficult to quantify, are likely to be far greater, and longer lasting.

Tackling serious violence and breaking this destructive cycle is a priority for the Government; and particularly so given recent increases in serious violence. Following decades of falling crime in England and Wales, we have seen an increase in the most serious violence categories such as homicides, knife crime and firearms offences since 2014.⁸ ⁹

³ For example, a study exploiting changes in sentencing policy in Denmark found that the policy, which reduced the likelihood that fathers were incarcerated significantly reduced the likelihood that male children were charged with crime by the time they were 28: Wildeman, C., & Andersen, S. H. (2017). Paternal incarceration and children's risk of being charged by early adulthood: Evidence from a Danish policy shock. *Criminology*, 55(1), 32-58.

⁴ Calvete, E., & Orue, I. (2011). The impact of violence exposure on aggressive behavior through social information processing in adolescents. *American Journal of Orthopsychiatry*, 81(1), 38.

⁵ Heeks, M., Reed, S., Tafsiri, M., & Prince, S. (2018), *The Economic and social costs of crime*, Research Report 99

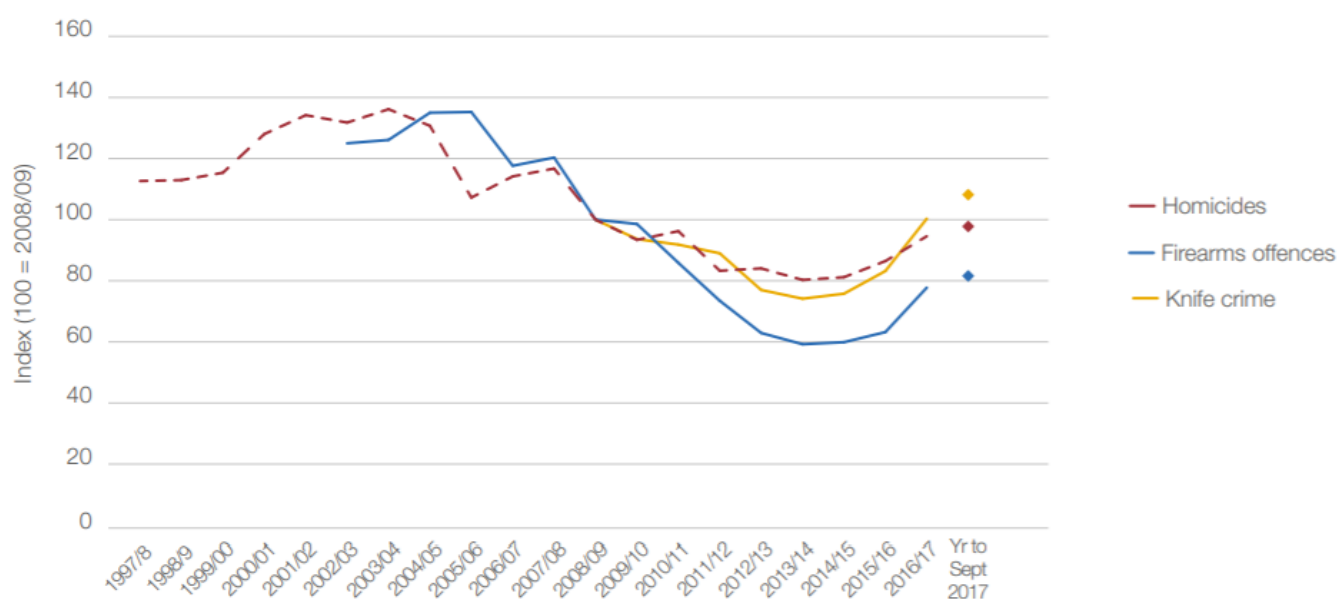
⁶ Homicide and Violence with Injury are prominent components of serious violence. However, the categorisation used in this document incorporates other offence-types. As such, we underestimate the total costs of serious violence. See Appendix A for information on calculations

⁷ The rest was spread across a number of other costs, such as other criminal justice system costs, victim services and physical and emotional harm. For more detail see Heeks et al. (2018)

⁸ Home Office (2018) *Serious Violence Strategy*

⁹ Home Office (2018)

Figure 1: Indexed long-term trends in police recorded homicide, firearms offences and knife crime offences¹⁰



The Avon and Somerset VRUs

The Government's Serious Violence Strategy advocates for a 'Public Health Approach', one that seeks to tackle the root causes as well as the immediate symptoms of violence, and that galvanises agencies beyond the Police in support of this goal. To facilitate this, the Government has allocated £35 million to PCCs in 18 local areas, including Avon and Somerset, to set up Violence Reduction Units.

In Avon and Somerset, this funding will be allocated across the five local authority areas, each of which will establish or build on a local VRU. The PCC will chair a Strategic Governance Group, on which each local VRU will be represented. The Strategic Governance Group will provide direction and oversee performance across the force area (see Figure 2).

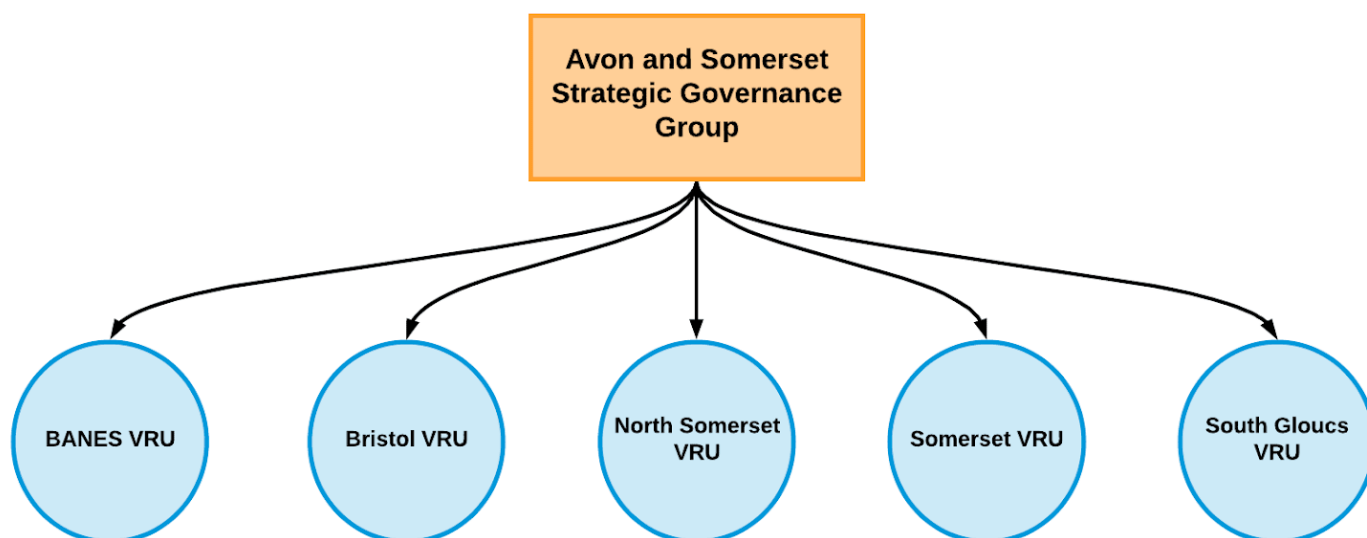
The opportunity

The set-up of the Avon and Somerset VRUs is an opportunity to develop and deliver a coordinated local response to serious violence that could: alleviate suffering; lead to substantial financial savings; and improve societal wellbeing and prosperity for current and future generations in Avon and Somerset.

¹⁰ Graph taken from Home Office (2018) Serious Violence Strategy, p.18. Note that the homicide data excludes those attributed to Harold Shipman (2002/2003), and the victims of 7 July London bombings (2005-2006), Hillsborough (2016-2017, the Manchester Arena bombing, and the London Bridge/Borough Market/Westminster attacks (2017-2018)

BIT has worked with the PCC for Avon and Somerset to develop a Serious Violence Strategy for Avon and Somerset. Our aim is to help Avon and Somerset make the most of the opportunity presented by additional Government funding and increase the impact of the five VRUs in their first year. In this report, we present a blueprint for developing a multi-agency approach to tackle serious violence in the local area.

Figure 2: the Avon and Somerset VRUs and Strategic Governance Group



Serious Violence in Avon and Somerset

In this section, we introduce a definition for serious violence. We then present an overview of serious violence in Avon and Somerset, based on primary analysis using data from Avon and Somerset Constabulary for the period from November 2015 – March 2019. Our methodology, along with its limitations can be found in full in Appendix B.

Defining violence and serious violence

There is no official definition of which offence types constitute serious violence, so we have worked with Avon and Somerset Constabulary and the PCC to develop a way of categorising serious violence for the purposes of this project. In line with the Government’s Serious Violence Strategy, which focuses on all criminality where “serious violence or its threat are inherent”,¹¹ we consider all offence types under the principal offence categories “Violence against the person” (VAP) and “Robbery” to be violent. We then use the degree of harm, or potential harm, to determine whether a violent offence is serious.¹² For example, all VAP offences where a knife was present are categorised as serious because of the potential harm resulting from the presence of a knife.

We include domestic violence in our definition of violence and all serious incidents of domestic violence in our definition of serious violence. We also include all occurrences of serious sexual assault or rape in our categorisation of serious violence. We exclude certain high harm offences, such as child neglect, from our definition of serious violence because we believe the underlying factors that drive them are different and will require different responses.

Details of our coding scheme for categorising serious violence offences, including a full list of the offence types falling in each category can be found in Appendix C.

Throughout this rest of this report, whenever we use the terms “serious violence” or “serious violence offences” we are referring to the offences we have selected in line with our coding scheme, unless we explicitly state otherwise.

¹¹ Home Office (2018)

¹² For example, “Assault Occasioning Actual Bodily Harm” is classed as serious violence, whilst “Common Assault” is not. We also consider the degree of harm occasioned by an offence to differentiate between violence and serious violence, using the Cambridge Crime Harm Index. See: Sherman, L., Neyroud, P. W., Neyroud, E. (2016) The Cambridge Crime Harm Index: Measuring Total Harm from Crime Based on Sentencing Guidelines, *Policing: A Journal of Policy and Practice*, 10(3), pp.171–183, <https://doi.org/10.1093/police/paw003>

Trends in serious violence in Avon and Somerset

In Avon and Somerset, over the past three years, serious violence recorded by the police has remained relatively stable. We observe an increase of around 14 per cent in police recorded serious violence offences. Avon and Somerset's population grew between 3 and 4 per cent over the same period.¹³ However, there is evidence that a proportion of this increase is due to improved police recording over the period, which suggests that the 'real' increase in serious violence is likely to be less than the 14 per cent we observe. When we drill down into specific offence types and groups, we see emerging trends which point to a need for more research, close monitoring and preventative intervention. These are summarised below.

1. Serious youth violence has increased

Young people are disproportionately involved in serious violence in Avon and Somerset. Those aged 10-19 are responsible for around 20 per cent of serious violence offences, while representing only 11 per cent of the population.¹⁴ When we compare the average number of serious youth violence offences each month in the first 12 months of our data set, with the monthly average in the last 12 months we see that serious youth violence has increased by around 45 per cent over the past three years.^{15 16}

2. There is some evidence of increases in knife crime and knife possession

There appears to have been a 60 per cent increase in the monthly average occurrences of violent knife offences over the past three years, as illustrated by Figure 3.¹⁷ Knife possession offences also increased from around 17 recorded possession offences per month to around 30 per month.¹⁸

3. There is some evidence of an increase in robbery offences

In line with national trends, robberies have increased in Avon and Somerset, albeit at a lower rate. We see in Figure 4 that the monthly number of robbery offences increased

¹³ Based on ONS 2016-based population projections for local authorities. See: <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/populationprojections/datasets/localauthoritiesinenglandtable2>

¹⁴ When considering all violent offences, those aged 10-19 are responsible for 17.5 per cent of all offences

¹⁵ See Appendix D for a graph displaying the trends in youth violence and serious violence

¹⁶ We compare the first 12 month average with last 12 month average in order to control for seasonality.

¹⁷ We calculate the increases in violent knife crime, knife possession, robbery and youth violent offences by comparing the monthly average of these offences for the first twelve months of our dataset with the monthly average in the last twelve months.

¹⁸ It is important to note that the increases in possession offences might be the result of changing police practices, such as the increased use of Stop-and-Search, particularly targeting young people, rather than any rise in the underlying prevalence of knives.

by around 25 per cent between November 2015 and March 2019.¹⁹ The percentage of robberies recorded as involving a knife, at 14 per cent, is lower than elsewhere in England and Wales (around 20 per cent of robberies nationally involve a knife).²⁰

Figure 3: Serious violence knife occurrences per month (Nov '15 – March '19)

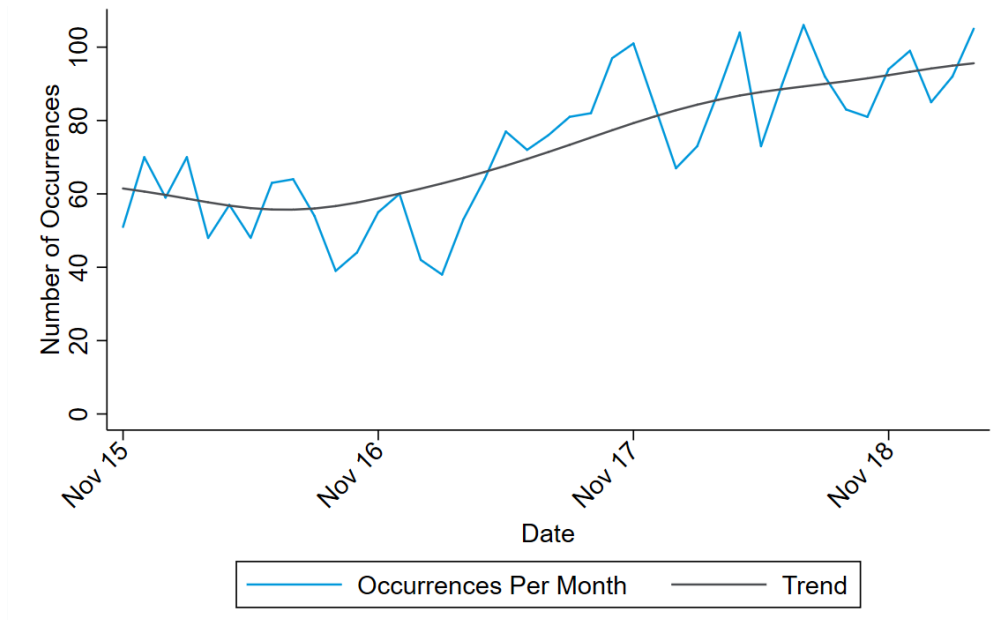
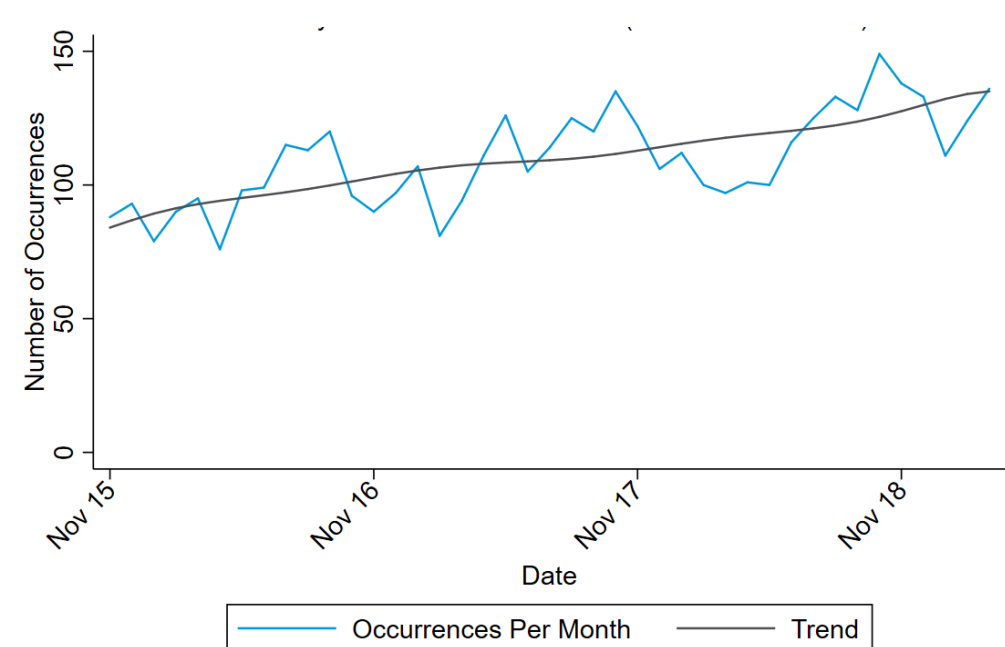


Figure 4: Robbery occurrences per month (Nov '15 – March '19)



¹⁹ From 96.8 per month to 124.4 per month.

²⁰ The Home Office (2018).

We cannot draw firm conclusions from the trends we observe on knife crime because we know police recording practices for knife crime have not been consistent over the period. In addition, from a statistical perspective, the number of violent knife crime or knife possession offences are very low relative to other offences, which means we are more likely to see greater variation from year to year.²¹ This limitation also applies to the trends we see in robbery offences.

It is also important to note that if a violent offence is recorded as having a knife present, this does not necessarily mean that the knife was used. When we compare the police recorded data with data on hospital admissions, we see that there are on average ten hospital admissions for assault by a sharp object each month in Avon and Somerset.²²

Domestic violence

Nearly a third of serious violence in Avon and Somerset is domestic; and one in five homicides for the period for which we have data was domestic. In addition to causing harm to the victim, domestic violence impacts children who may witness it. For example, a 2009 meta-analysis found a significant relationship between childhood exposure to domestic violence and future behavioural problems,²³ such as violence and aggression.

We do not see increases in serious domestic violence in the three years for which we have data. However, given its prevalence (which is likely to be higher than we observe given that domestic violence is widely recognised as being under-reported)²⁴ and the resulting harm, the VRUs should continue to build on existing work to tackle serious domestic violence in Avon and Somerset.

Sexual offences

There are approximately 250 serious violence sexual offences (serious sexual assault or rape) reported to Avon and Somerset Constabulary each month. As with domestic violence, we do not see increases in serious sexual violence over the period for which we have data. However, we know that sexual violence is also an under-reported crime. In addition, rape cases are often difficult to investigate and prosecute. For example, recent data on crime outcomes published by the Home Office shows that in two in five rape offences, cases were closed because the victim did not support further police action against a suspect, which highlights the limitations of enforcement as a lever for preventing this form of serious violence. As a result, we suggest that the VRUs explore sexual violence prevention alongside efforts to tackle other forms of violence.

²¹ When numbers are small, what looks like a systematic upward trend could just be due to random variation.

²² Monthly Hospital Admissions for Assault by Sharp Object (March 2019). Accessed at: <https://digital.nhs.uk/data-and-information/find-data-and-publications/supplementary-information/2019-supplementary-information-files/monthly-hospital-admissions-for-assault-by-sharp-object-march-2019>

²³ Evans, S.E., Davies, C., DiLillo, D. (2008) Exposure to domestic violence: A meta-analysis of child and adolescent outcomes, *Aggression and Violent Behaviour*, 13(2), pp.131-140

²⁴ ONS (2017) Domestic Abuse in England and Wales: year ending March 2017

How can agencies work together to prevent serious violence?

The Government's Serious Violence Strategy advocates a 'Public Health Approach' to violence prevention, one that seeks to tackle the root causes as well as the immediate symptoms of violence, and that galvanises agencies beyond the Police in support of this goal.

In this section, we set out what a public health approach involves; and why it might be beneficial in Avon and Somerset. We present a framework for developing a serious violence reduction strategy and lessons that the Avon and Somerset VRUs can draw from other multi-agency approaches to violence prevention.

Finally, we set out five recommendations to help the Avon and Somerset VRUs create the conditions to enable effective multi-agency responses to serious violence.

A public health approach to violence

What is a public health approach?

A public health approach is underpinned by three principles:

1. **Prevention:** if we identify and address the underlying root causes and correlates of violence, rather than focusing uniquely on its symptoms (i.e. the commission of offences), we can prevent violence from occurring.
2. **Evidence and evaluation:** evidence can help us to target and inform responses, and by evaluating the impact of changes we make to understand what works, we can scale effectively to prevent violence.
3. **Multi-agency working:** the causes and correlates of violence go beyond the remit and expertise of any one agency or profession. As a result, in order to identify where there is a risk of violence, and to respond accordingly, we need a multi-agency approach.^{25 26}

Why might a public health approach help in Avon and Somerset?

Based on our analysis of serious violence in Avon and Somerset, we believe that serious violence cannot be prevented by the police and criminal justice agencies in isolation. Below we give three examples to illustrate this:

1. **Spotting early warning signs and intervening before contact with the criminal justice system.** The average age for a young offender's first violent offence in Avon and Somerset is just 15. We know that school-based indicators can be early warning signs for youth violence. For example, research has shown that bullying in school increases the risk of future involvement in violence.²⁷ By intervening early with these children, the Avon and Somerset VRUs may be able to prevent them becoming involved in the criminal justice system at all.
2. **Identifying imminent risk of harm:** We found that none of the eight victims of domestic violence homicide in Avon and Somerset were reported as a victim of any form of violence in Avon and Somerset in the preceding three years. This highlights the limited opportunity the police had to intervene to prevent their

²⁵ The World Health Organisation (2002) World Report on Violence and Health

²⁶ Foege, W. H., Rosenberg, M. L., & Mercy, J. A. (1995). Public health and violence prevention. *Current Issues in Public Health*, 1, 2-9.

²⁷ Ttofi, M. M., Farrington, D. P., Lösel, F., & Loeber, R. (2011). The predictive efficiency of school bullying versus later offending: A systematic/meta-analytic review of longitudinal studies. *Criminal Behaviour and Mental Health*, 21(2), 80-89.

deaths. Research suggests that self-harm and suicide risk among potential domestic violence perpetrators could be good predictors for domestic homicide and serious assaults. This suggests that other agencies, such as mental health providers, or health services, might be able to assist in identifying where there is risk of domestic violence.²⁸

- 3. Bolstering enforcement responses.** In line with findings from the literature,²⁹ we found there is a small cohort of prolific offenders who account for a significant proportion of serious violence in Avon and Somerset. These offenders continue to commit violent offences despite being arrested and prosecuted, which suggests that enforcement and sanctions alone are insufficient in preventing violent offending. Addressing underlying factors that are associated with their offending, such as substance abuse, might assist in deterring future harm.

In addition, other agencies are likely to have an interest in preventing serious violence, because they bear a proportion of the costs. Between November 2015 and March 2019, homicide and violence with injury cost the health service in Avon and Somerset approximately £35 million.³⁰ A public health approach could mobilise and coordinate these interests around a common goal.

What does a public health approach involve?

A public health approach follows four iterative steps, summarised below:

1. To define the problem through the systematic collection of information about the magnitude, scope, characteristics and consequences of violence.
2. To establish why violence occurs using research to determine the causes and correlates of violence, the factors that increase or decrease the risk of violence, and the factors that could be modified through interventions.
3. To find out what works to prevent violence by designing, implementing and evaluating interventions.
4. To implement effective and promising interventions in a wide range of settings. The effects of these interventions on risk factors and the target outcome should be monitored, and their impact and cost-effectiveness should be evaluated.³¹

²⁸ Sherman, L. W. (2018). Policing domestic violence 1967–2017. *Criminology & Public Policy*, 17(2), 453-465.

²⁹ Frydensberg, C., Ariel, B., & Bland, M. (2019). Targeting the Most Harmful Co-Offenders in Denmark: a Social Network Analysis Approach. *Cambridge Journal of Evidence-Based Policing*, 1-16.

³⁰ Heeks, M., Reed, S., Tafiri, M., & Prince, S. (2018), *The Economic and social costs of crime*, Research Report 99

³¹ The World Health Organisation (2002)

This aligns with BIT's TESTS methodology for developing, evaluating and scaling interventions (Target, Explore, Solution, Trial, Scale) which we will use as a framework for developing a serious violence strategy in Avon and Somerset in the next chapter of this report.

What can we learn from elsewhere?

We now turn to what we can learn from other ‘models’ for violence prevention. It is important to highlight the limitations of the evidence in this area. While there has been much commentary about, for example, the “Glasgow model”, or the “Chicago model” research on what these models involved, whether they were effective, which components in particular were effective, and whether or how they can be transferred to other areas is very limited. This is not a criticism of the efforts made in those cities, more a reflection that some thought and deliberation are required when ‘porting’ an approach from one location to another.³²

In light of this, based on a rapid evidence review on four of the most frequently discussed violence prevention approaches (Boston, Cardiff, Chicago, and Glasgow), we present three lessons for the Avon and Somerset VRUs.

1. Systematic data collection and interrogation, combined with multi-agency working can prevent violence

The Cardiff Model, first implemented in 2001, involved harnessing and monitoring data (in this case including Accident and Emergency [A&E] data) to understand violence, target resources, mobilise partners and inform responses.

The model was developed 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 violence, the time and day of which incidents occur, the weapons used, and the number of assailants involved) was shared monthly and combined with police data to create hotspot maps charting the changing trends in violence.

Informed by these maps, a multi-agency “Violence Prevention Group”, made up of representatives from City Government, the Police, the Hospital Emergency Department, Education and Transport, was able to deploy resources more effectively. For example, the Violence Prevention Group identified specific licensed premises which were hotspots for night-time violence (in Cardiff, a large proportion of violence was driven by alcohol and the night-time economy). They then discussed the data with some licensees directly to point out they had a role to play in preventing violence; and located additional emergency service resources to those premises. The model also informed and drove a number of policy decisions, such as the adoption of plastic glassware in bars and pubs, and the creation of more pedestrian-friendly streets.³³

³² Cartwright, N., & Hardie, J. (2012). Evidence-based policy: A practical guide to doing it better. Oxford University Press.

³³ Warburton, A. L., Shepherd, J. P. (2006). Tackling alcohol related violence in city centres: effect of emergency medicine and police intervention. *Emergency medicine journal: EMJ*, 23(1), 12–17. doi:10.1136/emj.2004.023028

Of the models that we have reviewed, this is the one which has the strongest evidential basis that we are aware of. 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 (7 to 5 per 100 000), where admissions increased in comparison cities. Police-recorded woundings 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).³⁴

2. Without evaluating, we cannot know which parts of an approach work and where resources should be invested

The Glasgow VRU, officially established in January 2005 within Strathclyde Police is often held up as an exemplar of successful multi agency working to reduce violence. Since the VRU was set up, the total number of homicides recorded in the City of Glasgow has declined by 65 per cent and there have been similar if not higher reductions for other non-fatal types of violence.³⁵

While the Glasgow VRU is widely associated with a public health and multi-agency approach, many of its early actions were police-led and enforcement focussed (for example increasing police training; introducing metal detectors; and innovative policing tactics). Over following years, the VRU drove a wide array of projects and initiatives including anti-knife campaigns; early years education; and the adoption of the Community Initiative to Reduce Violence (CIRV), based on evidence from the United States³⁶.

However, none of these initiatives, except CIRV, was evaluated.³⁷ In addition, researchers studying the Glasgow VRU have highlighted that wider global factors may have contributed to the decline in violence.³⁸ The lack of specific evidence when it comes to the Glasgow VRU in terms of what worked, where, when, why and for whom, means it is not currently possible to understand *which* of the VRU’s range of activities, if any, drove the decline in violence noted there. This means we cannot know what should be scaled in Glasgow, or how to replicate the Glasgow VRU’s work elsewhere.

3. We need to interrogate the evidence and adapt interventions for the local context, not just “lift and shift”

³⁴ Florence, C., Shepherd, J., Brennan, I., Simon, T. (2013) An economic evaluation of anonymised information sharing between health services, police and local government for preventing violence related injury, *Injury Prevention*, 20(2)

³⁵ McVie et al, in press, see: <https://blogs.lse.ac.uk/politicsandpolicy/patterns-of-violence-glasgow-london/>

³⁶ We make this assertion based on presentations we have seen about the VRU’s activities. For more information see here: <http://actiononviolence.org/vru-projects>

³⁷ Williams, D. J., Currie, D., Linden, W., & Donnelly, P. D. (2014). Addressing gang-related violence in Glasgow: A preliminary pragmatic quasi-experimental evaluation of the Community Initiative to Reduce Violence (CIRV). *Aggression and violent behavior*, 19(6), 686-691.

³⁸ McVie et al, in press

Below we present the evidence on CIRV, one of the projects implemented in Glasgow based on emerging evidence from Chicago, Boston and other US cities.

Cure Violence Chicago

Formed in 1999, the Cure Violence (originally known as Ceasefire Chicago) initiative took a three-pronged approach to violence reduction: interrupting violence when it occurred to stop it spreading; providing those deemed at risk with support services; and harnessing the voice of the community to change social norms.³⁹

An evaluation that compared outcomes in the seven areas where the programme was implemented with seven control areas found that four of the seven areas had significant reductions in shootings. However, there are limitations to the design of this evaluation, particularly as the treatment areas had significantly higher levels of shooting than the control areas prior to the intervention (so the two are not directly comparable).

Ceasefire Boston

Boston's Operation Ceasefire, first implemented in 1996, used a "Problem-oriented" policing approach to tackle youth violence. Having identified a specific cohort of individuals to target, a multi-agency group put in place a "focused deterrence" approach that had three components: a) a zero-tolerance law-enforcement approach, based on a "pulling levers" strategy, whereby the police used all tools available to disrupt and prosecute those involved in violence and their associates; b) a communications strategy that made clear to other gang members that the zero-tolerance approach would affect them too; and c) support services for at-risk individuals, offered by churches, street-workers and other community groups in order to present viable alternatives to violence.

A Pre/Post analysis found a 63 per cent reduction in the youth homicide rate. However, this type of evaluation does not control for other factors which could also have affected youth violence (such as changes in the labour market), and is therefore likely to overstate the effect of *Ceasefire*. To try to corroborate the finding, researchers later used a quasi-experimental design, which compared the trends in Boston to other US cities and controlled for the influence of other factors (such as the employment rate) to determine the impact of the programme. This suggested the programme was effective but less so than the original analysis reported.⁴⁰

Ceasefire across the United States

³⁹ Skogan, W., Hartnett, S., Bumop, N., Dubois, J. (2009) Evaluation of Ceasefire – Chicago

⁴⁰ Braga, A. A., Hureau, D. M., & Papachristos, A. V. (2014). Deterring gang-involved gun violence: measuring the impact of Boston's Operation Ceasefire on street gang behavior. *Journal of Quantitative Criminology*, 30(1), 113-139.

Following the seminal Ceasefire focussed deterrence strategy in Boston, the approach was increasingly applied across the US. In 2011, a meta-analysis examined 11 “focused deterrence” strategies similar to Operation Ceasefire, adopted across the US.⁴¹ Drawing on 10 quasi-experimental evaluations and 1 randomised controlled trial, researchers found an overall statistically significant medium-sized effect in crime reductions.⁴² However, the strongest program effect sizes were generated by evaluations that used the weakest research designs. The authors concluded that the approach seemed very promising but required more rigorous evaluation.⁴³

From the USA to Glasgow and London

In 2008, the Glasgow VRU drew on the Cincinnati Initiative to Reduce Violence (one of the focused deterrence approaches implemented in the USA, discussed above),⁴⁴ to develop the Community Initiative to Reduce Violence (CIRV), a focused deterrence approach for Glasgow. Drawing on the “Cure Violence” initiative in Chicago, the programme also aimed to harness the voice of community actors, channelling the “Moral Voice of the Community” to convey the message that the violence must stop.⁴⁵

An evaluation of CIRV found no decline in the rate of physical violence in the intervention group compared to the control group, though did find reductions in weapon carrying as measured through police-recorded data. The authors of this study pointed to a number of limitations in the evaluation approach, which was a pre-post matched comparison design, with potential selection bias in the treatment group and reliance on police data alone to measure outcomes.⁴⁶

In 2014, the Mayor’s Office for Policing and Crime (MOPAC) in London sought to develop a Ceasefire intervention to tackle gang violence in London boroughs of Lambeth, Haringey and Westminster. The intervention, called Operation Shield was heavily resisted by stakeholders, leading ultimately to it being rejected by two of three

⁴¹ These were: Operation Ceasefire in Boston; Indianapolis Violence Reduction Partnership in Indianapolis; Operation Peacekeeper in Stockton, California; Project Safe Neighborhoods in Lowell, Massachusetts; Cincinnati Initiative to Reduce Violence in Cincinnati; Operation Ceasefire in Newark; Operation Ceasefire in Los Angeles; Project Safe Neighborhoods in Chicago, Illinois; Drug Market Intervention in Nashville, Tennessee; Drug Market Intervention in Rockford, Illinois; and Hawaii Opportunity with Probation Enforcement in Honolulu

⁴² The overall effect size for these studies was Cohen’s $d = .604$ which is above the Cohen’s standard for a medium effect of .50 and below that of a large effect at 0.80 See: Cohen, J. (1988). Statistical power analysis for the social sciences.

⁴³ Braga, A. A., & Weisburd, D. L. (2011). The effects of focused deterrence strategies on crime: A systematic review and meta-analysis of the empirical evidence. *Journal of Research in Crime and Delinquency*. Advance online publication. doi: 10.1177/0022427811419368

⁴⁴ Engel, R., Tillyer, M., Corsaro, N., (2011) Reducing Gang Violence Using Focused Deterrence: Evaluating the Cincinnati Initiative to Reduce Violence (CIRV), *Justice Quarterly*, 30(3), pp.403-439

⁴⁵ Violence Reduction Unit, Glasgow’s Community Initiative to Reduce Violence: Second Year Report, retrieved from: http://actiononviolence.org/sites/default/files/CIRV_2nd_year_report.pdf

⁴⁶ Williams, D. J., Currie, D., Linden, W., & Donnelly, P. D. (2014). Addressing gang-related violence in Glasgow: A preliminary pragmatic quasi-experimental evaluation of the Community Initiative to Reduce Violence (CIRV). *Aggression and violent behavior*, 19(6), 686-691.

chosen pilot councils. Stakeholders questioned whether a US approach was the most appropriate model for London, given the lower rates of serious violence, fluidity of gang structures and different legal mechanisms available.⁴⁷

A MOPAC evaluation of the pilots highlighted that partner agencies who would have been expected to implement the model did not find the operating model clear. It also suggested that partners and communities should have involved in the design of the programme much earlier (as opposed to being asked to agree a pre-defined model).

Lessons for Avon and Somerset

To summarise, the Ceasefire informed approach has been widely implemented across the US with promising (though inconclusive) evidence. However, it has not yet been demonstrated to be successful in the UK.⁴⁸ It is understandable that those working to prevent serious violence will want to do whatever might work, and draw on what seems promising to inform this. Our goal in this rapid evidence review is not to dismiss the efforts of practitioners and researchers across the cities described but to illustrate the gaps between previous implementation, current evidence and actions for future implementation. We think the evidence above presents two important takeaways for the Avon and Somerset VRUs:

- a) First: when looking to learn from elsewhere, the VRUs should interrogate whether, and importantly why an intervention or approach has been successful. This will help the VRUs to understand whether the success observed is likely to translate.**

- b) Second: the VRUs should work with partners to translate and adapt interventions for the local context and build buy in. This could involve selecting specific elements of an intervention and changing and adapting them for the context through a co-design phase with community partners.**

⁴⁷ 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.

⁴⁸To help address this, the College of Policing is currently evaluating a version of CIRV being implemented by Northamptonshire Police using a process evaluation to understand the implementation of the intervention (as opposed to establishing causal impact), with results due in March 2020

See: <https://whatworks.college.police.uk/Research/ResearchMap/Pages/ResearchProject.aspx?projectid=766>

Creating the conditions for a multi-agency response

The first step for the Avon and Somerset VRUs to create the conditions (processes, data architecture, etc.) in order to enable effective multi-agency working. Drawing on findings from interviews with local stakeholders, we set present five actions the VRUs could take support this objective.

1. Introduce Information Sharing to Tackle Violence (ISTV) and use ISTV data

Our research for this report has been limited by its reliance on police-recorded data. For example, had we had more granular data on hospital admissions, we could have better corroborated police recorded data on knife crime.⁴⁹ The Cardiff Model, described in the previous chapter, which draws on the sharing of A&E data is a cost-effective way of driving reductions in violence.⁵⁰ Supplementing this with ambulance data, which has much larger volumes, could help build an even more complete picture.⁵¹

We heard that there is no routine data-sharing between A&E departments and other agencies to inform violence prevention in Avon and Somerset. Instead, agencies rely on informal arrangements such as attendance at meetings based on individual relationships to gain insights. Reasons given for the absence of systematic data sharing between A&E and other agencies included concerns about data sharing post-GDPR,⁵² and the importance of doctor-patient confidentiality. Where data sharing does occur, we heard it was not always shared in a usable and useful format. For example, one interviewee told us the location of incidents is often missing.

In 2014, the Health and Social Information Centre published a standard on Information Sharing to Tackle Violence (ISTV) to help A&E departments to routinely collect and share data with other agencies. This Government-endorsed standard addresses many

⁴⁹ We were reliant on published data on hospital admissions which does not present a value for all sub-national breakdowns where the value is between 1 and 7 in order to protect patient confidentiality. For more information see: <https://digital.nhs.uk/data-and-information/find-data-and-publications/supplementary-information/2019-supplementary-information-files/monthly-hospital-admissions-for-assault-by-sharp-object-march-2019>

⁵⁰ Florence, C., Shepherd, J., Simon, T. (2011) Effectiveness of anonymised information sharing and use in health service, police, and local government partnership for preventing violence related injury: experimental study and time series analysis, *BMJ*, 342:d3313, <https://doi.org/10.1136/bmj.d3313>

⁵¹ : Giacomantonio, C., Sutherland, A., Boyle, A., Shepherd, J., Kruithof, K., Davies, M. (2014) Injury surveillance: using A&E data for crime reduction, *College of Policing*

⁵² Here, it should be noted that Information Sharing to Tackle Violence uses anonymised data, and data-protection concerns are therefore limited. NHS Digital has issued guidance on how to implement Information Sharing to Tackle Violence, updated post-GDPR. See: <https://digital.nhs.uk/data-and-information/information-standards/information-standards-and-data-collections-including-extractions/publications-and-notifications/standards-and-collections/isb1594-information-sharing-to-tackle-violence-minimum-dataset>

of the challenges to sharing of A&E data. The VRU Strategic Governance Group should work with NHS trusts in the area to ensure ISTV is introduced.⁵³

2. Facilitate pooling and use of wider data sets

In order to draw maximum value from the data available across the force area, the VRUs could pool other data sets, beyond A&E data (from example, data from substance abuse treatment providers). To support this, the Avon and Somerset VRU Strategic Governance Group could facilitate a common understanding of data uses and requirements across VRU agencies; clarify what is possible within GDPR constraints; and drive brokering of data sharing agreements.

The VRU Strategic Governance Group could also monitor the continuity and sustainability of data sharing agreements once they are in place, as research has shown adherence to processes can reduce over time. In those areas where the Cardiff Model has been successfully implemented, there have been champions such as Jonathan Shepherd in Cardiff and Adrian Boyle in Cambridge, who have driven the continued sharing and use of data. In addition, 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.⁵⁴

3. Build partnerships with universities and research organisations

As we will discuss later in this section, there are a number of research questions the VRUs should seek to address in order to inform their responses to serious violence. In addition, in order to increase the chances these responses are effective, they should ensure they are informed by evidence, and evaluated. By partnering with universities and research organisations, the VRUs can ensure they have the capability to carry out these tasks.

To achieve this, the VRUs could seek to build strategic partnerships with universities in Avon and Somerset; and ensure they are making the most of the advanced capabilities of organisations such as the Office for Data Analytics (ODA).⁵⁵

4. Focus multi-agency groups on vulnerability and risk, rather than offence types

In interviews, we consistently heard that existing multi-agency strategic groups across the force area were working in “*thematic silos*” based on crime types, rather than the vulnerability of those being discussed. We heard these strategic groups were often attended by the same people, and frequently discussed the same individuals. This can

⁵³ <https://www.gov.uk/government/news/aes-and-police-to-share-information-to-help-tackle-violence>

⁵⁴ Giacomantonio, C., Sutherland, A., Boyle, A., Shepherd, J., Kruithof, K., & Davies, M. (2014).

⁵⁵ The ODA is a data science and analytics capability to support multi-agency working across the South West, hosted by Avon and Somerset Constabulary.

lead to an inefficient use of time, frustration and may also lead to a failure to identify and respond to interconnected issues and needs.

In order to address the interconnected drivers of serious violence effectively and efficiently, the VRUs should seek to focus multi-agency fora on vulnerability, or specific populations who have been identified as being at risk.

5. Make multi-agency working as easy as possible

Often, small obstacles can inhibit collaborative working. 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, locality 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).⁵⁶ 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.






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 ice-breaker exercises that encourage people to reflect on the similarities between them;⁵⁷ or activities such as shadowing opportunities with partners in other agencies.

⁵⁶ 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. MHLCG (2019), *National evaluation of the Troubled Families Programme 2015-2020: Findings*.

⁵⁷ We found that an ice breaker exercise that primed people to think about their similarities significantly increased between participants: <https://www.bi.team/publications/increasing-social-trust-with-an-ice-breaking-exercise-an-rct-carried-out-with-ncs-participants/>

Mobilising the Avon and Somerset VRUs

In this section we set out recommendations for increasing the potential impact of Avon and Somerset VRUs in their first year and beyond. We use BIT's TESTS methodology as a framework to present recommendations for targeting developing, evaluating and scaling preventative interventions in Avon and Somerset.

Target		Define the problem and determine the measurable target outcomes.
Explore		Map relevant behaviours and the wider context.
Solution		Consider and design interventions.
Trial		Evaluate, learn and adapt.
Scale		Increase adoption of effective interventions.

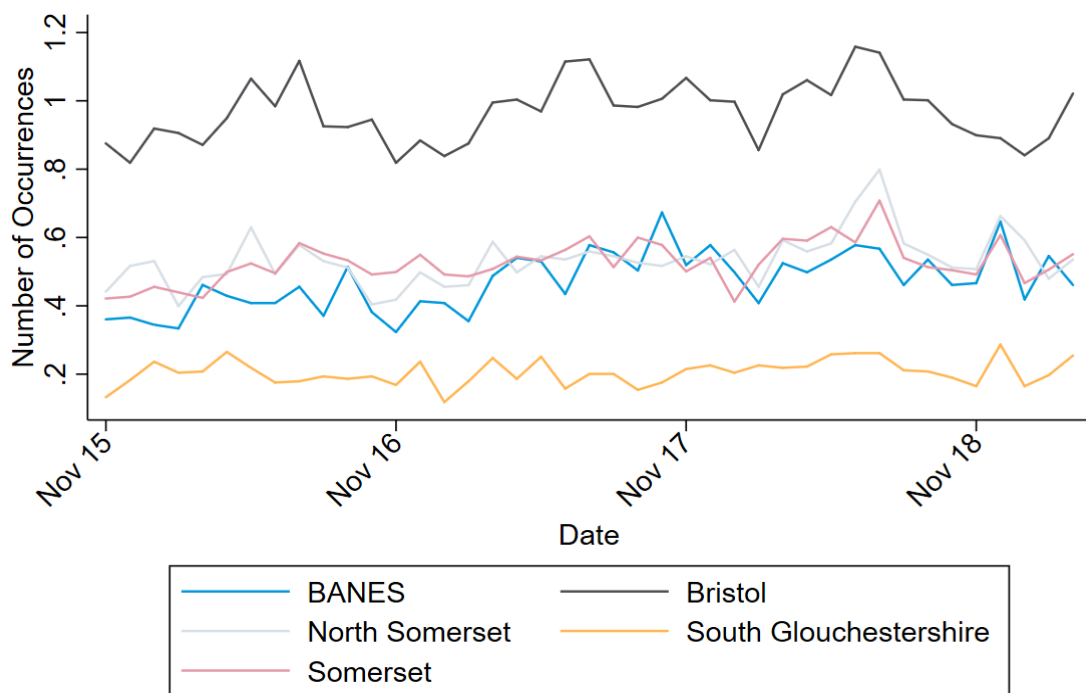
1. Target: define the problem

Without a nuanced understanding of where and to whom serious violence is currently happening in Avon and Somerset, the VRUs run the risk of investing limited resources without bringing about sustainable reductions in serious violence. To help mitigate this risk, we set out two recommendations for defining the scope and nature of serious violence in Avon and Somerset.

1. Identify areas with high serious violence and target resources towards them

Avon and Somerset Constabulary covers a large area, spanning rural countryside, market towns, and cities, so it is not surprising that, as we see from Figure 5, the serious violence offence rate varies significantly across Avon and Somerset's five Local VRU delivery areas. The rate is highest in Bristol and lowest in South Gloucestershire.

Figure 5 Serious violence occurrence rates per month by Local Authority (Nov '15 - March '19)



Occurrence rates per 1000 people

However, research shows that crime is highly concentrated,⁵⁸ so local-authority level comparisons may mask stark differences within local authority areas. For example, a recent study illustrated that over two thirds (69 per cent) of London's knife enabled (KE) assaults in 2017/2018 occurred in just 1.4 per cent of all Lower Layer Super Output Areas (LSOAs)⁵⁹ (67 out of 4835).⁶⁰

Given that crime is highly localised, researchers suggest that the lower the unit of geographic analysis the better for understanding where crime is happening.⁶¹ As a result, we have explored levels of serious violence at the postcode district level (the lowest unit available to us based on our data sharing agreement with Avon and Somerset Constabulary) to build a better understanding of the specific areas in which serious violence is more prevalent.⁶²

We found that there are a number of locations where both the absolute and population adjusted levels of serious violence are high relative to the rest of the force area; and these have remained relatively stable over the three years for which we have data. These areas include the city centres of Bath and Bristol (e.g. Clifton, Redcliffe), in addition to Somerset and North Somerset towns such as Yeovil, Bridgwater and Weston Super Mare, as illustrated by Figure 6 overleaf.⁶³

By targeting resources towards these specific geographies, the VRUs can ensure they focuses resources where they are likely to have the greatest impact. We also recommend further analyses to identify more precisely where serious violence is occurring, ideally using coordinate-level data.

⁵⁸ Weisburd, D., Bushway, S., Lum, C., & Yang, S. M. (2004). Trajectories of crime at places: A longitudinal study of street segments in the city of Seattle. *Criminology*, 42(2), 283-322.

⁵⁹ LSOAs in London have between 400 -12000 households

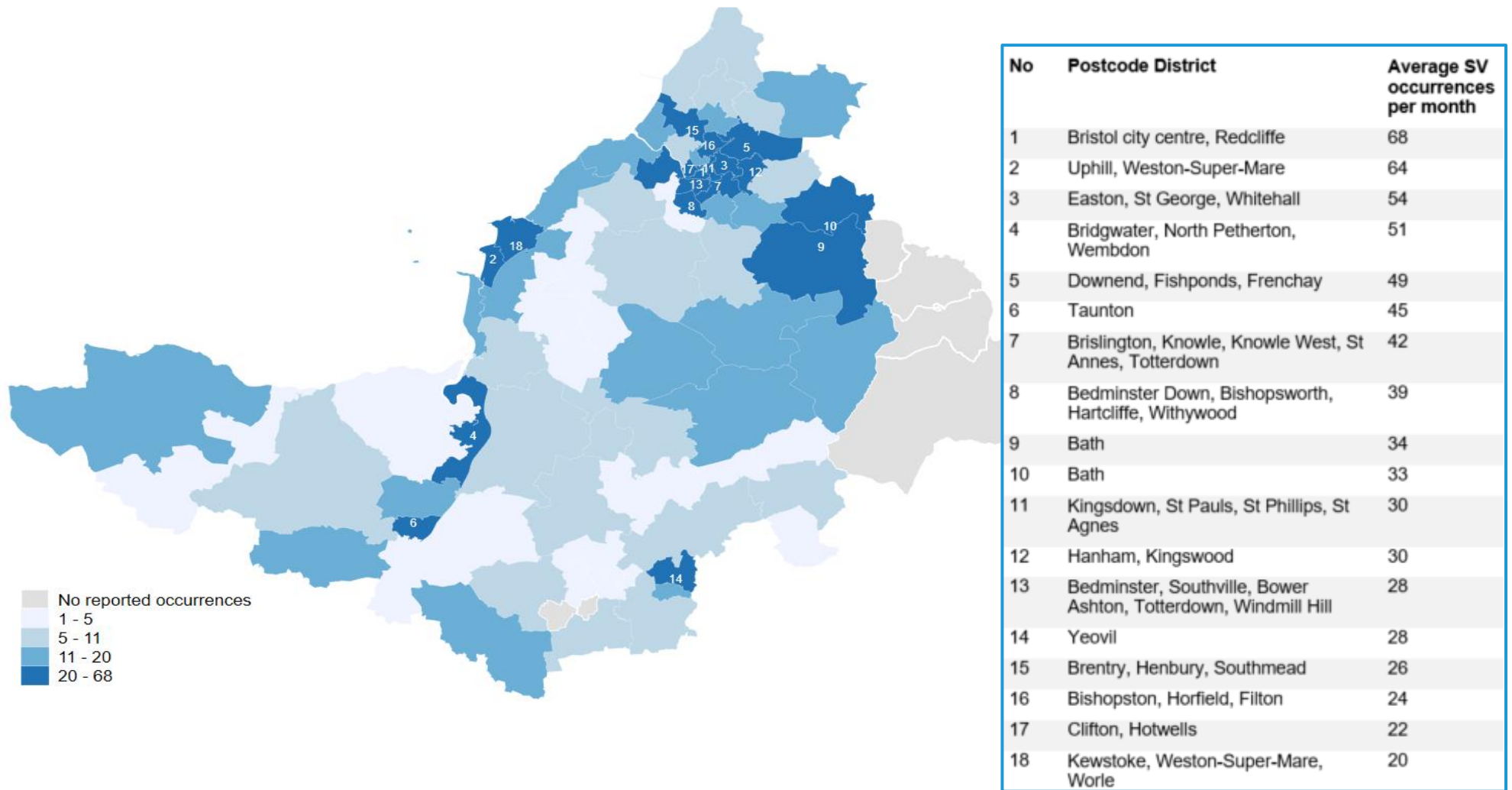
⁶⁰ Massey, J., Sherman, L. W., & Coupe, T. (2019). Forecasting Knife Homicide Risk from Prior Knife Assaults in 4835 Local Areas of London, 2016–2018. *Cambridge Journal of Evidence-Based Policing*, 1-20.

⁶¹ Oberwittler, D., & Wikström, P. O. H. (2009). Why small is better: Advancing the study of the role of behavioral contexts in crime causation. In *Putting crime in its place* (pp. 35-59). Springer, New York, NY.

⁶² The postcode district is the area represented by the first 2-4 characters of a postcode (e.g. BA1). In Avon and Somerset, these units include a maximum of 40,000 addresses, and a minimum of 15 (the mean number of postcodes in each district is 12602).

⁶³ We also produce these maps excluding serious domestic violence. See Appendix F

Figure 6: Average number of serious violence occurrences per month per postcode in Avon and Somerset (March '18- March '19) – numbers correspond to the key



2. Identify target groups for intervention

Studies have shown that a disproportionate amount of crime is committed by a small number of people.⁶⁴ In line with this research we find that serious violence offenders represent a very small proportion (just 1.4 per cent) of Avon and Somerset's population. We also found that the majority of serious violence in the force area is a 'local' issue with around 90 per cent of serious violence offences committed by people who live in Avon and Somerset.⁶⁵

By focussing on the few offenders who are responsible for most serious violence, the VRUs can increase the likelihood of bringing about reductions in the levels of serious violence with the resources available. We recommend that the VRUs prioritise two groups in particular in its first year.

Repeat and prolific offenders

In line with previous research,⁶⁶ we find a large proportion of violence and serious violence offences are committed by a very small cohort of repeat or "prolific offenders", who commit at least three violent offences, of which one was serious, in the period for which we have data.⁶⁷ These offenders represent just 0.35 per cent of Avon and Somerset's population but account for over 40 per cent of serious violence.⁶⁸

By identifying prolific offenders, and intervening to reduce levels of reoffending, agencies could drive substantial reductions in serious violence, particularly in areas with a high number of prolific offenders, such as Uphill, Weston-Super-Mare; Brislington (BS4); Bridgwater; and Taunton.⁶⁹ Given the level of serious violence driven by this small group, we recommend this as an early priority for the VRUs.

Young people at risk of involvement in serious violence

Young people are both disproportionately and increasingly involved in serious violence in Avon and Somerset (see Figure 6). Those aged 10-19 are responsible for around 20 per cent of serious violence offences, while representing only 11 per cent of the

⁶⁴ Martinez, N. N., Lee, Y., Eck, J. E., & SooHyun, O. (2017). Ravenous wolves revisited: A systematic review of offending concentration. *Crime Science*, 6(1), 10.

⁶⁵ Note that this measure is imperfect: offenders from outside the force area could, for example, provide an Avon & Somerset postcode when asked for their address, even if they do not reside in the force area.

⁶⁶ For example, a longitudinal study in Boston found that 3 per cent of males in the study were responsible for 51 per cent of arrests after the age of 31. For discussion see: Martinez et al. (2017) and Sampson, R. J., & Laub, J. H. (2003). Life-course desisters? Trajectories of crime among delinquent boys followed to age 70. *Criminology*, 41(3), 555-592.

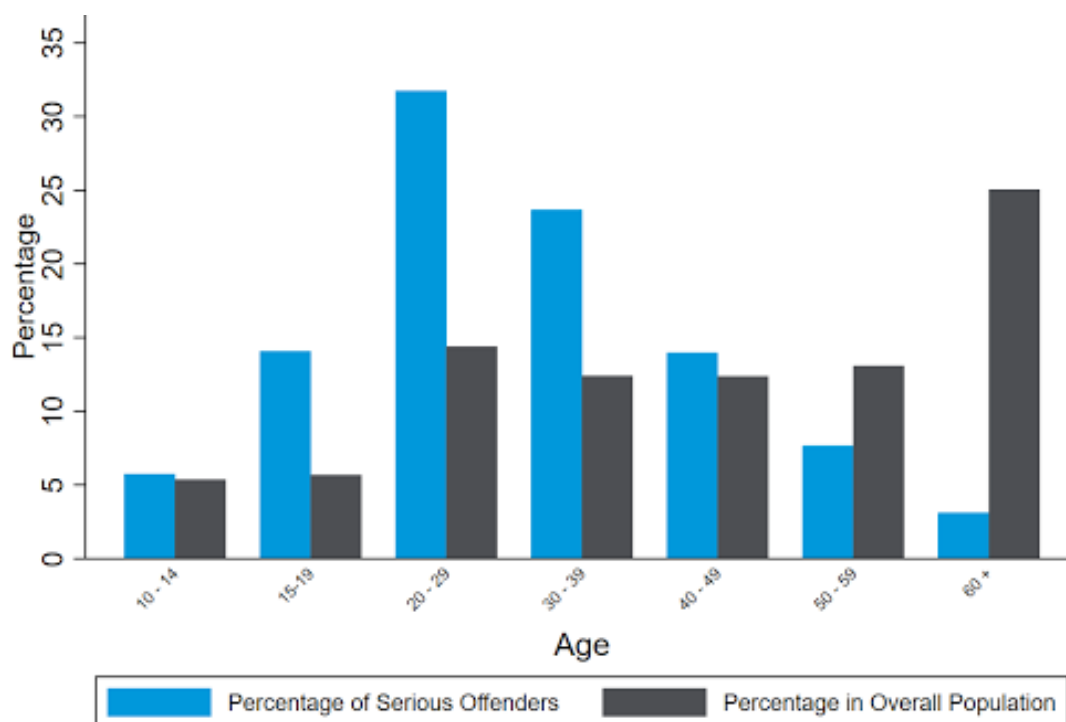
⁶⁷ While the Government definition of a prolific offender is 8 or more offences for an adult or 4 or more for a juvenile, we use 3 or more offences because our period of observation is only three years long.

⁶⁸ This is as a percentage of those offences for which we have offender data

⁶⁹ 38 per cent of "prolific" offenders are found in 10 postcode districts.

population.⁷⁰ Between November 2015 and March 2019, the monthly average of youth serious violence offences increased by 47 per cent, far exceeding the increases in serious violence overall.⁷¹ ⁷² Young people (10-19) are also disproportionately involved in knife possession offences, committing over 30 per cent of all possession offences.

Figure 6: percentage of serious violence occurrences in Avon and Somerset by age group relative to their percentage of the population (March '18- March '19)



Overall, there are around 3000 young people who have committed serious violence offences in the force area in the period for which we have data. Roughly one third of them reside in just 10 postcode districts, including a number of Bristol postcode districts (such as BS4), as well as Bridgwater, Yeovil, and Bath.

Table 1 overleaf lists the most common violent offence categories amongst young offenders. As we can see, the significant majority of serious violence offences committed by young people (around 3500) were serious violence of a non-sexual nature occasioning some form of injury. However, there were also just over 400 serious sexual offences reported to Avon and Somerset Constabulary in the period.

⁷⁰ When considering all violent offences, those aged 10-19 are responsible for 17.5 per cent of all offences

⁷¹ The overall increase in serious violence offences was 14.7 per cent

⁷² See Appendix E for a graph displaying the trends in youth violence and serious violence

Table 1: Most Common Serious Violence Offence Categories (Young Offenders) (Nov '15 – March '19)

Offence Type	No. of occurrences	Of which a knife was flagged as present
Assault occasioning actual bodily harm	3212	79
Rape of a female aged under 16	187	0
Wounding with intent to do grievous bodily harm	138	67
Rape a woman 16 years of age or over - SOA 2003 (recordable)	116	2
Malicious Wounding: wounding or inflicting grievous bodily harm	71	8
Rape of a female child under 13 by a male	56	0
Assault on a female by penetration	34	0
Racially or Religiously Aggravated assault or assault occasioning actual bodily harm	34	1
Rape of a male child under 13 by a male	19	0
Rape of a male aged under 16	16	0

2. Explore: map relevant behaviours and the wider context.

There is a wide body of research on the individual and environmental risk factors associated with violence.⁷³ However, when it comes to understanding which environmental or individual factors are driving serious violence in Avon and Somerset (i.e. who, where and why), research is limited. The Avon and Somerset VRUs should rapidly plug this evidence gap in their first year in order to inform its responses to serious violence going forward. Below we set out five research priorities for the VRUs.

1. Investigate whether knife-carrying has become more prevalent in Avon and Somerset. If so, how and why are knives being used?

Nationally, increases in homicides have been driven primarily by offences where a knife was the weapon of choice.⁷⁴ In Avon and Somerset we see upward trends in police recorded knife crime and possession data but we cannot draw firm conclusions about patterns in weapon carrying from these trends due to the low reliability of this data. As a result, the Avon and Somerset VRUs should investigate these trends more thoroughly through methods including:

- a) A detailed review of instances of police recorded knife crime to determine for example, how knives were used, (for example whether the offences were 'knife enabled assaults', or whether knives were present but not used), and where (e.g. in the street or in people's homes) these offences occurred.⁷⁵
- b) A review of hospital injury records for cases of assaults with sharp objects to investigate what can be established about motives and knife use based on the characteristics of injuries.

In addition, the VRUs should look to investigate why people are increasingly carrying knives. For example, previous research has highlighted a potential "contagion effect" of weapon carrying,⁷⁶ where the introduction or increase in visibility of weapons (such as knives) to a community signals an increase in the overall riskiness of the area, which

⁷³ E.g. high daring or risk-taking, low verbal intelligence, high hyperactivity, a disrupted family, harsh parental discipline, and large family size; see Farrington, D.P. (2019) The development of violence from age 8 to 61. *Aggressive Behavior*, 45, 365-376.

⁷⁴ ONS (2018) Crime in England and Wales: year ending March 2018

⁷⁵ The author of a recent Metropolitan Police Service study on predicting knife-enabled homicides manually read 3543 police reports in order to determine whether they were knife enabled and where specifically they occurred. This is an illustration of the limitations to analysing police data at speed to inform targeting. See: Massey, J., Sherman, L. W., & Coupe, T. (2019). Forecasting Knife Homicide Risk from Prior Knife Assaults in 4835 Local Areas of London, 2016–2018. *Cambridge Journal of Evidence-Based Policing*, 1-20.

⁷⁶ Iain R Brennan (2019) Weapon-carrying and the Reduction of Violent Harm, *The British Journal of Criminology*, Volume 59, Issue 3, Pages 571–593.

increases demand for more lethal weapons among those who do not have them. To investigate whether this is occurring in Avon and Somerset, the VRUs could explore which types of knives are being seized by the police (e.g. is there evidence of a form of localised “arms race” with increasing prevalence of larger or “zombie knives”). The VRUs could also carry out or commission qualitative research with members of the community, particularly young people, to explore attitudes towards weapon carrying.

2. Explore the drivers of exclusions and models for engaging with schools

The recently published Timpson review of school exclusion reiterates that exclusion is a risk factor for both violence perpetration and victimisation.⁷⁷ For the years 2014-2016, Avon and Somerset was consistently above the national average for fixed period exclusion rate, a figure driven primarily by a consistently high rate of exclusion in Bristol.

The VRUs could look to understand the drivers of exclusions, particularly in Bristol. This could include investigating school-based factors such as schools’ attitudes towards parental engagement, or their organisational cultures, as well as the ‘user journey’ of a young person and their families’ experience prior to exclusion.⁷⁸ This research would identify and inform early intervention opportunities.

3. Investigate the drivers of vulnerability and connections to serious violence

Through our data analysis we found an overlap between indicators of vulnerability, and serious violence perpetration and victimisation. A substantial proportion (more than 30 per cent) of serious violence offences were committed by an offender who was previously a victim of violence;⁷⁹ and around 12 per cent of serious violence offences were committed by an offender who was previously reported as a missing person.

We found evidence to suggest that offenders involved in violent knife offences display particularly high levels of vulnerability: in over 40 per cent of cases, the offender was previously the victim of violence, and in a quarter, they had been previously reported as missing. To better understand the drivers of serious violence, and identify early intervention opportunities the VRUs should carry out research to understand the link between vulnerability and serious violence in the area. This could include, for example, identifying specific locations (such as care homes) from which young people who go on to be involved in serious violence go missing. This would enable the identification of potential early intervention.

⁷⁷ HMG (2019) Timpson Review of School Exclusion.

⁷⁸ Graham, B., White, C., Edwards, A., Potter, S., Street, C.(2019) School exclusion: a literature review on the continued disproportionate exclusion of certain children.

⁷⁹ It is important to note our dataset only looks at violent offences, and only spans a period of three years. As such, we cannot know about offenders who were previously the victims of other offences, or those who were victims earlier than November 2015. Therefore, the percentage of offenders who were previously victims is possibly an underestimate.

4. Explore the drivers of alcohol consumption and alcohol-related serious violence

Previous research has found that the number of alcohol outlets in an area is strongly correlated with local crime rates.⁸⁰ For example, the peak time for violent offending on weekend nights,⁸¹ and the number of alcohol outlets in an area is strongly correlated with local crime rates.⁸² This is due both to alcohol consumption (which increases levels of risk-taking and aggression), and to the increased density of potential victims and offenders located in a given space.⁸³

In line with research, we found increases in serious violence on Saturdays and Sundays, with around half of all serious violence occurring on weekends and over a quarter of all non-domestic serious violence (more than 25 per cent) taking place on Friday and Saturday nights.⁸⁴ During the period for which we have data (November 2015 – March 2018), nearly half of all non-domestic serious violence which took place in Bristol City Centre (BS1) (the highest serious violence postcode district in Avon and Somerset) occurred on Friday and Saturday nights. As a result we hypothesise that the night time economy is likely to be a significant driver of serious violence across Avon and Somerset.

In addition, Avon and Somerset has consistently been above the national average for alcohol related hospital admissions since 2015, including for under-18s. These above average admissions rates are consistent across the force area. For example, in the year 2017-2018, alcohol-related admissions to hospitals for under-18s was above the national average in each of the five local authority areas.⁸⁵

The VRUs should investigate the link between alcohol consumption and violence, for example drawing on ISTV data to examine whether there are specific locations that are driving alcohol-related violence.

5. Explore the drivers of drug markets and drug-related serious violence

In recent years we have seen the emergence of county lines, in which gangs from large cities like London, Birmingham and Liverpool have sought to create and take over drug

⁸⁰ Mark Livingston, Ade Kearns & Jon Bannister (2014) Neighbourhood Structures and Crime: The Influence of Tenure Mix and Other Structural Factors upon Local Crime Rates, *Housing Studies*,29:1, 1-25, DOI: 10.1080/02673037.2014.848267

⁸¹Finney, A. (2004) Violence in the night-time economy: key findings from research, *Home Office Findings 214*

⁸² Mark Livingston et al. (2014) Neighbourhood Structures and Crime: The Influence of Tenure Mix and Other Structural Factors upon Local Crime Rates, *Housing Studies*,29:1, 1-25

⁸³ Bannister, J., Bates, E., Kearns, A. (2018) Local variance in the crime drop: a longitudinal study of neighbourhoods in greater Glasgow, Scotland, *British Journal of Criminology*, 58. pp.177.199

⁸⁴ We determine this period to be between 8pm-Midnight on Friday, Midnight-8am Saturday; 8pm-Midnight Saturday; Midnight-8am Sunday

⁸⁵ Public Health England (2019) *Local Alcohol Profiles for England*

markets in other towns and areas. The Government identifies this as one of the possible drivers of serious violence in non-urban areas.⁸⁶

We understand that there are a number of county lines in market towns in Avon and Somerset, as well as a more established drug market in Bristol. To explore the potential link between county lines and serious violence, we examined whether serious violence offenders who do not have recorded residential addresses in Avon and Somerset, have recorded addresses in the major urban centres from which county lines enterprises are run (London, Birmingham, Liverpool). We did not find any pattern in the data to support this hypothesis in the data, though there are limitations to this approach (for example because those involved in county lines enterprises may provide the police with an Avon and Somerset residential address).

The VRUs could map known drug markets in the local area over data on known occurrences of serious violence to investigate how these factors interrelate. In addition, drawing on data from substance abuse services, the VRUs could investigate whether new drug markets have emerged in non-urban areas (the Crime Survey for England and Wales shows there have been statistically significant increases in the use of powder cocaine and ecstasy among rural residents in England and Wales since 2013).⁸⁷

⁸⁶ Home Office, 2018

⁸⁷ Home Office (2018), Drug Misuse: findings from 2017 to 2018 Crime Survey for England and Wales

3. Solution: Consider and design interventions

The next step is for the Avon and Somerset VRUs to develop interventions. Below we set out four recommendations to assist this.

1. Map service provision and carry out a gap analysis

The Home Affairs Select Committee's recent report on youth violence highlighted the widening gap between demand for and provision of public health services (including drug and alcohol services and mental health services) and youth services as significant barriers to realisation of a public health or preventative approach to serious violence.⁸⁸

In line with this, we heard in interviews that in some parts of the force area the level of non-statutory services, such as victim support, could not meet local demand. In addition, we heard that due to reductions in provision, entry thresholds for services (such as early intervention youth services, or domestic violence interventions) had increased, which meant that those who might benefit could not always access them.

Before developing new interventions, the VRUs should identify where there are gaps in provision relative to needs identified in the explore phase. We suggest following the steps below.

- a) Map the services in the area available to reduce risk of serious violence based on findings from exploratory work.
- b) Identify whether there are any clear gaps in provision (in terms of the type of service provided).
- c) Identify where there are insufficient levels of provision (i.e. too few spaces on specific programmes).
- d) Establish where demand and supply do not overlap (i.e. whether those who would most benefit from services based on their risk currently access them given provision and eligibility criteria). This could be achieved through a data matching exercise, taking data on a cohort of individuals involved in serious violence in a given area, and mapping this against the violence prevention interventions available to determine whether those in this cohort had access to them.

⁸⁸ House of Commons Home Affairs Committee (2019) Serious Youth Violence Sixteenth Report of Session 2017-19

2. Identify and remove barriers to uptake of existing interventions

By identifying the structural and behavioural barriers to the delivery of existing services, and developing interventions to overcome or remove these, the Avon and Somerset VRUs can optimise their violence reduction approach within available resources.

For example, there is promising empirical evidence that restorative justice, can prevent offending and improve victim satisfaction, particularly for violent offences.⁸⁹ The Victims Code 2013 made it mandatory for police forces to offer restorative justice to victims. Despite this, cultural and behavioural barriers to the use of restorative justice persist. Evidence suggests that only 4 per cent of victims in the four years to March 2017 were aware that restorative justice had been offered to them and that frontline officers may be deterred from offering it for reasons including insufficient knowledge and a lack of confidence.^{90 91} Similarly, it is likely that some people who are eligible for services such as substance abuse treatment will not attend.

3. Identify intervention opportunities and develop new interventions

The next step is to identify additional intervention opportunities and develop new interventions based on need. Drawing on our data analysis we recommend three initial areas of focus for consideration.

Diversion

An early arrest or contact with the police is a timely early intervention opportunity to prevent future offending and involvement in violence. In many cases more could be made of this opportunity, as people may not be engaged by diversionary services, particularly if they receive No Further Action.

In around a third of serious violence offences, offenders had previously been arrested for violence, serious violence, or domestic violence in the three years for which we have data. Around 15 per cent serious violence offenders who were previously arrested had No Further Action taken by the Police on a previous offence, which suggests that an important opportunity to affect their future behaviour may not have been seized. Finally, in around 5 per cent of cases of violent knife crime, the offender had previously been arrested for knife possession.

⁸⁹ Strang, H., Sherman, L.W., Mayo-Wilson, E., Woods, D. and Ariel, B. (2013) 'Restorative Justice Conferencing (RJC) Using Face-to-Face Meetings of Offenders and Victims: Effects on Offender Recidivism and Victim Satisfaction. A Systematic Review', Campbell Systematic Reviews,

⁹⁰This is for offences where an offender had been identified. See: Her Majesty's Government (2018), Victims Strategy.

⁹¹ Shapland, Crawford, Gray, Burns (2017). Restorative Justice at the level of the police in England: implementing change

Disrupting negative associations

As we know, serious violence is concentrated among small groups of people,⁹² and research suggests that many of them are connected. A study from Denmark found that a small group of “co-offenders” (offenders who had been charged in groups of two or more), accounted for just 1.2 per cent of the total offender population, but were responsible for 24 per cent of overall crime harm.⁹³

Based on data analysis, we found that prolific offenders in Avon and Somerset are more likely to co-offend than the general population of offenders: out of all occurrences with at least one prolific serious violence offender, 12.3 per cent of them involve more than one offender, and 3.9 per cent had three or more offenders; this is substantially higher than the overall proportion of all offences with multiple offenders.⁹⁴

The academic research suggests that young people who in early to mid-adolescence who are at risk of committing crime, and spend the most time unsupervised with peers tend to be delinquent. For those with a greater propensity to commit crime, one of the most effective ‘treatments’ is to avoid the settings and people who trigger, or are the most associated with that behaviour.⁹⁵ Based on this research, the VRUs could identify intervention opportunities to reduce the impact of negative social networks, particularly for young people at risk of violence. These could include: using bail conditions to prevent harmful associations; and sharing information about harmful networks with parents or carers; and providing positive alternatives to occupy time and provide access to new networks, such as sport or other out of school activities.

Teachable moments

There is evidence that by identifying ‘teachable moments’, we can increase the likelihood that someone will be willing to listen, engage and respond to a suggested change. For example, research in health has shown that having surgery doubles the likelihood that someone will quit smoking.⁹⁶ Drawing on this concept of teachable moments, the charity Redthread seeks to use a young person’s admission to hospital

⁹² Our own analysis for a police force with whom we are working shows that only 1.4 per cent of the population committed serious violent offences; and a very small number of repeat offenders account for 40 per cent of all serious violent offences.

⁹³ Frydensberg, C., Ariel, B., & Bland, M. (2019). Targeting the Most Harmful Co-Offenders in Denmark: a Social Network Analysis Approach. *Cambridge Journal of Evidence-Based Policing*, 1-16.

⁹⁴ 5.34 per cent of all occurrences involved two or more offenders, 1.41 percent of all occurrences involved three or more offenders

⁹⁵ Wikström, P. O. H., Oberwittler, D., Treiber, K., & Hardie, B. (2012). *Breaking rules: The social and situational dynamics of young people's urban crime*. OUP Oxford.

⁹⁶ Shi Y, Warner DO. Surgery as a teachable moment for smoking cessation. *The Journal of the American Society of Anesthesiologists*, 2010; 112(1): 102–7.; Keenan PS. Smoking and weight change after new health diagnoses in older adults. *Archives of Internal Medicine*, 2009; 169(3): 237–42.; Lee SM, Landry J, Jones PM, Buhrmann O, Morley-Forster P. Long-term quit rates after a perioperative smoking cessation randomized controlled trial. *Anesthesia & Analgesia*, 2015; 120(3): 582–7.

with injuries likely to have been inflicted by violence to help them reassess their life choices and give them support. Though this intervention has not yet been evaluated, it is a good demonstration of how to think about the timing of delivering serious violence prevention messages or initiatives.

The Avon and Somerset VRUs could identify and develop interventions that similarly make use of teachable moments. These could include intervening following a young person's suspension or exclusion from school; or following the arrest of a sibling.

4. Trial: evaluate, learn and adapt

In order to maximise the impact and sustainability of violence prevention initiatives, a public health approach should be evidence-generating, as well as evidence based below we set out recommendations for how the Avon and Somerset VRUs can support this.

1. Evaluate new and existing violence prevention interventions

Below we set out three ways that the Avon and Somerset VRUs can drive evaluation.

- a) Develop a clear logic model or theory of change for interventions. I.e. what are the outcomes the intervention seeks to change; why might it affect those outcomes; and how can we measure success?
- b) Ensure data is routinely collected and outcomes (such as attendance at appointments or interventions) are tracked.
- c) Put forward interventions for evaluation as part of the Government's Youth Endowment Fund, a multi-year fund that will fund and evaluate interventions to prevent youth violence.

5. Scale: Increase adoption of effective interventions

The final step of Avon and Somerset's serious violence reduction strategy should be to scale what works across the local area.

1. Facilitate knowledge transfer across the Avon and Somerset

In interviews for this project we heard that there is often not enough sharing of good practice across Avon and Somerset's five local authority areas. This is a wasted opportunity for the five areas to learn from each other based on what has worked **locally**. The VRU Strategic Reference Group should monitor interventions across the area and disseminate those for which evidence is promising.

Next steps

This report presents a blueprint for developing a serious violence strategy to support the work of the five Avon and Somerset VRUs. The document aims to assist the VRUs in making the most of the opportunities presented by the additional Government funding, and to increase the impact of the VRUs in the first year.

The next steps are for the five VRUs to consider local responses to the recommendations contained in this report, ahead of the first meeting of the Avon and Somerset Violence Reduction Strategic group, on 10 September 2019.

Appendices

Appendix A: Calculating the costs of violence in Avon & Somerset

		General Cost (Per Unit)	Cost for A&S
Homicide	Total Cost	£3,217,740	£135,145,088
	Health Cost	£1,110	£46,620
	Police Cost	£11,960	£502,320
Violence with Injury	Total Cost	£14,050	£549,172,352
	Health Cost	£920	£35,960,040
	Police Cost	£1,130	£44,168,312
Total			£764,994,732

Appendix B: Methodology

In order to establish an understanding of serious violence in Avon and Somerset, and how a public health approach can be implemented, we conducted both quantitative and qualitative research. In each case, we describe our methodology below.

Quantitative analysis

We conducted primary analysis using data from Avon and Somerset Constabulary. Unless otherwise stated, all figures, graphs, tables and statistics were generated using this data. The data was collected using the programme *Niche*, and includes Police-recorded occurrences of violent offences during the period November 2015-March 2019.⁹⁷

There are a number of limitations to basing our analysis on police recorded crime data.

1. **Police recorded crime.** There are two overarching limitations to using police data to understand violence. Firstly, not all occurrences of violence will come to the attention of the police, this may be particularly the case where victims are vulnerable or in domestic abuse cases, which are often under-reported.⁹⁸ Secondly, changes in Police recorded crime may be a reflection of differing recording and/or operational practices (i.e. improved detection), rather than changes in the underlying crime levels.
2. **Limited data coverage.** In our dataset, we have information on the offender in only 58 per cent of recorded crimes. Furthermore, we only have a complete information on offenders (age, postcode, gender, ethnicity) in only 32 per cent of recorded crimes. Data coverage on certain offender variables is better than others. For example, in 95 per cent of recorded crimes where there is a known offender, we have data on the offenders age. Conversely, we have data on offender ethnicity in only 59.5 per cent of recorded crimes for which there is a known offender.⁹⁹

Limited data coverage may be due to a number of reasons. Firstly, there may not be a suspect or offender associated with recorded crimes. Secondly, Police recording practices may mean that information on Offenders is not

⁹⁷ As defined on page 9

⁹⁸ Office for National Statistics (2018) *Domestic abuse in England and Wales: year ending March 2018*, retrieved

<https://www.ons.gov.uk/peoplepopulationandcommunity/crimeandjustice/bulletins/domesticabuseinenlandandwales/yearendingmarch2018>

⁹⁹ We have data on offender gender in 99 per cent of recorded crimes for which there is a known offender; we have data on offender postcode in 89.5 per cent of recorded crimes for which there is a known offender

collected or is collected inconsistently. Due to limited data coverage, we do not know whether our findings regarding offenders (about their age, postcode, gender, ethnicity) also apply to offenders for whom we do not have data.

3. **Limited time period.** Due to a change in the data collection programme used by Avon and Somerset Constabulary, and the unreliability of police recorded crime data before 2015, we only analyse data collected during the period November 2015-March 2019. This precludes the identification of trends which pre-date the start of our dataset. More importantly, it means that we are unable to match offenders and victims in our dataset with events that took place before November 2015. This means that we can only identify factors such as reoffending/ repeat victimisation if these occur within the 41 months under study.
4. **Recording accuracy.** The data used in this analysis is manually entered, so the accuracy and consistency of information is likely to vary. This may be especially so at the beginning of the dataset (November 2015), where it is possible that Avon and Somerset Constabulary was still implementing changes in response to HMIC's crime data integrity report.¹⁰⁰ Data on domestic violence and knife crime depends on the use of "Flags", which are also manually entered and we cannot guarantee that officers use these Flags consistently. In our dataset, details on victims, offenders or offences were not always complete, indicating possible data-quality issues. Finally, an extremely disproportionate number of offences are recorded as taking place between midnight and 1am, which leads us to believe that the time of day recording may be inaccurate.
5. **Knife Flags.** Knife Flags do not enable us to differentiate between offences where a knife is present, and more serious offences, such as knife-enabled assaults.¹⁰¹ ¹⁰² As a result, in this report, when we refer to Knife Crime, we are not able to differentiate between knife enabled assaults, or stabbings, and other offences where a knife may have been found but was not used.
6. **Postcodes.** Our dataset provides information on offender/victim address and the location of the offence. Research has found crime to be highly

¹⁰⁰ HMIC (2014) *Crime data integrity: Inspect of Avon and Somerset Constabulary*, retrieved from <https://www.justiceinspectors.gov.uk/hmicfrs/wp-content/uploads/crime-data-integrity-avon-and-somerset-2014.pdf>

¹⁰¹ The author of a recent study paper looking at more serious knife enabled assaults manually read Police reports in order to make this differentiation

¹⁰² Massey, J., Sherman, L.W. & Coupe, T. (2019) Forecasting Knife Homicide Risk from Prior Knife Assaults in 4835 Local Areas of London, 2016-2018. *Cambridge Journal of Evidence-Based Policing*, retrieved from <https://doi.org/10.1007/s41887-019-00034-y>

localised.¹⁰³ However we were only provide with location information at the postcode district level,¹⁰⁴ which, in some cases covers relatively large geographical areas.¹⁰⁵ Therefore, our geographical analysis does not completely capture the localised variation in violent crime. Furthermore, postcode districts limit our ability to match offenders and victims address to infer whether the two live together, or in close proximity to one another. Our geographical analysis assumes that the postcode district linked to an offence is the same district in which the offence took place, rather than for example the postcode district where the individual was arrested. We also assume that the postcode district corresponding to a victim/offender address is accurate, which it may not be as people may give false addresses to the police.

7. **Additional information.** Our dataset does not include certain information which could shed light on the nature of the offences. This includes information on the relationship between offenders and victims, which could help us to better understand domestic violence in Avon and Somerset. Nor do we have information on whether alcohol or drugs were factors in the offence

Qualitative analysis

In order to identify the barriers to multi-agency working and the development of a public health approach, we conducted twenty-four semi-structured interviews with stakeholders from across the force area. Interviewees worked in each of the five local authority areas, and in a range of agencies, from Police to Local Authorities and Third Sector organisations. The range of interviewees is presented in following Table:

Organisation	Number of Interviewees
Avon & Somerset Constabulary	5
Public Health England	1
NHS England	1
Community Safety Partnerships	2

¹⁰³ Groff, E., Weisburd, D., Yang, S-M. (2010) Is it important to examine crime trends at a Local “Micro” Level?: a longitudinal analysis of street to street variability in crime trajectories, *Journal of Quantitative Criminology*, 26(1) pp.7-32

¹⁰⁴ The postcode district is the area represented by the first 2-4 characters of a postcode (e.g. BA1)

¹⁰⁵ The town of Yeovil is, for example, divided into two districts

Local Authorities	6
Councillors/ Elected Officials	1
Crown Prosecution Services	1
Victim Support Services	1
Youth Offending Team	1
Education	2
Third / Voluntary Sector Organisations	3

The aim of these interviews was to learn about the barriers to a public health approach to serious violence in Avon and Somerset and how these could be overcome. Nevertheless, there are limitations to this type of qualitative research:

1. **Limited number of interviewees.** Due to time constraints and the nature of qualitative interviews, we were only able to speak to 24 individuals. Therefore, claims made in these interviews may not have been representative of the whole of Avon and Somerset.
2. **Limited geographic spread.** Although we spoke to stakeholders from each of the five Local Authority areas, we spoke to more stakeholders in some areas than in others.

Appendix C Coding Scheme for Categorising Violence and Serious Violence

Serious violence		
Principal Offence Category	Current Offence HOCode	Current Offence Description
Violence against the Person (VAP)	001/01	Murder - of persons aged 1 year or over
VAP	001/02	Murder - of persons under 1 year of age
VAP	002/00	Attempt murder
VAP	003/02	Conspiracy to commit murder
VAP	003/04	Intentionally encouraging or assisting commission of murder
VAP	004/01	Manslaughter
VAP	004/02	Infanticide
VAP	004/03	Child destruction
VAP	004/11	Cause or Allow a Child or Vulnerable Adult to Suffer Serious Physical Harm
VAP	005/01	Wounding with intent to do grievous bodily harm
VAP	005/04	Attempting to choke etc. in order to commit indictable offence
VAP	005/05	Using chloroform etc. to commit indictable offence
VAP	005/07	Causing explosions, sending explosive substance or throwing corrosive fluids with intent to do grievous bodily harm
VAP	005/10	Administering poison so as to endanger life
VAP	005/13	Making, possessing or controlling explosive substance with intent to endanger life
VAP	005/14	Possession of firearm with intent to injure (Group I (All Firearms in S1 of Firearms Act except Shotguns & Air Weapons))
VAP	005/15	Possession of firearm with intent to injure (Group II (Shotguns))

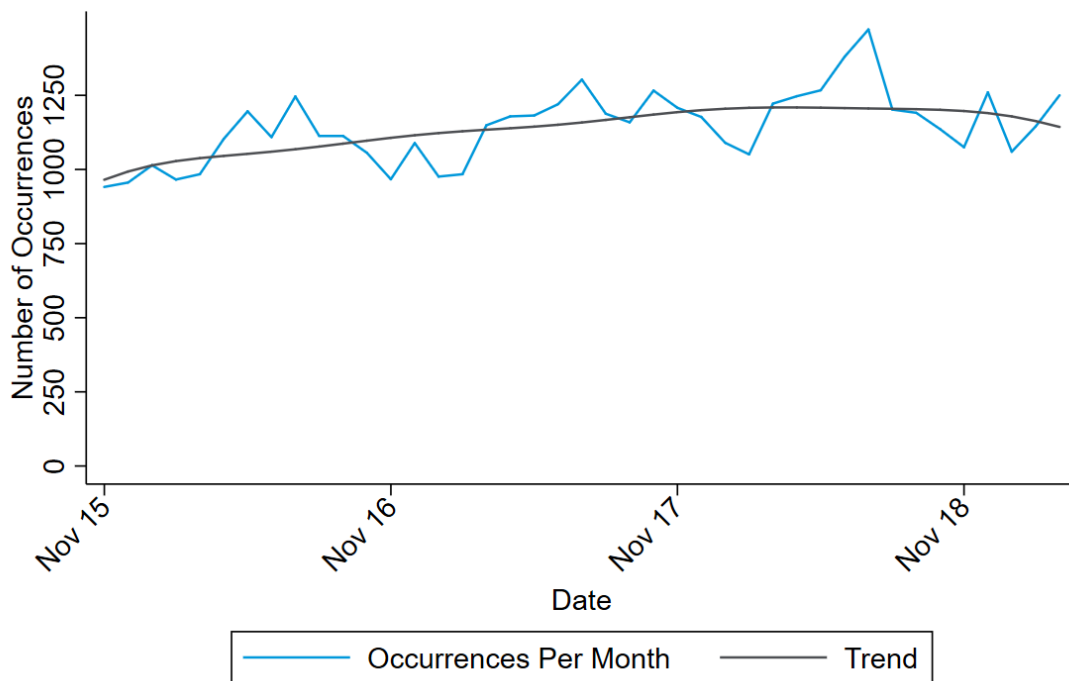
VAP	005/16	Possession of firearm with intent to injure (Group III (Air Weapons))
VAP	005/24	Use of noxious substances or things to cause harm and intimidate
VAP	005/27	Torture
VAP	008/01	Malicious Wounding: wounding or inflicting grievous bodily harm
VAP	008/01S	Assault constable - Malicious wounding: wounding or inflicting (V) grievous bodily harm
VAP	008/02	Administering poison with intent to injure or annoy
VAP	008/06	Assault occasioning actual bodily harm
VAP	008/06S	Assault constable - Assault occasioning actual bodily harm
VAP	008/33J	Racially Aggravated Grievous Bodily Harm without Intent (recordable)
VAP	008/52	Excise, infibulate, aid, abet, counsel (Female Genital Mutilation Act)
VAP	008/59	Racially or Religiously Aggravated wounding or grievous bodily harm
VAP	008/60	Racially or Religiously Aggravated assault or assault occasioning actual bodily harm
Sexual Offences	019/17	Rape of a male child under 13 by a male
Sexual Offences	019/18	Attempted rape of a female child under 13 by a male
Sexual Offences	019/19	Attempted rape of a male child under 13 by a male
Sexual Offences	019/07	Rape of a female child aged under 16
Sexual Offences	019/07	Rape a girl aged 13 / 14 / 15 - SOA 2003 (recordable)
Sexual Offences	019/07	Rape of a female aged under 16
Sexual Offences	019/08	Rape a woman 16 years of age or over - multiple undefined offenders

Sexual Offences	019/08	Rape a woman 16 years of age or over - SOA 2003 (recordable)
Sexual Offences	019/09	Rape of a male aged under 16
Sexual Offences	019/10	Rape of a male aged 16 or over
Sexual Offences	019/11	Attempted rape of a female aged under 16
Sexual Offences	019/12	Attempted rape of a female aged 16 or over
Sexual Offences	019/13	Attempted rape of a male aged under 16
Sexual Offences	019/14	Attempted rape of a male aged 16 or over
Sexual Offences	019/16	Rape of a female child under 13 by a male
Sexual Offences	017/14	Assault of a male child under 13 by penetration
Sexual Offences	020/04	Assault of a female child under 13 by penetration
Sexual Offences	020/04	Attempt to assault a girl under 13 by penetration with a part of your body / a thing (recordable)
Sexual Offences	017/13	Assault on a male by penetration
Sexual Offences	020/03	Conspire to sexually assault a female person 13 or over by penetration (recordable)
Sexual Offences	020/03	Attempt to sexually assault by penetration a female aged 13 and over (recordable)
Sexual Offences	020/03	Assault on a female by penetration

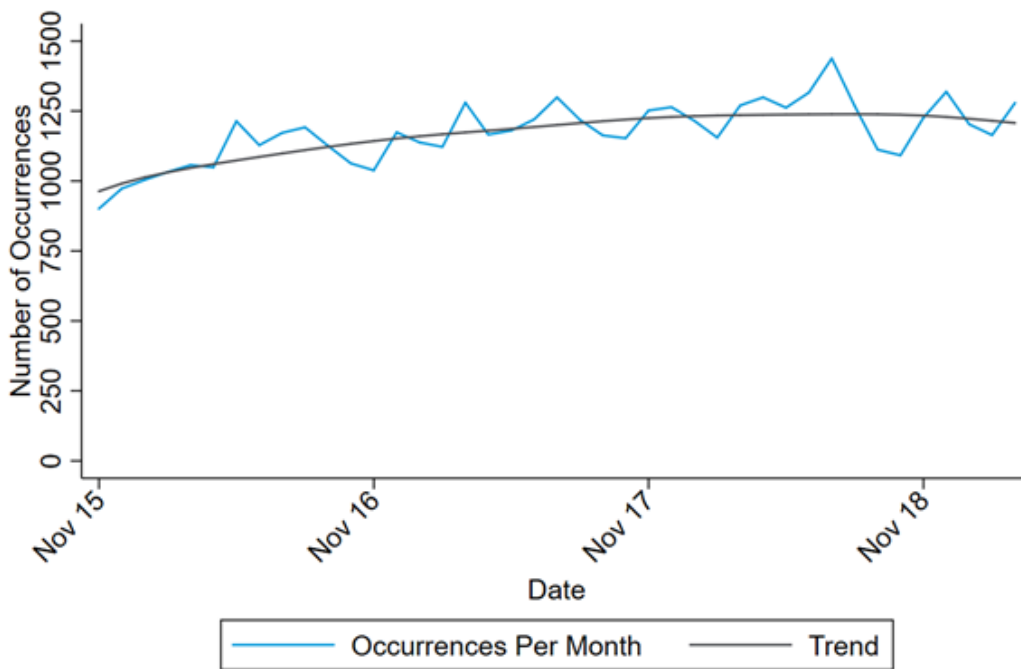
Violence		
Principal Offence Category	Current Offence HOCODE	Current Offence Description
Violence against the Person (VAP)		All remaining offences under this Principal Offence Category
Robbery	034/02	Assault with intent to Rob - Business Property
Robbery	034/02B	Assault with intent to Rob - Personal Property
Robbery	034/02	Assault with intent to commit robbery (recordable)
Sexual Offences	017/16	Attempt to sexually assault a boy under 13 by touching (recordable)
Sexual Offences	017/16	Sexual assault on a male child under 13
Sexual Offences	020/16	Aid abet the sexual assault of a female child under 13 by touching (recordable)
Sexual Offences	020/16	Sexual assault of a female child under 13
Sexual Offences	017/15	Sexual assault on a male
Sexual Offences	020/05	Attempt sexual assault on a female - SOA 2003 (recordable)
Sexual Offences	020/05	Sexual assault on a female

Appendix D: Trends in serious violence, domestic violence

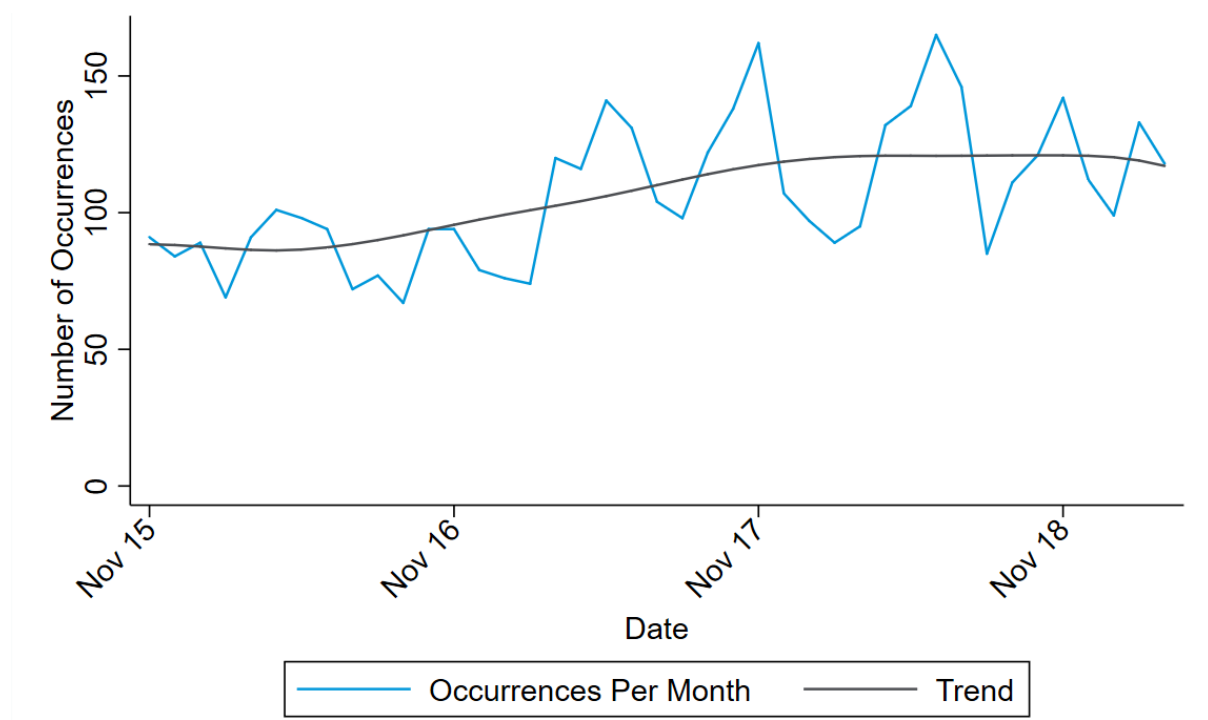
Serious violence occurrences per month (Nov' 15 – March '19)



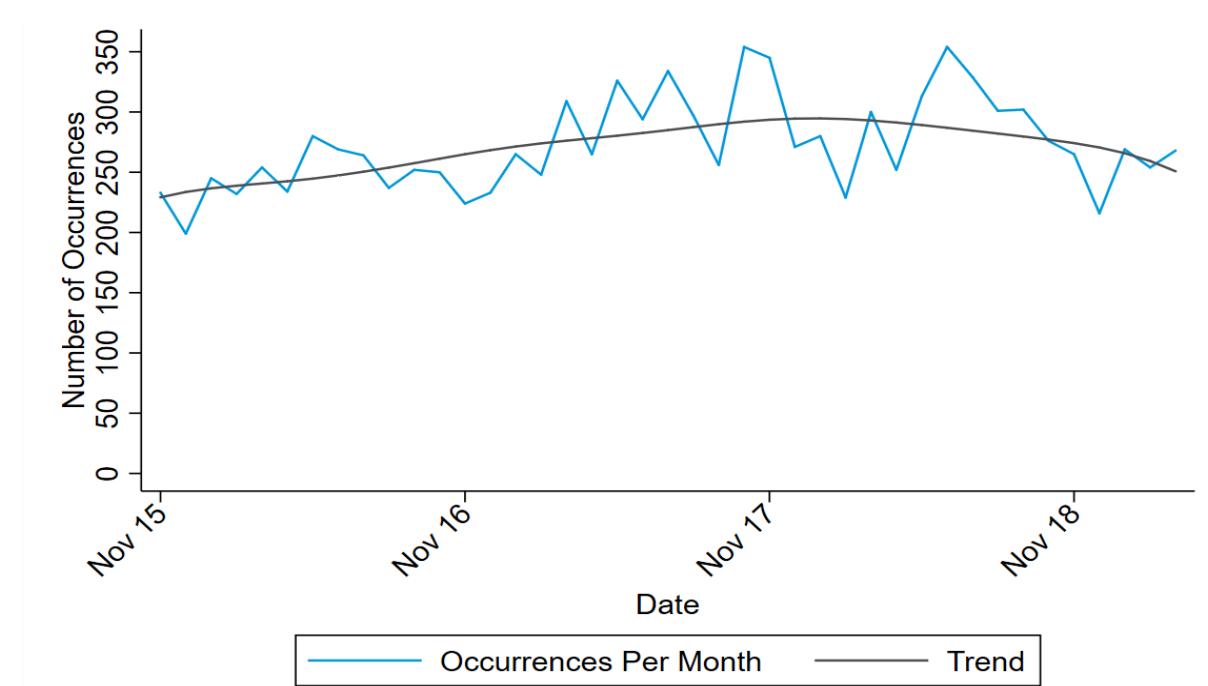
Domestic violence occurrences per month (Nov' 15 – March '19)



Serious violence occurrences per month, Young Offenders (Nov '15 – March '19)



Sexual violence occurrences per month, Young Offenders (Nov '15 – March '19)



Appendix E Postcode Key for hotspot maps

Postcode	Number on Map	Town area	Average per month	Rate
BA14	1	Trowbridge	-	-
BA15	2	Bradford-on-Avon	-	-
BA16	3	Street	6	0.51
BA2	4	Bath	34	0.58
BA20	5	Yeovil	19	2.02
BA21	6	Yeovil	28	0.99
BA22	7	Yeovil	5	0.28
BA3	8	Radstock, Midsomer Norton, Holcombe, Coleford	15	0.56
BS36	9	Frampton Cotterell, Winterbourne	5	0.31
BS37	10	Chipping Sodbury, Yate	16	0.50
BS39	11	Clutton, Temple Cloud	5	0.34
BS4	12	Brislington, Knowle, Knowle West, St Annes, Totterdown	42	1.10
BS40	13	Chew Valley, Chew Magna, Chew Stoke, Wrington	5	0.28
BS41	14	Long Ashton	3	0.49
BS48	15	Backwell, Nailsea	7	0.32
BS49	16	Congresbury, Yatton	4	0.32
BS5	17	Easton, St George, Whitehall	54	1.30
BS6	18	Redland, Montpelier, Westbury Park	15	0.51

BS7	19	Bishopston, Horfield, Filton	24	0.75
BS8	20	Clifton, Hotwells	22	0.99
BS9	21	Coombe Dingle, Sneyd Park, Stoke Bishop, Westbury on Trym, Henleaze, Bristol	9	0.30
TA5	22	Cannington, Nether Stowey, Over Stowey, Spaxton, Fiddington	4	0.40
TA6	23	Bridgwater, North Petherton, Wembdon	51	1.41
TA7	24	Puriton, Polden Hills, Westonzoyland, Middlezoy, Shapwick, Catcott, Ashcott, Chedzoy	5	0.34
TA8	25	Burnham on Sea, Berrow, Brean	11	0.75
TA9	26	Highbridge, West Huntspill, Brent Knoll	10	0.92
BS1	27	Bristol city centre, Redcliffe	68	7.54
BS10	28	Brentry, Henbury, Southmead	26	1.17
BS11	29	Avonmouth, Shirehampton	20	1.39
BS13	30	Bedminster Down, Bishopsworth, Hartcliffe, Withywood	39	1.65
BS14	31	Hengrove, Stockwood, Whitchurch, Withywood	19	0.83
BS15	32	Hanham, Kingswood	30	0.74
BS16	33	Downend, Fishponds, Frenchay	49	0.82
TA1	34	Taunton	45	1.41
TA10	35	Langport	5	0.54
TA11	36	Somerton	4	0.34
TA12	37	Martock	3	0.38

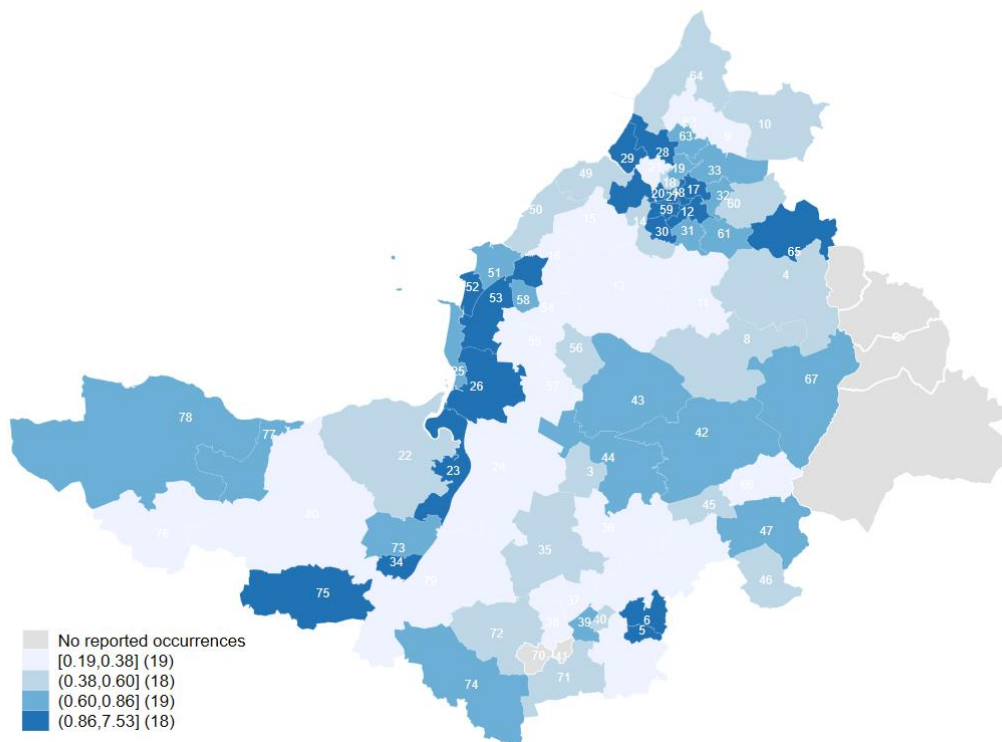
TA13	38	South Petherton	2	0.28
TA14	39	Stoke-sub-hamdon	3	0.68
TA15	40	Montacute	2	0.40
TA16	41	Merriott	-	-
BA4	42	Shepton Mallet	11	0.67
BA5	43	Wells	11	0.72
BA6	44	Glastonbury	10	0.83
BA7	45	Castle Cary	2	0.49
BA8	46	Templecombe	2	0.43
BA9	47	Wincanton	5	0.72
BS2	48	Kingsdown, St Pauls, St Phillips, St Agnes	30	2.40
BS20	49	Portishead	11	0.45
BS21	50	Clevedon	11	0.56
BS22	51	Kewstoke, Weston-super-Mare, Worle	20	0.62
BS23	52	Uphill, Weston-super-Mare	64	2.38
BS24	53	Bleadon, Hutton, Locking, Lympsham, Puxton, Weston-super-Mare, Wick St. Lawrence	16	0.94
BS25	54	Churchill, Winscombe, Sandford, Shipham	3	0.28
BS26	55	Axbridge, Compton Bishop, Loxton	2	0.30
BS27	56	Cheddar, Draycott	4	0.47

BS28	57	Wedmore	2	0.21
BS29	58	Banwell	3	0.77
BS3	59	Bedminster, Southville, Bower Ashton, Totterdown, Windmill Hill	28	0.97
BS30	60	Bitton, Cadbury Heath, Warmley, Wick	11	0.41
BS31	61	Chewton Keynsham, Keynsham, Saltford	13	0.75
BS32	62	Almondsbury, Bradley Stoke	8	0.37
BS34	63	Filton, Little Stoke, Patchway, Stoke Gifford	20	0.82
BS35	64	Alveston, Rudgeway, Thornbury	9	0.50
BA1	65	Bath	33	0.99
BA10	66	Bruton	2	0.23
BA11	67	Frome	19	0.69
BA12	68	Warminster	-	-
BA13	69	Westbury	-	-
TA17	70	Hinton Saint George	-	-
TA18	71	Crewkerne	5	0.38
TA19	72	Ilminster	6	0.43
TA2	73	Taunton	20	0.86
TA20	74	Chard	12	0.72
TA21	75	Wellington	15	0.94
TA22	76	Dulverton	1	0.19

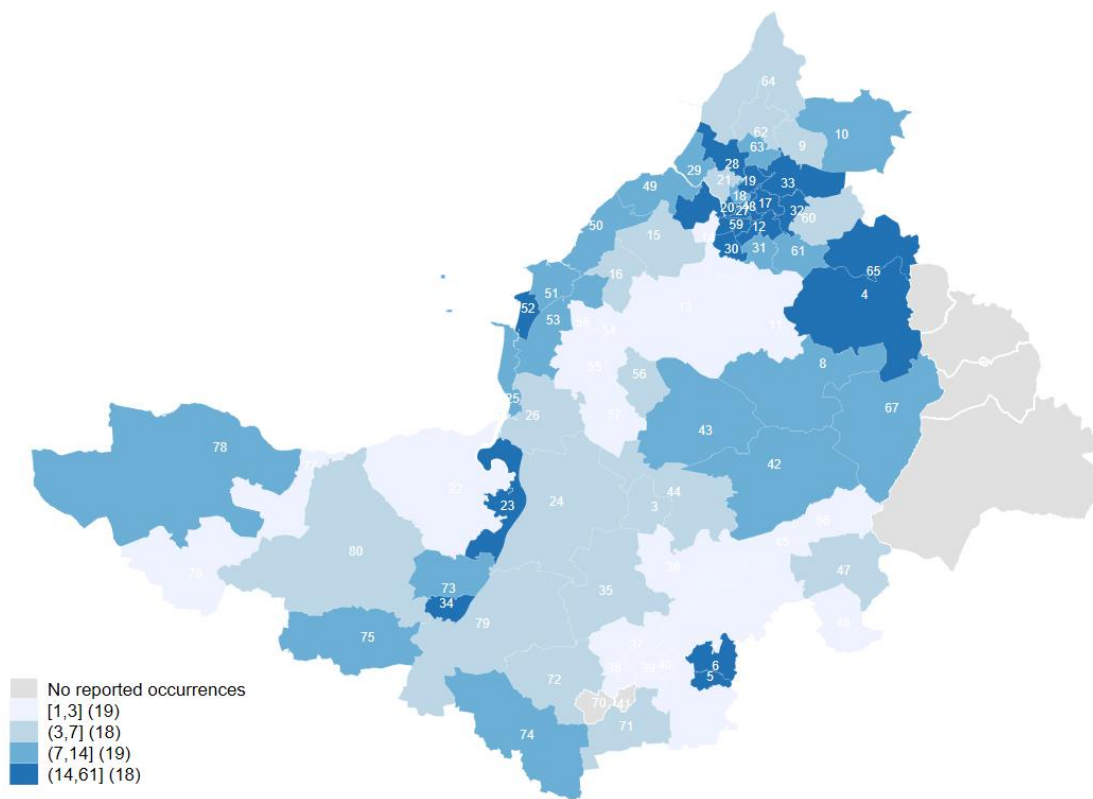
TA23	77	Watchet	3	0.65
TA24	78	Minehead	13	0.80
TA3	79	North Curry	5	0.32
TA4	80	Bicknoller, Bishops Lydeard, Crowcombe, West Bagborough, Williton	5	0.27

Appendix F: Maps

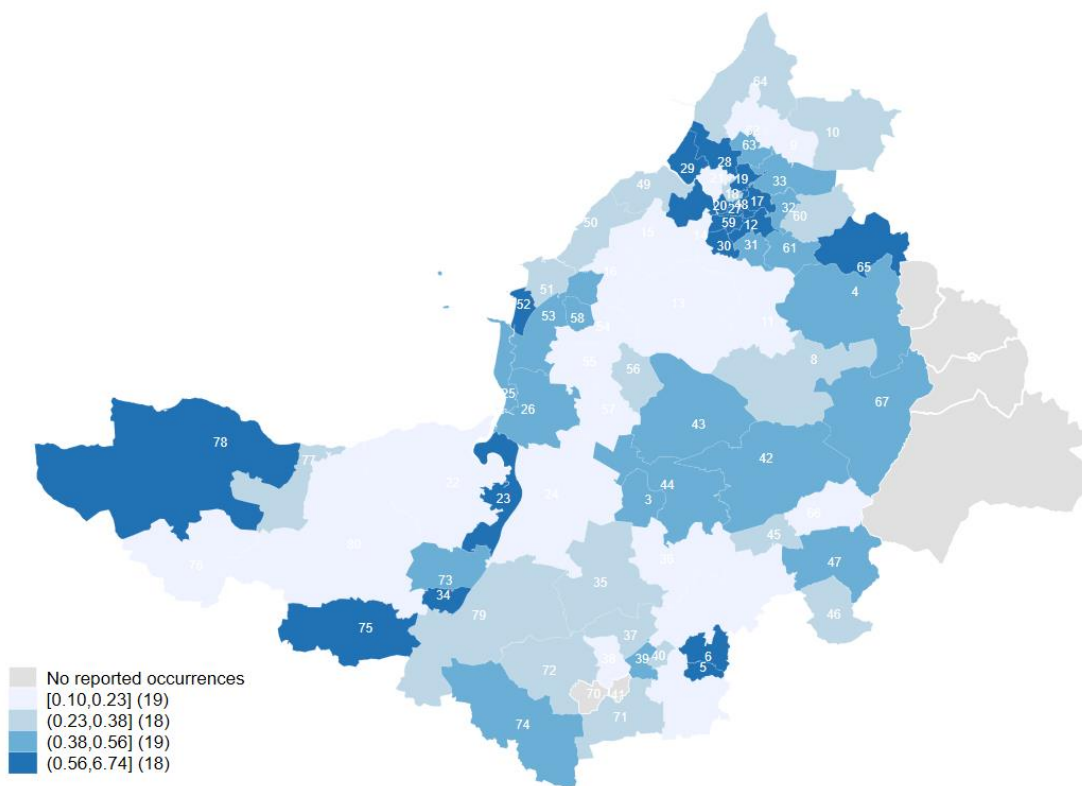
Serious violence offence rate per postcode (March '18 – March '19)



Average number of non-DV serious violence occurrences per month per postcode (March '18 – March '19)



Non-DV serious violence occurrence rate per postcode (March '18 – March '19)



Appendix G: Indicators by local authority area**Fixed period exclusion rate¹⁰⁶**

	2014	2015	2016
BANES	3.77	5.49	5.61
Bristol	6.02	7.31	8.7
North Somerset	2.57	3.73	3.41
Somerset	4.55	5.41	7.2
South Gloucs	3.56	5.14	6.15
Avon and Somerset	4.09	5.41	6.21
National Average	3.88	4.29	4.77

¹⁰⁶ Department of Education (2018) Permanent and fixed-period exclusions in England: 2016 to 2017, retrieved from: <https://www.gov.uk/government/statistics/permanent-and-fixed-period-exclusions-in-england-2016-to-2017>

Alcohol episodes for alcohol-related conditions per 100,000¹⁰⁷

	2013/14	2014/15	2015/16	2016/17	2017/18
BANES	590	541	553	546	572
Bristol	773	774	800	774	810
North Somerset	625	658	616	612	663
Somerset	626	619	639	647	668
South Gloucs	519	621	628	678	667
Avon and Somerset	626.6	642.6	647.2	651.4	676
National Average	640	635	647	636	632

¹⁰⁷ Public Health England, Local Alcohol Profiles for England, retrieved from: <https://fingertips.phe.org.uk/profile/local-alcohol-profiles>

Children in care at 31 March rates per 10,000 children under 18¹⁰⁸

	2014	2015	2016	2017	2018
BANES	44	38	42	45	48
Bristol	76	76	73	73	69
North Somerset	51	55	52	52	55
Somerset	45	45	46	43	47
South Gloucs	29	30	29	31	34
Avon and Somerset	49	48.8	48.4	48.8	50.6
National Average	60	60	60	62	64

¹⁰⁸ Department for Education (2018) Children looked after in England including adoption: 2017 to 2018, retrieved from: <https://www.gov.uk/government/statistics/children-looked-after-in-england-including-adoption-2017-to-2018>