VIOLENCE REDUCTION NETWORK

LEICESTER, LEICESTERSHIRE & RUTLAND

Injury Surveillance

VRN Briefing No.7

#PreventionThroughConnection

@VR_Network

www.violencereductionnetwork.co.uk

Introduction

The following briefing provides partners with an overview of what injury surveillance is, how it can be implemented and its benefits. We believe that violence is preventable. Our vision is for Leicester, Leicestershire and Rutland to be a place where people can lead their lives free from violence and the fear of violence. Understanding where and when violence takes place provides the foundation for prevention.

About Injury Surveillance

Injury Surveillance involves using non-idenitifiable violence-related data held by different partners to strengthen the effectiveness of multi-agency preventative action. Data on violence-related attendances to emergency departments has been used to inform violence prevention activity in England and Wales since the 1990s. It was through the Cardiff Model of Violence Prevention[i] that the value of combining both health and police data became apparent. The Cardiff Model demonstrated that combining emergency department (ED) data with police data and sharing these datasets with multi-agency partnerships provided additional intelligence which helped identify new hotspots and patterns of violence that had previously been unknown.
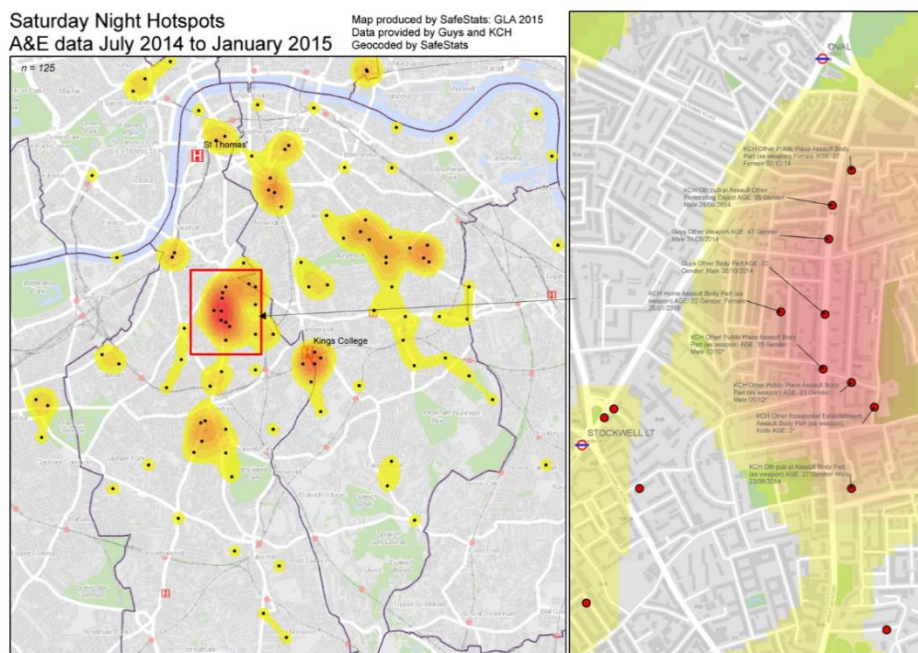

Figure 1: Example map taken from Shepherd (Jan 2020) presentation on 'Data led Violence Prevention: The Cardiff Model'

It has been estimated that 50% of violence which results in emergency hospital treatment does not come to the attention of the police[ii]. A recent study analysing both ambulance and police data in the West Midlands revealed that 90% of ambulance call outs for violence-related injuries did not have a corresponding case in the police dataset[iii]. The use of ambulance data is an extension of the practice pioneered through the Cardiff Model for Violence Prevention. When combined with ED and police data, ambulance data can further enrich the local understanding of violence.

The sharing and use of both health and police data has been linked with statistically significant reductions in violence in a local area[iv] and efficiency savings for the health service and criminal justice system[v]. This is because health data can support preventative activities by providing insights into hot places and times, and into the context and risk factors associated with local violence. These insights can be used to contribute to evidence-informed:

- police patrols in high-violence areas

- detached youth work in emerging hotspots
- activities at licensed premises identified as being hot places
- targeted interventions aimed at addressing contextual and risk factors

As a result of the growing evidence-base around efficacy, the use of ED data in particular is now a national standard of practice through the government's Information Sharing to Tackle Violence (ISTV) guidance[vi]. More broadly, Injury Surveillance aligns with the soon-to-be implemented Serious Violence Duty which will mandate local areas to:

> '...*take a multi-agency approach to understand the causes and consequences of serious violence, focused on prevention and early intervention, and informed by evidence and and rigourous evaluation of interventions.*'[vii]

Injury Surveillance in LLR

Our ambition is to improve our local understanding of violence and to use this to prevent and reduce violence and the health, economic and social impacts it has on the population in Leicester, Leicestershire and Rutland. To deliver on this ambition, we are implementing and testing a local Injury Surveillance System which is illustrated by the following infographic:
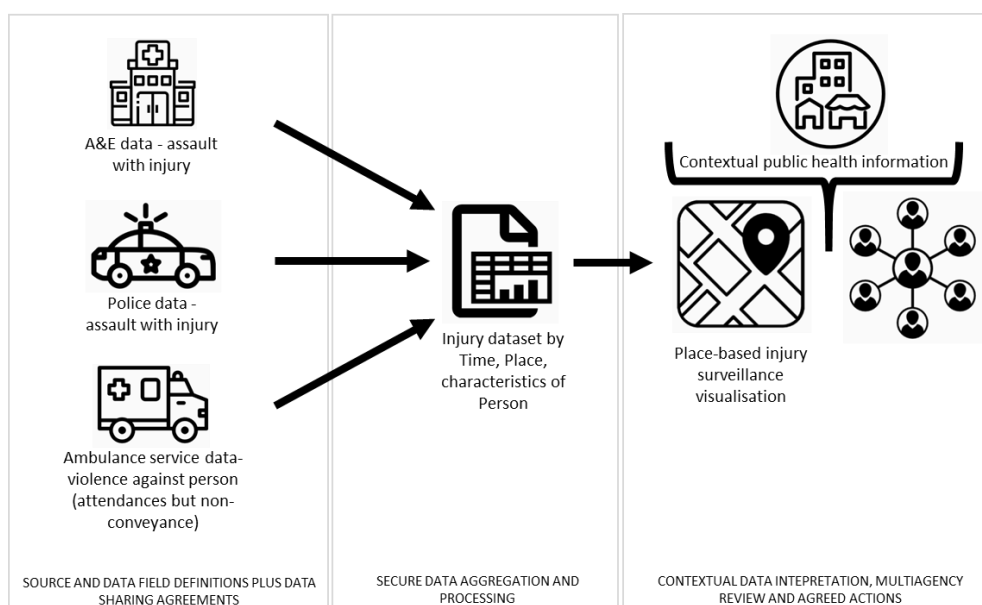

Figure 2: Infographic to explain the key stages and aspects of drawing together data from different sources to produce place-based injury surveillance visualisation

In 2021, the Violence Reduction Network (VRN) collaborated with Leicestershire Police, University Hospitals Leicester and East Midlands Ambulance Service to undertake a proof of concept stage. This small-scale project highlighted notable differences between the different datasets in terms of key trends and hotspots. It enabled us to understand the challenges and benefits of Injury Surveillance, and to develop a plan for implementing it locally.

Over the course of the past 12 months, the VRN has continued to work with the partners listed above to put an Information Sharing Agreement in place which enables each partner to share a specified non-identifiable dataset on a monthly basis. The datasets include the:

- Data and time of the violence-related police incident, ambulance call-out or A&E attendance
- Location of the incident or call-out pick up place (grid reference - eastings and northings minus two digits)
- Classification of the location (home, public place, hospitality etc)
- Name of the bar/pub/club (if relevant and known)

- Nature of the incidents (Home Office offence classification subgroups of Violence with Injury and Homicide, Chief Complaint or Injury Mechanism depending on dataset)
- Sex of victim and suspected perpetrator
- Age of victim and suspected perpetrator
- Ethnicity of victim and suspected perpetrator

On receiving the datasets, they are ingested into Power BI – an interactive data visualisation tool – to create an Injury Surveillance Dashboard. The aim of the Dashboard is to visualise key trends and hotspots for serious violence in an accessible format which can then be used by multi-agency forums, such as Community Safety Partnerships, to design, implement and test violence prevention activity.
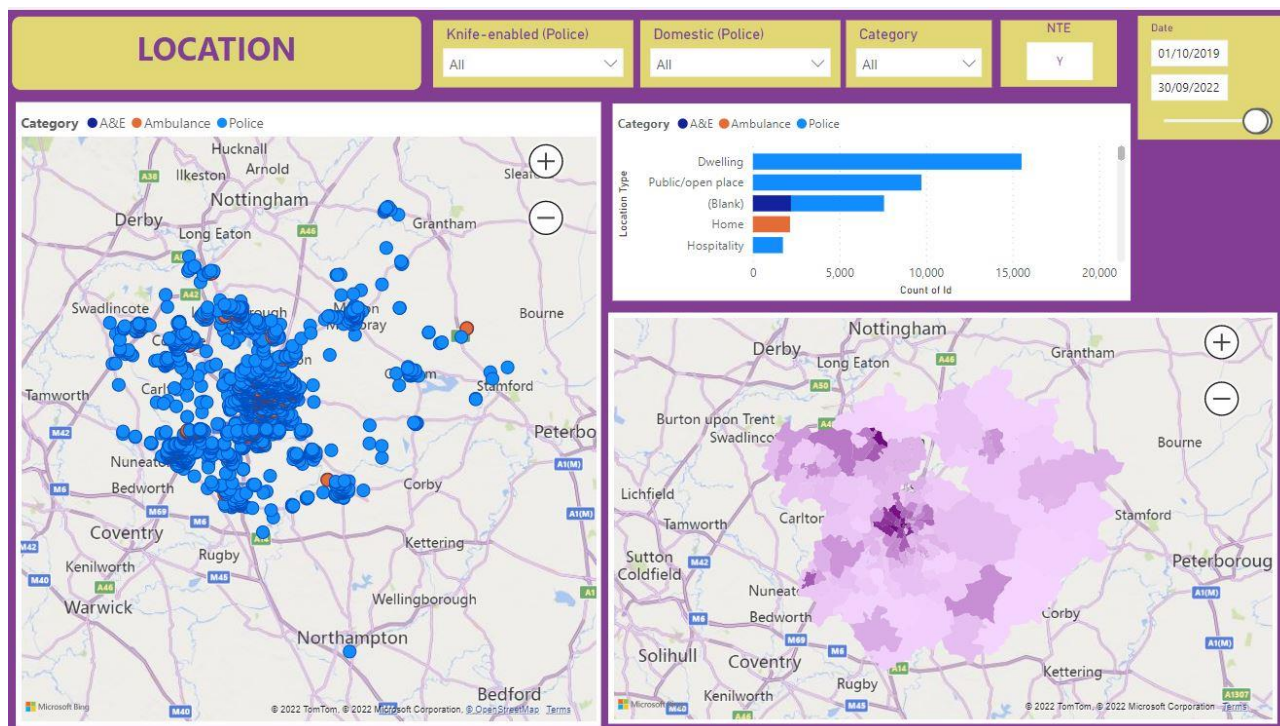

Figure 3: Screenshot from the Injury Surveillance Dashboard.

The local approach to testing Injury Surveillance involves sharing the Dashboard with a multi-agency forum and providing support to adopt a problem-solving framework to inform violence prevention activity. This will include considering the following key questions:

- *What is happening now?* Using the Dashboard, identify who is involved and where and how violence is occurring (or has been occurring recently) as well as where it is less prevalent.
- *Why is it happening?* Draw on the expertise of the forum to explore the different factors that may be influencing these findings. Importantly due regard needs to be given to contextual factors and understanding the 'causes of the causes' and so that attention is given to strategic, as well as operational action.
- *What is likely to happen?* Use information about known events or changes to also consider and predict changes arising from short, medium and long-term influences (e.g. short-term events such as upcoming sporting tournament to longer-term dynamics such as societal changes).
- *What do we need to do?* Consider and agree a range of evidence-informed responses, tailored to the above analysis, to ensure multi-agency preventative action is in place.

While the membership of each multi-agency forum may differ, there are likely to be some consistent partners involved including:

- Police
- Health

- Local Authorities
- Fire & Rescue Service
- Businesses
- Outreach Workers such as Street Pastors
- Security and/or Watch Schemes
- Other Voluntary and Community Organisations

The membership of the multi-agency forum is likely to be iterative. For instance, following initial analysis of the local problem, the forum might consider extending the membership to a particular service, intervention or community group whose input might benefit the design or delivery of the response.

Evaluating the Impact of Injury Surveillance

The VRN aims to secure both short- and long-term reductions in serious violence and hospital attendances and admissions for violence related injuries. While Injury Surveillance is an evidence-informed data sharing and problem-solving approach, we need to know if it is having an impact on serious violence locally.

Evaluation is central to helping us understand how Injury Surveillance is being implemented and whether is it effective and cost-efficient. The VRN will be providing support to embed evaluation into the roll-out of Injury Surveillance which will involve developing a Theory of Change and an Outcomes Framework. As a partnership, we are committed to sharing learning and to the continual improvement of our interventions, services and strategies to ensure that they're benefiting those most in need. The findings from this evaluation will be publicly accessible and shared via the VRN's website and social media channels.

[i] Shepherd, J. (2004). *Effective NHS contributions to violence prevention – the Cardiff Model*. Cardiff: Cardiff University.

[ii] Wu, D., Moore, J., Bowen, D., Mercer Kollar, L., Mays, E., Simon, T. and Sumner, S. (2018) 'Proportion of Violent Injuries Unreported to Law Enforcement' *JAMA Internal Medicine*. Available at: doi:10.1001/jamainternmed.2018.5139

[iii] Sutherland, A., Strang, L., Stepanek, M., Giacomantonio, C., Boyle, A. and Strang, H. (2021) 'Tackling Violence Crime with Ambulance Data: How Much Crime Goes Uncounted?' *Cambridge Journal of Evidence-Based Policing*. Available at: https://doi.org/10.1007/s41887-021-00064-5

[iv] Sutherland, A., Strang, L., Stepanek, M. and Giacomantonio, C. (2017) Using Ambulance Data to Inform Violence Prevention. Cambridge: Rand Europe.

[vi] See https://www.gov.uk/government/news/aes-and-police-to-share-information-to-help-tackle-violence

[vii] See https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/967790/Serious_Violence_Duty_IA.pdf