

Scanning – a problem-solving approach to homicide

Scanning as part of a problem-solving approach to homicide.

First published 19 October 2022

5 mins read

Scanning forms part of the [SARA model](#) and can be used as part of a problem-solving approach to homicide.

Video Transcript

Scanning typically involves three steps.

1. Select a broad category of crime or public safety issue that you would like to focus on.
2. Identify data and information relevant to the selected crime or public safety issue.
3. Interrogate relevant data and information sources to arrive at, and better understand, a highly specific problem that is suitable for problem solving.

In relation to homicide, scanning typically involves three steps.

- Step one – [selecting and refining a homicide problem](#)
- Step two – [identifying relevant data and information that can help you to understand the homicide problem](#)
- Step three – [analysing the data to provide a detailed description of the selected homicide problem's key features](#)

Selecting and refining a homicide problem

A common starting point for problem solving is identifying a broad category of crime problem that has:

- become more common in your area
- been a longstanding and serious issue

Homicide may fall into either category.

When we talk about crime problems, we rarely talk about them with the level of precision required to inform an effective problem-solving strategy. This is particularly true if a problem is relatively rare, such as homicide.

However, broad categories are less useful if we plan to understand the causes of specific, localised problems and identify a feasible strategy of intervention.

The process of scanning can help you to identify common types of homicide in an area. This might include homicides broken down by relationships between the people involved. For example, homicide of:

- one partner by another
- a gang member by a member of another gang
- one acquaintance by another in a night-time economy setting
- a child by a parent
- a parent by an adult offspring
- a stranger in a terrorism-related event

This list is a useful starting point. But it is not exhaustive and not precise enough for an effective problem-solving strategy.

To identify a meaningful target, it might be useful to cross-reference these categories with the circumstances of the event. For example:

- use of a weapon
- specific location type
- timing of incident
- involvement of alcohol or drugs
- dynamic relationship between perpetrator and victim

Another category to consider is influencing factors, which can be fixed characteristics or may reflect more dynamic and short-term features. Examples of these include:

- spontaneous altercation
- domestic abuse
- alcohol related

- mental health
- drug use
- monetary or property gain
- inadvertent or collateral harm
- murder-suicide
- revenge or retribution
- gang-related
- night-time economy
- county lines
- politically or ideologically motivated
- corporate

For example, combining two or more of these categories we might identify:

- domestic homicide shortly after separation
- serious violence involving knives in or around a local park
- violence following conflict via social media

Not all combinations of categories will yield a meaningful and actionable problem. However, this is a useful exercise to identify the kind of specific problem needed for effective problem solving.

Identifying relevant data and information

Once you've identified and clearly defined your local homicide problem, it's important to look at how the selected problem is patterned. Identifying relevant data and information can help you to understand this.

Problem solving draws heavily on the principle that crime is highly concentrated – a small number of people and places experience a large proportion of all crime. Targeting preventive efforts at crime concentrations is central to police problem solving. It has repeatedly been shown to be an effective and efficient use of resources.

Once you've precisely defined the type of homicide you want to focus on, you should look to understand patterns in its occurrence, such as who, when, where and how the patterns have changed over time. Patterns to examine include:

- [repeat offenders](#)
- [repeat groups](#)
- [repeat victimisation](#)
- [hot weapons](#)
- [locations](#)
- [near-miss homicide data](#)

Repeat offenders

Although repeat homicide is unlikely, many studies have shown that seriousness of violence can escalate in an individual. Assess whether there are individuals showing worrying trends in their violence relating to this problem.

Repeat groups

Certain types of homicide might reflect conflicts in a community. Assess whether your homicide problem is clustered in certain populations or groups.

Repeat victimisation

Repeat homicide victimisation is not possible, but homicide reviews have demonstrated escalating severity of violent victimisation as an indicator of increased risk of homicide. Assess whether there are vulnerable groups relevant to your problem that have shown signs of escalating victimisation.

Hot weapons

Assess whether there has been an increase in the detection of certain types of weapons in your area, such as knives or firearms.

Locations

Assess whether types of homicide cluster in areas over time. Assess whether these are places associated with any drivers of violent crime – such as the night-time economy or drug markets – or are types of homicide clustered in particular neighbourhoods.

Near-miss homicide data

An additional data factor is considering what counts as a homicide. At first this seems nonsensical – either it was fatal, or it wasn't. But we need to remember that we're more interested in the act of fatal violence than the outcome.

For example, if a shooter's gun jams, a stabbing just misses the heart or a passer-by is an experienced paramedic, incidents that most likely would have been homicides become non-fatal violence. We should be just as interested in preventing these incidents as preventing fatalities.

One solution to this when scanning homicide is to include near-miss homicides. This approach is logical in terms of preventing lethally violent behaviour. It also boosts the number of incidents (by around a factor of three) that you can use to understand your homicide problem during analysis.

Defining a crime as a near-miss

It can be useful to include near-miss homicides in your data.

Defining a crime as near-miss is subjective and may be dependent on individual circumstances. As a guide, the following crimes may be considered as homicide and near-miss homicide.

Homicide

- 001/01 Murder aged over one
- 001/02 Murder aged under one
- 004/01 Manslaughter
- 004/10 Corporate manslaughter
- 004/02 Infanticide

Near-miss

- 002/00 Attempted murder
- 004/07 Cause/allow death or serious physical harm to child or vulnerable person
- 003/02 Conspiracy to murder
- 005/01 Wounding with intent to do grievous bodily harm (GBH)
- 008/01 Malicious wounding or inflicting GBH
- 056/01 Arson endangering life
- 5E (all sub-categories) Endangering life (all sub-categories)

Although the rarity of homicide makes its analysis vulnerable to inaccurate conclusions about patterns, problem solving for homicide is rich in data at the case level. You can therefore get information about an incident at a level of detail not usually possible for less serious crimes.

Analysing the data to provide a detailed description

Compared to other crime types, homicide is rare. So it's important to exercise caution in reading patterns in the data that may be statistical anomalies.

Sample size

This problem – where we draw conclusions about an issue based on a small sample of information – is sometimes known as the 'law of small numbers' or the 'black swan fallacy'. For example, two domestic homicides in an affluent community over a short space of time may seem like a pattern, but may also reflect random variation.

Historical data

It's also important not to reach too far back into the data. Macro-level drivers of homicide (such as demographics and inequality) change slowly. Meso-level factors (such as an age group's alcohol consumption) and micro-level factors (such as gang activity) change more quickly.

As a rule, around three years should be enough to reflect current serious violence activity in most police forces while overcoming the problem of rare events. However, local intelligence and knowledge is crucial in deciding whether a problem warrants a more concise period to examine.

Pooling data

An additional consideration is whether forces that are experiencing similar types of homicide might consider pooling their data.

Multi-agency data

In addition to much police data on homicide, data from other sources is usually more readily available – such as from social services, coroners and health services.

Although the insights gleaned from multi-agency homicide reviews come too late to prevent the incident, piecing together multi-agency data can help construct a detailed problem analysis that might inform future prevention efforts.

For example, data on non-fatal serious violence might suggest that gang-related crime is increasing. But a coroner's report might identify a particular type of knife or firearm that can be linked to past crimes and offenders.

Examples of data that might be used to better understand homicide problems include:

- emergency call logs
- police crime data
- police case files
- police intelligence reports
- health data
- local authority data
- homicide and safeguarding reviews (including child death reviews, adult safeguarding reviews, domestic homicide reviews, child safeguarding practice reviews, mental health homicide investigations and (forthcoming) offensive weapon homicide reviews)
- coroner's reports

These records are often known as secondary data in that they were not collected for the purposes of problem solving. An example of primary data however would be data that's collected (not retrieved) as part of the problem-solving process. This might include interviewing witnesses, investigating officers or visiting areas where violence is known to concentrate.

Next steps

Once you're confident that your homicide problem is clearly defined and that there are clear, meaningful patterns linking these homicides, you can move on to the next stage of the SARA model – [analysis](#).

Tags

Homicide Crime reduction