

# Analysis – a problem-solving approach to homicide

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

First published 19 October 2022

6 mins read

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

## Video Transcript

Analysis is the second step of problem solving. It follows the scanning stage. It involves systematic study into the causes and conditions that enable problems to persist.

Problem solving does not require you to identify and address all of the causes that give rise to your selected problem.

Effective problem analysis is about analysing a problem to identify pinch points.

Pinch points are causes and conditions that contribute to a problem and are open to preventative intervention by the police and partners.

The goal of problem analysis is to help you identify an appropriate and effective response that is based on those pinch points and can be delivered within the resources of your organisation.

Effective problem solving is finding pinch points that can be changed by responses that can be implemented in a reasonable time frame and which also have a sustained impact.

Having defined your local homicide problem and identified its common characteristics through [scanning](#), you can progress to analysis. Analysis helps you to understand the causes of your problem by using available data to identify the circumstances that are generating or maintaining it.

There are many causes of homicide. It's often not feasible for the police to influence:

- long-term macro-level drivers of homicide, such as demographics or inequality

- meso-level factors, such as an age group's alcohol consumption

But intervening in many of the short-term micro-level factors often sits in the police remit. In setting your analysis goals, it's therefore useful to aim for micro-level factors, which tend to manifest at the individual, interpersonal and community levels.

A common term in the problem-solving literature is identifying **pinch points** and your analysis is aiming to identify these. A pinch point is a causal factor in homicide that can reasonably be addressed through policing practice. It's a common event or circumstance that's present in or precedes most of these incidents. This might be an event that increases an individual's vulnerability or a predictable/scheduled removal of a safeguard or a failure of that system.

## Problem analysis triangle

The problem analysis triangle can be used to think about the identification of pinch points.

### Video Transcript

There are two tools that are commonly used in problem solving, which can help break down your problem and structure your problem analysis.

These tools are the problem analysis triangle and crime scripts.

Problem analysis triangles can help structure the analysis of your crime problem.

Using the example of knife crime, the inner triangle refers to three conditions that must occur for a knife crime to take place:

- the presence of an equipped offender – someone in possession of a knife
- who is at the same time in contact with an accessible victim
- where there is no adequate guardianship in a location

The middle triangle refers to people in a position to prevent knife crime by:

- guarding people who are potential victims
- inhibiting, or handling, the person or people engaging in knife crime
- overseeing, or managing, locations in ways that reduce the opportunities for knife crimes to occur

The outermost triangle relates to super controllers, who are those able to apply levers to guardians, relevant handlers or place managers to persuade them to act in ways that will lessen or eliminate a particular knife crime problem.

For example, a nightclub chain may introduce a policy mandating club managers to check for weapons on entry.

Or regulations might be put in place to clamp down on the sale of combat knives, thereby reducing the likelihood that motivated offenders can gain access to certain knife types.

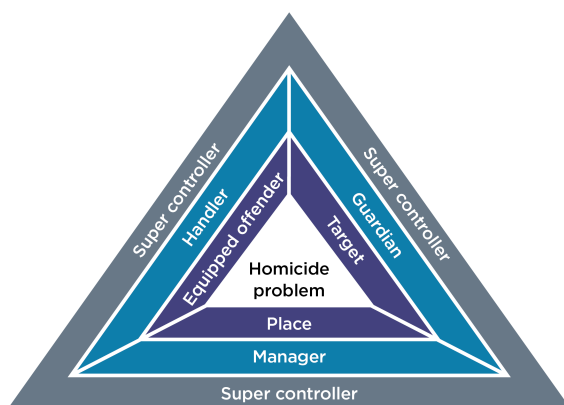
The problem analysis triangle provides you with a framework to begin to break down your crime problem and work out which elements are most open to intervention.

## Inner layer

Three things must be present for a homicide to occur:

- a person who is motivated to commit a homicide (the equipped offender)
- an accessible victim (the target)
- these two coming together in a place and at a time where capable guardians are absent (the place)

In the case of industrial homicide, the perpetrator of the homicide need not be present. But the mechanism by which the homicide occurs – such as a fire – must be present to fatally affect the victim.



## Middle layer

Capable guardianship can be any person or thing that can prevent the homicide from occurring. Examples of this include police, security guards and even bullet-proof glass, as guardianship does not have to be physical. The sound of a child in a home may prevent a domestic abuse incident from becoming fatal, or witnesses may be able to de-escalate a violent situation simply by their presence.

The middle layer of the problem analysis triangle reminds us to look at actors beyond the immediate homicide event that might be able to deter or pre-empt the homicide. These actors might be:

- guarding a victim (guardian). Examples of guards include police domestic abuse liaison officers or child welfare officers
- handling perpetrators (handler). Handlers might include probation officers or family members of a perpetrator
- managing locations where homicide is a possibility (manager). Managers might include nightclub security staff or housing officers

When victims have already come to the attention of the police and allied services, as is often the case with homicide, this layer of the triangle is an essential part of the causal pathway to homicide and a crucial component for response.

At this level, data sharing is important. Homicide reviews have repeatedly identified that a lack of joined-up data sharing between services who 'guard' victims and services who 'handle' perpetrators have failed to share information that could have been central to identifying and managing risk of homicide earlier.

## Outer layer

The outer layer of the triangle focuses on 'super controllers' who can influence the activity of the actors in the middle layer. This might be a local authority that increases the availability of domestic abuse shelter facilities, or legislators who support or prohibit data sharing.

A careful analysis of a specific crime problem using the problem analysis triangle can be an enlightening experience in the process of developing a response. The triangle emphasises that there are many levers that might profitably be pulled and actors engaged in the interests of preventing homicide.

The important point to recognise is that not all causes of your local homicide can (or need to) be addressed at once. Good problem solving might examine an issue from several perspectives and result in the implementation of a range of interventions that target different outputs (or pinch points) of the analysis.

## Crime scripts and trajectories

Homicides are events about which we often have unusually detailed information. Case files and [homicide reviews](#) will often provide timelines of events as well as contextual and background information.

Working on the assumption that there is at least some consistency across specific types of homicide, you may be able to construct an event script for the homicide type you have chosen.

### Video Transcript

Crime scripts are the second tool commonly used in problem solving, which can help break down your problem and structure your problem analysis.

All crimes have a beginning, middle and end, with offenders making decisions at different stages in the crime commission process.

Using a knife crime example, knives have to be acquired, stored, transported, used and potentially discarded.

Crime scripts can be useful when you're problem solving to help break down problems into the sequence of actions adopted prior to, during and following an offence.

Constructing scripts can help identify a fuller range of preventive pinch points at which you might direct your problem-solving responses.

Police data, investigation files, and interviews with offenders and victims can all help piece together information to create a script that reflects your local circumstances.

Other data sources might also help you to analyse the crime commission process.

Naturally there will be some variation when dealing with small numbers of incidents, even when homicide types are closely matched. A problem solver seeking a pinch point must be able to find

the common signal in the noise of the data. Examples include the following.

- In post-separation domestic homicide, was there a trigger event that preceded perpetrators returning to the family home?
- If there has been a spate of knife crime homicides involving machetes, did the perpetrators access their knives through a local underground market?

The challenge here is to avoid the **black swan fallacy** of extrapolating from one rare event to another. Thinking critically about the relative importance of signals you have identified and seeking independent advice is important if your response is to be effective.

## Multi-agency responsibility for a multi-agency problem

The evidence on the ‘cycle of violence’ (Butler and others, 2020) and the impact of ‘adverse childhood experience’ (Fox and others, 2015) on later violent behaviour is compelling.

It seems beyond doubt that much of today’s violence has its origins in the childhood experiences of ten and fifteen years ago. This link is not just about street violence, it seems to endure across types – witnessing domestic abuse as a child is strongly associated with both domestic abuse perpetration and victimisation as an adult.

If the levers available to police are not likely to be effective in isolation, a problem-solving approach to homicide must look beyond policing. Even when police think beyond their usual constraints to develop creative solutions, police may not be the best organisation to deliver the intervention. Having trusted community and statutory partners to be the public face of interventions can greatly affect how they’re received by the public.

It’s also important to remember that partnership working has its limits. Services have different cultures and priorities that are sometimes incompatible. If partnership activities are too broadly defined, wide initial enthusiasm will result in weakening commitment from many partners. Organisational commitment is also vulnerable to changes in personnel.

In establishing partnerships for a specific intervention:

- try to keep the partner membership as lean as possible
- involve partners thoroughly in the design of the intervention

- try to ensure full written organisational commitment
- consider a sunset clause (expiry date) for the partnership so that it does not outlast its value

## Data sharing for homicide prevention

- Clear guidance on data protection and general data protection regulation (GDPR) rules are required for all agencies involved in homicide prevention. Concerns over culpability in the instance of data loss outweigh the potential value of data sharing for prevention.
- Prevention efforts would benefit from a coordinated, multi-agency, national data-sharing infrastructure.
- Crime analysts would benefit from guidance on use of data to determine risk and identify patterns.
- Analysts involved in homicide problem solving should have a working knowledge of common logical fallacies in interpreting data and causal inference, such as the law of small numbers, the base rate fallacy and the 'table 2' fallacy.

## Next steps

Once your analysis is complete, you can move on to the next stage of the SARA model – [response](#)

## Related resources

- [Center for Problem-Oriented Policing, Arizona State University](#)
- [Community Violence Intervention \(US Department of Justice, Community Oriented P...](#)

## Tags

Homicide   Crime reduction