# Interventions for situational crime prevention

Effective interventions for tackling neighbourhood crime

First published 19 January 2022

This section outlines the various interventions that can be used to tackle neighbourhood crime.

The majority of these relate to burglary offences, although some interventions are relevant to more than one crime type. No relevant interventions have been identified for theft from the person alone, although some exist for this crime type in addition to other neighbourhood crimes.

# **Domestic burglary**

For domestic burglary, initiatives that involve changes to the built environment have the greatest impact on crime, although schemes that raise awareness of risk have also shown positive crime reduction effects.

## Physical security

There is strong evidence to suggest that physical security measures reduce crime by making residential properties more difficult to break into, and some measures may act as a deterrent. Measures include a range of devices and options, used individually or in combination, such as:

- double door locks and deadbolts
- window locks
- security chains and limiters
- external lights on a timer or sensor
- internal lights on a timer
- window bars and grilles

Analysis of data from the CSEW on the effect of physical security measures on burglary (Tseloni and others, 2017a; Tseloni and others, 2017b) found that:

• window locks, external lights or door locks offer the greatest benefit as an individual, stand-alone security feature

- a greater number of security devices generally gives more protection than fewer, although the benefit of adding devices reduces when there are more than four
- the most effective combination of two security devices are window locks with external lights or window locks with door locks
- the most effective combination of four security devices is 'WIDE':
  - W window locks installed
  - I interior lights on timer
  - D double door locks or deadbolts
  - E exterior lights on sensor

Counterintuitively, intruder alarms on their own were found to increase burglary risk. However, these analyses did not distinguish between factors such as alarm monitoring, installation quality and geographical factors, and did not establish whether the alarm was fitted post-burglary.

Within England and Wales, Secured By Design (SBD) provide details on security standards and design principles that underpin the CPTED principles. Evaluation of SBD developments have been conducted, for both refurbished and new-build developments. A recent meta-analysis, currently in press, found that building to SBD standards reduces the likelihood of burglary victimisation by 53% (Armitage, Sidebottom and Tompson, in press, as cited in Armitage and Tompson, in press).

## Alley gates

There is strong evidence to suggest that installing <u>alley gates</u> can reduce crime in areas with a particular type of housing stock. Alley gates are lockable gates that prevent access by offenders to alleyways that are commonly found along the rear of older-style terraced housing in the UK. Residents are given keys to the gates to allow access but non-residents are unable to enter.

A systematic review of the effectiveness of alley gates (Sidebottom and others, 2018) found a mean reduction of 43% in burglary in areas that had them installed. Alley gates may be less suitable for communities with a high turnover of residents, as it may mean that many people have access to keys or key-codes without necessarily having any investment in the area.

#### **Neighbourhood Watch**

There is strong evidence to suggest that **Neighbourhood Watch Schemes** (NWS) reduce crime. These are also known as home watch, block watch and community watch.

The purpose of NWS is to encourage involvement of local citizens in activities that promote safety or assist with crime prevention.

A systematic review that examined the effectiveness of NWS found that overall, for every 100 burglaries, an average of 26 crimes were prevented with NWS (Bennett and others, 2008). There is limited evidence on how Neighbourhood Watch schemes work, but research suggests that it could be a combination of:

- deterrence, as offenders may be concerned that residents will actively look for and report suspicious activity
- enhancing community cohesion and increasing the effectiveness of informal social control
- facilitating detection via an increased flow of intelligence between the public and police

# Interventions for repeat and near-repeat victims (cocooning)

There is strong evidence to suggest that use of interventions for repeat victims reduces acquisitive crime. Research suggests that, when a home is burgled, there is an increased risk of it being burgled again or properties within 400 metres of the burgled home being targeted within the following six weeks.

Evidence also suggests that the risk of burglary is greater for immediate neighbours of the burgled property, with the risk reducing the further away properties are from the original burglary (known as 'near' or 'virtual' repeat victimisation).

This pattern of risk is thought to be due to burglars being aware of the layout and security status of particular properties and the risks of being overseen (Fielding and Jones, 2012). This is known as 'optimal forager' theory (Chainey, 2012).

Housing diversity has been shown to be the most effective predictor of near-repeat burglaries, with areas containing properties of similar characteristics (such as layout and/or security features) more susceptible to near repeats than areas containing properties with different characteristics (Townsley, Homel and Chaseling, 2003).

Cocooning (otherwise known as cocoon watch or super-cocooning) are activities designed to address repeat and near-repeat victimisation. These activities involve the provision of crime prevention advice and guidance to residents of burgled properties, as well as neighbours and inhabitants of surrounding addresses. The provision of crime prevention advice is often combined with other interventions, such as target hardening, property marking and security surveys.

A systematic review of 22 repeat domestic burglary prevention evaluations in Australia (six studies), the USA (three studies) and the UK (13 studies) showed a significant reduction in burglary repeat victimisation, with the UK programmes generally showing greater effects than the US and Australian studies (Grove, 2011). Other UK studies that used these techniques to address burglary also showed a reduction in subsequent offending (Fielding and Jones, 2012; Weems, 2014; Johnson and others, 2017).

# Street lighting

There is strong evidence to suggest that the improvement of **<u>street lighting</u>** reduces crime. Improved street lighting is a form of situational crime prevention that involves increasing the levels of illumination on the street or in other public spaces.

A systematic review of 13 studies (eight from the USA and five from the UK) showed an average 21% reduction in all crime types in areas with improved street lighting, compared to control areas. The UK studies showed statistically significant reductions in total crime in four of the five studies, and the combined estimated average reduction across the five UK studies was 38%. The improvement of street lighting has also been shown to decrease crime during the day.

## **Property marking**

There is moderately strong evidence to suggest that property marking reduces crime. Property marking involves adding a house number and postcode to items of property, therefore making it easier for these items to be returned to the relevant householder if stolen. Property marking can be carried out by the use of UV pens, security tags, radiofrequency identification (RFID) devices or microdot solutions (containing a uniquely coded digital signature).

Evidence for the effectiveness of property marking is not as rigorous as for the other interventions detailed above. Two studies that investigated the effect of property marking on burglary noted that this approach had a crime reduction effect (Laycock, 1985; Raphael, 2015). A further study tested

different forms of property marking in 10 burglary hotspots and found that only one marking technique showed a statistically significant reduction in burglary, compared to the control group, although burglaries recorded were low before and after the intervention, which weakened this finding (Agnew-Pauley, Lundrigan and Specht, 2021).

Studies used police employees to personally visit householders, carry out property marking and advertise that marking had taken place. It is possible that these other activities also had an impact on any subsequent drop in burglary rates.

## Road and pathway design

There is moderately strong evidence to suggest that the design of roads and pathways can reduce crime. Evidence has shown a relationship between street access and crime rates, with streets that have greater ease of access experiencing more crime. Offenders are more likely to avoid cul-de-sacs, where the probability of being observed is higher, access to properties is restricted, and reduced entrance and exit routes can make it more difficult to escape without being seen (Clarke, 2005).

Available research that relates to specific types of crime varies, with the majority of studies focusing on burglary. Clarke (2005) identified 11 studies investigating the effect of road closures on crime, either as a stand-alone intervention, or as part of a range of different crime reduction techniques. All studies showed a reduction in crime, with little or no displacement recorded.

In addition, research conducted by Johnson and Bowers (2010) found that risk of burglary was associated with increased permeability – burglary risk was lower in cul-de-sacs and higher on major roads (Johnson and Bowers, 2010). Armitage, Monchuk and Rogerson (2011) also found that, compared to a true cul-de-sac (without linked pathways), through roads experience 93% more crime, while leaky cul-de-sacs (with linked pathways) experience 110% more crime. Being located on a corner plot increases risk by 18%.

# Robbery

While there are few identified interventions specifically addressing robbery, two interventions have been shown to be effective for both robbery and burglary – street lighting, and road and pathway design.

#### **Street lighting**

As described in **Domestic burglary – street lighting**, there is strong evidence to suggest that **street lighting** reduces crime (Welsh and Farrington, 2008). While a meta-analysis was conducted on total crime, regardless of crime type, there is evidence from individual studies included in the review that street lighting was effective in reducing robbery.

#### Road and pathway design

There is moderately strong evidence to suggest that the design of roads and pathways can reduce crime. While most of this research focuses on burglary (see <u>Domestic burglary – road and</u> <u>pathway design</u>), two identified studies found that rates of robbery reduced after road closures when compared to control areas, although one study noted that the reduction was only temporary (Clarke, 2005).

# Vehicle crime

The following initiatives have been successful in reducing vehicle crime.

## ССТУ

There is strong evidence to suggest that use of **closed-circuit television (CCTV)** in certain settings can reduce crime.

CCTV surveillance cameras are used as a situational crime prevention measure in public and private places. CCTV is a formal surveillance technique where cameras are set up and monitored to aid crime prevention, detect offenders and control crowds (Farrington and others, 2007; Welsh and Farrington, 2009).

A meta-analysis (Farrington and others, 2007) of 14 CCTV projects, published in 2007, reported that CCTV was:

- most effective in reducing vehicle crimes in locations such as train station parking facilities, especially with high coverage and with the involvement of other interventions, such as lighting
- not effective in city centres or residential areas

A further systematic review, conducted in 2009, based on 41 studies (Welsh and Farrington, 2009), found that:

- CCTV was associated with a 16% decrease in crime in the areas studied, in comparison to control areas
- the most effective CCTV schemes were in parking facilities, which experienced a 51% decrease in crime
- schemes in other public places, such as city and town centres and around public housing, were small and non-significant, showing a 7% decrease

#### Secure car parking

There is moderately strong evidence to suggest that the development of secure car parking facilities can reduce vehicle crime. One study has been identified that examined the effectiveness of the Secured Car Park Award Scheme (now called The Park Mark Safer Parking Scheme) (Smith, Gregson and Morgan, 2003).

The scheme involved awarding 'secured car park' status to parking facilities that met the required standards in terms of security. The study found that features such as levels of formal surveillance, lighting, access control and physical appearance were useful in reducing levels of vehicle crime within existing high-crime parking facilities. It was also found that applying these standards to the construction of new parking facilities led to lower crime levels.

In addition to the reduction of vehicle crime within secured car parks, the study found that improving parking facilities to the Secured Car Park Award standard increased use of the parking facilities and also reduced fear of crime in these areas.

Similar interventions have been developed for reducing the theft of two wheeled-vehicles, including bicycles, mopeds, scooters and motorcycles (Sidebottom, 2012). These interventions aim to improve the security of cycle parking facilities or how cyclists lock their bikes. However, the evidence on their effectiveness has been described as 'weak and anecdotal' (Sidebottom, 2012), and more systematic evaluations are required.

#### Vehicle security devices

There is moderately strong evidence to suggest that the use of vehicle security devices can reduce crime. The term 'vehicle security devices' covers a number of different methods for securing vehicles to prevent their theft, or theft of belongings inside the vehicle. These methods include locks, immobilisers (electronic and mechanical), alarms, window security etching and tracking devices.

Vehicle security devices can be fitted to the vehicle during the manufacturing process or retrofitted later.

The absence or presence of particular security devices and the quality of the device fitted determines its effectiveness in reducing vehicle crime. Studies that examined vehicle theft before and after the implementation of security devices found sustained drops in crime rates after the introduction of electric immobilisers (Farrell and others, 2011; Morgan and others, 2016).

With regard to the effectiveness of different vehicle security devices:

- for theft of motor vehicles, a combination of an alarm, central locking, electronic immobiliser and tracker had the best protection against theft of the motor vehicle, followed by central locking, electronic and manual immobilisers
- for theft from motor vehicles, alarms and central locking featured in each of the top six security configurations – single security devices offered some protection but were less effective than a combination

of different devices (Farrell, Tseloni and Tilly, 2011).

There is limited research of the effectiveness of retrofitted vehicle security devices and so evidence of their effectiveness is sparse.

# All neighbourhood crime types

Two types of intervention, crime prevention advice and publicity, appear to have a positive effect on all neighbourhood crime types. These initiatives are typically used in combination with other interventions.

#### **Crime prevention advice**

There is moderately strong evidence to suggest that crime prevention advice can reduce crime. Crime prevention advice involves contact with individuals who have experienced crime, or are at risk of being victims.

This contact is likely to involve a discussion with the victim or potential victim to highlight any vulnerabilities to crime, together with the provision of crime prevention literature. In some cases, this may also involve provision of physical materials (such as stickers or devices to turn lights on at a certain time), to help prevent the individual from becoming a victim of crime or of further victimisation.

Crime prevention advice is frequently used in combination with other interventions, such as **property marking**, **Neighbourhood Watch** and interventions for repeat victims.

For cycle theft, two studies investigated the effectiveness of crime prevention advice in the form of stickers and leaflets promoting good locking practices. The intervention resulted in a reduction in cycle theft and an increase in good cycle locking practices (Van Limbergen, Walgrave and Dekegel, 1996; Sidebottom, Thorpe and Johnson, 2009).

For vehicle theft, crime reduction initiatives tend to involve a number of different interventions, with crime prevention forming one element. In Australia, in response to an increasing rate of vehicle theft, a community awareness intervention was developed that aimed to encourage the use of vehicle security devices.

This intervention involved a state-wide advertising campaign, as well as a letter sent from the Commissioner of Police to individuals renewing their car registration. The study found that there was an increased awareness of the scheme and a significant reduction in vehicle theft after the scheme was introduced (Wortley, Kane and Grant, 1998).

No specific evidence has been identified for theft from the person or robbery, although the Home Office have produced an information pack that details useful crime prevention advice aimed at reducing these crime types (Home Office, 2013).

## **Publicity**

There is moderately strong evidence to suggest that publicity can reduce crime.

Situational crime prevention focuses on the removal of opportunities to commit crime, increasing the perceived risk of getting caught, or making it more difficult to commit offences. These can be achieved through changes to the physical environment, or by influencing offender perceptions of potential risks and opportunities (Bowers and Johnson, 2003).

Publicising crime prevention activities is potentially an effective method of reducing crime by influencing offender perceptions.

As with crime prevention advice, publicity is frequently combined with other crime reduction activities. Whereas crime prevention advice is specifically targeted at victims or those at risk of victimisation, publicity tends to be more general in terms of targeting, and can include offenders.

A review of the Reducing Burglary Initiative in 2003 (Bowers and Johnson, 2003) looked at the effectiveness of publicity and found the following.

- Schemes running publicity campaigns prior to the implementation of a burglary reduction initiative reported that rates of burglary started to fall before the initiative was rolled out, suggesting that publicity was at least partly responsible for the observed reduction in crime.
- Schemes that spent more per household on advertising showed larger burglary savings than those who had spent less.
- Four of the five most cost-effective schemes implemented standalone publicity campaigns.

#### **Combining interventions**

As shown in the material on publicity and crime prevention advice, a number of interventions are frequently used in combination, which can make it difficult to isolate the crime reduction effects of specific initiatives.

In order to measure the effect of a particular tactic accurately, it must be implemented without being combined with other interventions, and any evaluation must be rigorous enough to discount other possible explanations for any effects found.

The **Policing evaluation toolkit** provides practical advice on how this can be achieved.

# Tags

Neighbourhood policing	Crime reduction	CCTV	Roads policing	Vulnerable people
Safeguarding Hot spots policing				