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A schedule for phasing-out knife crime

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Abstract

Knife crime has become a prominent and seemingly intractable problem in England & Wales. Theory and evidence indicate that reducing crime opportunities is an effective means of crime control, including restrictions on lethal weapons. While public debate has centred on zombie and other 'status' knives, the most prevalent homicide weapon is a kitchen knife. Here we argue that replacing lethal pointed-tip kitchen knives with safer round-tip knives would reduce knife crime with little or no displacement. Drawing on the approach to remove fossil-fuel vehicles from roads, we propose a phased removal of lethal kitchen knives that we estimate will cut knife-related homicide in half, reduce other knife crime and criminality, and prevent thousands of non-criminal knife-related injuries.

Introduction

On Monday 29 July 2024, BBC news reported that:

> *"Three young girls have been killed in a "ferocious" knife attack in Southport at a Taylor Swift-themed dance and yoga event.... Eight more children were injured, with five left in a critical condition, after the incident late on Monday morning. Two adults also suffered critical injuries, Merseyside Police said.*
> *Armed officers detained a male and seized a knife, with police later saying that a 17-year-old boy had been arrested on suspicion of murder and attempted murder." (Culley and Khalil 2024).*

This tragedy furthered the mounting perception that knife crime in England & Wales was out of control. In the year ending June 2024 there were over 50,000 knife crimes recorded by police (Office for National Statistics, 2024b), and knives were the most popular weapon used in homicide (reviewed further below with other

evidence). This is reflected internationally: according to the United Nations Office on Drugs and Crime (2023), sharp objects were responsible for approximately 100,000 homicides globally in 2021, and the majority of homicides in several countries.

Faced with a series of high-profile incidents, the UK government sought to strengthen existing restrictions on carrying so-called 'zombie' knives and machetes via a ban on sales (Nevett, 2024). This complements existing policy and practice to reduce knife crime, including police operations and legal measures such as the 2019 Offensive Weapons Act.

Policy and practice to address knife crime in England and Wales is reviewed elsewhere (Bullock et al., 2023; Sidebottom et al., 2021), and we give only a brief recap here. The 2019 Offensive Weapons Act made it illegal to possess dangerous weapons in private rather than solely in public as previously. It introduced Knife Crime Prevention Orders, which are court orders that require an individual to desist from activities that might involve violence. The 2019 Act also made it illegal to carry a kitchen knife without good reason, setting a legislative precedent and reference point for what follows.

Major recent police operations have targeted knife crime (Bullock et al., 2023). A review assessed eight types

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of police response, identifying four to reduce knife carrying (knife sweeps, knife bins, metal-detecting knife arches, and 'teachable moments'), and four to reduce knife crime (school-based interventions, police stop and search, focused deterrence, and import enforcement) (Sidebottom et al., 2021). The study concluded that relatively little is known about what works. While there is extensive support among police for knife-crime interventions, effective problem-solving efforts have proved difficult to develop (Bullock et al., 2023).

In 2019, Violence Reduction Units (VRUs) were introduced in the 18 police force areas with the highest rates of hospital admissions for knife crime injuries (Home Office, 2022, 2023). The VRUs promote multi-agency approaches and data sharing, seek to engage young people, and commission evidence-based interventions. The limited evaluation of VRUs to date has produced mixed evidence (e.g. Home Office, 2023): no statistically significant reduction has been found for either homicide or hospital admissions for violent injury with a sharp object that cn be linked to VRU activities. Hospital admissions for violence have declined and there is a general downward trajectory in recorded offences and knife-related homicide, but these trends appeared to begin before VRU impact would be expected (see below for trends in these indicators).

Reducing the availability of 'status' knives has been a policy goal. A voluntary agreement with major retailers has been in place since 2016 and was extended in 2024 (Home Office, 2024). This sought to restrict in-person and online sales of dangerous knives to customers aged under 18 using age verification checks similar to those for alcohol. The 'think 21' or 'think 25' approach encourages retail staff to ask for proof of age from customers who may be under-age, implemented via staff training. Retailers are also required to ensure that knives are securely displayed and packaged to minimise risk including theft. Some online retailers, including eBay, restrict the sale of all knives except cutlery. Others, such as Amazon, require age verification on delivery (Home Office, 2024), though the present authors are unclear on whether or how this is enforced.

Overall, then, the repertoire of policy and practice known to be effective against knife crime is limited. Here we suggest a change of emphasis. The theoretical and evidential platform for the study is outlined first. It shows that reducing crime opportunities is an effective means of reducing crime, including control of lethal weaponry. We then examine evidence that the most popular homicide weapon is a knife, and that – contrary to the orientation of much of the public debate – the most prevalent knife in homicide is a lethal pointed-tip kitchen knife. We follow this with research evidence that pointed-tip knives are more harmful than round-tip knives. This is the foundation for our proposal to phase-out lethal pointed-tip knives, particularly kitchen knives, for which round-tip knives can be substituted. We address the potential criticism that crime will displace to other weapons and explain why it is unlikely to occur to any great extent. The schedule we propose draws on that for fossil-fuelled vehicles, involving consultation plus periods to allow knife manufacturers and customers to adapt.

We are not the first to propose the phasing out of pointed-tip knives; as far back as 2005, Hern et al. made a similar suggestion, informed by experienced in emergency medicine. While the resulting debate did not bring about policy change, we argue that several factors mean the time is right for the idea to be reconsidered. The most immediate is urgency: the problem of knife crime has become significantly more pronounced over the last 20 years, contrasting with the downward trend in many other crime types. In addition, however, there is now a significantly stronger evidence base concerning both the relative potential for harm of different weapons, and the effectiveness of crime control measures. It is for these reasons – expanded on below – that we renew this policy suggestion.

We define knife crime as any crime involving a knife or sharp instrument, consistent with the Office for National Statistics and a recent House of Commons briefing (Allen et al. 2023). This includes assaults and threats with knives, as well as other crimes where a knife or sharp instrument was involved, which could include theft and robbery, sexual assaults, and other crimes. Pointed-tip and round-tip knives are sometimes referred to here as lethal and non-lethal knives respectively because these terms more accurately reflect the problem under discussion[1].

Reducing crime opportunities in theory and practice

This study is framed in terms of a crime opportunity perspective. A crime opportunity is any situation in which the perceived benefits of committing a crime outweigh the perceived costs. The central theoretical elements of the perspective are routine activities, rational choice and situational crime prevention (Cohen & Felson 1979, Clarke & Cornish, 1985, Clarke, 2018). The routine activities perspective asserts that crime occurs when a potential offender and suitable target converge when there is no capable guardianship. Offenders make decisions that pursue a goal, based on their existing knowledge, experience and information. Decisions are subjective and context-dependent, which means there are situations where one person perceives a crime opportunity while another does not. Hence whether a kitchen knife is viewed as a

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[1] Technically round-tip knives are 'less lethal' or 'safer' but the categorisation is appropriate for present purposes (see research by Nichols-Drew and colleagues discussed later).

weapon depends on its availability, the context (Sunday lunch or an alcohol-fuelled Saturday night argument), and the individual (their capabilities, experiences and so on). This means that poorly-informed, poorly-made and other seemingly 'irrational' decisions are still also made within the same cost-benefit framework. When it comes to crime, key decisions in an individual's criminal 'career' relate to initial involvement in crime (often by adolescents), decisions to continue committing crime (which can lead to habitual offending), and desistence. For example, few young people carry weapons before they become involved in other types of crime, and weapon-carrying increases with habituation (White et al., 2008). Individual criminal events comprise decision sequences that can be represented as scripts (Cornish 1994, Dehghanniri & Borrion, 2021, Leclerc, 2016). A script for a domestic assault involving a knife may involve a history of other forms of violence, an immediate precursor argument, location of the argument at home and in the kitchen, a physical fight, and the aftermath of escape and dealing with injuries. A script for crime where knife-carrying is central may involve decisions relating to knife acquisition (purchasing or stealing a knife), decisions relating to when and where to carry, concealment decisions, and then a series of decisions relating to each crime in which the knife is involved (each involving preparation, target acquisition, commission and aftermath). Scripts have become increasingly prominent in crime prevention research because each decision identifies a potential pinch-point for intervention.

Situational crime prevention aims to reduce or block crime opportunities in ways that reduce crime or its harms. Reducing crime opportunities shifts offenders'

Table 1 Examples of successful situational crime prevention projects

Responsible drinking practices in Australia
Street closures to prevent drive-by shootings in Los Angeles
Video cameras in housing for retired persons
Anti-cloning measures for U.S. cell phones
Alley gates to reduce burglaries in Liverpool
Airline baggage and passenger screening
Cash reduction in U.S. convenience stores
Anti-robbery screens in London post offices
Automated checking of income by applicants for housing subsidies in Sweden
Systematic cleaning of graffiti on New York City subway cars
Electronic and ink tag on merchandise in U.S. clothing stores
Speed cameras and random breath tests in Australia
Exact change and drop safes on U.S. buses to prevent robbery of bus drivers
Safes with time locks to prevent betting shop robberies in Australia
Removal of gas and electric coin meters from council houses in England to prevent burglary

Source: Clarke (2018)

decisions, at any point in the script, away from crime. If lethal knives are difficult to obtain generally then decisions to carry, and decisions to use, are made more difficult. Knife crime prevention efforts can work by different situational crime prevention mechanisms which may include controlling access to weapons, removing knives that facilitate crime or reducing temptation to commit a crime, or making weapons less harmful, and we return to prevention efforts later.

More generally, there are many documented examples of different types of property and violent crime prevented by situational crime prevention efforts, some of which are listed in Table 1.

The specificity of the examples in Table 1 captures the nature of many crime and context-dependent situational crime prevention efforts. Different interventions are typically needed for different crime types in different contexts, with situational approaches also widely used to prevent cybercrimes (Ho et al., 2022).

The flagship example of effective situational interventions is the international crime drop. In recent decades, security improvements have reduced many types of crime. Vehicle security improvements, particularly the vehicle engine immobiliser, not only largely eliminated joyriding and other temporary theft but also significantly reduced professional and organised car theft (Farrell, 2024). Household burglary was reduced by gradual and seemingly mundane improvements to the quality and quantity of door and window security fixtures and fittings (Tseloni et al., 2017). As a result of these high-volume crimes being reduced, individuals were less likely to become involved in crime at a young age, with fewer subsequently graduating to violent crime. In England & Wales, car theft, burglary and violence fell by close to 90% between the early to mid-1990s and 2023 (Fig. 1).

Guns are more deadly than knives, and gun control fits with the situational crime prevention framework. England & Wales has significant gun control compared to the United States. The rate of gun-related homicide in the US is over 40 times that of the UK for all gun homicides, and over 50 times for handguns (Table 2). While the non-gun US homicide rate is also higher, it is fractionally so in comparison, and may reflect the normalisation of violence enshrined in US gun control laws.

A common criticism of efforts to reduce crime opportunities is that offenders displace to commit the same crime by other means (referred to as tactical displacement). However, extensive research shows that prevented crime typically does not displace, or may do so to a limited extent in the aggregate (Guerette, 2009, Guerette & Bowers, 2009). In the context of knife crime, if the availability of a particular type of dangerous knife is reduced then the potential criticism is that offenders will use a
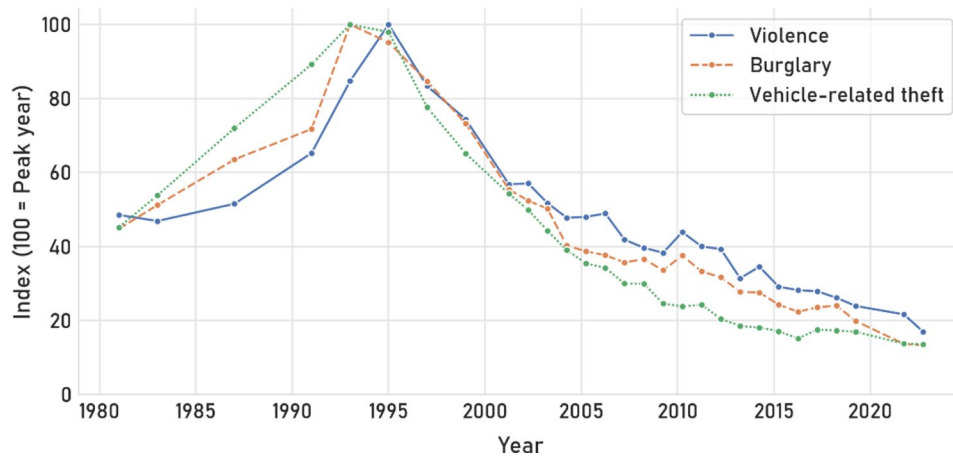
Fig. 1 The crime drop in England and Wales by 2023 (Source: CSEW; ONS (2024a). Violence, domestic burglary and vehicle-related theft incidence rates each indexed to its peak year)

Table 2 Comparison of gun and non-gun homicides in England and Wales and in the United States 2009–2013

Type of murder	Number of homicides		Annual rate (per 1 million population)		Ratio
	England & Wales	United States	England & Wales	United States	England & Wales: United States
All gun	205	50,190	0.73	32.22	1: 44.0
Handgun	118	35,362	0.42	22.70	1: 53.9
Non-gun	2584	23,644	9.64	15.19	1: 1.6
Total	2907	73,834	10.37	47.41	1: 4.6

Source: Clarke, 2018 based on data from Home Office and Office for National Statistics for England and Wales, and Federal Bureau of Investigation for United States

different type of knife or another weapon. We return to this later.

Extent and nature of knife crime

The most reliable source of information on the extent and trends for many crime types in England & Wales is the Crime Survey for England and Wales (CSEW). This is a methodologically rigorous survey that asks a sample of around 30,000 people annually about their experiences of crime. Knife crime is fortunately rare, however, such that the CSEW is unable to produce statistically reliable trends. While this indicates the comparatively low prevalence of knife crime, it means that other sources are required to identify trends.

Three sources from which trends in knife crime can be derived are police recorded crimes, hospital records, and homicide data. Each has their strengths and weaknesses. Not all knife crime is reported to or recorded by the police. Only some of the more serious offences will result in a hospital admission linked to a knife crime.

Homicides comprise a small part of the overall picture of knife crime, albeit by far the most serious.

The main trend in knife crime indicated by each of these sources is similar. From a relative low in 2012-13, knife crime increased through the 2010s to peak between 2017 and 2019 and has since been mostly in decline (Fig. 2). It has been speculated that the increase reflected growth in the global cocaine market and violence relating to county lines distribution networks (Davies & Farrell, 2024). Although the trends have somewhat diverged post-2020, their similarity over the preceding decade means we can be confident that the trends are broadly representative of the longer-term pattern. There were around 50,000 knife crime offences recorded by police in the financial year 2022/3, and, of the three measures, recorded crimes evidenced the largest proportional increase over the last decade.

The number of knife crimes began to decline before the Covid-19 pandemic. The decline was more pronounced during the pandemic, with evidence of a resurgence in 2022 as restrictions were removed, consistent with trends in many other crime types (Seyidoglu et al., 2024). Two of the three indicators show a decline for the most recent year of 2022/3 compared to the preceding year (Fig. 3). The most prevalent crime types involving knives – and those which drive the overall trend – are assaults[2] and robberies, though threats with knives have also increased and did not decrease during the pandemic to the same extent as knife-related theft and robbery.

Knife-related homicide

Knives or sharp instruments have long been the most prevalent means of committing homicide in England and Wales (Fig. 4). This suggests knives would be an

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[2] The ONS definition of assaults is 'assault with injury and assault with intent to cause serious harm' in worksheet 22 of ONS (2024c).
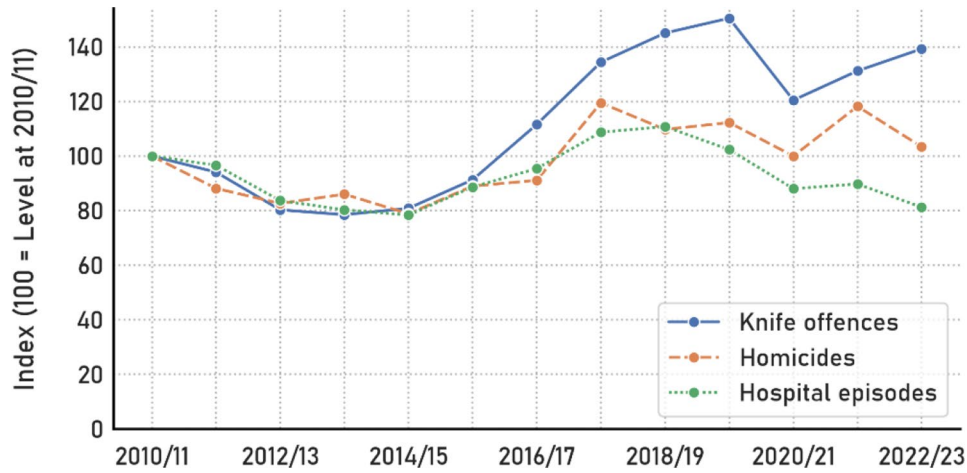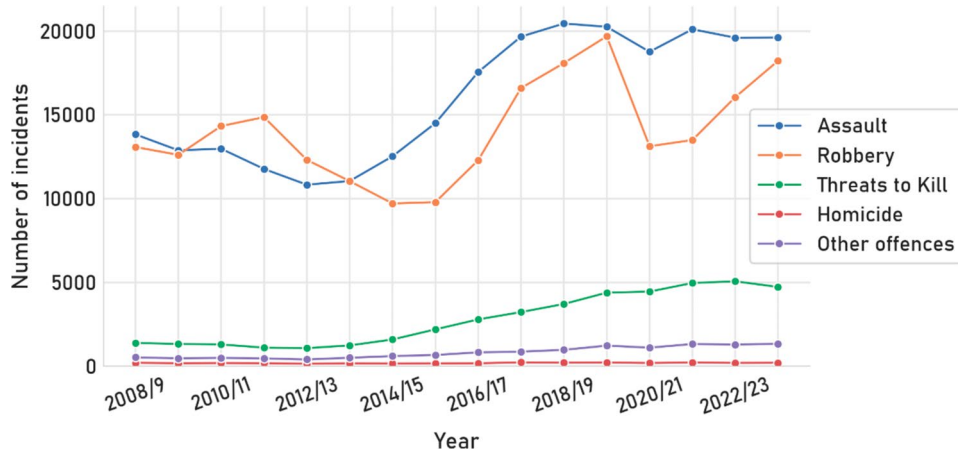
Fig. 2 Knife crime trends for three indicators

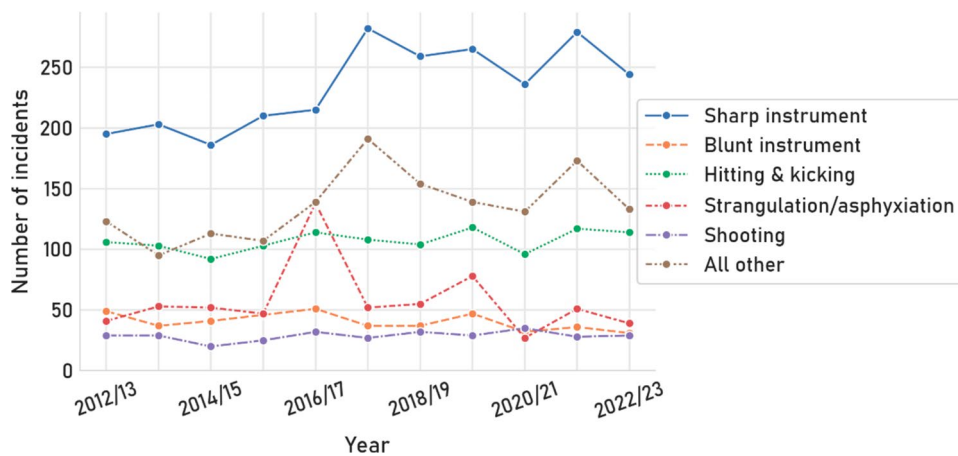**Fig. 3** Crime types involving knives (Source: ONS 2024c)

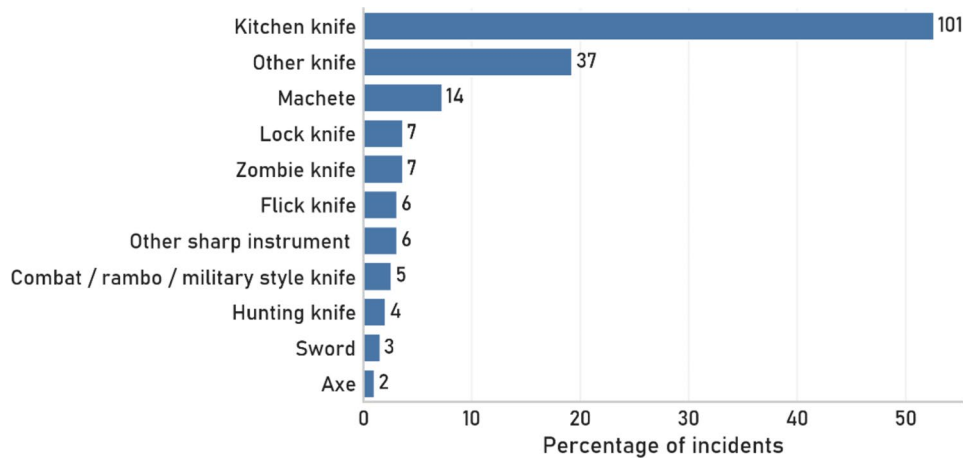**Fig. 4** Means of homicide in England and Wales (Source: ONS 2024c)

Fig. 5 Type of knife or sharp instrument used in homicide in England & Wales 2022-23 (Source: ONS 2024c; homicides where type of knife used is known)
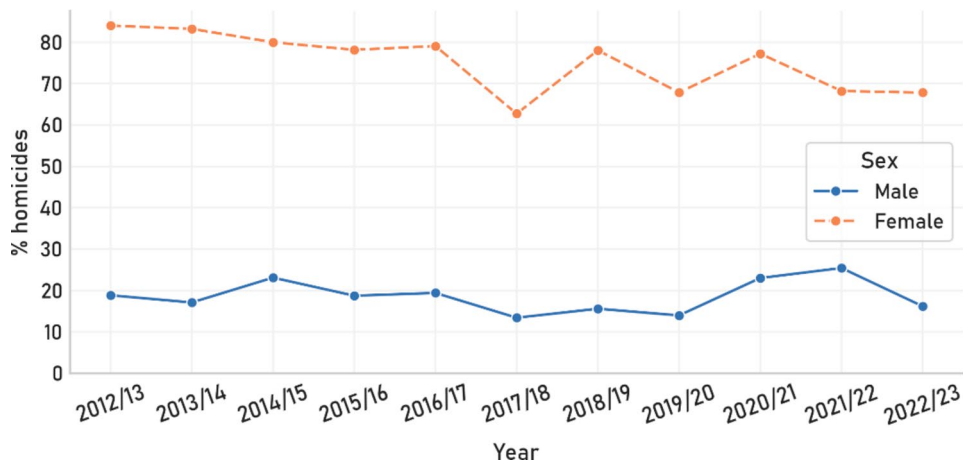

Fig. 6 Percentage of homicides where suspect known to victim, by sex of victim, where relationship is known (Source: ONS 2024c)

appropriate strategic national priority for homicide prevention efforts.[3] The increase in knife-related homicides in the 2010s, along with the broad category of 'all other methods', accounted for the bulk of the increase in homicides over that decade. Note that 96 asphyxiated victims of the Hillsborough disaster were included in the 2016-17 homicide statistics and account for the anomalous increase in 'strangulation or asphyxiation'.

The Office for National Statistics made available information on type of knife used in homicides in 2022/23, with type of knife used known in the majority (192 of 244) knife-related homicides. For homicides where the type of knife used was known, kitchen knives were by far the most prevalent (Fig. 5), with the next most prevalent being 'other knife' which does not fall into any of the remaining categories. While zombie and hunting knives appear to dominate much of the public discussion – and may indeed be disproportionately used in some settings – they each account for between two and four%

of knife-related homicides. When the eight non-other categories (zombie, hunting, combat/Rambo/military style, flick and lock knives, machetes, swords and axes) are combined, they account for a quarter of knife-related homicides.

Kitchen knives are a readily available, weapon in domestic settings. In homicides of women where the relationship between victim and suspect is known, the suspect was a partner, ex-partner or other family member in around three quarters of cases, compared to around 20% for males (Fig. 6). Of these female homicides, most were partners or ex-partners. Since these are more likely to have occurred in domestic settings, reducing availability and lethality of pointed kitchen knives will disproportionately reduce homicide of women and girls.

Pointed-tip and round-tip knives

A number of studies have examined the relationship between the characteristics of knives and their potential to cause damage. The first of these was conducted by Hainsworth et al. (2008), who examined the sharpness

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[3] The years run from February to March.

and penetrative ability of a range of kitchen knives. They found thinner knives, and those with more pronounced tips, had greater penetrability, though the effect of removing the tips was only modest. A later study by the same authors also involved kitchen knives, quantifying the forces generated in various stabbing actions (Nolan et al., 2018).

More recently, a series of studies by Nichols-Drew and colleagues have examined the damage associated with different knife types (Nichols-Drew, 2019, 2023; Nichols-Drew et al., 2020). In these studies, the effects upon humans were mimicked by testing a five different knife types against a range of materials. It may seem unsurprising that pointy knives were found to be by far the most damaging, but this is the nature of evidence-based research; without such basic evidence, we cannot know for sure, and critics would say that there is no proof that pointed-tip knives are the problem.

In a policy brief, Nichols-Drew (2023) makes three recommendations. These are the promotion of the use of rounded knives as safe alternatives to hazardous pointed knives, that governments should legislate to that end, and that there is engagement with knife manufacturers and retailers to create and supply rounded knives (Nichols-Drew, 2023; 3). The present study locates these proposals in the context of theory, evidence and existing policy relating to crime prevention and knife-crime prevention, and in proposing a practical approach to policy adoption in a realistic timeframe.

Everyday control of lethal knives

"In 1669, as a measure to reduce violence, King Louis XIV [of France] made pointed knives illegal, whether at the table or on the street. Such actions, coupled with the growing widespread use of forks, gave the table knife its now familiar blunt-tipped blade.... Whereas .... kitchen knives have changed little over the centuries. Their blades have remained pointed." (Petroski, 1994; 12–14).

Elsewhere it is argued that many crime prevention efforts are such a mundane part of everyday life that they are easy to overlook and sometimes taken for granted (Farrell & Tilley 2022). We suggest this is true in relation to table knives. Think about the last time you used a knife in a café, restaurant, or in your dining room. Dining knives usually have a rounded end. Why? The reason is that they are used frequently by everyone and would pose a major threat of violence if they were pointed. These are the majority of knives in everyday use, including by children, and account for the majority of knife usage. Yet the rounded end means they are not viable weapons. While there are still a few pointed 'steak' knives they are, for the most part, specially distributed when needed. Evidence elsewhere suggests that the public will tolerate similar design changes where there is a clear crime prevention rationale: the availability of only short and relatively blunt knives in airport terminals, for example, is one of a range of measures that have become normalised under the banner of terrorism prevention. Recognising that round-tip knives are an almost universally used crime prevention tactic, and that there is an implied consensus on their importance for public safety and crime prevention, brings us to the proposal.

Proposal for phased removal of killer kitchen knives

Recent policy developments relating to motor vehicles evidence the viability of the proposal outlined here to control knife crime. Only a few years ago, many readers would have scoffed at the suggestion that society could phase out the internal combustion engine. It was largely unthinkable to tamper with an integral, iconic and economically important component of everyday life. At the time of writing, increasing numbers of countries are phasing-out fossil-fuelled vehicles in favour of electric vehicles, active travel, and public transportation (BBC, 2020, International Energy Authority, 2020). In the UK, sales of petrol and diesel engines will end by 2030, and all new cars and vans will have zero emissions by 2035 (Department for Transport 2020). This schedule gives manufacturers and consumers time to adapt.

The policy adopted for fossil-fuelled vehicles provides the model for our proposal relating to knife-crime. Indeed, our proposal is modest in comparison. Drawing on this evidence, we propose an incremental phasing-out of pointed knives and an incremental phasing-in of round-tip knives for all culinary, domestic and other purposes (Table 3).

The process is here envisaged as having four stages across two decades. This preliminary proposal should be refined in consultation with interested parties. The

Table 3 Phasing-out knife crime

Phase	Year	Activity
1	2026–2030	Manufacturers develop safe knives for culinary and other uses. Marketing campaigns to promote knowledge, purchase and use of safe knives. Start of 'natural wastage' process: old discarded knives replaced with similar non-lethal version. Consultation and consideration of exemptions.
2	2031–2035	Depletion of stocks/sales of lethal knives; increased stock/sales of non-lethal knives. Subsidised grinding of remaining lethal knives to round the tips.
3	2036–2040	Only safe knives on sale. Incentivised removal of dangerous knives from homes and workplaces.
4	2041 onwards	Ban on manufacturer, sale, possession and use of dangerous knives.

phased approach is intended to allow markets and manufacturers time to adapt. It will take time to introduce non-lethal knife designs into production processes and to deplete the manufacture of lethal knives. It will take time to exhaust existing stocks. For the most part, the process of replacement will occur as natural wastage, that is, as old knives are discarded and replaced with a similar less-lethal alternative.

Enterprising manufacturers should quickly recognise the opportunity that this proposal represents. Policy development might consider whether any aspects need to be subsidised or incentivised. It may be that kitchen knife purchases represent a sufficiently small proportion of disposable income that subsidies are not required in most circumstances. Consideration should be given to subsidised grinding of existing knives so that businesses can keep knives where there has been significant investment, and so that individuals can keep treasured knife sets. Consideration may need be given to certified exemptions that exceed a requirement threshold and justify ownership of a lethal weapon.

International trade agreements will need to be reconciled as standards change in England & Wales. There are likely to be few professions where a lethal knife is required to complete a task – the earlier article by Hern et al. (2005) included an informal survey of chefs, who

Fig. 7 A set of round-tip kitchen knives (Source: Viners[4])

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[4] https://www.viners.co.uk/.

identified no functional reason why long pointed knives are essential – and these should be considered on a case-by-case basis. Policy change is probably best framed as improvement to health and safety measures, similar to those for a wide range of products where safety standards have been introduced to reduce risk to life and limb. These things take time.

Consideration should be given to evaluation. Key outcome measures would include the rate of knife-related crime, knife-crime involving kitchen knives, and average severity, relative to knife availability and lethality. It may be possible to construct counterfactuals indicating what would have happened in the absence of intervention, triangulated with data signatures identifying mechanisms and outcomes in different contexts (Eck & Madensen 2009). Baseline and repeated measures of kitchen, other knife and safer-knife ownership could be incorporated into the CSEW or other household surveys (and ideally a business survey), allowing local-level comparisons to crime and non-criminal knife-related injury data.

The specifics of the schedule shown in Table 3 can be refined as required. The primary notion is that of shaping behaviour gradually while allowing time for changes to take place without significant disruption to markets.

Safe kitchen knives

Round-tip kitchen knives are already on the market. The Offensive Weapons Act 2019, which classified kitchen knives as an offensive weapon, is cited by one manufacturer as prompting their work on 'safety first' kitchen knives (Fig. 7). The manufacturer reports "a new generation of kitchen knife that has safety front of mind, yet still answers everyday food preparation needs." (Viners, 2019). The knife set was developed in consultation with 1700 consumers "who shared their thoughts on the functionality and aesthetics" of knife designs "eliminating the tip of the knife to make it safer to use without compromising on performance." (Viners, 2019).

The figures shows an example block set including a chef's knife, bread knife, carving knife, santoku knife, utility knife and paring knife. Retail prices vary by type, model, and whether purchased individually or as a set. At the time of writing, safer paring or utility knives were £4 at a popular online market, the larger knives were £6 except the bread knife at £7, with sets of four from £17, and a display block of five at £38.99. If display blocks increased weapon availability, safer knives would reduce the effect because they are less harmful as found by Nichols-Drew et al. (2020). This suggests that safer knives are already at prices comparable to those for lethal knives, and any differential would likely decrease as markets expanded.

Won't they just use something else? The possibility of displacement

The issue of displacement was touched on earlier. Both theory and evidence indicate that, when crime is prevented, displacement often does not occur, or may occur to a limited extent. Nevertheless, we anticipate that displacement will be raised as a criticism of the present proposal. This section focuses on the possibility of a tactical switch to another sharp instrument or other weapon if pointed kitchen knives are controlled.

Much knife crime relates to knife *carrying.* We suggest the carrying of other weapons is less likely overall if pointed knives are removed from the equation. 'Status knife' is the term capturing that a key motivation for carrying some types of knife is the psychological reward from peers: the carrier may derive some kudos and be able to threaten others. Kitchen knives may have lower status than zombie knives, but for present purposes let us assume that being armed in any form brings status. Once pointed-end knives are removed, what other weapon might be a good substitute? Perhaps a chain of some sort could be carried as a weapon, except it is less readily available, harder to wield as a weapon, and less injurious on average. The status for chain-carrying is likely to be less than that of knife-carrying, which means the temptation to carry would also be reduced. Most other objects are inferior both in terms of status and when used as weapons.

What about 'tinder-box' violence occurring in the home? If lethal kitchen knives are not available, what is the next-best alternative? Perhaps scissors or screwdrivers? Many scissors are already rounded rather than pointed. Further, the design of scissors makes them unwieldy for the purpose of stabbing. The default use of scissors involves the fingers being threaded through handles, which means using them to threaten or stab offers an uncomfortable grasp. To use the term favoured by designers such as Norman (2002), scissors do not readily *afford* the act of stabbing. Scissors are also less numerous than kitchen knives and less likely to be on open display compared to, say, a box set of knives. The reason that scissors do not already feature more prominently in the crime statistics for sharp instruments is that, for these reasons, they are a significantly inferior weapon.

Another contender is a screwdriver. However, there is a reason why screwdrivers account for only a small proportion of existing 'knife or sharp instrument' crimes: they are not as readily to hand as knives in a kitchen or other domestic setting, aside from perhaps a toolshed or garage. They are significantly inferior as 'status' weapons, arguably indicating the inability of the carrier to obtain a 'proper' status weapon, that is, a pointed knife.

Glass bottles are a potential alternative. However, most bottles and other domestic containers these days are manufactured from plastic, cardboard or aluminium. Available glass bottles are often unsuitable: they are the wrong size or too fragile, for instance. A perfume bottle makes a poor weapon. Beer for domestic consumption is often sold in cans, while some bottles are generally too large (750 ml and one litre bottles), and others too small (stubby 330 ml bottles). The popularity of recycling means empties are routinely disposed of, reducing accessibility. Use of a bottle as a weapon not only requires availability but also requires a user to recognise and realise the potential, which cannot be assumed. Adopting a bottle as a weapon can shatter the bottle, which can injure the holder.

It is not obvious if other kitchen items will serve. Most require more effort or skill to utilise in a lethal fashion. Whisks and spatulas are mostly poor weapons. What about other household items? Perhaps a pencil could be a lethal stabbing weapon, but it is structurally weaker and likely to do far less damage than a pointed kitchen knife. Some garden tools – secateurs and such – are potentially dangerous but on average require significantly more time and effort to retrieve from the shed, garage or elsewhere, providing cooling-off and escape time, and they can be tricky to wield. Generally speaking, garden-tool weapons are a poor and unlikely substitute.

What about blunt objects and other potential weapons? Heavy ornaments or rocks from the garden are potential weapons but take time and effort to acquire and are wielded with difficulty. Books and remote controls may be available but are insufficiently dangerous for the most part. Most other items afford a low probability of weaponization, with consideration of many quickly lapsing into the absurd.

Put another way, the reason that the crime category used here is defined as 'knives and other sharp instruments' is because knives are significantly more dangerous than the closest substitute, and all alternatives are inferior - they do not afford threats or stabbing to the same extent - and are less readily available.

In discussing these alternatives, however, we should be clear that we are not claiming that no displacement will occur – and indeed this is not a requirement for success. It is true that a determined offender may be able to find an alternative weapon; however, only a minority of offenders are determined in this sense, and many more incidents are the result of impulsive decisions or the availability of a deadly weapon. It has repeatedly been shown that, in such circumstances, marginal increases in the difficulty of committing crime will deter some proportion of offenders, which in this case means fewer assaults. Furthermore, those assaults which do still occur, but with less lethal weapons, will result in less harmful outcomes, representing a secondary benefit. This is the key idea: reducing the availability and lethality of knives

may not eradicate knife crime but it will prevent significant parts of it and make less harmful that which occurs.

This discussion is consistent with the existing theory and evidence relating to crime displacement. Displacement is generally scarce. It may occur in some instances but usually in the context of a significant net reduction in crime. The clearest evidence for the fact that other items are inferior is the fact that they are not already the first choice. That is, lethal kitchen knives are the weapon of choice for homicide in England and Wales for a reason. We conclude that some small amount of displacement may occur but that for most part it will be conspicuous by its absence: look again at the vast difference in gun-related deaths in the UK and the US detailed earlier.

The diffusion of benefits

A 'diffusion of benefits' effect is framed as the opposite of displacement (Guerette & Bowers, 2009). Numerous evaluations have found that crime prevention effects extend beyond the initial scope, or that an anticipatory benefit is induced before a policy is implemented (Smith et al. 2022). We suggest that both types of diffusion may occur here. If customers and manufacturers anticipate legislative change, then behaviour relating to lethal knives may change in advance. Similarly, an impending ban on pointed knives may cause a broader effect upon violence and other types of crime. We would not only expect a reduction in homicides but also other knife-related crime types, proportional to the use of kitchen knives (which, in the context of bans on other lethal knives will be more effective overall). Previous research suggests that reducing crime opportunities reduces the involvement of young people in crime, which in turn reduces the size of cohorts progressing to habitual involvement in crime (Dixon & Farrell, 2020): this type of broader beneficial effect may occur if the murder weapon of choice, and likely precipitator of much violent crime, is removed from the equation.

In this context, pointed knive cause avoidable injuries in kitchens and elsewhere. There were 43,000 knife-related reportable workplace accidents in 2019 (British Safe Industry Federation 2021). Knife-related injuries account for over 10% of major injuries reported to the government's Health and Safety Executive (HSE) and 58% of all work-related accidents involving manual tools (British Safe Industry Federation 2021). We expect that a significant beneficial diffusionary aspect of safe knives would be a reduction, by potentially tens of thousands, in non-criminal injuries in workplaces, homes and elsewhere.

Discussion of the study's contribution

Knife crime is a significant problem. It has been a dominant feature of news media and political discussions about crime in England and Wales in recent years, and knives are the most prevalent murder weapon. Existing efforts to reduce knife crime have met with limited success and have often focused on zombie knives, machetes and other status knives. In that context this study is ambitious in proposing a significant policy change and schedule to reduce knife crime. It details the mechanisms by which knife crime will be reduced with little or no displacement, and suggests other forms of crime and criminality, plus non-criminal injuries, will decline as a positive knock-on effect (a diffusion of preventive benefits). While the focus is England & Wales, there are significant implications for other countries which, depending on the nature of their knife crime problem, may wish to consider adopting this approach.

Central to the study is an original proposal. It is novel in the emphasis upon lethal knives in everyday life which contrasts with most media and policy debate centred on zombie and other 'status' knives or on gangs and young people. To do this, the study was underpinned by evidence of the dominant role of kitchen knives in homicide, in the context of extensive theory and evidence on the effectiveness of reducing crime opportunities. Few readers, we suggest, will have previously recognised the important crime prevention role of rounded-end dining room knives that they encounter every day.

The proposal outlined here will affect the lives of most householders and some businesses in England and Wales. Extensive justification such a policy change is required. But the study is rigorous in being evidence-based while informed by proven theory. Further, we detail the mechanisms by which the policy would work, explain why little or no displacement is expected and why, in contrast, a diffusion of benefits is likely. We also suggest a phased approach that allows time for the knife industry, markets and customers to adapt.

Conclusion

Killer kitchen knives are the murder weapon of choice in England and Wales, and prevalent in knife crime in countries around the world. The sharp tip of kitchen knives is unnecessary for culinary purposes: it is possible to julienne a carrot, or even chop a butternut squash, without a lethal weapon. Safe kitchen knife designs already exist and are in production, and safe table knives are the default in dining rooms to the extent that we barely notice their crime prevention role. Extensive theory and evidence support the proposal, while fossil-fuel motor vehicles offer a high-profile precedent using a phased approach. The proposal will, we suggest, reduce knife-related homicide by half in England and Wales, reduce other crimes in proportion to the use of lethal kitchen knives, potentially reduce other crime types and

criminality as a by-product, and prevent thousands of non-criminal knife-related injuries.

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