

Pointing out the need for change: round-ended kitchen knives – reducing harm across society

Safer-style less-lethal rounded-end kitchen knives scientifically tested to show that they do not penetrate clothing garments when used in a stabbing style motion.

Key details

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Police region	East Midlands
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Key details

Level of research	Professional/work based
Project start date	April 2018
Date due for completion	March 2028

Research context

This is a project which commenced with the award of a Churchill Fellowship in 2018, which investigated international approaches to knife crime in Australia and Canada to aid the UK response. This resulted in numerous reactive (to aid detection) and proactive (to aid prevention) recommendations.

One proactive recommendation was to change kitchen knife design, as kitchen knives are the most common sharp instrument encountered within stabbing related investigations, and result in 76% of domestic homicides. Kitchen knives are used in street-based violent incidents and those in a domestic setting, within urban areas and rural communities. Every group in society, from women and girls, children and elderly, and vulnerable individuals may be impacted by kitchen knives.

The pointed knife blade tip shape results in sharp force trauma otherwise known as severance damage, which is the leading cause of life-changing injuries and fatalities. Kitchen knives cause intentional, accidental and self-harm stabbing-related injuries. Safer-style less lethal rounded-end kitchen knives are scientifically proven to show that they do not penetrate clothing garments when used in a stabbing style motion.

This research underpins the Let's Be Blunt campaign founded by Leanne Lucas, one of the survivors of the July 2024 Southport mass-stabbing incident. Caley Walden (Violence Reduction Unit Co-ordinator) created the exemplar for a Safer Knife Replacement Scheme (SKRS) using this scientific research as the underpinning evidence base. This SKRS model has been used by

numerous Violence Reduction Units and police forces across the UK as a preventive and interventive measure to reduce knife harm and safeguard society.

Research methodology

The aim of this research was to compare conventional pointed knives with novel knives with different shaped tips. Four clothing garments were used:

- two upper body (T-shirt, jumper)
- two lower body (jeans and faux leather skirt)

This replicated typical exhibits submitted to forensic laboratories and reflected the most targeted body areas in stabbing incidents (torso/trunk). Over 300 downward stabbing motions were conducted. Any resulting damage was photographed and measured for statistical analysis.

The results show the mean severance damage for each knife and clothing garment. The appearance of this severance (sharp force trauma) damage varies depending upon the knife responsible. Both pointed kitchen knives, straight edged pointed and serrated edged pointed, caused the greatest damage, resulting in pronounced openings in the garments. The only knife not to penetrate the garments during the stabbing motions was the rounded tip knife, offering a safer alternative. The rounded tipped knife impacted the fabrics, but the blade failed to penetrate any clothing garments. This suggests a clear alternative to pointed tip knife blades, offering an opportunity for crime reduction, a knife of culinary utility without the possibility of accidental injury, and with little or no value in violent crime.

Interim reports or publications

Knife Crime App. (n.d). [Research: Rounded knives and safer alternatives](#). [Accessed 24 July 2026].

Nichols-Drew L. (2018). [Researching international forensic science responses in Australia and Canada to aid the UK knife crime response](#). Leicester: De Montfort University.

Nichols-Drew L and others. (2020). [On a knife edge: A preliminary investigation of clothing damage using rounded-tip knives](#). Science & Justice, volume 60, issue 6, pages 495–503.

Nichols-Drew L. (2023). [Rounded knives – saving lives: Crime reduction and accident prevention](#). In: 'Research informed policy recommendations for the Sustainable Development Goals'. Policy Brief Series. Leicester: De Montfort University.

The Safer Knives Group. (2025). [Safer knives reducing knife harm](#). Leeds Social Sciences Institute and De Montfort University, Leicester.

Related practice bank interventions

[Kent and Medway safer knife replacement scheme](#)