

A rapid review of interventions to reduce suicide ideation, attempts, and deaths at public locations

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WARNING

This infographic includes **references to suicide and self-harm** which some readers may find distressing. Information on support in Wales can be found here: www.sshp.wales/en/get-help-now/

Background

Suicides that occur in public places have an impact not only on the individual that has died and their family and friends, but also on members of the public.

Up-to-date research allows policy makers and organisations **managing these locations** to choose the most appropriate suicide prevention strategies.

This review will inform the development of Welsh national guidance, and builds on existing work around suicide 'locations of concern' developed by Public Health Scotland.



Evidence Base

29 documents were found, reporting on **24 different studies** published since 2014.

Locations reviewed included:

- Railway stations and tracks
- Bridges
- Tall buildings
- Cliffs and other natural heights

The review did **not** look at **physical means restriction alone** due to a wealth of existing evidence around this.

Key Findings



Surveillance technologies that **increase potential for third-party intervention** showed the **most promise**.

One study suggested CCTV units were associated with **fewer suicides at railway stations**.

Another study that **tested CCTV, infrared security fences and a suicidal behaviour recognition alert system**, showed an improvement in the number of prevented suicides.

Other studies found no change in numbers of suicides.



Promoting the use of
suicide helplines

- Two studies reported an **increase** in suicides.
- Three studies observed **no change**.
- In two studies, the effect could **not be determined**.

However, an assessment of the **overall body of evidence** indicates that there is a **low level of confidence in the evidence for the above outcomes**.

What is low level confidence?

When the review team feels that because of how the studies are conducted, it is **not possible to make firm conclusions about the results**.



Currently, there are **Artificial Intelligence (AI)** suicide prevention technologies, such as detection systems, under development which are likely to be evaluated in future research.

There was **not enough evidence** to support or refute that implementing interventions at locations causes **displacement to other locations or suicide method substitution**.

Other interventions evaluated included:

- staff training
- deployment of specialist staff
- a crisis café
- blue lights at railway stations
- suicide prevention messages, memorials or notes other than official crisis line signage
- campaigns encouraging bystanders to intervene
- spinning rollers at the top of fences that prevent gripping

The effect of these interventions could not be firmly determined but some may be promising and should be examined through future research.

Policy Implications

Better support is needed in **gathering and sharing evidence** on the effectiveness of different interventions, taking into consideration the **sensitivity** around the topic.

Research Implications

There is an urgent need for:

- **more high-quality research**, involving stakeholders and academics at an early stage, evaluating interventions aimed at reducing suicides at public locations of concern.

This is especially true if there is a risk that interventions may have unintended negative effects.

The full rapid review, **including economic considerations**, is available to view here:

<https://www.medrxiv.org/content/10.1101/2025.04.09.25325515v1>