



Effectiveness of Suicide Barriers on Bridges

What does the data say?

Some studies have formally evaluated the effects of bridge barriers on preventing suicides.

1. O'Carroll et al. (1994) reported the effect of the construction of barriers on the Ellington Bridge in Washington D.C. According to the report:
 - Prior to installation of barriers, an average of four people a year died by jumping from the bridge.
 - In the five years following installation of barriers, there was only one suicide from the Ellington Bridge.
 - The number of suicides from nearby Taft Bridge, where no barriers had been installed, remained the same.
2. A second study examined suicide patterns before and after removal of protective barriers from Grafton Bridge in Auckland, New Zealand. (Beautrais 2001)
 - There were three suicides in the four years before the barriers were removed (1992 – 1995).
 - There were 15 suicides in the years following barrier removal (1996 – 2002, when barriers were reinstalled).
3. Andrew Pelletier, M.D., at the Centers for Disease Control and Prevention, studied barriers installed at the Memorial Bridge in Augusta, Maine.
 - The barrier was installed in 1983. In the following 22 years, there were zero suicides.
 - Prior to the barrier installation there had been a total of 14 suicides.
 - Results of this study indicated that the safety fence installed in 1983 was effective in preventing further suicides from the Memorial Bridge. The number of suicides related to jumping from other structures in Augusta remained unchanged following installation of the fence, suggesting that suicidal individuals did not seek alternative sites.
4. One researcher writes since suicide prevention barriers on bridges are rare, we do not yet have enough evidence to prove that suicide prevention barriers save lives. (Glasgow, 2007)

Suicide barriers are in use at other bridges around the world and data shows corresponding reductions in the number of suicides although comparative studies have not occurred.

- Jacques Cartier Bridge (Montreal, Canada)
- Bloor Street Viaduct, (Toronto, Canada)
- Sydney Harbor Bridge (Sydney, Australia)

Mental health experts and suicidologists cite impulsivity associated with jumping from bridges as one of the primary factors that contributes to the effectiveness of physical barriers.

- Impulsivity is one of the factors associated with suicidal behavior (Mann JJ 2003) and reductions in both method-specific and possibly overall suicide rates. (Kreitman 1976; Gunnell and Frankell 1994)
- Any form of obstruction at a high-risk site not only gives the individual time to reconsider but, by delaying the suicidal act, may also increase the chances of intervention. (Lindqvist, Johnsson, Eriksson et al. 2004)
- The available evidence thus far suggests that the most promising interventions are physician and gatekeeper education, and restriction of access to lethal means of suicide. (Mann, Apter, Bertolote, Beautrais et al., 2005).

References

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