

# Suicide by drowning is the 21st century's rescue challenge: A review

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## Introduction

Most published statistics list only unintentional drowning deaths (1), reducing artificially the size of the world drowning problem. Suicide is examined in a number of countries ranging from low rate (e.g. USA), to high rate (e.g. New Zealand) to show how the published drowning figures vary from the actual figures. The exclusion of suicide numbers from published statistics on the grounds that such deaths are not preventable is not sustainable. Successful strategies used by some Irish water rescue organisations (e.g. Foyle Search and Rescue) point the way to reducing greatly the number of suicidal deaths.

## Aim

To overview and describe the burden of suicide by drowning internationally.

## Methods

The terms 'drowning', 'suicide', 'rescue', 'swimming' and 'lifeguard' were used as key words in a literature search undertaken to identify suicide and drowning rescue attempts. The search used internet search engines, academic data bases and textbooks. Over 50 journal articles and book references were obtained for evaluation.

## Results and Discussion

According to the World Health Organization about 1 million persons globally die from suicide annually; a mortality rate of 16 per 100,000 population. Suicide rates have increased by 60% since the 1960's and it is among the leading causes of death in those aged between 15–44 years, increasing at such a rate among young people that they are at highest risk in one third of all countries (developed and undeveloped) (2). This is also the age range most at risk of drowning – accidental or deliberate (1). Suicide by drowning is most likely present in every country with the reported incidence rate, where recorded, varying between 3% and 26% of total suicide numbers. There is substantial evidence to suggest that the numbers of such deaths are greatly under-reported due to the nature of drowning itself and the legal requirements associated with a verdict of suicide (3). In the USA, between 1999 and 2002, drowning deaths made up 0.9% (n= 873) of male suicides and 2.1% (n= 496) of female suicides; in New Zealand, 2000–2003, 1.9% male (n= 28) and 4.4% female (n= 20); and in the Netherlands, 1996–2004, 6.6% male (n= 607) and female 11% (n= 497). Access to lethal means is a major factor in the method chosen. In the USA, where firearms are abundant 60.6% of male and 35.7% of female suicides shoot themselves (2). In 2004, Ireland had a suicide rate of 10.2 per 100,000 population with one-fifth of males and one-third of females (around 100 persons annually) choosing drowning. Irish organisations such as Foyle Search and Rescue, with their nightly foot patrols, and Dublin Fire Brigade, with its Water Rescue Unit based on the river side, have successfully prevented entry to the water and rescued suicidal persons attempting to drown themselves (4).

## Conclusions

The exclusion of suicide figures from published drowning statistics greatly reduces the scale of the global drowning problem. An acknowledgement of this tragic problem and of successful practices in preventing and rescuing suicidal persons should lead to increased research into this important aspect of drowning.

## References

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