Measure Name Strategy for publishing data

<u>Definition</u> Develop policies for responsibly publishing rail trespass and suicide data to reduce

unintended consequences.

Tags:

 Incident Type
 Both trespass and suicide

 Location
 Both station and right-of-way

Intervention Strategy Education: outreach and messaging

Measure Group Public communication

Description

Sharing data about trespass incidents can help to convey the risk inherent in trespassing on the railroad right-of-way. However, the way this information is shared should be carefully considered; research has shown that how rail trespass and suicide incidents are discussed publicly can have unintended adverse effects on vulnerable individuals [1]. Developing policies for publishing rail suicide and trespass data can help ensure that the public is responsibly informed about the prevalence of these issues. For example, language that sensationalizes acts of suicide or normalizes suicide—such as referring to a series of suicides as "an epidemic"—is associated with an uptick in suicide rates [2][3]. Instead, incident rates should be reported in an accurate, objective way. This kind of language keeps suicide rates from being dramatized or exaggerated [3]. One example of responsibly reported rail suicide statistics is the FRA Safety Data Website which provides an objective overview of national data (see Additional Resources for more examples). Information about responsible media reporting of suicide incidents can be found at https://suicidepreventionmessaging.org/.

Research also shows that suicidal individuals may be drawn to using the rail system, in part because they are not aware of the bodily or legal risks, and it may be viewed as a quick and certain death [4][5]. Therefore, it is important that public data discussions avoid language that supports this view. Publishing injury data in addition to fatalities is one way to help convey that death by train is not certain. Messages about the potential for severe injury may also help to shape public perception. Developing a strategy for publishing rail suicide and trespass data is complementary to responsible media reporting, as the two measures share similar practices.

Some evidence suggests that suicides may be underreported in FRA data. FRA only counts a death as a suicide if a coroner or other official authority has ruled it a suicide and until that time it is categorized as a non-suicide, often a trespasser. This assumption is referred to as a "reporting default" which may be a significant factor in the underreporting of suicides by rail [5]. It is crucial that FRA data users are aware of the reporting default to avoid potential misinterpretation of these data. Delays in determining whether an incident was a result of suicide also creates challenges with presenting accurate data in a timely fashion. Care should be given to ensure data are presented in a manner that does not create confusion.

Additional search terms: *media*, *policy*, *rates*

Advantages

- It is low-cost to develop a plan for publishing data responsibly and apply existing media reporting guidelines.
- This measure can increase public awareness of rail safety, suicide prevention, and actual rates of train strikes.
- This measure may discourage individuals from deciding to trespass (with or without suicidal intent) before they enter the rail environment.

Drawbacks

• Accurate, timely public data can be delayed while waiting to determine whether individual incidents were suicides or non-suicides.

Notable Practices

- The strategy should address publishing both suicide and trespass (non-suicide) data.
- Consider publishing injury data in addition to fatality data to help increase awareness of the potential for severe, life-altering injury as opposed to certain death.
- Consider providing suicide helpline information to accompany rail suicide data.
- Refrain from using language that sensationalizes, dramatizes, and normalizes suicide [6].
- Carefully consider any differences in the way suicides are determined and recorded when making comparisons of rail suicide rates among different countries [6].

References

[1] Kunrath, S., Baumert, J., & Ladwig, K. H. (2011). <u>Increasing railway suicide acts after media coverage of a fatal railway accident? An ecological study of 747 suicidal acts</u>. *Journal of Epidemiology & Community Health*, 65(9), 825-828.

Abstract: Background: While coverage of a celebrity suicide in the mass media may trigger copycat suicides, evidence for the effect of media reports of non-prominent suicides is moderate. Diversification of current media may raise further doubts as to whether their influence on suicidal acts is still present. We examined whether widespread media coverage of a railway accident, in which several people were killed while investigating a presumed railway suicide, subsequently increased the number of railway suicides.

Methods: The daily incidence of railway suicides was derived from the national accident registry on the German railway net. We estimated incidence ratios by Poisson regression, adjusting for relevant confounders (eg, outdoor temperature, unemployment rate), for the 2 months following the accident

(predefined index period) and predefined control periods (preceding 2 years of the same period and 1 month before/after the index period).

Results: The mean number of railway suicides per day in the index period increased significantly to 2.66 (95% CI 2.19 to 3.13) compared to 1.94 (95% CI 1.78 to 2.10) during both control periods. Fully adjusted Poisson regression showed a 44% daily increase in railway suicides in the index period compared to the control periods (incidence ratio 1.44, 95% CI 1.02 to 2.03). A maximum of eight suicides per day was reached about 1 week after the accident.

Conclusions: Non-fictional media coverage of a fatal accident appears to affect subsequent railway suicide numbers. Supposedly, media reports drew attention to railways as a means of suicide.

[2] Niederkrotenthaler, T., Voracek, M., Herberth, A., Till, B., Strauss, M., Etzersdorfer, E., ... & Sonneck, G. (2010). Role of media reports in completed and prevented suicide: Werther v. Papageno effects. The British Journal of Psychiatry, 197(3), 234-243.

Abstract: Background: Media reporting of suicide has repeatedly been shown to trigger suicidal behaviour. Few studies have investigated the associations between specific media content and suicide rates. Even less is known about the possible preventive effects of suicide-related media content.

Aims: To test the hypotheses that certain media content is associated with an increase in suicide, suggesting a so-called Werther effect, and that other content is associated with a decrease in suicide, conceptualised as a Papageno effect. Further, to identify classes of media articles with similar reporting profiles and to test for associations between these classes and suicide.

Method: Content analysis and latent class analysis (LCA) of 497 suicide-related print media reports published in Austria between 1 January and 30 June 2005. Ecological study to identify associations between media item content and short-term changes in suicide rates.

Results: Repetitive reporting of the same suicide and the reporting of suicide myths were positively associated with suicide rates. Coverage of individual suicidal ideation not accompanied by suicidal behaviour was negatively associated with suicide rates. The LCA yielded four classes of media reports, of which the mastery of crisis class (articles on individuals who adopted coping strategies other than suicidal behaviour in adverse circumstances) was negatively associated with suicide, whereas the expert opinion class and the epidemiological facts class were positively associated with suicide.

Conclusions: The impact of suicide reporting may not be restricted to harmful effects; rather, coverage of positive coping in adverse circumstances, as covered in media items about suicidal ideation, may have protective effects.

[3] Sisask, M., & Värnik, A. (2012). Media roles in suicide prevention: a systematic review. *International journal of environmental research and public health*, *9*(1), 123-138. [PubMed Linkv]

Abstract: The aim of the current systematic review was to monitor and provide an overview of the research performed about the roles of media in suicide prevention in order to find out possible effects media reporting on suicidal behaviours might have on actual suicidality (completed suicides, attempted suicides, suicidal ideation). The systematic review was performed following the principles of the PRISMA statement and includes 56 articles. Most of the studies support the idea that media reporting and suicidality are associated. However, there is a risk of reporting bias. More research is available about how irresponsible media reports can provoke suicidal behaviours (the 'Werther effect') and less about protective effect media can have (the 'Papageno effect'). Strong modelling effect of media coverage on suicide is based on age and gender. Media reports are not representative of official suicide data and tend to exaggerate sensational suicides, for example dramatic and highly lethal suicide methods, which are rare in real life. Future studies have to encounter the challenges the global medium Internet will offer in

terms of research methods, as it is difficult to define the circulation of news in the Internet either spatially or in time. However, online media can provide valuable innovative qualitative research material.

[4] Mishara, B. L. (2007). Railway and metro suicides: Understanding the problem and prevention potential. *Crisis*, *28*(S1), 36-43.

Abstract: Abstract. This article reviews research on railway and metro (underground and subway) suicides around the world. Although the incidence and survival rates vary and standardized methodologies are lacking, it is evident that there is a high incidence among psychiatric patients and at stations, crossings, and track areas near psychiatric institutions. Fictional and news reports of railway and metro suicides are related to increased rates, and false beliefs about a certain, fatal, and painless outcome may contribute to use of this method. Train drivers and rail personnel are often traumatized and in need of personal support after the incident. Most prevention involves surveillance, limiting access to tracks, or prompt intervention during an attempt. Other potential strategies include focusing upon the high-risk populations of previous attempters and patients in psychiatric facilities near stations and tracks and hanging attitudes concerning the acceptability of this method to ensure that potentially suicidally active individuals are not under the illusion that this is a certain and painless method of death.

[5] Topel, K. (2022). Do U.S. Rail Safety Statistics Undercount Suicides? *Transportation Research Record: Journal of the Transportation Research Board*, 2676(9).

Abstract: Rail safety researchers have long suspected that U.S. accidental rail trespassing tallies include some suicides, that is, that suicides are undercounted relative to accidents. Reports issued by the Federal Railroad Administration (FRA) imply that suicides account for less than 30% of total deaths, whereas other countries show a much higher proportion of suicides, sometimes as high as 80% of total rail deaths. The purpose of the present research was to gain insight into this question by evaluating whether official manner of death determinations are correctly reflected in FRA reports. All FRA railroad fatality records for the state of Illinois for 2019 were compared with police reports, coroner/medical examiner manner of death determinations, and online media coverage. These sources indicated that less than half of official suicides were reported correctly in FRA reports and that over 50% of all fatalities were a result of suicide. It was also found that the primary reason for the considerable undercount of suicides was FRA reporting defaults and a breakdown in the process of railroads separating accidents from suicides; it was not a reluctance or delay on the part of local authorities to declare the death as intentional.

[6] World Health Organization. (2008). Preventing Suicide A Resource for Media Professionals.

Document Excerpt: reporting of suicide, and, using this evidence, provides a resource for media professionals about how to report on suicide. It encourages caution in reporting suicide. It recognizes that there are times when a suicide will need to be reported on the grounds of its newsworthiness. It makes suggestions about how best to ensure that such reporting is accurate, responsible and ethical. The resource acknowledges that reporting of suicide differs within and across countries. There are cultural differences in terms of what is appropriate to report and how information about a given suicide is accessed. This resource is designed to provide general guidance, but media professionals are encouraged to work with their own suicide prevention community and to draw on local guidelines wherever possible. (Refer to p.7 for information on normalizing suicide.)

Additional Resources FRA Office of Safety Data – Website

Description: FRA database that contain railroad safety information including accidents and incidents, inventory and highway-rail crossing data.

The following websites provides examples of responsible reporting of suicide statistics:

- American Foundation for Suicide Prevention: <u>Suicide Facts and Figures</u>
- American Foundation for Suicide Prevention: <u>Suicide Statistics</u>
- World Health Organization: Suicide Data

Related Measures

- Identify funding opportunities
- Incident cost estimation
- Responsible media reporting