

PUBMED Search Terms.

The PUBMED search was (((("Medical Record Linkage"[Mesh]) OR ("Records as Topic/statistics and numerical data"[Mesh])) OR record*[tiab] link*[tiab]) OR data*[tiab] link*[tiab])) AND (((((("Self-Injurious Behavior"[Mesh:NoExp]) OR "Self Mutilation"[Mesh]) OR "Suicide"[Mesh:NoExp]) OR "Suicidal Ideation"[Mesh]) OR "Suicide, Attempted"[Mesh])) OR (((Suicid*[tiab] thought*[tiab]) OR Suicid*[tiab] think*[tiab]) OR Suicid*[tiab] cris*[tiab]) OR Suicid*[TIAB] Idea*[tiab]) OR Suicidalit*[tiab))). Terms and logic were tailored for the Scopus search.

Supplementary Table 1: Studies based on linked police or ambulance data, excluded with reasons

Reference	Reason for exclusion*
1 Amundsen, E. J. (2017). Lack of overlap and large discrepancies in the characteristics of the deceased in two sources of drug death. A linkage study of the Cause of Death and the Police Registries in Norway 2007–2009. <i>International Journal of Drug Policy</i> , 41, 74-79.	Exclusion criterion 2
2 Annor, F. B., Bayakly, R. A., Morrison, R. A., Bryan, M. J., Gilbert, L. K., Ivey-Stephenson, A. Z., . . . Simon, T. R. (2019). Suicide Among Persons With Dementia, Georgia, 2013 to 2016. <i>Journal of Geriatric Psychiatry and Neurology</i> , 32(1), 31-39.	Exclusion criterion 6
3 Arnberg, F. K., Gudmundsdóttir, R., Butwicka, A., Fang, F., Lichtenstein, P., Hultman, C. M., & Valdimarsdóttir, U. A. (2015). Psychiatric disorders and suicide attempts in Swedish survivors of the 2004 southeast Asia tsunami: A 5 year matched cohort study. <i>The Lancet Psychiatry</i> , 2(9), 817-824.	Police records used as sampling frame to identify alive cohort.
4 Austin, A. E., Vladutiu, C. J., Jones-Vessey, K. A., Norwood, T. S., Proescholdbell, S. K., & Menard, M. K. (2016). Improved Ascertainment of Pregnancy-Associated Suicides and Homicides in North Carolina. <i>American Journal of Preventive Medicine</i> , 51(5), S234-s240.	Exclusion criterion 7
5 Bahraini, N. H., Gutierrez, P. M., Harwood, J. E., Huggins, J. A., Hedegaard, H., Chase, M., & Brenner, L. A. The Colorado Violent Death Reporting System (COVDRS): validity and utility of the Veteran status variable. <i>Public Health Reports</i> , 127(3), 304-309.	Exclusion criterion 7
6 Barber, C. W., Azrael, D., Hemenway, D., Olson, L. M., Nie, C., Schaechter, J., & Walsh, S. (2008). Suicides and suicide attempts following homicide: Victim-suspect relationship, weapon type, and presence of antidepressants. <i>Homicide Studies</i> , 12(3), 285-297.	Exclusion criterion 6

- 7 Barbieri, S., Omizzolo, L., Tredese, A., Vettore, G., Calaon, A., Behr, A. U., . . . Feltracco, P. (2018). The rise of new alcoholic games among adolescents and the consequences in the emergency department: Observational retrospective study. *Journal of Medical Internet Research*, 20(4). Violation of inclusion criterion 3
- 8 Barner-Rasmussen, P., Dupont, A., & Bille, H. (1986). Suicide in psychiatric patients in Denmark, 1971-81. I. Demographic and diagnostic description. *Acta Psychiatrica Scandinavica*, 73(4), 441-448. Exclusion criterion 6
- 9 Basham, C., Denneson, L. M., Millet, L., Shen, X., Duckart, J., & Dobscha, S. K. Characteristics and VA health care utilization of U.S. Veterans who completed suicide in Oregon between 2000 and 2005. *Suicide and Life-Threatening Behavior*, 41(3), 287-296. Exclusion criterion 6
- 10 Borschmann, R., Young, J. T., Moran, P., Spittal, M. J., Snow, K., Mok, K., & Kinner, S. A. (2017). Accuracy and predictive value of incarcerated adults' accounts of their self-harm histories: findings from an Australian prospective data linkage study. *CMAJ Open*, 5(3), E694-E701. Exclusion criterion 7
- 11 Calam, R., Horne, Louise, Glasgow, David, Cox, Antony. (1998). Psychological disturbance and child sexual abuse: a follow-up study *Child Abuse & Neglect*, 22(9), 901-913. Violation of inclusion criterion 1
- 12 Cerel, J., Singleton, M. D., Brown, M. M., Brown, S. V., Bush, H. M., & Brancado, C. J. (2016). Emergency department visits prior to suicide and homicide: Linking statewide surveillance systems. *Crisis*, 37(1), 5-12. Exclusion criterion 6
- 13 Chang, S. S., Bjørngaard, J. H., Tsai, M. K., Bjerkeset, O., Wen, C. P., Yip, P. S. F., . . . Gunnell, D. (2016). Heart rate and suicide: Findings from two cohorts of 533 000 Taiwanese and 75 000 Norwegian adults. *Acta Psychiatrica Scandinavica*, 133(4), 277-288. Exclusion criterion 6
- 14 Cho, J., Lee, W. J., Moon, K. T., Suh, M., Sohn, J., Ha, K. H., . . . Jung, S. H. Medical care utilization during 1 year prior to death in suicides motivated by physical illnesses. *Journal of Preventive Medicine and Public Health*, 46(3), 147-154. Exclusion criterion 6
- 15 Choi, N. G., DiNitto, D. M., Marti, C. N., & Kaplan, M. S. (2017). Older Suicide Decedents: Intent Disclosure, Mental and Physical Health, and Suicide Means. *American Journal of Preventive Medicine*, 53(6), 772-780. Exclusion criterion 6
- 16 Deisenhammer, E. A., Behrndt, E. M., Kemmler, G., Haring, C., & Miller, C. A comparison of suicides in psychiatric in-patients, after discharge and in not recently hospitalized individuals. *Comprehensive Psychiatry*, 69, 100-105. Exclusion criterion 6
- 17 Denneson, L. M., Basham, C., Dickinson, K. C., Crutchfield, M. C., Millet, L., Shen, X., & Dobscha, S. K. Suicide risk assessment and content of VA health care contacts before suicide completion by veterans in Oregon. *Psychiatric Services*, 61(12), 1192-1197. Exclusion criterion 6

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- 18 Duncan, D. T., & Hatzenbuehler, M. L. Lesbian, gay, bisexual, and transgender hate crimes and suicidality among a population-based sample of sexual-minority adolescents in Boston. *American Journal of Public Health*, 104(2), 272-278. Violation of inclusion criterion 1
- 19 Edwards, N., , A., an, R., MacDonald, D., Sikdar, K., Collins, K., & Avis, S. Suicide in Newfoundland and Labrador: a linkage study using medical examiner and vital statistics data. *Canadian Journal of Psychiatry*, 53(4), 252-259. Exclusion criterion 7
- 20 Ferreira, T. D. G., Vedana, K. G. G., do Amaral, L. C., Pereira, C. C. M., Zanetti, A. C. G., Miasso, A. I., & Borges, T. L. (2019). Assistance related to suicidal behavior at a mobile emergency service: Sociodemographic and clinical associated factors. *Archives of Psychiatric Nursing*, 33(2), 136-142. Violation of inclusion criterion 1
- 21 Fowler, K. A., Jack, S. P. D., Lyons, B. H., Betz, C. J., & Petrosky, E. (2018). Surveillance for violent deaths - National violent death reporting system, 18 states, 2014. *MMWR Surveillance Summaries*, 67(2), 1-36. Exclusion criterion 6
- 22 Galway, K., Gossrau-Breen, D., Mallon, S., Hughes, L., Rosato, M., Rondon-Sulbaran, J., & Leavey, G. Substance misuse in life and death in a 2-year cohort of suicides. *British Journal of Psychiatry*, 208(3), 292-297. Exclusion criterion 6
- 23 Gatov, E., Kurdyak, P., Sinyor, M., Holder, L., & Schaffer, A. (2017). Comparison of Vital Statistics Definitions of Suicide against a Coroner Reference Standard: A Population-Based Linkage Study. *Canadian Journal of Psychiatry*, 706743717737033. Exclusion criterion 7
- 24 Gold, K. J., Singh, V., Marcus, S. M., & Palladino, C. L. (2012). Mental health, substance use and intimate partner problems among pregnant and postpartum suicide victims in the National Violent Death Reporting System. *General Hospital Psychiatry*, 34(2), 139-145. Exclusion criterion 6
- 25 Hedlund, J., Ahlner, J., Kristiansson, M., & Sturup, J. (2014). A population-based study on toxicological findings in Swedish homicide victims and offenders from 2007 to 2009. *Forensic Science International*, 244, 25-29. Exclusion criterion 6
- 26 Hernandez-Meier, J. L., Akert, B., Zheng, C., Guse, C. E., Layde, P. M., & Hargarten, S. (2019). Status of legal firearm possession and violent deaths: Methods and protocol for a retrospective case-control study. *Injury Prevention*. Violation of inclusion criterion 1
- 27 Jamison, E. C., Bol, K. A., & Mintz, S. N. (2019). Analysis of the Effects on Time between Divorce Decree and Suicide. *Crisis*, 40(5), 309-316. Exclusion criterion 6
- 28 Jayasinghe, N. R., & Foster, J. H. (2011). Deliberate self-harm/poisoning, suicide trends. The link to increased alcohol consumption in Sri Lanka. *Archives of Suicide Research*, 15(3), 223-237. Violation of inclusion criterion 1
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- 29 Johansson, L., Lindqvist, P., & Eriksson, A. Teenage suicide cluster formation and contagion: implications for primary care. *BMC Family Practice*, 7, 32. Exclusion criterion 6
- 30 Kellermann, A. L., Rivara, F. P., Lee, R. K., Banton, J. G., Cummings, P., Hackman, B. B., & Somes, G. Injuries due to firearms in three cities. *New England Journal of Medicine*, 335(19), 1438-1444. Violation of inclusion criterion 3
- 31 Kristiansen, T., Lossius, H. M., Rehn, M., Kristensen, P., Gravseth, H. M., Røislien, J., & Søreide, K. (2014). Epidemiology of trauma: A population-based study of geographical risk factors for injury deaths in the working-age population of Norway. *Injury*, 45(1), 23-30. Violation of inclusion criterion 3
- 32 Lahti, A., Harju, A., Hakko, H., Riala, K., & Räsänen, P. (2014). Suicide in children and young adolescents: A 25-year database on suicides from Northern Finland. *Journal of Psychiatric Research*, 58, 123-128. Exclusion criterion 6
- 33 Logan, J., Hill, H. A., Black, M. L., Crosby, A. E., Karch, D. L., Barnes, J. D., & Lubell, K. M. (2008). Characteristics of perpetrators in homicide-followed-by-suicide incidents: National Violent Death Reporting System - 17 US States, 2003-2005. *American Journal of Epidemiology*, 168(9), 1056-1064. Exclusion criterion 6
- 34 Logan, J. E., Skopp, N. A., Reger, M. A., Gladden, M., Smolenski, D. J., Floyd, C. F., & Gahm, G. A. Precipitating circumstances of suicide among active duty U.S. Army personnel versus U.S. civilians, 2005-2010. *Suicide and Life-Threatening Behavior*, 45(1), 65-77. Exclusion criterion 6
- 35 Manley, N. R., Croce, M. A., Fischer, P. E., Crowe, D. E., Goines, J. H., Sharpe, J. P., . . . Magnotti, L. J. (2019). Evolution of Firearm Violence over 20 Years: Integrating Law Enforcement and Clinical Data. *Journal of the American College of Surgeons*, 228(4), 427-434. Violation of inclusion criterion 3
- 36 Martiniuk, A. L., Ivers, R. Q., Glozier, N., Patton, G. C., Lam, L. T., Boufous, S., . . . Norton, R. Self-harm and risk of motor vehicle crashes among young drivers: findings from the DRIVE Study. *CMAJ*, 181(11), 807-812. Exclusion criterion 6
- 37 Mellesdal, L., Kroken, R. A., Lutro, O., Wentzel-Larsen, T., Kjelby, E., Oedegaard, K. J., . . . Mehlum, L. (2014). Self-harm induced somatic admission after discharge from psychiatric hospital - A prospective cohort study. *European Psychiatry*, 29(4), 246-252. Exclusion criterion 6
- 38 Mellesdal, L., Gjestad, R., Johnsen, E., Jørgensen, H. A., Oedegaard, K. J., Kroken, R. A., & Mehlum, L. (2015). Borderline Personality Disorder and Posttraumatic Stress Disorder at Psychiatric Discharge Predict General Hospital Admission for Self-Harm. *Journal of Traumatic Stress*, 28(6), 556-562. Exclusion criterion 6
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- 39 Meyer-Rochow, V. B., Hakko, H., Ojamo, M., Uusitalo, H., & Timonen, M. (2015). Suicides in Visually Impaired Persons: A Nation-Wide Register-Linked Study from Finland Based on Thirty Years of Data. *PLoS ONE*, 10(10), e0141583. Exclusion criterion 6
- 40 Moskowitz, A., Simpson, A. I. F., McKenna, B., Skipworth, J., & Barry-Walsh, J. (2006). The role of mental illness in homicide-suicide in New Zealand, 1991-2000. *Journal of Forensic Psychiatry & Psychology*, 17(3), 417-430. Exclusion criterion 6
- 41 Oliver, J. E. (1985). Successive generations of child maltreatment: social and medical disorders in the parents. *British Journal of Psychiatry*, 147, 484-490. Violation of inclusion criterion 3
- 42 Parks, S. E., Johnson, L. L., McDaniel, D. D., & Gladden, M. (2014). Surveillance for violent deaths - National Violent Death Reporting System, 16 states, 2010. *MMWR Surveillance Summaries*, 63(1), 1-33. Exclusion criterion 6
- 43 Partonen, T., Haukka, J., Pirkola, S., Isometsa, E., & Lonnqvist, J. Time patterns and seasonal mismatch in suicide. *Acta Psychiatrica Scandinavica*, 109(2), 110-115. Exclusion criterion 6
- 44 Petrosky, E., Harpaz, R., Fowler, K. A., Bohm, M. K., Helmick, C. G., Yuan, K., & Betz, C. J. (2018). Chronic Pain Among Suicide Decedents, 2003 to 2014: Findings From the National Violent Death Reporting System. *Annals of Internal Medicine*, 169(7), 448-455. Exclusion criterion 6
- 45 Pushpakumara, P. H. G. J., Thennakoon, S. U. B., Rajapakse, T. N., Abeysinghe, R., & Dawson, A. H. (2019). A prospective study of repetition of self-harm following deliberate self-poisoning in rural Sri Lanka. *PLoS One*, 14(2). Exclusion criterion 6
- 46 Schaffer, A., Sinyor, M., Kurdyak, P., Vigod, S., Sareen, J., Reis, C., . . . Cheung, A. (2016). Population-based analysis of health care contacts among suicide decedents: Identifying opportunities for more targeted suicide prevention strategies. *World Psychiatry*, 15(2), 135-145. Exclusion criterion 6
- 47 Schwab-Reese, L. M., & Peek-Asa, C. (2019). Factors contributing to homicide-suicide: differences between firearm and non-firearm deaths. *Journal of Behavioral Medicine*, 42(4), 681-690. Exclusion criterion 6
- 48 Shiffler, T., Hargarten, S. W., & Withers, R. L. The burden of suicide and homicide of Wisconsin's children and youth. *WMJ*, 104(1), 62-67. Exclusion criterion 6
- 49 Sohn, J., Cho, J., Moon, K. T., Suh, M., Ha, K. H., Kim, C., . . . Jung, S. H. Medical care expenditure in suicides from non-illness-related causes. *Journal of Preventive Medicine and Public Health*, 47(6), 327-335. Exclusion criterion 6
- 50 Soole, R., Kõlves, K., & De Leo, D. (2014). Suicides in Aboriginal and Torres Strait Islander children: analysis of Queensland Suicide Register. *Australian and New Zealand Journal of Public Health*, 38(6), 574-578. Exclusion criterion 6
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51	Sumarokov, Y. A., Brenn, T., Kudryavtsev, A. V., & Nilssen, O. (2014). Suicides in the indigenous and non-indigenous populations in the Nenets Autonomous Okrug, Northwestern Russia, and associated socio-demographic characteristics. <i>International Journal of Circumpolar Health</i> , 73, 24308.	Exclusion criterion 6
52	Walsh, S., Clayton, R., Liu, L., & Hodges, S. Divergence in contributing factors for suicide among men and women in Kentucky: recommendations to raise public awareness. <i>Public Health Reports</i> , 124(6), 861-867.	Exclusion criterion 6
53	Weiser, M., Kapra, O., Werbeloff, N., Goldberg, S., Fenchel, D., Reichenberg, A., . . . Davidson, M. A population-based longitudinal study of suicide risk in male schizophrenia patients: Proximity to hospital discharge and the moderating effect of premorbid IQ. <i>Schizophrenia Research</i> , 169(1), 159-164.	Exclusion criterion 6
54	Weiser, M., Goldberg, S., Werbeloff, N., Fenchel, D., Reichenberg, A., Shelef, L., . . . Fruchter, E. Risk of completed suicide in 89,049 young males assessed by a mental health professional. <i>European Neuropsychopharmacology</i> , 26(2), 341-349.	Exclusion criterion 6
55	Yang, C. Y. Association between parity and risk of suicide among parous women. <i>CMAJ</i> , 182(6), 569-572.	Exclusion criterion 6

* Inclusion criteria:

- 1) Article reports findings of individual records linkage across at least two datasets.
- 3) Article examines suicide behaviours, including suicidal thoughts, intentions, behaviours, suicide attempts, self-harm, and suicide deaths, as (i) an aim; or (ii) outcome.

Exclusion criteria:

- 2) Study reports on suicide, only in relation to the study of cause of death, or death rates in general.
- 6) Linkage to police or ambulance records is primarily for the purpose of establishing cause, intent, mechanism or manner of death or self-harm (e.g., as part of a coronial investigation).
- 7) Study has a methodological focus (e.g., investigates case ascertainment).