



HHS Public Access

Author manuscript

Pa J Posit Approaches. Author manuscript; available in PMC 2024 April 24.

Published in final edited form as:

Pa J Posit Approaches. 2023 November ; 12(3): 69–76.

Recent Research Points to a Clear Conclusion: Autistic People are Thinking About, and Dying by, Suicide at High Rates

Caitlin M. Conner, Ph.D.,

Amy Ionadi, Ph.D.,

Carla A. Mazefsky, Ph.D.

Department of Psychiatry, University of Pittsburgh School of Medicine, Regulation of Emotion in Autistic Adults, Children, and Teens (REAACT) Program

Rates of death by suicide among teens and adults have increased more than 30% since 2000 in the United States, and an estimated 800,000 people die from suicide worldwide each year.^{1,2} Even more people experience suicidal thoughts and/or make suicide attempts. The past several years of research have taught us that autistic people are more likely to die from suicide than non-autistic people.^{3–5} Autistic people are also more likely to have suicidal ideation and to make attempts. Based on rates from a recent meta-analysis (statistical analysis to combine rates from published studies on the topic), 20% of autistic children and teens reported suicidal ideation in the past year, and 10% reported suicide attempts.⁶ Non-autistic children and teens comparatively report rates of 14.2% for suicidal thoughts and 4.5% for suicidal attempts.⁷ This suggests that the rates of suicide attempts are double in autistic children and teens compared to non-autistic children and teens. The comparisons for adults are even more striking. For autistic adults, 42% reported suicidal ideation in the past year, and 18% reported attempts.⁶ In studies of people who were first diagnosed as autistic in adulthood, over 60% reported having suicidal ideation.⁸ Comparatively, non-autistic adults reported rates of 4.8% for suicidal ideation and 0.7% for suicidal attempts.⁹ Therefore, available data suggests that autistic adults are 25 times more likely to make a suicide attempt than non-autistic adults.

An important limitation is that nearly all of the suicide research in autism has occurred in the past five years and the body of evidence remains limited in comparison to the general suicide literature. Further, it is important to note that there are large differences in suicide rates across different studies. Many studies have used online samples, and it may be possible that relying on online studies may result in higher rates. As a potential explanation, autistic adults might be drawn to participate in studies because of their personal experiences with suicidality. Furthermore, it can be hard to know if people in an online sample accurately represent the entirety of the autistic community. Regardless, these high rates are very concerning, and several autistic advocacy groups have identified suicide risk and prevention as top priorities for research and government efforts.^{10,11}

Note: If you are currently experiencing a crisis or are thinking of suicide, please call, text, or chat the national suicide prevention lifeline at 988 (call or text) or [Link to 988 Lifeline Chat and Text](#).

Risk and Protective Factors

One reason for higher rates of suicidality in autistic people might be that many known risk factors (that increase a person's risk) for suicide are also more likely in autistic people. The most commonly cited examples of these risk factors are depression and lacking social support, but other risk factors common in both suicidality and autism include rumination (getting "stuck" on negative thoughts and emotions), loneliness, difficulties with problem solving, difficulty using coping skills when upset, experiencing trauma or abuse, and being impulsive.¹²⁻¹⁴

Autism researchers have also started to evaluate whether established suicide risk factors are also related to suicide risk in autistic people. Examples of risk factors for suicidal thoughts and behavior that have been considered in research on autism include: feelings of hopelessness, feeling like you are a burden to others, feeling like you do not belong, feeling trapped in your life circumstances, not fearing pain, and access to lethal means (things people use to try to die). These studies' findings are mixed, with some results supporting these theories and others not supporting these theories as key contributors to suicidality in autistic people.¹⁵ Studies have also examined protective factors (related to being less likely to have suicidal thoughts or behaviors) like social support, finding that autistic adults' feeling of having supportive social connections is associated with a lack of suicidal thoughts or attempts.¹⁵⁻¹⁷ However, we need more research to determine other protective factors for autistic people.

Additionally, research has shown that there are potentially unique risk and protective factors for suicidal thoughts and behaviors in autistic people, like masking their autism characteristics, autistic burnout, and sensory overload.^{11,18,19} There may also be unique protective factors for suicide in autism, but none have been explored yet. There may also be important differences in suicide risk between autistic and non-autistic people that need to be identified. Thus far, death records suggest that autistic women are more likely to die by suicide than autistic men, a pattern that is opposite the non-autistic literature that consistently finds men to be more likely to die by suicide. It is also important to consider that autistic people often experience intersectionality (i.e., having multiple minoritized identities such as being both autistic and a gender minority), which is a well-established risk factor for suicidality.²⁰

Future Directions and Implications

For researchers, there is a lot of work to do to learn more about what puts an autistic person at risk for suicidal thoughts and behaviors, and what can be most helpful. It is also important to understand what might support positive quality of life and well-being. We are currently working on a large study to better understand mental health and suicide in autistic people with a goal to learn what factors are the most important. In the most comprehensive study of suicidality in autism to date, we are using neuroimaging, physiological measures, repeated phone surveys in daily life, clinical interviews, questionnaires, and follow-up over a year to hopefully speed up progress.

Despite how much remains unknown about suicidal thoughts and behaviors in autistic people, it is clear that autistic people are at higher risk. Therefore, service providers and counselors need to check in with their autistic clients regularly. Assessing clients for suicidal thoughts and plans to harm themselves can be feel uncomfortable; however, it is important to ask the person clearly and directly, in a supportive and non-punitive manner. Many years of research has shown that asking people if they have considered suicide does not make them more likely to have suicidal thoughts or behaviors.²¹ However, it is possible that fear of consequences may lead clients to deny suicidality that they are, in fact, experiencing. Thus, it is critical to establish rapport and be mindful of any sudden changes in a person’s mood and behavior, or whether a person is dealing with a challenging or traumatic experience in life. When discussing suicide, it is imperative to be validating (and avoid being dismissive or judgmental), as often autistic people experience suicidality as a reaction to repeated negative social experiences. Listening and providing support and validation can be the first and most important step.

Service providers should also create a safety plan with clients who are at risk/have reported any suicidal thoughts or behaviors, including helping them refer to it or use it later. Safety plans are collaborative, where you work with your client to identify times/situations when they are more likely to have suicidal thoughts and behaviors and list the coping skills, people to reach out to, or professionals or agencies to reach out to when in crisis. It is important to ensure that safety plans are individualized to the client. And it may also be important to be cognizant that existing resources, such as 988, were not developed for autistic people, and, while perhaps necessary and the best available option, may not be as helpful for autistic people as intended. As we await more research on autism-specific intervention and support research, there are some resources available based on best available evidence and clinical experience (see below).

Resources

- [Link to American Association of Suicidology Autism Resources.](#)
- [Link to PA ASERT Mental Health Resources.](#)
- [Link to University of Pittsburgh REAACT Research Program Crisis Resources Page.](#)

Safety plan resources:

- [Link to ASERT Safety Plan for Individuals with Autism.](#)
- [Link to UK Safety Plan.](#)

Biographies

Dr. Caitlin Conner is an Assistant Professor in the Department of Psychiatry at the University of Pittsburgh School of Medicine, and a licensed clinical psychologist. Her research interests are in co-occurring mental health conditions in autism, including suicidality, and how underlying issues like emotion dysregulation and emotional

awareness affect mental health in autistic teens and adults. She is co-leading (with Dr. Mazefsky) a project to develop a measure of suicidality for autistic teens and adults. connercm2@upmc.edu; www.reaact.pitt.edu

Dr. Amy Ionadi has her PhD in neuroscience; due to being autistic, her curiosity was drawn to the neuroscience of neurodiversity. She now works full time in the Pitt Regulation of Emotion in Autistic Adults Children & Teens (REAACT) Program at the University of Pittsburgh contributing to manuscripts, supporting dissemination and partnership efforts, graphic design, and REAACT team projects focused on increasing acceptance and understanding of autism and suicide in autism. ionadiaa@upmc.edu; www.reaact.pitt.edu

Dr. Carla Mazefsky is a licensed clinical psychologist, Nancy J. Minshew Endowed Chair in Autism Research, and Professor of Psychiatry, Psychology, and Clinical and Translational Science, and Director of the REAACT Program at the University of Pittsburgh. Her research centers around understanding, assessing, and supporting emotion regulation in autism. She is Center Director of an NIMH Autism Center of Excellence (ACE) focused on advancing research on suicide and mental health for autistic adults. mazefskyca@upmc.edu; www.reaact.pitt.edu

References

- Hedegaard H, Curtin SC, Warner M. Suicide Rates in the United States Continue to Increase Key findings Data from the National Vital Statistics System, Mortality. NCHS Data Brief. 2018;(309):1–8. NCHS Data Brief: Suicide Rates in the United States Continue to Increase.
- World Health Organization. Suicide fact sheet. 2019. World Health Organization Suicide Fact Sheet. Accessed March 8, 2021.
- Kirby AV, Bakian AV, Zhang Y, Bilder DA, Keeshin BR, Coon H. A 20-year study of suicide death in a statewide autism population. *Autism Res.* 2019;12(4):658–666. doi:10.1002/aur.2076 [PubMed: 30663277]
- Hirvikoski T, Mittendorfer-Rutz E, Boman M, Larsson H, Lichtenstein P, Bölte S. Premature mortality in autism spectrum disorder. *Br J Psychiatry.* 2016;208(3):232–238. [PubMed: 26541693]
- Lai MC, Saunders NR, Huang A, et al. Self-Harm Events and Suicide Deaths Among Autistic Individuals in Ontario, Canada. *JAMA Netw open.* 2023;6(8):e2327415. doi:10.1001/jamanetworkopen.2023.27415 [PubMed: 37552480]
- Huntjens A, Landlust A, Wissenburg S, Van Der Gaag M. The Prevalence of Suicidal Behavior in Autism Spectrum Disorder: A Meta-Analysis. *Crisis.* 2023. doi:10.1027/0227-5910/a000922
- Lim KS, Wong CH, McIntyre RS, et al. Global lifetime and 12-month prevalence of suicidal behavior, deliberate self-harm and non-suicidal self-injury in children and adolescents between 1989 and 2018: A meta-analysis. *Int J Environ Res Public Health.* 2019;16(22). doi:10.3390/ijerph16224581
- Cassidy S, Bradley P, Robinson J, Allison C, McHugh M, Baron-Cohen S. Suicidal ideation and suicide plans or attempts in adults with asperger's syndrome attending a specialist diagnostic clinic: A clinical cohort study. *The Lancet Psychiatry.* 2014;1(2):142–147. doi:10.1016/S2215-0366(14)70248-2 [PubMed: 26360578]
- SAMHSA. Key Substance Use and Mental Health Indicators in the United States : Results from the 2019 National Survey on Drug Use and Health.; 2019. SAMHSA's Center for Behavioral Health Statistics and Quality (CBHSQ).
- INSAR. Autism Community Priorities for Suicide Prevention. INSAR Working Brief for Suicide Prevention. An International Society for Autism Research Policy Brief on Suicide Prevention.

11. Benevides TW, Shore SM, Palmer K, et al. Listening to the autistic voice: Mental health priorities to guide research and practice in autism from a stakeholder-driven project. *Autism*. 2020;24(4):822–833. doi:10.1177/1362361320908410 [PubMed: 32429818]
12. Lai JKY, Rhee E, Nicolas D. Suicidality in Autism Spectrum Disorder: a Commentary. *Adv Neurodev Disord*. 2017;1(3):190–195. doi:10.1007/s41252-017-0018-4
13. Segers M, Rawana J. What do we know about suicidality in autism spectrum disorders? A systematic review. *Autism Res*. 2014;7(4):507–521. doi:10.1002/aur.1375 [PubMed: 24798640]
14. Hedley D, Uljarević M, Cai RY, Bury SM, Stokes MA, Evans DW. Domains of the autism phenotype, cognitive control, and rumination as transdiagnostic predictors of DSM-5 suicide risk. *PLoS One*. 2021;16(1 January):1–17. doi:10.1371/journal.pone.0245562
15. Mournet AM, Wilkinson E, Bal VH, Kleiman EM. A systematic review of predictors of suicidal thoughts and behaviors among autistic adults: Making the case for the role of social connection as a protective factor. *Clin Psychol Rev*. 2023;99(September 2022):102235. doi:10.1016/j.cpr.2022.102235 [PubMed: 36459876]
16. Hedley D, Uljarević M, Wilmot M, Richdale A, Dissanayake C. Brief Report: Social Support, Depression and Suicidal Ideation in Adults with Autism Spectrum Disorder. *J Autism Dev Disord*. 2017;47(11):3669–3677. doi:10.1007/s10803-017-3274-2 [PubMed: 28861661]
17. Moseley RL, Gregory NJ, Smith P, Allison C, Baron-Cohen S. Links between self-injury and suicidality in autism. *Mol Autism*. 2020;11(1): 1–15. doi:10.1186/s13229-020-0319-8 [PubMed: 31893022]
18. Cassidy S, Bradley L, Shaw R, Baron-Cohen S. Risk markers for suicidality in autistic adults. *Mol Autism*. 2018;9(1):1–14. doi:10.1186/s13229-018-0226-4 [PubMed: 29321841]
19. Raymaker DM, Teo AR, Steckler NA, et al. “Having All of Your Internal Resources Exhausted Beyond Measure and Being Left with No Clean-Up Crew”: Defining Autistic Burnout. *Autism in Adulthood*. 2020;2(2):132–143. doi:10.1089/aut.2019.0079 [PubMed: 32851204]
20. Standley CJ. Expanding our paradigms: Intersectional and socioecological approaches to suicide prevention. *Death Stud*. 2022;46(1):224–232. doi:10.1080/07481187.2020.1725934 [PubMed: 32048555]
21. Law MK, Furr RM, Arnold EM, Mneimne M, Jaquett C, Fleeson W. Does assessing suicidality frequently and repeatedly cause harm? A randomized control study. *Psychological Assess*. 2015;27(4):1171–1181. doi:doi:10.1037/pas0000118