TYPE 1 DIABETES IN YOUTH

ADDRESSING THE OVERLOOKED MENTAL HEALTH BURDEN

YOURAH'S MISSION

Type 1 diabetes (T1D) is an autoimmune, lifelong condition, most often diagnosed in childhood or young adulthood, requiring lifelong around-the-clock management. Through its YOURAH network, IDF Europe empowers young people living with T1D to advocate for their needs.

30%



of adolescents living with T1D experience **diabetes distress** - the emotional distress that results from living with diabetes and the burden of relentless daily self-management.

People living with T1D make about

180

additional health-related decisions every day

compared to people without diabetes, that's **one every five minutes**



Anxiety is prevalent in youth with T1D. **Anxiety is associated with higher HbA1c, greater difficulties with self-management and coping, depression, fear of hypoglycemia and lower blood glucose** monitoring frequency.

Young people with diabetes are 2X

more likely to have a **mental, emotional or behavioural disorder** compared to peers without diabetes.

Between 15% and 30%

of youth with T1D experience **depressive symptoms.**

People living with diabetes are 2-3X

more likely to experience depression than people without diabetes

The years following T1D onset are associated with an increased risk of:

- eating disorders
- anxiety & mood disorders
- substance misuse
- personality disorders



MENTAL HEALTH CONCERNS	PREVALENCE IN T1D YOUTH	PREVALENCE IN GENERAL YOUTH	KEY IMPACT ON DIABETES OUTCOMES
Mental, emotional or behavioral disorders	Almost 40% of children	20% of children	Can lead to experiencing burnout, depression and anxiety
Anxiety disorders	13% (adolescents living with T1D)	4.1% of 10-14-year-olds and 5.3% of 15-19-year-old	Increases HbA1c levels, compromises self-management skills and coping strategies, contributes to fear of hypoglycemia and lowers blood glucose (BG) monitoring frequency
Depressive Symptoms	~ 6.5% of adolescents aged 10-14 years and ~17% of 15-19-year-olds.	1.3% of adolescents aged 10-14 years and 3.4% of 15-19-year-olds	Lack of motivation for diabetes management, social isolation and stress
Eating disorders	~ 21,5%	~ 10.5%	Can increase the risk of severe hypoglycemia and lead to severe lows, dehydration and DKA

Being unable to manage blood glucose levels and other aspects of diabetes management due to the additional burden of mental health conditions can increase the risk of serious long-term, diabetes-related complications affecting many areas of the body and overall health

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Sources:

- Barrett, C. E., Zhou, X., Mendez, I., Park, J., Koyama, A. K., Claussen, A. H., Newsome, K., McKeever Bullard, K. (2023). Prevalence of Mental, Behavioral, and Developmental Disorders Among Children and Adolescents with Diabetes, United States (2016-2019). Journal of Pediatrics, 253, 25-32. doi: 10.1016/j.jpeds.2022.09.008. PMID: 36113638; PMCID: PMC11000210.
- Breakthrough T1D. (n.d.). Eating disorders and T1D. Breakthrough T1D. https://www.breakthrought1d.org/t1d-resources/food-nutrition/eating-disorders-and-t1d/
- Buchberger, B., Huppertz, H., Krabbe, L., Lux, B., Mattivi, J. T., Siafarikas, A. (2016). Symptoms of depression and anxiety in youth with type 1 diabetes: A systematic review and meta-analysis. Psychoneuroendocrinology, 70, 70-84. https://doi.org/10.1016/j.psyneuen.2016.04.019
- Chatterjee, S., Bakhla, A. K., Biswas, P., Singha, S., Dubey, S., Sharma, C. B., Chowdhury, S. (2020). Psychosocial morbidity among children with type-1 diabetes mellitus. Journal of Family Medicine and Primary Care, 9(2), 652-656. doi: 10.4103/jfmpc.jfmpc_1216_19. PMID: 32318398; PMCID: PMC7114057.
- Ducat, L., Rubenstein, A., Philipson, L. H., Anderson, B. J. (2015). A Review of the Mental Health Issues of Diabetes Conference. Diabetes Care, 38(2), 333–338. https://doi.org/10.2337/dc14-1383
- Dybdal, D., Tolstrup, J. S., Sildorf, S. M., et al. (2018). Increasing risk of psychiatric morbidity after childhood onset type 1 diabetes: a population-based cohort study. Diabetologia, 61, 831–838. https://doi.org/10.1007/s00125-017-4517-7
- Gregory, J. W., Cameron, F. J., Joshi, K., Eiswirth, M., Garrett, C., Garvey, K., Agarwal, S., Codner, E. (2022). ISPAD Clinical Practice Consensus Guidelines 2022: Diabetes in adolescence. Pediatric Diabetes, 23(7), 857-871. doi: 10.1111/pedi.13408. PMID: 36250644; PMCID: PMC9828225.
- Hirvelä, L., Haukka, J., Keski-Rahkonen, A., et al. (2025). Eating disorders among people with and without type 1 diabetes: incidence and treatment in a nationwide population-based cohort. Diabetologia, 68, 766–777. https://doi.org/10.1007/s00125-024-06346-7
- IDF Europe. (2023, July 25). [Fact sheet / report].
- McGill, D. E., et al. (2018). Depressive Symptoms at Critical Times in Youth With Type 1 Diabetes: Following Type 1 Diabetes Diagnosis and Insulin Pump Initiation. Diabetes/Metabolism. DOI: S1054139X17304834.
- Roberts, A., Corathers, S., Rapaport, R., Rompicherla, S., Majidi, S., Rioles, N., Ebekozien, O., Malik, F. S. (2024). Depression Rates in Youth With Type 1 Diabetes During the COVID-19 Pandemic: Data From the T1D Exchange Quality Improvement Collaborative. Clinical Diabetes, 42(4), 532–539. https://doi.org/10.2337/cd24-0004
- World Health Organization. (2023). Adolescent mental health. World Health Organization. https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health
- Breakthrough T1D. (n.d.). Mental health and T1D. Breakthrough T1D. https://breakthrought1d.ca/mental-health-support/mental-health/