

# Colorado TEDDY Newsletter

## TEDDY Talk



Volume 31  
2023

### TEDDY Stats

#### TEDDY World Wide

8,667 Enrolled  
440 diagnosed type 1 diabetes  
568 diagnosed celiac disease  
76 diagnosed thyroid autoimmunity  
2,704 aged out—15 years

#### TEDDY Colorado

1,375 Enrolled  
79 diagnosed type 1 diabetes  
106 diagnosed celiac disease  
19 diagnosed thyroid autoimmunity  
383 aged out—15 years



Please arrive a few minutes early to check in for your Children's Hospital TEDDY visit.

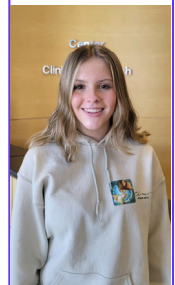
Thank you!

### TZIELD - FDA approves the first treatment to delay onset of type 1

On November 17, 2022, the FDA approved TZIELD (teplizumab). TZIELD has the potential to delay the onset of clinical type 1 diabetes (T1D). It is approved for adults and pediatric patients aged 8 years and older with Stage 2 T1D. Stage 2 T1D is when a person has 2 or more T1D associated autoantibodies (GAD, IAA, IA-2 and/or Znt8) and dysglycemia. Dysglycemia in stage 2 T1D is defined by the American Diabetes Association as a fasting blood glucose of 100-125 mg/dl, a 2-hour glucose during an oral glucose tolerance test of 140-199 mg/dl or an HbA1c between 5.7-6.4%.

Research has shown people who received TZIELD had an average of 2 more years before the onset of clinical T1D (Stage 3 T1D), compared to those who did not receive TZIELD. Additionally, more people who were given TZIELD had not been diagnosed with Stage 3 T1D by the end of the study, compared with people who did not receive TZIELD. TZIELD is an intravenous (IV) infusion. This means the medication is given through a needle into a vein in the arm. Infusions are once a day, every day, for 14 days. Treatment is completed after 14 days. TZIELD attaches to certain cells in the immune system and may work by turning off the immune cells that attack the insulin making cells in the pancreas. Treatment for those who are eligible can take place through the Barbara Davis Center Early T1D Clinic. Check out this link to learn more: <https://www.tzield.com>

Meet a fellow member of TEDDY Colorado



Lucille  
15 years old

### Physical Activity and Autoimmunity

Physical activity is associated with insulin sensitivity in both children and adults. Insulin sensitivity tells us how well the body's cells respond to insulin. Oral Glucose Tolerance Tests (OGTT) can tell us how well a child's pancreas is working. The test can be used to see if a child is showing the early signs of type 1 diabetes. Measuring C-peptide tells us if the pancreas is making insulin. The hemoglobin A1C (HbA1c) is an average of blood sugars over a 3 month period of time. TEDDY studied the relationship between physical activity, HbA1c, and the c-peptide levels during the OGTT in children with multiple autoantibodies. Researchers found more vigorous physical activity was associated with both lower glucose and a better C-peptide response in children ≥5 years of age who have been multiple autoantibody positive for longer periods of time.

Johnson, S. et al, *Pediatric Diabetes*, 2022



### Rapid Onset T1D

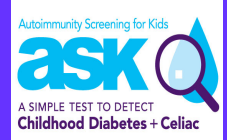


Genetically high-risk children diagnosed with type 1 diabetes before the age of 6 developed autoantibodies earlier and progressed to diabetes more rapidly than those diagnosed between 6 and 13 years old. Diabetes at an early age is likely to be preceded by IAA autoantibodies and is a more aggressive form of the disease in young children. Among older children, there is no association between progression to diabetes and the age of the child or family history.

Krischer JP, et al, *Diabetologia*, 2021

### ASK Screening Available!

Remember TEDDY kids 16 and older and/or siblings can be screened through ASK for autoantibodies for type 1 diabetes and celiac disease. Please let your TEDDY staff know if you are interested in an ASK screening at your next TEDDY visit. You can schedule a visit by contacting TEDDY at 303-724-7577 or [teddy.study@ucdenver.edu](mailto:teddy.study@ucdenver.edu).





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Blog: [teddystudymom.blogspot.com](http://teddystudymom.blogspot.com)

## COLORADO TEDDY NEWSLETTER

The Environmental Determinants of Diabetes in the Young

[www.teddystudy.org](http://www.teddystudy.org)

Save these discount links for 2023 fun at Elitches or Water World.



**Elitch Gardens 2023 season passes available for purchase now** <https://elitchtickets.parkezipay.com/#/34/BARBARA/store>

**Water World**  
[www.thecalypsoclub.com](http://www.thecalypsoclub.com)  
Store name: DAISY



# TEDDY Mom Blog

We have a blog written by a TEDDY mom who is also a staff member at one of our centers. There you can read blogs about difficult blood draws, poop samples, interviews with adults who have celiac disease or diabetes, parents of children with celiac disease and many more. If you'd like to write a guest post, please email [teddy.study@ucdenver.edu](mailto:teddy.study@ucdenver.edu).



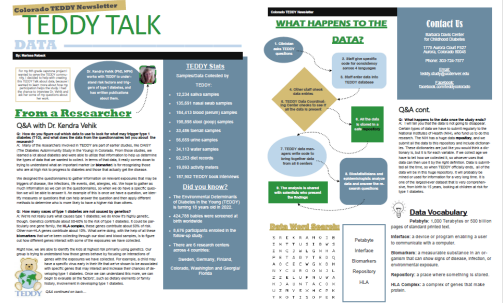
Blog QR

### <http://teddystudymom.blogspot.com> **8th Grade Capstone Project!**



TEDDY participant Marissa created a TEDDY Newsletter for her 8th grade Capstone Project in the spring of 2022. We have included it with our emailed 2023 TEDDY News and added a [link](#) and QR code. Marissa chose to learn more about TEDDY data and

interviewed Dr. Kendra Vehik one of our TEDDY researchers who analyzes data and writes publications. Please check it out! If you are interested in TEDDY being a focus of your school project, please let us know!



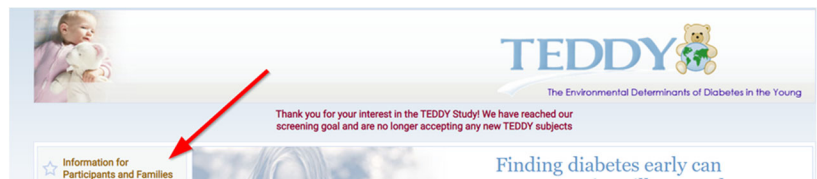
### Colorado's TEDDY Study Manager Retires!

Below is a letter from Judy Baxter, our TEDDY Colorado Study Manager 2004 — 2022. Judy is a one-of-a-kind person who helped many TEDDY staff members grow in their professional lives over so many years. We are all stronger with her wisdom and guidance! We will miss her leadership but she has taught us well and we will finish the study strong.

It was about this time in 2004, when I joined the TEDDY Colorado study team that was just forming. Dr. Rewers, who I had worked with on two other big studies, had told me about this incredibly important collaborative study that he, together with others from around the world, were starting with funding from NIH. It was a pivotal time in my career and life. When Dr. Rewers asked me to step in and step up, I only hoped I could make a difference for TEDDY as he had made in offering me the job. Creating, implementing and helping oversee the TEDDY protocol for 19 years with an incredible team has made the second half of my career a joy, giving me a sense of accomplishment, community and yes, family. Moreover, you, the TEDDY kids and families, who have been on this journey, are the heart of this family and the mission of discovery that is TEDDY. Though I have met very few of the 1375 families that enrolled in TEDDY Colorado, I know well of your efforts on our behalf. I am so grateful to all of you, for the patience given, stamina in completing protocols, feedback to make us better, and dedication to making a difference in ways you may never see. Working with this incredible TEDDY family of staff, investigators and participants has been an enormous privilege and the adventure of a lifetime. From my heart, I thank you all. Warmest Regards—Judy Baxter



BDC Employees on World Diabetes Day in November 2022



The TEDDY Staff have developed a new **Information for Participants and Families** section of the TEDDY Website. Here you will find links to the TEDDY Findings, publications, and the number of kids who have developed type 1 diabetes, celiac disease and thyroid disease. This can be a quick resource if you need to brush up on the most common signs and symptoms of these autoimmune diseases. Go to the website to learn more: <https://teddy.epi.usf.edu>

