

# The Colorado Autistic Perinatal Experience

A Claims-Based Study of Pregnancy and Delivery

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## Research Objective

To describe pregnancies and deliveries among autistic individuals in Colorado using the Colorado All Payer Claims Database (CO APCD), and to inform future interventions aimed at improving perinatal outcomes and reducing complications.

## Background

- Maternal mortality and morbidity are significant concerns across the US (Gunja et al., 2024; Hoyert, 2023).
- The autistic adult experience is rarely studied, especially during the perinatal period (Fujiwara et al., 2014; McDonell et al., 2021).
- Small observational studies indicate autistic individuals experience lower provider satisfaction due to communication mismatches, and increased pregnancy-related anxiety, depression, stigma, comorbidities, and postpartum complications (Hampton et al., 2024; McDonell et al., 2021; Thom-Jones et al., 2024).

## Study Design

Retrospective cohort analysis of CO APCD claims (2012–2023), allowing for an extensive population analysis using the:

- Identified Pregnancy and Delivery: Validated Johns Hopkins ACG Adjusted Clinical Groups System
- Stratified the population by:
  - Age group
  - Insurance type (Medicaid, Commercial, Medicare)

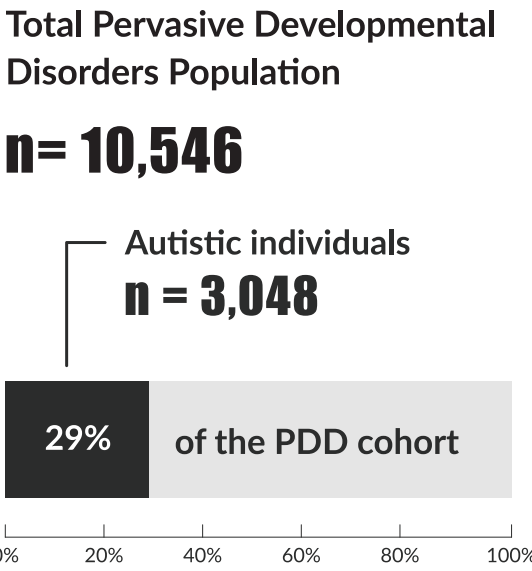
## Cohort

### Included

- Individuals with PDD identified via ICD 10 (F80-89), ICD-9 (315 & 299)
- Autistic Individuals (ICD 10 (F84), ICD 9 (299))
- Pregnancies and deliveries regardless of outcome

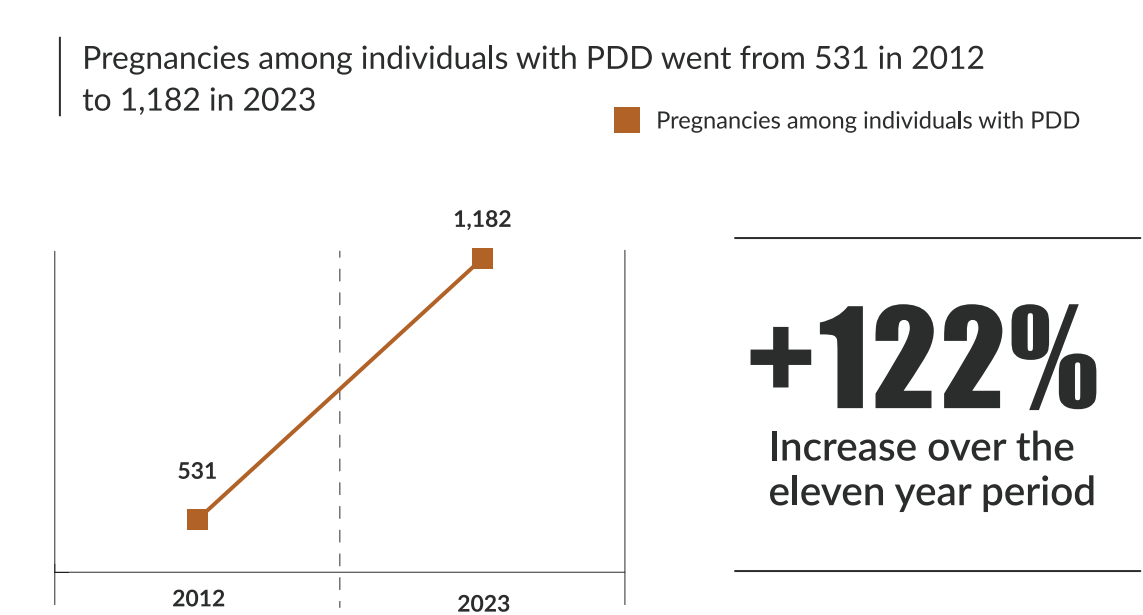
### Excluded

- Dual-eligible Medicare/Medicaid individuals
- Individuals without an ACG-identified pregnancy or deliveries

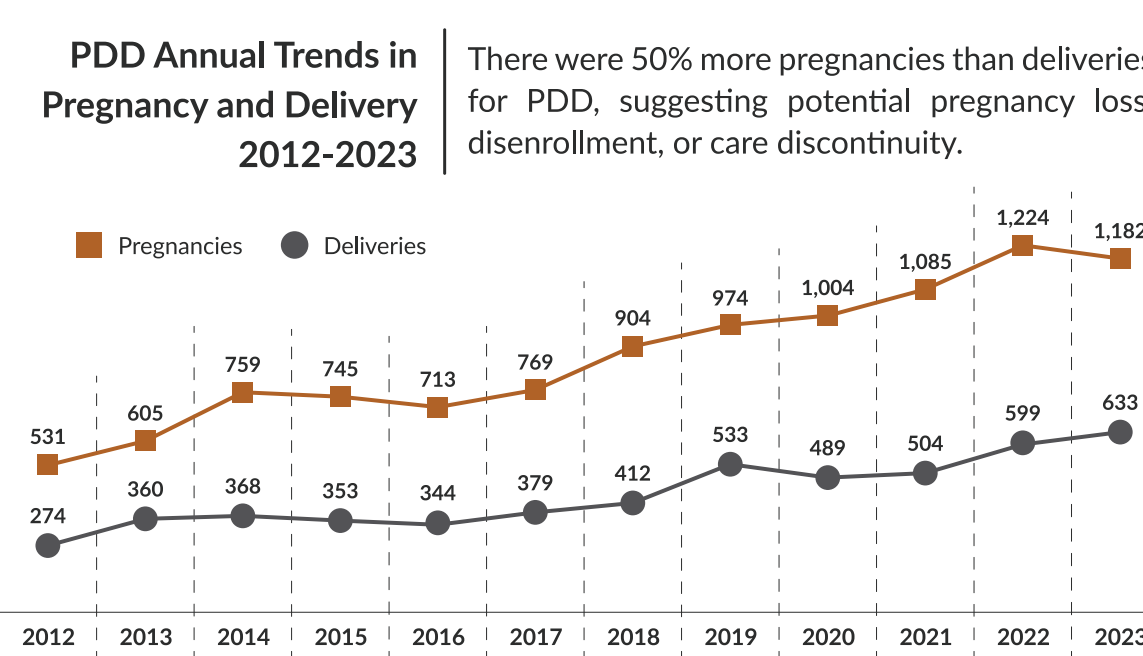


## Principle Findings

### Increasing PDD Pregnancies

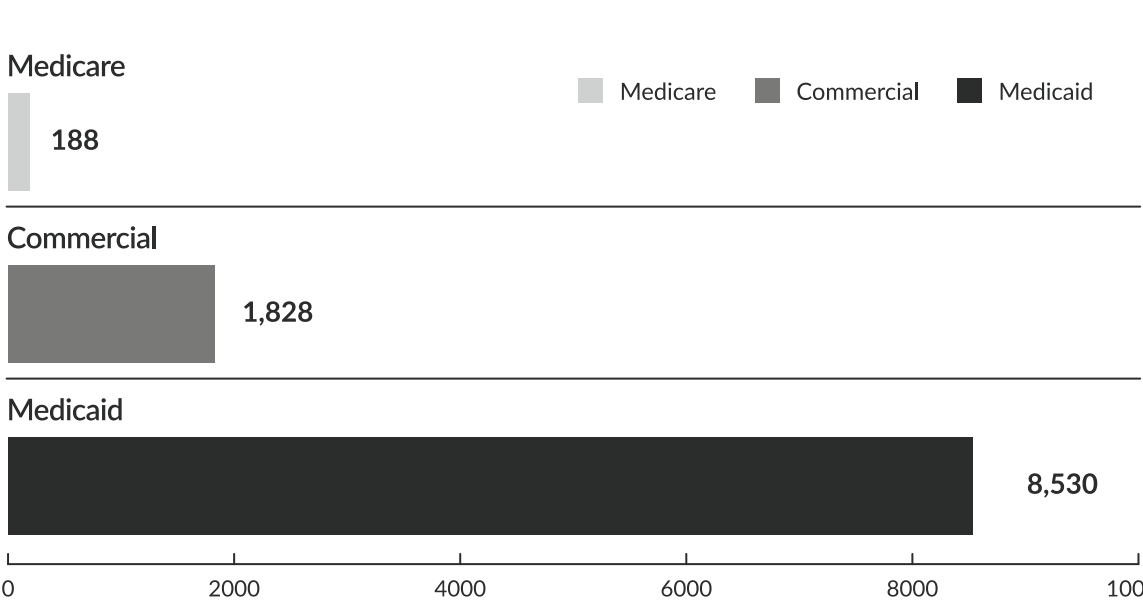


### Pregnancy vs. Delivery Gap



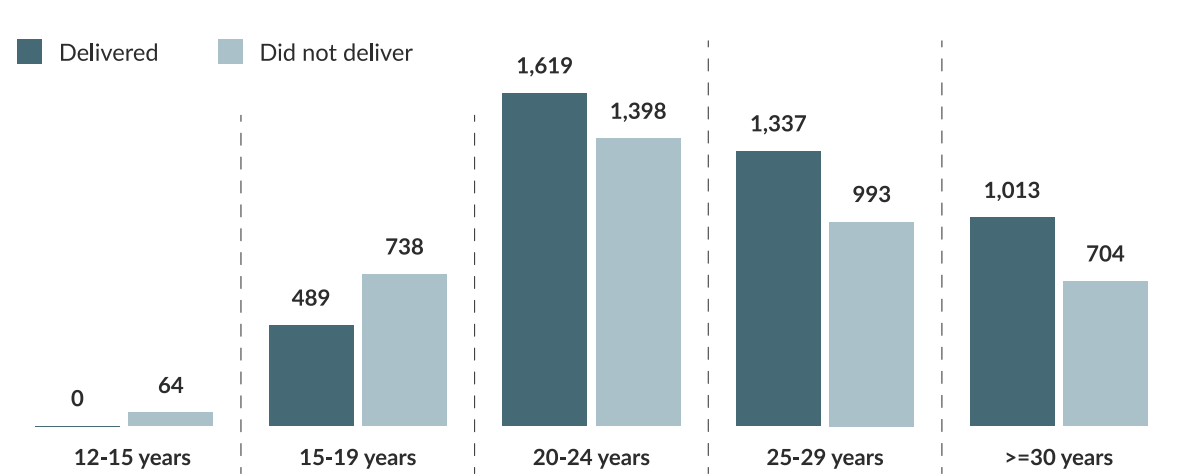
### Insurance Coverage

#### PDD Insurance Coverage Among Pregnant and Delivered | 2012-2023

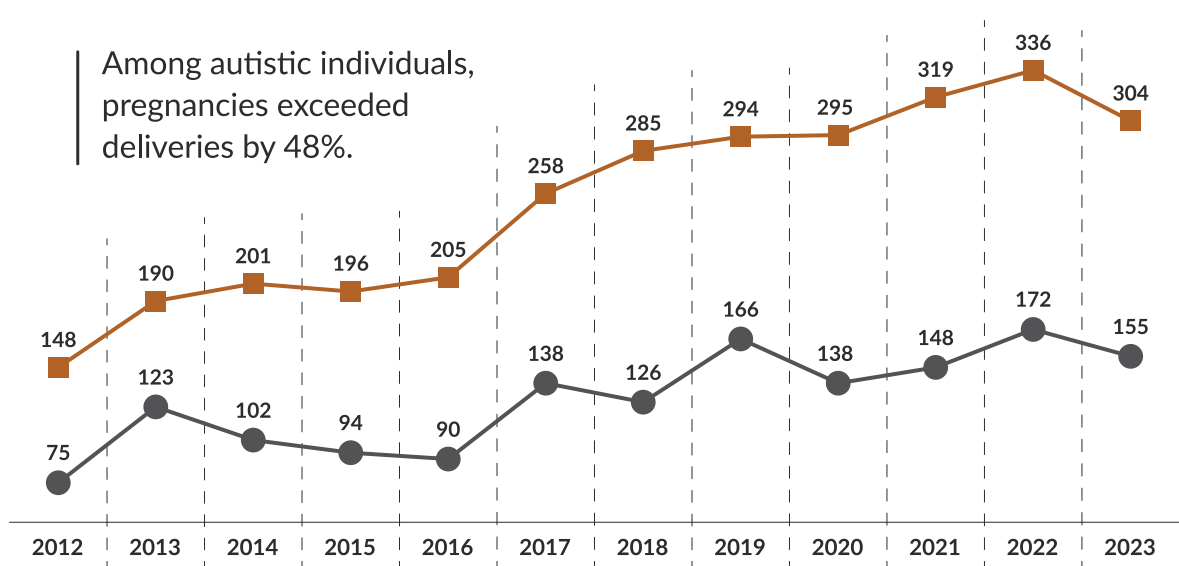


### Age Distribution

#### PDD Delivery Outcomes by Age Group | 2012-2023



#### Annual Trends in Pregnancy and Delivery Among Autistic Individuals 2012-2023



**81%**

Most pregnant individuals with PDD relied on Medicaid (81%), highlighting high social and economic vulnerability in this population.

## Implications for Policy or Practice

- Autistic and PDD-identified individuals face a significant gap between pregnancy and delivery points, which points to missed care, loss, or system breakdowns, yet remain largely invisible in perinatal care efforts.
- This work echoes prior research showing higher disease burden and earlier mortality among autistic individuals (Shaw et al., 2023).

## Conclusions

- Autistic individuals represent a high-medical need and social vulnerability population, with over 80% covered by Medicaid or Medicare.
- Findings reinforce the urgent need for tailored perinatal interventions to improve outcomes and promote maternal health equity.
- This study demonstrates the power of claims data to identify inequities and inform targeted, data-driven maternal health strategies.

## References

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To access the full Colorado Autistic Perinatal Experience abstract and to learn more about public and non-public CO APCD data, visit [civhc.org](https://civhc.org)

