

## High Rate of Metabolic Comorbidities in Young Adults With HIV Acquired Around Birth

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Young adults who acquired HIV perinatally had a high incidence of type 2 diabetes, abnormal lipids, hypertension, and chronic kidney disease (CKD), according to analysis of 375 people in the North American NA-ACCORD cohort [1]. Rates of these comorbidities in people infected perinatally exceeded rates in the general population and sometimes outran rates in older people with HIV infection.

Young adults infected with HIV at or around the time of birth have carried HIV longer than young adults who acquired HIV during their teens or 20s. NA-ACCORD researchers compared a 30-year-old infected perinatally with a 30-year-old infected with HIV later in life. The young person not infected perinatally will have carried HIV for an average 5 to 10 years, whereas the 30-year-old infected perinatally will have carried HIV for 30 years.

NA-ACCORD investigators tapped their combined North American HIV cohorts to determine incidence (new diagnoses) of four sex- and race-specific non-AIDS comorbidities in people infected perinatally and now 18 to 30 years old and enrolled in their cohort sometime from 2000 to 2019: type 2 diabetes mellitus, dyslipidemia (high cholesterol or triglycerides), hypertension, and chronic kidney disease (CKD). Cohort members qualified for this study if they had clinical care for at least 1 month in the 2000-2019 study period and had reached age 18 to 30 by December 31, 2019.

Most of the 375 young adults analyzed entered their cohort in the early 2010s during their early 20s. Median year of study entry was 2012, median age at study entry 21.6, and median follow-up 2.0 years. The study group consisted of 77 nonblack males (21% of all 375), 92 black males (25%), 89 nonblack females (24%), and 117 black females (31%). One hundred of these people (27%) ever smoked, and median body mass index stood within the normal weight range at 24 kg/m<sup>2</sup> when they entered the study.

Checking electronic medical records, the researchers determined that:

*By age 30:*

- 1 in 5 young adults (19%) with perinatally acquired HIV had type 2 diabetes
- 2 in 5 (40%) had high cholesterol
- 1 in 2 (50%) had high triglycerides
- 1 in 5 (22%) had hypertension
- 1 in 4 (25%) had CKD

Nonblack women had the highest incidence of high cholesterol and high triglycerides, while

black man had the highest CKD rate, and black men and women together had the highest hypertension rate.

The NA-ACCORD team noted that these comorbidity rates in young adults infected perinatally were higher than rates reported in the general population and in some cases higher than in everyone with HIV. They suggested that clinicians “may consider early screening and treatment for these comorbidities at younger ages for people with perinatally acquired HIV.”

#### Reference

1. Haw N, Agwu A, Lesko C, et al. Incidence of non-AIDS defining comorbidities among young adults with perinatally acquired HIV in North America, 2000-2019. International Workshop on HIV & Aging 2023, October 26-27, Washington, DC. Abstract 25.