

# STARTING HIV MEDICATIONS DURING PREGNANCY AND GROWTH IN UNINFECTED YOUTH AT TWO YEARS OF AGE

Many pregnant women living with HIV take antiretroviral medications (ARVs) during their pregnancy. They take them for their own health and to protect their babies from getting HIV. We wanted to know if ARV exposure during pregnancy could affect how youth grow in the first two years of life. We also wanted to know if the time when a mother starts taking ARVs affects how youth grow. If youth do not grow as they should they may be at greater risk for health problems when they get older.

## WHO PARTICIPATED



We studied 509 two-year-old youth without HIV in SMARTT. We included youth whose mothers starting taking ARVs during pregnancy.

## WHAT WE DID

ARV Abbreviations	
Tenofovir	TDF
Emtricitabine	FTC
Zidovudine	ZDV
Lamivudine	3TC

We looked at growth in two-year-old youth whose mothers started taking ARVs in the first trimester of pregnancy. The growth measures were weight, height, weight-for-height, triceps skinfold thickness, and head circumference. We did the same study for youth whose mothers started ARVs in the second trimester.

We studied the effect of TDF+FTC compared to ZDV+3TC. We also studied boosted protease inhibitors (bPI) and non-boosted protease inhibitors (non-bPI) on growth.

## WHAT WE FOUND

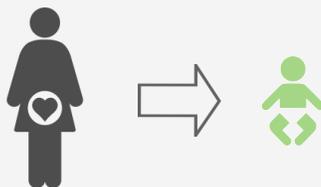


On average, weight, weight-for-length and head circumference were high. Height and thickness of triceps were in the normal range.

In youth whose mothers started ARVs in the first trimester, we found some difference by ARV type. The youth exposed to TDF+FTC tended to be heavier and heavier for their height than youth exposed to ZDV+3TC. Youth exposed to TDF+FTC tended to have less thick triceps than those exposed to ZDV+3TC. BPI was not associated with growth.

Next, we looked at growth in youth who mothers started ARVs in the second trimester. We did not find any differences in growth by type of ARV.

## WHAT WE LEARNED



There may be differences in growth depending on when a mother started ARVs in pregnancy and what type of ARVs she used. We need to follow the youth longer to see if the differences continue over time. We also need to do more studies to see if a larger weight gain affects health when they get older.