

PHACS Adolescent Master Protocol  
Abstract Summary

**Title:** Language Impairment in Perinatally HIV-Infected Children and Adolescents as Compared to Uninfected HIV-exposed Children in the Pediatric HIV/AIDS Cohort Study (PHACS)

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**Study Description:** Children born to mothers with HIV may have problems learning to talk or to use language later in life. We studied language development in children. Some were born with HIV, and some were born without it. We wanted to know what kinds of language problems the children had (if any). We also wanted to know if the children born with HIV had more problems with language than those born without HIV. We looked at two kinds of language problems. One kind, called Primary, is when a child's language skills are not as good as we would expect them to have at their age. However, their nonverbal (not language-based) skills and hearing are okay and they speak only English (and have only English spoken to them). Another kind, called Secondary, is when a child's language skills are not as good as we would expect them to be at their age. Their nonverbal skills are also not as good as expected or they have hearing problems or they speak more than one language (or have more than one language spoken to them).

**Study Population:** There were 357 children in the study. All were exposed to HIV before birth. 252 were born with HIV and 105 were born without it. Half (50%) of the children were boys, 72% were black, and 24% were Hispanic.

**Results:** Language problems were fairly common among the children. However, there was no difference between those with HIV and those without HIV in the number who had language problems. There was no difference in the number of children with HIV and without HIV who had Primary language problems. There was no difference in the number of children with HIV and without HIV who had Secondary language problems. Children with HIV were more likely to be older, black, non-Hispanic, and living with a parent or caregiver who did not finish high school. We took these differences in age, race, ethnicity, and parent education into account. We found no differences between the children with and without HIV in terms of their risk for language problems. Instead, we found some things other than HIV were connected with secondary language problems. Secondary language problems were influenced by race and education.

**Conclusions:** Language problems were common in children exposed to HIV before birth. We found no difference in the risk for language problems between children born with HIV and those born without it. This shows that something besides HIV, something else that the families have in common, is having an effect on the children's language development. In families living with HIV, it is important to watch how the children learn language. It's also important to offer help to improve their skills when needed.

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