

# Department of Research Abstracts

**PREVALENCE OF CONGENITAL GENITAL ABNORMALITIES IN BOYS AGES 6-16 YEARS** Jennifer Steffes, Donna Harris, Marcia Herman-Giddens, Eric Slora, Steven Dowshen, Dianna Abney, Richard Wasserman.. Pediatric Research in Office Settings (PROS), American Academy of Pediatrics, Elk Grove Village, IL; University of North Carolina, Chapel Hill, NC; Alfred I. duPont Hospital for Children, Wilmington, DE; Cambridge Pediatrics, Waldorf, MD; NMAPedsNet, National Medical Association, Washington, DC; Department of Pediatrics, University of Vermont, Burlington, VT. **Presented at the May 2009 Pediatric Academic Societies Annual Meeting.**

**BACKGROUND:** International studies from the late 20th century have raised concern about a rising prevalence of congenital genital abnormalities in boys, with some suggesting that environmental endocrine disruptors may be a factor. Several US studies have been done; none have estimated the current prevalence of abnormalities.

**OBJECTIVE:** Determine the prevalence of congenital genital abnormalities in a sample of boys ages 6-16 years, as well as to examine potential differences in prevalence by race and ethnicity, as well as by Medicaid status.

**DESIGN/METHODS:** As part of a study to determine the emergence of puberty in young boys, practitioners examining 2895 boys ages 6-16 years at health supervision visits gathered data on history and prevalence of congenital genital abnormalities. Data on a *history* of abnormalities was included, since many or most of the abnormalities would have been repaired by the time of the visit. Boys were recruited from 112 Pediatric Research in Office Settings (PROS) practices in 33 states and 1 Canadian province. Practices were urban (43%), suburban (39%), and rural (17%).

**RESULTS:** The mean age of boys was 11.5 years. Fifty-four percent were white, 15% African American, 5% Asian, 4% multiracial, 21% Hispanic, and 1% other. Twenty-eight percent were covered by Medicaid. The table below reports the frequency of subjects with congenital genital abnormalities both overall and by race and ethnic group. (Subjects may have had  $\geq 1$  abnormality.)

Prevalence of Congenital Genital Abnormalities				
	Any congenital genital abnormality	Undescended testis(es)	Hypospadias	Other
All subjects	1.9%	1.3%	0.6%	0.2%
White	1.2%	0.8%	0.4%	0.2%
African American	0.4%	0.3%	0.1%	0.0%
Hispanic	0.2%	0.1%	0.1%	< 0.1%
Multiracial	0.0%	0.0%	0.0%	0.0%
Other	< 0.1%	< 0.1%	0.0%	0.0%

No significant differences in prevalence were found either among racial/ethnic groups, or between Medicaid and non-Medicaid patients.

**CONCLUSIONS:** The prevalence of congenital genital abnormalities in this population was consistent with that found in the past in US boys. However, because the present investigation is based on data of a *history* of genital abnormalities, rather than on data derived from birth examination, it is possible that our study could either over- or under-estimate the true prevalence.

