

eTable 1. Associations of Maternal Prenatal Smoking and Childhood Secondhand Smoke Exposure with Pubertal Onset<sup>a</sup>, Stratified by Race/ethnicity; adjusted<sup>b</sup> time ratios (aTRs) with 95% confidence intervals (CI)

Child Race/ethnicity	Breast Development	Pubic Hair Development
	aTR (95% CI)	aTR (95% CI)
<b>Black</b>		
Prenatal Smoking		
≥5 cigs/day	1.12 (1.02-1.22)	0.95 (0.85-1.07)
<5 cigs/day	1.02 (0.95-1.08)	0.99 (0.92-1.07)
Secondhand Smoke <sup>c</sup>		
High	1.02 (0.97-1.08)	0.94 (0.88-1.01)
Low/Moderate	0.99 (0.95-1.02)	0.99 (0.94-1.03)
<b>Hispanic</b>		
Prenatal Smoking		
<5 cigs/day	0.87 (0.72-1.05)	0.78 (0.66-0.93)
<5 cigs/day	1.03 (0.95-1.14)	0.94 (0.86-1.03)
Secondhand Smoke <sup>c</sup>		
High	1.01 (0.93-1.08)	0.96 (0.89-1.03)
Low/Moderate	1.02 (0.99-1.06)	1.00 (0.97-1.04)
<b>Asian</b>		
Prenatal Smoking		
≥5 cigs/day	N/A	N/A
<5 cigs/day	0.91 (0.75-1.10)	0.96 (0.76-1.20)

Secondhand Smoke<sup>c</sup>

High	N/A	N/A
Low/Moderate	1.06 (0.96-1.17)	1.00 (0.89-1.13)

**White**

Prenatal Smoking

≥5 cigs/day	0.92 (0.84-1.00)	0.95 (0.86-1.03)
<5 cigs/day	1.00 (0.93-1.07)	1.02 (0.95-1.10)

Secondhand Smoke<sup>c</sup>

High	0.91 (0.85-0.96)	0.91 (0.85-0.97)
Low/Moderate	1.00 (0.97-1.04)	0.99 (0.96-1.03)

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<sup>a</sup> Pubertal onset defined (separately) as breast or pubic hair development at Tanner stage 2 or higher (B2+ or PH2+).

<sup>b</sup> Adjusted models include: study site, household income, primary caregiver's education, maternal age at delivery, child BMI (baseline), and birth weight.

<sup>c</sup> Secondhand smoke categories determined from combination of number of cigarettes smoked in the home and hours exposed away from home. No exposure reflects no regular household smokers in the home or exposure outside (>1 hour/week), High is defined as >35 cigarettes smoked per week in home or > 5 hours/week secondhand smoke exposure outside the home and at least one regular smoker at home, and Low/Moderate includes everyone else with at least some exposure at home or away.

eTable 2. Associations of Maternal Prenatal Smoking and Childhood Secondhand Smoke Exposure with Pubertal Onset <sup>a</sup>, Stratified by Child BMI categories; adjusted<sup>b</sup> time ratios (aTRs) with 95% confidence intervals (CI)

Smoke Exposure	High BMI (≥85%)		Low/Moderate BMI (<85%)	
	Breast Onset aTR (95% CI)	Pubic Hair Onset aTR (95% CI)	Breast Onset aTR (95% CI)	Pubic Hair Onset aTR (95% CI)
<b>Maternal Prenatal Smoking</b>				
≥5 cigs/day	1.07 (0.98-1.17)	0.90 (0.82-0.99)	0.98 (0.91-1.05)	0.94 (0.87-1.02)
<5 cigs/day	1.03 (0.96-1.11)	0.97 (0.90-1.04)	1.00 (0.95-1.05)	1.00 (0.95-1.05)
<b>Secondhand Smoke <sup>c</sup></b>				
High	0.97 (0.91-1.03)	0.92 (0.87-0.98 )	1.03 (0.98-1.07)	0.96 (0.91-1.00)
Low/Moderate	0.98 (0.95-1.02)	0.98 (0.95-1.02)	1.02 (0.99-1.04)	1.00 (0.97-1.03)

<sup>a</sup> Pubertal onset defined (separately) as breast or pubic hair development at Tanner stage 2 or higher (B2+ or PH2+).

<sup>b</sup> Adjusted model includes: child study race, site, household income, primary caregiver’s education, maternal age at delivery, girl’s birth weight.

<sup>c</sup> Secondhand smoke categories determined from combination of number of cigarettes smoked in the home and hours exposed away from home. No exposure reflects no regular household smokers in the home or exposure outside (>1 hour/week), High is defined as >35 cigarettes smoked per week in home or > 5 hours/week secondhand smoke exposure outside the home and at least one regular smoker at home, and Low/Moderate includes everyone else with at least some exposure at home or away.

eTable 3. Associations of Maternal Prenatal Smoking and Childhood Secondhand Smoke Exposure with Pubertal Onset<sup>a</sup>, Stratified by Birthweight; adjusted<sup>b</sup> time ratios (aTRs) with 95% confidence intervals (CI)

Smoke Exposure	Low Birthweight (<5.5lbs)		High Birthweight (>9.0lbs)		Mid Birthweight (5.5-9.0lbs)	
	Breast Onset aTR (95% CI)	Pubic Hair Onset aTR (95% CI)	Breast Onset aTR (95% CI)	Pubic Hair Onset aTR (95% CI)	Breast Onset aTR (95% CI)	Pubic Hair Onset aTR (95% CI)
<b>Maternal Prenatal Smoking</b>						
≥5 cigs/day	1.10 (0.93-1.31)	1.11 (0.91-1.35)	0.89 (0.67-1.20)	0.84 (0.68-1.05)	1.00 (0.94-1.06)	0.91 (0.85-0.97)
<5 cigs/day	1.09 (0.99-1.21)	1.07 (0.98-1.18)	1.01 (0.84-1.21)	1.04 (0.84-1.30)	0.99 (0.95-1.03)	0.96 (0.91-1.00)
<b>Secondhand Smoke<sup>c</sup></b>						
High	1.11 (0.99-1.25)	1.11 (0.98-1.26)	0.96 (0.84-1.09)	0.99 (0.84-1.17)	0.98 (0.94-1.02)	0.92 (0.88-0.96)
Low/Moderate	0.96 (0.90-1.03)	1.02 (0.95-1.10)	0.88 (0.82-0.95)	0.97 (0.90-1.05)	1.01 (0.99-1.03)	0.99 (0.97-1.02)

<sup>a</sup> Pubertal onset defined (separately) as breast or pubic hair development at Tanner stage 2 or higher (B2+ or PH2+).

<sup>b</sup> Adjusted model includes: child race, study site, household income, primary caregiver's education, maternal age at delivery, child BMI (baseline).

<sup>c</sup> Secondhand smoke categories determined from combination of number of cigarettes smoked in the home and hours exposed away from home. No exposure reflects no regular household smokers in the home or exposure outside (>1 hour/week), High is defined as >35 cigarettes smoked per week in home or > 5 hours/week secondhand smoke exposure outside the home and at least one regular smoker at home, and Low/Moderate includes everyone else with at least some exposure at home or away.

eTable 4. Urinary Cotinine Concentrations at Baseline by Characteristics of Girls in BCERP<sup>a</sup>

	N	Cotinine levels at baseline (creatinine-adjusted, ug/g)
		Geometric mean (95% CI)
<b>Study Site</b>		
New York	378	1.82 (1.57-2.12)
Ohio	337	1.14 (0.96-1.36)
California	415	0.34 (0.30-0.38)
<b>Annual household income</b>		
<\$50,000	537	1.70 (1.49-1.95)
≥\$50 - <100,000	317	0.63 (0.53-0.74)
≥\$100,000	276	0.32 (0.28-0.37)
<b>Maternal education</b>		
High School or less	321	1.45 (1.22-1.73)
Some College	344	1.29 (1.08-1.54)
College grad or higher	457	0.42 (0.38-0.48)
<b>Maternal age at delivery</b>		
<25years	306	1.92 (1.62-2.29)
25-35years	520	0.72 (0.63-0.82)
>35years	267	0.42 (0.36-0.50)
<b>Maternal prenatal smoking</b>		
None	1036	0.71 (0.65-0.78)
<5 cigarettes /day	64	4.52 (2.90-7.06)
≥5 cigarettes /day	30	12.23 (7.30-20.47)
<b>Child race</b>		
Black	358	1.66 (1.38-1.99)
Hispanic	328	0.91 (0.78-1.06)
Asian	55	0.33 (0.24-0.45)

White	389	0.51 (0.44-0.59)
Child BMI (baseline)		
<85 <sup>th</sup> %ile CDC	759	0.78 (0.70-0.88)
≥85 <sup>th</sup> %ile CDC	371	1.02 (0.87-1.21)
Birth weight		
Low (<5.5lbs)	105	1.10 (0.77-1.56)
Mid (5.5-9.0lbs)	900	0.83 (0.75-0.93)
High (>9.0lbs)	73	0.60 (0.42-0.86)
Total weekly cigarettes smoked in the home		
None (no smokers in the home)	826	0.49 (0.45-0.53)
None (smokers in the home)	162	2.04 (1.64-2.54)
1-35 cigarettes/week	71	4.56 (3.21-6.48)
>35 cigarettes/week	70	14.94 (11.10-20.11)
Childhood secondhand smoke <sup>b</sup>		
None	700	0.41 (0.38-0.45)
Low/Moderate	344	1.96 (1.68-2.30)
High	85	12.51 (9.41-16.63)

<sup>a</sup> Girls with all smoke exposure variables (self-report and cotinine concentrations) non-missing, N=1129.

<sup>b</sup> Secondhand smoke categories determined from combination of number of cigarettes smoked in the home and hours exposed away from home. No exposure reflects no regular household smokers in the home or exposure outside (>1hr/week), High is defined as >35 cigarettes smoked per week in home or > 5 hours/week secondhand smoke exposure outside the home and at least one regular smoker at home, and Low/Moderate includes everyone else with at least some exposure at home or away.

BMI indicates body mass index; CDC, Centers for Disease Control and Prevention growth charts used to define overweight as BMI ≥ 85<sup>th</sup> percentile; BCERP, Breast Cancer and the Environment Research Program.