



Supplementary file

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Supplementary Table S1. The baseline characteristics of participants based on missing covariates data in US children aged 4–15 years: NHANES 1999-2004 (weighted)

Characteristics	[ALL] <i>N=8078</i>	Excluded <i>N=1288</i>	Included <i>N=6790</i>	<i>p</i>
Age, years	10.00 [7.00, 13.00]	9.00 [7.00, 13.00]	10.00 [7.00, 13.00]	0.641
Gender, n(%)				0.558
Male	3961 (50.73%)	656 (52.29%)	3305 (50.55%)	
Female	4117 (49.21%)	632 (47.71%)	3485 (49.45%)	
Race, n(%)				<0.001
Mexican American	2678 (12.33%)	454 (16.83%)	2224 (11.81%)	
Non-Hispanic White	2146 (59.89%)	270 (45.36%)	1876 (61.58%)	
Non-Hispanic Black	2568 (14.84%)	455 (21.52%)	2113 (14.07%)	
Other Race	686 (12.93%)	109 (16.30%)	577 (12.54%)	
Household SHS exposure, n(%)				0.050
No	6325 (76.66%)	1023 (81.03%)	5302 (76.15%)	
Yes	1753 (23.34%)	265 (18.97%)	1488 (23.85%)	
ADHD, n(%)				0.414
Control	7543 (91.89%)	1205 (90.70%)	6338 (92.03%)	
ADHD	535 (8.11%)	83 (9.30%)	452 (7.97%)	

ADHD: attention deficit hyperactivity disorder. Median [IQR] for continuous variables, *p*-values were calculated by weighted Wilcoxon rank-sum tests. Number(%) for categorical variables, *p*-values were calculated by the weighted chi-square tests.

Supplementary Table S2. The association between SHS exposure in the household and ADHD after multiple imputation of missing covariates in US children aged 4-15 years: NHANES 1999-2004 (Weighted multivariate logistic regression analyses)

	Model 1		Model 2		Model 3	
	OR (95% CI)	<i>p</i>	AOR (95% CI)	<i>p</i>	AOR (95% CI)	<i>p</i>
Household SHS exposure	1.867 (1.475, 2.362)	<0.001	1.625 (1.213, 2.178)	0.003	1.438 (1.077, 1.920)	0.020

Model 1: no covariates were adjusted. AOR: adjusted odds ratio. Model 2: adjusted for age, gender, race and PIR. Model 3: adjusted as for

Model 2 plus BMI, maternal age at childbirth, birth weight, smoking during pregnancy, asthma, and health insurance.

Supplementary Table S3. The association between log-transformed serum cotinine levels and ADHD in US children aged 4-15 years: NHANES 1999-2004 (Weighted multivariate logistic regression analyses)

	Model 1		Model 2		Model 3	
	OR (95% CI)	<i>p</i>	AOR (95% CI)	<i>p</i>	AOR (95% CI)	<i>p</i>
N-transformed serum cotinine levels	1.976 (1.400, 2.789)	<0.001	1.915 (1.251, 2.930)	0.004	1.762 (1.181, 2.628)	0.007

Model 1: no covariates were adjusted. AOR: adjusted odds ratio. Model 2: adjusted for age, gender, race and PIR. Model 3: adjusted as for Model 2 plus BMI, maternal age at childbirth, birth weight, smoking during pregnancy, asthma, and health insurance.