Table S1. Logistic Regression for Oral Clefts Including Interactions between First-Trimester Maternal Smoking and Pre-Pregnancy BMI Only Adjusting for Study Fixed Effects

Cleft Status	Smoking			BMI[├]			Smoking x BMI			
	OR[†]	95% CI		OR[†]	95% CI		OR[†]	95% CI		P-Value
Isolated and non-Isolated Clefts										
Any Cleft	2.29	1.57	3.33	1.14	1. 07	1.22	0.83	0.71	0.96	0.01
Cleft lip Only	3.05	1.55	6.02	1.09	0.96	1.24	0.75	0.57	0.98	0.04
Cleft Lip with Palate	2.06	1.25	3.40	1.14	1.03	1.25	0.88	0.72	1.07	0.20
Cleft Palate Only	2.21	1.26	3.87	1.18	1.07	1.31	0.81	0.65	1.01	0.06
Isolated Clefts										
Any Cleft	2.35	1.58	3.49	1.12	1.04	1.21	0.83	0.71	0.97	0.02
Cleft lip Only	3.11	1.55	6.23	1.08	0.95	1.24	0.76	0.58	1.01	0.06
Cleft Lip with Palate	1.69	0.99	2.88	1.08	0.97	1.20	0.96	0.78	1.19	0.71
Cleft Palate Only	3.09	1.62	5.89	1.20	1.07	1.34	0.71	0.55	0.92	0.009

Notes: [†]Multivariable logistic regression model was adjusted for study fixed effects (individual-level observable confounders were not included in the model). A separate regression is estimated for each cleft group. The regressions are estimated for the groups with complete data on all the covariates adjusted for in models reported in Table 1.

[├] BMI is expressed in 10 units.

Table S2. Logistic Regression Results for Smoking Associations with Oral Clefts Stratified by Maternal Pre-Pregnancy BMI

Smoking Measure and Cleft Status	Underweight				Normal weight				Overweight				Obese			
	N	OR†	95% CI		N	OR†	95% CI		N	OR†	95% CI		N	OR†	95% CI	
First trimester smoking (Yes/No)																
Any Cleft	873	1.64[b]	1.18	2.28	8463	1.46[a]	1.29	1.65	3638	1.36	1.13	1.64	2518	1.17[a,b]	0.94	1.44
Any Isolated Cleft	810	1.71	1.20	2.45	7988	1.52	1.34	1.72	3434	1.44	1.18	1.75	2366	1.22	0.98	1.53
Smoking Dosage per Day																
Any Cleft	866				8396				3615				2502			
Non-smokers		Ref				Ref				Ref				Ref		
<5 cigarettes		1.33	0.77	2.30		1.32	1.08	1.60		1.13	0.83	1.55		1.11	0.78	1.58
≥5 cigarettes		1.75	1.21	2.54		1.55	1.34	1.78		1.41	1.13	1.75		1.20	0.93	1.53
Any Isolated Cleft	803				7924				3412				2352			
Non-smokers		Ref				Ref				Ref				Ref		
<5 cigarettes		1.55	0.88	2.72		1.34	1.09	1.65		1.24	0.89	1.72		1.18	0.82	1.71
≥5 cigarettes		1.77[b]	1.18	2.63		1.62[a]	1.40	1.88		1.48	1.17	1.86		1.26[a,b]	0.97	1.64

Notes: †Multivariable logistic regression model was estimated to evaluate the association of any smoking (or alternatively the smoking dosage indicators) and oral clefts stratifying the sample by BMI level (underweight, normal weight, overweight, and obese) and adjusting for, maternal education (less than high school degree versus higher education), maternal age (≤18, 19-25, 26-30, 31-35, 36-49yrs), any alcohol use (Yes/No) and folic acid use(Yes/No) as well as study fixed effects. N indicates the number of cases and controls included the regression. The two indicators for the 3-category cigarette number indicator are simultaneously included in the same model. Separate regressions are estimated when combining all clefts and for isolated clefts alone. [a] and [b] indicate that the ORs in a specific model (i.e. within a row) are different from each other at $p<0.1$ based on a Chow-type test. The number of cases (controls) in the first trimester smoking models for any cleft was 308 (565), 2642(5821), 1136 (2502), and 849(1669) in the underweight, normal weight, overweight, and obese groups, respectively. The number of cases (controls) in the first trimester smoking models for any isolated cleft was 245 (565), 2167 (5821), 932 (2502), and 697 (1669) in the underweight, normal weight, overweight, and obese groups, respectively. The number of cases (controls) in the smoking dosage models for any cleft who were non-smokers was 199 (420), 2013 (4819), 882 (2076), and 664 (1334) in the underweight, normal weight, overweight, and obese groups, respectively. The number of cases (controls) in the smoking dosage models for any cleft who smoked less than 5 cigarettes per day was 25 (42), 184 (322), 69 (136), and 54 (101) in the underweight, normal weight, overweight, and obese groups, respectively. The number of cases (controls) in the smoking dosage models for any cleft who smoked less than 5 cigarettes per day was 82 (98), 426 (632), 176 (276), and 127 (222) in the underweight, normal weight, overweight, and obese groups, respectively.

Table S3. Logistic Regression Results for Associations of Smoking and BMI Combinations with Isolated Oral Clefts by Cleft Type

Smoking and BMI Group	Cleft Lip Only			Cleft Lip with Palate			Cleft Palate Only		
	OR†	95% CI		OR†	95% CI		OR†	95% CI	
No Smoking – Underweight	0.91	0.63	1.32	1.24	0.96	1.60	1.00	0.72	1.38
Smoking – Underweight	2.17[b]	1.40	3.36	1.42	0.95	2.1	2.08[a,b]	1.38	3.14
No smoking – Normal Weight	Ref			Ref			Ref		
Smoking – Normal Weight	1.69	1.37	2.08	1.55	1.31	1.84	1.46[a]	1.18	1.77
No Smoking – Overweight	0.97	0.81	1.17	1.03	0.89	1.19	1.06	0.90	1.25
Smoking – Overweight	1.78	1.34	2.37	1.45	1.14	1.85	1.27[b]	0.95	1.71
No Smoking – Obese	1.17	0.95	1.44	1.20	1.02	1.41	1.22	1.02	1.46
Smoking – Obese	1.16[b]	0.80	1.70	1.56	1.19	2.03	1.41	1.03	1.94

Notes: †Multivariable logistic regression model was estimated to evaluate the associations of combinations between any smoking and the 4 BMI categories relative to normal weight non-smokers as the reference group with oral clefts. The model was adjusted for maternal education (less than high school degree versus higher education), maternal age (≤18, 19-25, 26-30, 31-35, 36-49yrs), any alcohol use (Yes/No) and folic acid use(Yes/No) as well as study fixed effects. Separate regressions were estimated for each cleft type. Differences in smoking risk estimates (compared to normal weight nonsmokers) across BMI groups were tested for each specific cleft type (i.e. within a column); [a] and [b] indicate that these differences are significant at $p<0.1$ and $p<0.05$, respectively.