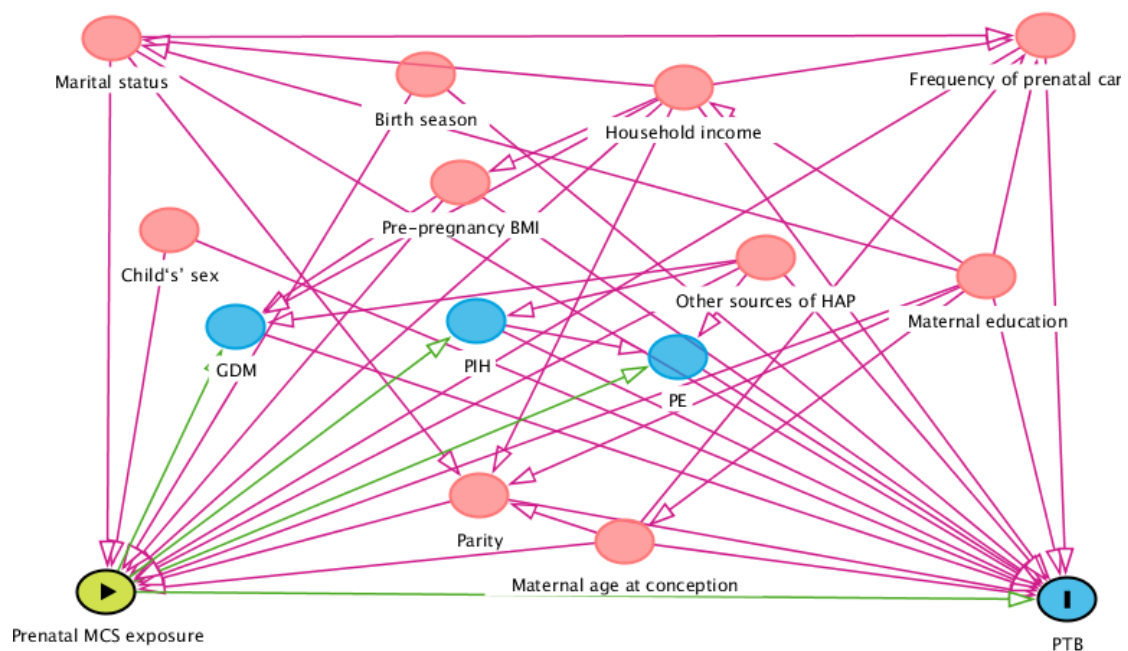


**Figure S1.** Flow chart of the analytic sample selection process.



**Figure S2.** Directed acyclic graph (DAG) for the association between prenatal MCS exposure and PTB, showing all potential confounders. Pink lines indicate potential confounders.

MCS: mosquito coil smoke; PTB: preterm birth; BMI: body mass index; GDM: gestational diabetes mellitus; PIH: pregnancy induced hypertension; PE: Pre-eclampsia

**Table S1.** Cross-over analysis for association between prenatal MCS exposure and PTB.

MCS exposure			PTB/n	ORs (95% CI)	
The first trimester	The second trimester	The third trimester		Crude	Adjusted <sup>a</sup>
No	No	No	3186/46167	1.00	1.00
<b>Yes</b>	No	No	210/2411	1.29 (1.11, 1.49)	1.27 (1.09, 1.46)
No	<b>Yes</b>	No	34/549	0.89 (0.62, 1.24)	0.86 (0.60, 1.20)
No	No	<b>Yes</b>	47/781	0.86 (0.63, 1.15)	0.86 (0.63, 1.14)
<b>Yes</b>	<b>Yes</b>	No	118/1375	1.27 (1.04, 1.53)	1.23 (1.01, 1.48)
<b>Yes</b>	No	<b>Yes</b>	18/282	0.92 (0.55, 1.44)	0.90 (0.53, 1.40)
No	<b>Yes</b>	<b>Yes</b>	73/1146	0.92 (0.72, 1.16)	0.90 (0.70, 1.13)
<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	1101/13792	1.17 (1.09, 1.26)	1.14 (1.06, 1.23)

<sup>a</sup> Adjustment for maternal age at conception, maternal education, marital status, household income, frequency of prenatal care visits, pre-pregnancy BMI, parity, child's sex, birth season, and exposure to other four sources of household air pollution.

Abbreviations: MCS, mosquito coil smoke; PTB, preterm birth

**Table S2.** Cross-over analysis for association between prenatal MCS exposure and PTB, stratified by the child's sex <sup>#</sup>.

MCS exposure			aORs (95% CI)	
The first trimester	The second trimester	The third trimester	Boys	Girls
No	No	No	1.00	1.00
<b>Yes</b>	No	No	1.21 (0.99, 1.47)	1.34 (1.07, 1.66)
No	<b>Yes</b>	No	0.91 (0.57, 1.38)	0.78 (0.41, 1.33)
No	No	<b>Yes</b>	0.88 (0.58, 1.27)	0.83 (0.50, 1.29)
<b>Yes</b>	<b>Yes</b>	No	1.21 (0.93, 1.55)	1.24 (1.01, 1.49)
<b>Yes</b>	No	<b>Yes</b>	1.01 (0.53, 1.75)	0.73 (0.29, 1.53)
No	<b>Yes</b>	<b>Yes</b>	0.85 (0.61, 1.16)	0.96 (0.65, 1.35)
<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	1.04 (0.94, 1.15)	1.27 (1.14, 1.42)

<sup>#</sup> Adjustment for maternal age at conception, maternal education, marital status, household income, frequency of prenatal care visits, pre-pregnancy BMI, parity, child's sex, birth season, and exposure to other four sources of household air pollution.

Abbreviations: MCS, mosquito coil smoke; PTB, preterm birth.

**Table S3.** Associations between maternal MCS exposure during different periods of pregnancy and PTB (n = 61226).

Exposure periods	MCS exposure	PTB/n	OR (95% CI)	
			Crude	Adjusted <sup>a</sup>
Entire pregnancy	No	2914/42599	1.00	1.00
	Yes	1429/18627	1.13 (1.06, 1.21)	1.11 (1.03, 1.18)
The first trimester	No	3053/44884	1.00	1.00

	Yes	1290/16342	1.17 (1.10, 1.26)	1.15 (1.07, 1.23)
The second trimester	No	3161/45801	1.00	1.00
	Yes	1182/15425	1.12 (1.04, 1.20)	1.09 (1.01, 1.17)
The third trimester	No	3240/46599	1.00	1.00
	Yes	1103/14627	1.09 (1.02, 1.17)	1.06 (0.99, 1.15)

<sup>a</sup> Adjustment for maternal age at conception, maternal education, marital status, household income, frequency of prenatal care visits, pre-pregnancy BMI, parity, child's sex, birth season, and exposure to other four sources of household air pollution.

Abbreviations: MCS, mosquito coil smoke; PTB, preterm birth.

**Table S4.** Trimester-specific association between prenatal MCS exposure and PTB (n = 61226).

MCS exposure			PTB/n	OR (95% CI)	
The first trimester	The second trimester	The third trimester		Crude	Adjusted <sup>a</sup>
No	No	No	2914/42599	1.00	1.00
<b>Yes</b>	No	No	185/2218	1.24 (1.06, 1.44)	1.22 (1.04, 1.42)
No	<b>Yes</b>	No	31/507	0.89 (0.60, 1.26)	0.86 (0.59, 1.22)
No	No	<b>Yes</b>	45/732	0.89 (0.65, 1.19)	0.89 (0.64, 1.19)
<b>Yes</b>	<b>Yes</b>	No	110/1275	1.29 (1.05, 1.56)	1.24 (1.01, 1.51)
<b>Yes</b>	No	<b>Yes</b>	17/252	0.99 (0.58, 1.56)	0.97 (0.57, 1.54)
No	<b>Yes</b>	<b>Yes</b>	63/1046	0.87 (0.67, 1.12)	0.86 (0.65, 1.10)
<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	978/12597	1.15 (1.06, 1.24)	1.12 (1.03, 1.21)

<sup>a</sup> Adjustment for maternal age at conception, maternal education, marital status, household income, frequency of prenatal care visits, pre-pregnancy BMI, parity, child's sex, birth season, and exposure to other four sources of household air pollution.

Abbreviations: MCS, mosquito coil smoke; PTB, preterm birth.