

**Appendix**  
**Associations Between State and Local Government Spending and Pregnancy-Related Mortality in the U.S.**  
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**Appendix Table 1.** Lagged associations between pregnancy-related mortality (2015-2019), including stratified by race/ethnicity, and state and local government expenditures (2010-2014)

	Overall PRM	Black PRM	Hispanic PRM	White PRM
	<b>ARR (95% CI)</b>	<b>ARR (95% CI)</b>	<b>ARR (95% CI)</b>	<b>ARR (95% CI)</b>
<i>Education services</i>	<b>1.08**</b> ( <b>1.03, 1.13</b> )	<b>1.14**</b> ( <b>1.10, 1.17</b> )	1.01 (0.95, 1.07)	1.03 (0.99, 1.08)
<i>Social services and income maintenance</i>	0.98 (0.94, 1.03)	<b>0.95*</b> ( <b>0.91, 1.00</b> )	<b>1.04*</b> ( <b>1.01, 1.07</b> )	1.01 (0.97, 1.05)
<i>Transportation</i>	<b>0.86**</b> ( <b>0.79, 0.94</b> )	<b>0.79**</b> ( <b>0.74, 0.86</b> )	<b>0.79**</b> ( <b>0.73, 0.86</b> )	<b>0.92*</b> ( <b>0.87, 0.98</b> )
<i>Public safety</i>	0.91 (0.77, 1.07)	<b>1.25*</b> ( <b>1.02, 1.52</b> )	<b>0.77**</b> ( <b>0.68, 0.88</b> )	<b>0.89*</b> ( <b>0.79, 0.99</b> )
<i>Environment and housing</i>	1.00 (0.94, 1.06)	0.93 (0.85, 1.01)	1.04 (0.93, 1.16)	0.99 (0.95, 1.04)

<sup>a</sup> Race/ethnicity categories are mutually exclusive (i.e., non-Hispanic Black, non-Hispanic White, and Hispanic any race).

<sup>b</sup> All models adjusted for local and state total spending per capita, state population size, state-level poverty, income inequality (Gini coefficient), % population with BA degree or higher, % non-Hispanic White population, % urban population, % foreign-born population, Medicaid expansion status, average % of births covered by Medicaid, average % of births to women over 35 years old, and regional differences. Models predicting the study's outcomes by the proportion of the overall spending on public safety domain also included state level violent crime rate as a covariate. Boldface indicates statistical significance (\*p<0.05; \*\*p<0.01).

PRM, pregnancy-related mortality; ARR, adjusted rate ratios.

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**Appendix Table 2.** Lagged associations between PRM (2015-2019), including stratified by race/ethnicity, and state and local government spending allocated to specific sub-domains (2010-2014).

Spending domains	Sub-domains	Overall PRM	Black PRM	Hispanic PRM	White PRM
		ARR (95% CI)	ARR (95% CI)	ARR (95% CI)	ARR (95% CI)
<i>Education services</i>	Elementary and secondary education	<b>1.09**</b> (1.04, 1.13)	<b>1.11**</b> (1.06, 1.16)	1.03 (0.97, 1.09)	1.05 (1.00, 1.10)
	Higher education	<b>0.93*</b> (0.86, 1.00)	0.94 (0.88, 1.01)	<b>0.92**</b> (0.86, 0.98)	<b>0.93*</b> (0.87, 0.98)
<i>Social services and income maintenance</i>	Public welfare	1.00 (0.96, 1.03)	0.95 (0.87, 1.04)	<b>1.03*</b> (1.00, 1.06)	1.00 (0.98, 1.03)
	Hospitals	0.99 (0.93, 1.06)	0.96 (0.91, 1.02)	1.00 (0.95, 1.06)	1.02 (0.98, 1.07)
	Health	0.92 (0.80, 1.05)	1.02 (0.86, 1.21)	1.04 (0.92, 1.18)	<b>0.90*</b> (0.81, 0.99)
<i>Transportation</i>	Highways and roads	<b>0.84**</b> (0.76, 0.93)	<b>0.79**</b> (0.72, 0.86)	<b>0.80**</b> (0.74, 0.86)	<b>0.90**</b> (0.84, 0.97)
<i>Public safety</i>	Police protection	<b>0.82*</b> (0.67, 0.99)	0.96 (0.67, 1.38)	<b>0.67**</b> (0.58, 0.76)	<b>0.67**</b> (0.54, 0.82)
	Fire protection	1.11 (0.83, 1.48)	1.70 (0.99, 2.94)	1.16 (0.65, 2.08)	<b>1.34**</b> (1.12, 1.59)
	Corrections	1.10 (0.91, 1.34)	<b>1.22*</b> (1.04, 1.43)	0.86 (0.65, 1.15)	0.93 (0.78, 1.10)
<i>Environment and housing</i>	Natural resources	0.87 (0.73, 1.04)	<b>0.80*</b> (0.64, 0.99)	0.97 (0.81, 1.17)	<b>0.88*</b> (0.79, 0.99)
	Parks and recreation	<b>0.60**</b> (0.43, 0.84)	<b>0.43**</b> (0.32, 0.60)	<b>0.53**</b> (0.47, 0.60)	<b>0.76**</b> (0.63, 0.91)
	Housing and community development	<b>1.28**</b> (1.06, 1.54)	1.11 (0.84, 1.45)	<b>1.35**</b> (1.19, 1.53)	<b>1.23*</b> (1.04, 1.45)
	Sewerage and solid waste management	1.15 (0.95, 1.38)	0.99 (0.76, 1.30)	<b>1.30*</b> (1.04, 1.61)	1.03 (0.85, 1.24)

<sup>a</sup> Race/ethnicity categories are mutually exclusive (i.e., non-Hispanic Black, non-Hispanic White, and Hispanic any race).

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<sup>b</sup>All models adjusted for local and state total spending per capita, state population size, state-level poverty, income inequality (Gini coefficient), % population with BA degree or higher, % non-Hispanic White population, % urban population, % foreign-born population, Medicaid expansion status, average % of births covered by Medicaid, average % of births to women over 35 years old, and regional differences. Models predicting the study's outcomes by the proportion of the overall spending on public safety domain also included state level violent crime rate as a covariate. Boldface indicates statistical significance (\* p<0.05; \*\* p<0.01). PRM, pregnancy-related mortality; ARR, adjusted rate ratios.

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**Appendix Table 3. State and local government spending in health and non-health domains per capita**

	Mean (SD)	Range	IQR	75 <sup>th</sup> percentile
Education services	3.13 (0.66)	2.03-5.08	0.68	3.35
Elementary and secondary education	1.99 (0.56)	1.16-3.88	0.60	2.19
Higher education	0.93 (0.26)	0.22-1.46	0.33	1.07
Social services and income maintenance	2.84 (0.86)	1.67-6.63	0.99	3.18
Public welfare	2.02 (0.74)	1.16-5.31	0.94	2.44
Hospitals	0.52 (0.38)	0.03-1.96	0.41	0.66
Health	0.28 (0.16)	0.09-0.83	0.19	0.36
Transportation	0.77 (0.42)	0.41-2.8	0.22	0.79
Highways and roads	0.67 (0.36)	0.34-2.21	0.17	0.68
Public safety	0.74 (0.22)	0.49-1.70	0.22	0.80
Police protection	0.32 (0.11)	0.18-0.89	0.12	0.37
Fire protection	0.14 (0.06)	0.04-0.39	0.08	0.18
Corrections	0.23 (0.07)	0.13-0.49	0.08	0.26
Environment and housing	0.68 (0.36)	0.39-2.74	0.24	0.74
Natural resources	0.12 (0.09)	0.03-0.57	0.09	0.15
Parks and recreation	0.14 (0.07)	0.07-0.41	0.07	0.16
Housing and community development	0.17 (0.16)	0.04-1.15	0.09	0.19
Sewerage and solid waste management	0.25 (0.13)	0.14-1.08	0.082	0.27

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**Appendix Table 4.** Associations between pregnancy-related mortality, including stratified by race/ethnicity, and state and local government spending per capita

	Overall PRM	Black PRM	Hispanic PRM	White PRM
	<b>ARR (95% CI)</b>	<b>ARR (95% CI)</b>	<b>ARR (95% CI)</b>	<b>ARR (95% CI)</b>
<i>Education services</i>	1.18 (0.67, 2.10)	<b>2.62**</b> <b>(1.51, 4.54)</b>	0.67 (0.41, 1.09)	1.00 (0.58, 1.72)
<i>Social services and income maintenance</i>	1.10 (0.73, 1.68)	0.96 (0.53, 1.73)	<b>1.41*</b> <b>(1.05, 1.90)</b>	1.16 (0.86, 1.55)
<i>Transportation</i>	<b>0.33**</b> <b>(0.16, 0.67)</b>	<b>0.29**</b> <b>(0.18, 0.47)</b>	<b>0.40*</b> <b>(0.16, 0.97)</b>	<b>0.42**</b> <b>(0.23, 0.77)</b>
<i>Public safety</i>	0.61 (0.21, 1.75)	0.90 (0.10, 8.31)	1.01 (0.34, 2.95)	0.31 (0.09, 1.07)
<i>Environment and housing</i>	1.08 (0.60, 1.96)	0.39 (0.13, 1.11)	<b>2.42*</b> <b>(1.26, 4.64)</b>	0.85 (0.46, 1.59)

<sup>a</sup> Race/ethnicity categories are mutually exclusive (i.e., non-Hispanic Black, non-Hispanic White, and Hispanic any race).

<sup>b</sup> All models adjusted for local and state total spending per capita, state population size, state-level poverty, income inequality (Gini coefficient), % population with BA degree or higher, % non-Hispanic White population, % urban population, % foreign-born population, Medicaid expansion status, average % of births covered by Medicaid, average % of births to women over 35 years old, and regional differences. Models predicting the study's outcomes by the proportion of the overall spending on public safety domain also included state level violent crime rate as a covariate. Boldface indicates statistical significance (\*p<0.05; \*\*p<0.01).

PRM, pregnancy-related mortality; ARR, adjusted rate ratios.

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**Appendix Table 5.** Associations between PRM, including stratified by race/ethnicity, and state and local government spending allocated to specific sub-domains (per capita).

Spending domains	Sub-domains	Overall PRM	Black PRM	Hispanic PRM	White PRM
		ARR (95% CI)	ARR (95% CI)	ARR (95% CI)	ARR (95% CI)
<i>Education services</i>	Elementary and secondary education	<b>2.03**</b> (1.30, 3.19)	<b>2.08**</b> (2.12, 3.68)	0.92 (0.55, 1.55)	1.63 (0.94, 2.80)
	Higher education	<b>0.28**</b> (0.18, 0.44)	<b>0.38**</b> (0.25, 0.58)	<b>0.38**</b> (0.20, 0.72)	<b>0.35**</b> (0.23, 0.54)
<i>Social services and income maintenance</i>	Public welfare	1.04 (0.82, 1.33)	1.47 (0.86, 2.51)	1.32 (0.87, 2.00)	1.14 (0.92, 1.40)
	Hospitals	1.07 (0.67, 1.71)	0.70 (0.45, 1.08)	0.91 (0.59, 1.40)	1.12 (0.73, 1.72)
	Health	1.21 (0.47, 3.07)	1.48 (0.33, 6.56)	2.03 (0.73, 5.62)	0.65 (0.27, 1.55)
<i>Transportation</i>	Highways and roads	<b>0.27**</b> (0.13, 0.55)	<b>0.22**</b> (0.13, 0.38)	<b>0.31**</b> (0.13, 0.70)	<b>0.36**</b> (0.02, 0.67)
<i>Public safety</i>	Police protection	<b>0.05*</b> (0.00, 0.63)	0.47 (0.01, 16.98)	0.13 (0.01, 1.30)	<b>0.02**</b> (0.00, 1.13)
	Fire protection	2.36 (0.11, 51.84)	2.78 (0.08, 99.73)	28.76 (0.93, 887.94)	22.54 (2.56, 198.58)
	Corrections	0.81 (0.16, 4.01)	2.81 (0.25, 31.47)	1.51 (0.31, 7.38)	0.73 (0.17, 3.11)
<i>Environment and housing</i>	Natural resources	0.64 (0.26, 1.60)	<b>0.14**</b> (0.03, 0.60)	<b>3.49*</b> (1.04, 11.69)	0.49 (0.21, 1.14)
	Parks and recreation	<b>0.02*</b> (0.00, 0.49)	<b>&lt;0.00**</b> (0.00, 0.02)	<b>&lt;0.00**</b> (0.00, 0.02)	<b>0.03**</b> (0.00, 0.37)
	Housing and community development	8.70 (0.79, 95.84)	2.00 (0.04, 90.36)	4.28 (0.44, 41.50)	8.57 (0.98, 75.00)

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	Sewerage and solid waste management	2.53 (0.27, 24.13)	15.64 (0.57, 426.32)	<b>19.19**</b> <b>(6.66, 55.28)</b>	0.85 (0.08, 9.20)
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