

Supplemental Table 1. Census Tract-Level Variables Used in Computation of the Neighborhood Deprivation Index. Data Downloaded from Summary File 3 of the 2000 US Census

Analysis Variable (tract-level)	Census Variable(s)	Census Variable Number(s)
Percent with < high school education	Total population aged 25+	P037001
	Males: no schooling, ..., 12th grade, no diploma	P037003, ..., P037010
	Females: no schooling, ..., 12th grade, no diploma	P037020, ..., P037027
Percent males not in the labor force	Total population, males aged 16+	P043002
	Males aged 16+ not in labor force	P043008
Percent unemployed	Total male civilian population aged 16+ in labor force	P043005
	Total female civilian population aged 16+ in labor force	P043012
	Males aged 16+ unemployed	P043007
	Females aged 16+ unemployed	P043014
Percent renter-occupied households	Total number of occupied housing units	H007001
	Renter occupied housing units	H007003
Percent crowding (>1 person/room)	Total number of occupied housing units	H020001
	Owner occupied: 1.01, ..., 2.01+ occupants per room	H020005, ..., H020007
	Renter occupied: 1.01, ..., 2.01+ occupants per room	H020011, ..., H020013
Percent below poverty level	Total population for whom poverty status is determined	P087001
	Individuals with income below poverty level in 1999	P087002
Percent female-headed families	Total number of family households	P010006
	Female headed family households, children aged <18	P010015
Percent income <\$30,000 per year	Total number of households	P052001
	<\$10,000 per year, ..., \$29,999 per year	P052002, ..., P052006
Percent on public assistance	Total number of households	P064001
	Households on public assistance	P064002
Percent no vehicle	Total number of occupied housing units	H044001
	Owner-occupied with no vehicle available	H044003
	Renter-occupied with no vehicle available	H044010
Percent males in profession	Total employed civilian males aged 16+	P050002
	Males aged 16+ in professional occupations	P050010
Percent females in profession	Total employed civilian females aged 16+	P050049
	Females aged 16+ in professional occupations	P050057
Percent males in management	Total employed civilian males aged 16+	P050002
	Males aged 16+ in management occupations	P050004
Percent females in management	Total employed civilian females aged 16+	P050049
	Females aged 16+ in management occupations	P050051

Supplemental Table 1, continued. Census Tract-Level Variables Used in Computation of the Neighborhood Deprivation Index. Data Downloaded from Summary File 3 of the 2000 US Census

Analysis Variable (tract-level)	Census Variable(s)	Census Variable Number(s)
Median household income	Median household income in 1999	P053001
	Total number of households	P010001
Median individual income	Median earnings for individuals aged 16+ with earnings	P085001
	Total number of individuals aged 16+ with earnings	P084001
Median value of housing units	Median value of owner-occupied housing units	H085001
	Total number of owner-occupied housing units	H084001
	Population aged 5+ in same house since 1995	PCT021002

Supplemental Table 2

Distribution of births to non-Hispanic black women across covariate levels by neighborhood type: New York City 1995-2003

COVARIATE	NEIGHBORHOOD TYPE											
	High Hispanic Density ^a			High Asian Density ^a			High White Density ^a			High Black Density ^a		
	N	%	% PTB	N	%	% PTB	N	%	% PTB	N	%	% PTB
Age (years)												
<20	3,073	12%	11%	2,042	8%	9%	2,299	9%	10%	2,408	9%	10%
20-34	18,724	73%	10%	18,461	72%	10%	17,600	69%	9%	18,187	72%	10%
35+	3,784	15%	13%	5,047	20%	12%	5,546	22%	12%	4,843	19%	13%
Maternal education (years)												
<12, age<20	2,165	9%	11%	1,319	5%	10%	1,531	6%	10%	1,421	6%	11%
<12, age>=20	7,000	28%	11%	3,448	14%	12%	2,796	11%	12%	3,111	12%	12%
12	8,999	36%	10%	9,266	37%	10%	7,958	32%	11%	9,435	38%	11%
13-15	5,151	20%	10%	6,400	25%	9%	6,908	28%	10%	7,423	30%	10%
16+	1,863	7%	9%	4,775	19%	9%	5,900	24%	8%	3,745	15%	10%
Previous births												
1	9,456	37%	10%	11,897	47%	10%	12,230	48%	10%	11,086	44%	10%
2-5	15,443	60%	11%	13,429	53%	10%	12,991	51%	10%	14,065	55%	10%
6+	677	3%	19%	223	1%	17%	223	1%	18%	287	1%	17%
Prepregnancy weight (pounds)												
<125	4,559	20%	12%	5,202	23%	10%	4,849	21%	11%	4,076	17%	11%
125-150	8,605	37%	10%	8,746	38%	10%	9,169	39%	10%	8,434	36%	10%
>150	10,169	44%	9%	9,091	39%	10%	9,215	40%	9%	11,200	47%	10%
Tobacco use												
Nonsmoker	23,334	92%	10%	24,430	96%	10%	24,248	96%	10%	24,296	96%	10%
Smoker	2,132	8%	18%	975	4%	18%	1,046	4%	16%	982	4%	17%
Late or no prenatal care												
No	16,061	73%	10%	17,691	77%	9%	17,602	78%	10%	17,690	78%	10%
Yes	6,017	27%	11%	5,236	23%	10%	4,914	22%	10%	5,116	22%	11%

^a"High density" refers to >90th percentile ethnic density as experienced by black mothers in the birth records. The 90th percentile corresponds to neighborhoods that are >61.9% Hispanic, >8.1% Asian, >23.6% non-Hispanic white, and >88.9% non-Hispanic black. [Women could live in neighborhoods with "high density" of multiple ethnic groups.](#)

Supplemental Table 2, continued

Distribution of births to non-Hispanic black women by neighborhood type: New York City 1995-2003

COVARIATE	NEIGHBORHOOD TYPE											
	High Hispanic Density ^a			High Asian Density ^a			High White Density ^a			High Black Density ^a		
	N	%	% PTB	N	%	% PTB	N	%	% PTB	N	%	% PTB
Payment for delivery												
Private insurance	6,444	25%	9%	10,853	43%	9%	12,171	49%	9%	10,043	41%	10%
Medicaid	17,969	71%	11%	13,387	53%	10%	11,882	47%	11%	13,728	56%	11%
Self pay	981	4%	15%	994	4%	16%	968	4%	14%	920	4%	16%
Nativity												
US-born	16,434	65%	12%	11,520	45%	11%	13,933	55%	11%	12,649	50%	11%
Foreign-born	8,912	35%	8%	13,856	55%	10%	11,293	45%	9%	12,688	50%	10%
Residential stability												
Less stable	12,272	48%	10%	16,089	63%	10%	14,804	58%	10%	1,223	5%	11%
More stable	13,309	52%	11%	9,461	37%	11%	10,640	42%	10%	24,215	95%	10%
Neighborhood deprivation												
Richer	453	2%	9%	18,391	72%	10%	21,632	85%	10%	17,723	70%	10%
Poorer	25,128	98%	11%	7,159	28%	11%	3,812	15%	10%	7,715	30%	12%

^a"High density" refers to >90th percentile ethnic density as experienced by black mothers in the birth records. The 90th percentile corresponds to neighborhoods that are >61.9% Hispanic, >8.1% Asian, >23.6% non-Hispanic white, and >88.9% non-Hispanic black. [Women could live in neighborhoods with "high density" of multiple ethnic groups.](#)

Supplemental Table 3

Fully adjusted preterm birth risk differences per 1,000 births for non-Hispanic black women associated with a change from 10th to 90th percentiles of Hispanic, Asian, and non-Hispanic black ethnic density: New York City 1995-2003

ETHNIC DENSITY EXPOSURE	MODEL			
	Fully-adjusted ^a : US-born		Fully-adjusted ^a : Foreign-born	
	RD ^b	(95% CI)	RD ^b	(95% CI)
Hispanic	3.8	(-5.3, 12.9)	-17.4	(-27.4, -7.4)
Asian	-0.3	(-3.6, 3.0)	0.5	(-2.7, 3.7)
Non-Hispanic black	11.1	(1.0, 21.2)	-2.4	(-12.9, 8.1)

^aFully adjusted models included receipt of early prenatal care and pre-pregnancy weight

^bFully adjusted risk differences were calculated for women aged 20-34 who were high-school educated, had 2-5 previous live births, weighed between 125 and 150 pounds pre-pregnancy, were nonsmokers, had early prenatal care, were on Medicaid, and resided in a more stable, poorer, and white neighborhood.

Supplemental Table 4

Preterm birth risk differences per 1,000 births for non-Hispanic black women associated with a change from 10th to 90th percentiles of Hispanic, Asian, and non-Hispanic black ethnic density under alternative population and outcome specifications: New York City 1995-2003

RESTRICTION & ETHNIC DENSITY EXPOSURE	MODEL			
	Adjusted: US-born		Adjusted: Foreign-born	
	RD ^a	(95% CI)	RD ^a	(95% CI)
Spontaneous PTB Only				
Hispanic	-4.2	(-13.2, 4.8)	-12.1	(-20.0,-4.2)
Asian	-1.2	(-4.4, 1.9)	0.1	(-2.3, 2.6)
Non-Hispanic black	2.6	(-7.4, 12.6)	-0.6	(-9.1, 7.9)
Primips Only				
Hispanic	0.7	(-12.3, 13.7)	-12.6	(-26.6, 1.5)
Asian	1.4	(-3.4, 6.3)	2.9	(-0.9, 6.7)
Non-Hispanic black	10.9	(-4.1, 26.0)	2.6	(-12.0, 17.1)
Very Preterm				
Hispanic	3.1	(-1.5, 7.7)	-5.7	(-10.4, -1.1)
Asian	-0.6	(-2.1, 0.8)	-1.2	(-2.9, 0.4)
Non-Hispanic black	6.2	(0.9, 11.5)	-2.6	(-7.5, 2.4)

^a Adjusted risk differences were calculated for women aged 20-34 who were high school educated, were nonsmokers, were on Medicaid, and resided in a more stable, poorer, and white neighborhood. Spontaneous PTB and very preterm risk differences were calculated for women with 2-5 previous live births.

Supplemental Figure 1a

Distribution of births to non-Hispanic black women in relation to non-Hispanic black density^a: New York City, 1995-2003

^aProximity-weighted non-Hispanic black density computed from 2000 US Census data with a 500-meter radius and categorized into 10th percentiles based on non-Hispanic black births.

Supplemental Figure 1b

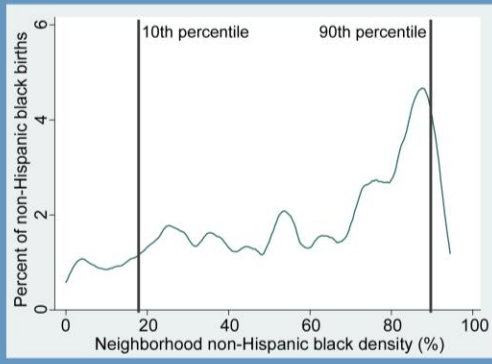
Distribution of births to non-Hispanic black women in relation to Hispanic density^a: New York City, 1995-2003

^aProximity-weighted Hispanic density computed from 2000 US Census data with a 500-meter radius and categorized into 10th percentiles based on non-Hispanic black births.

Supplemental Figure 1c

Distribution of births to non-Hispanic black women in relation to Asian density^a: New York City, 1995-2003

^aProximity-weighted Asian density computed from 2000 US Census data with a 500-meter radius and categorized into 10th percentiles based on non-Hispanic black births.



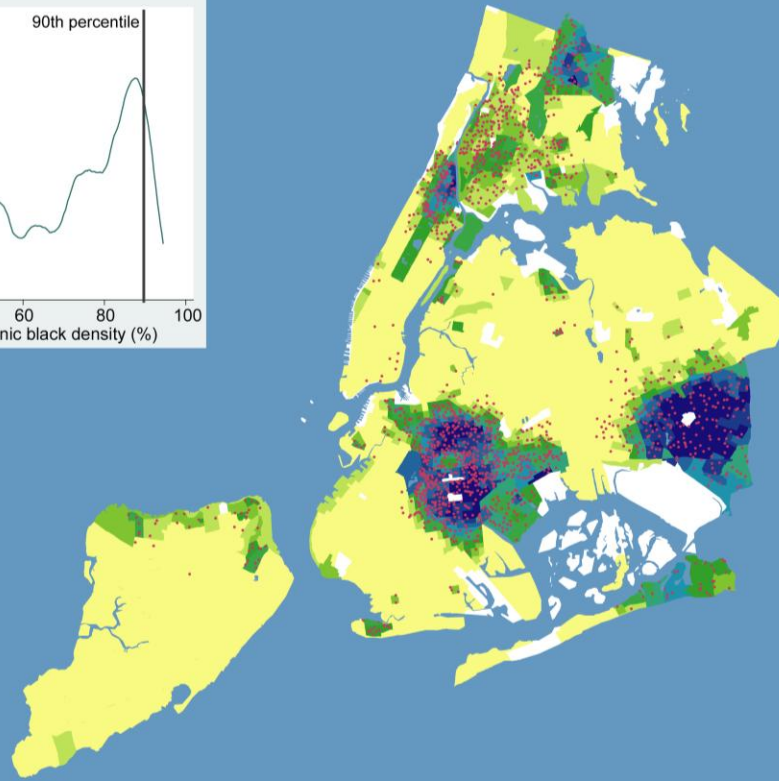
Births to non-Hispanic black women

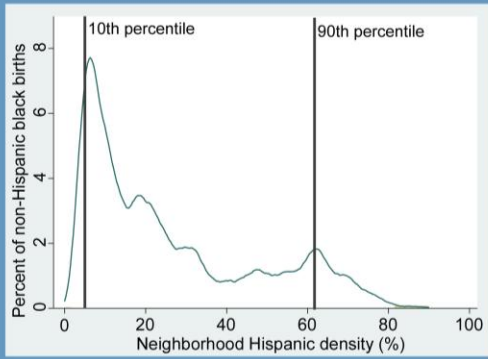
• 1 Dot = 140

Neighborhood non-Hispanic black density (%).

10th percentiles

0.0 - 17.9
 18.0 - 28.4
 28.5 - 41.1
 41.2 - 53.1
 53.2 - 64.1
 64.2 - 73.8
 73.9 - 80.2
 80.3 - 85.3
 85.4 - 88.9
 89.0 - 100.0

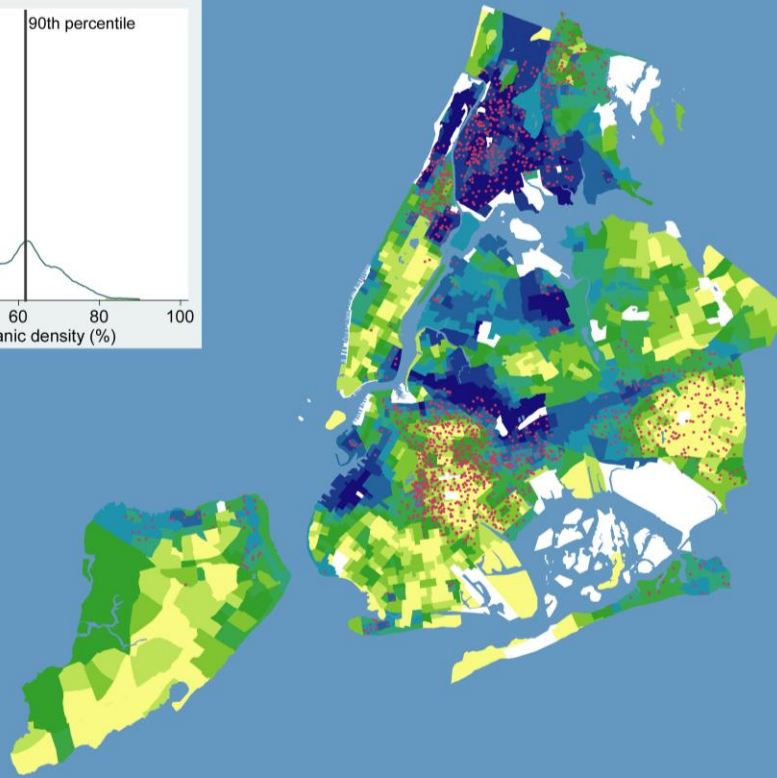
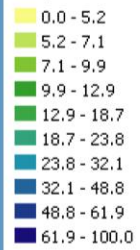


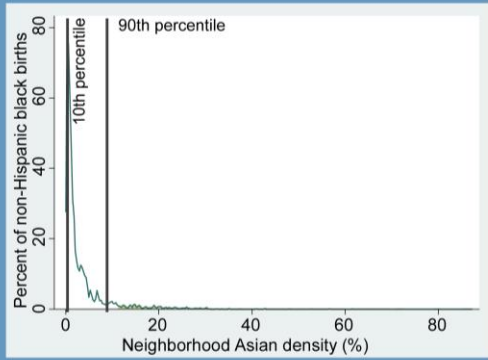


Births to non-Hispanic black women

1 Dot = 140

Neighborhood Hispanic density (%), 10th percentiles





Births to non-Hispanic black women

• 1 Dot = 140

Neighborhood Asian density (%), 10th percentiles

