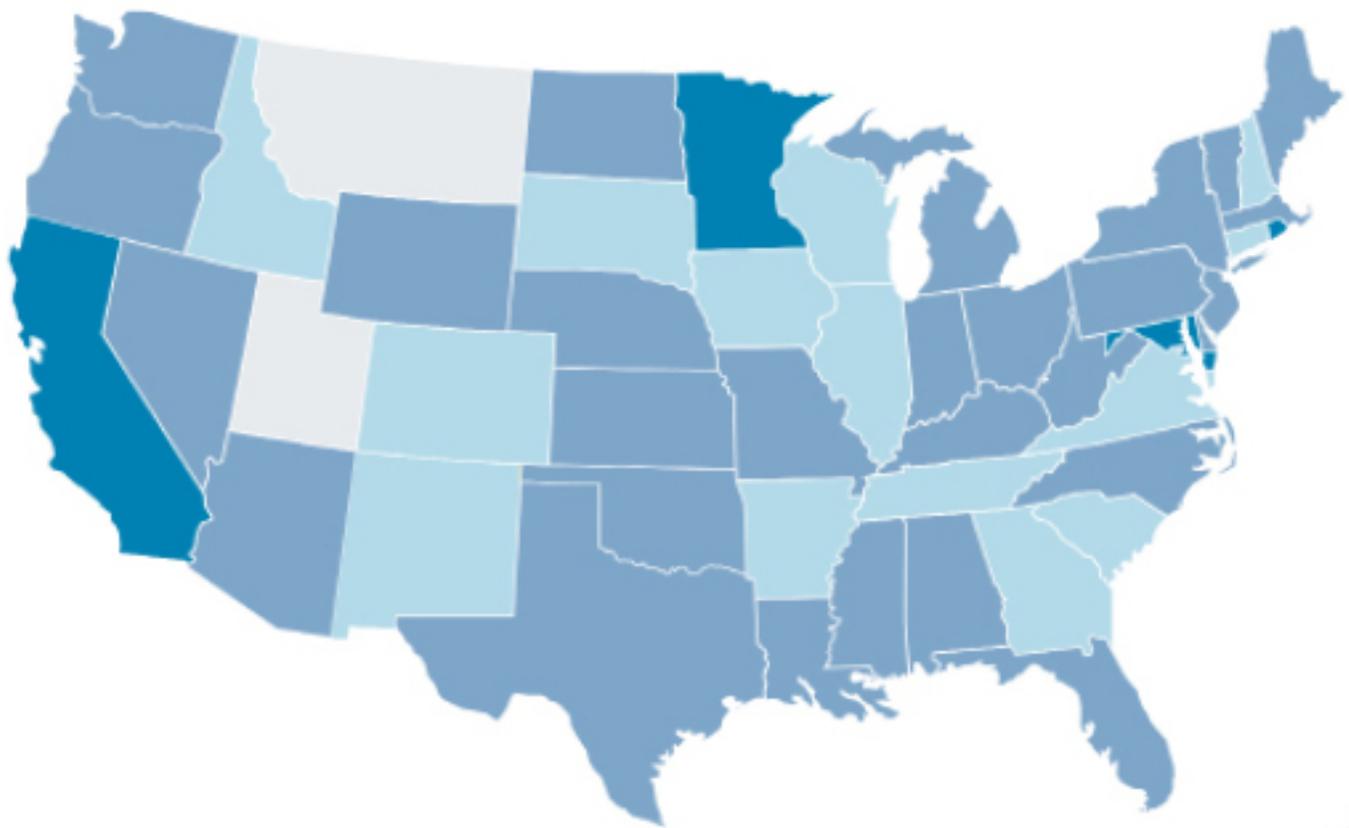




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National- and State-Level Estimates of WIC Eligibility and WIC Program Reach in 2016



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Appendix A. Detailed Tables for National WIC Estimates: CY 2016

The tables in appendix A present detailed information on the 2016 national-level estimates of eligibility for the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC) by participant category. The tables document the assumptions and calculations used to produce the national estimates and provide more detailed breakdowns of the estimates by participant category. Some of the tables include the same information provided in volume I; they are repeated here to provide a comprehensive record of all methods and estimates for 2016. Note that except when specified, all the tables that show national data provide information for individuals in the 50 States, the District of Columbia, and Puerto Rico and the other four U.S. territories served by WIC. A description of each table follows.

Table A.1. Steps, Data Sources, Methods, and Adjustment Factors Used for 2016 Estimates of WIC Eligibility

This table summarizes the data sources, methods, and adjustment factors used to estimate WIC eligibility for infants, children, and pregnant and postpartum women. The following data sources were used for the 2016 estimates: (1) 2017 Current Population Survey Annual Social and Economic Supplement (CPS-ASEC) data (National Bureau of Economic Research [NBER], n.d.b.); (2) 2016 American Community Survey (ACS) and Puerto Rico Community Survey (PRCS) data (The Integrated Public Use Microdata Series-USA [IPUMS-USA], n.d.); and (3) 2016 U.S. Census Bureau International Data Base (IDB) data (U.S. Census Bureau, n.d.d).¹

Table A.2. Estimated Average Monthly Number of WIC-Eligible Individuals by Participant Category: CY 2016

This table shows the estimated average monthly number of WIC-eligible individuals by participant category in calendar year (CY) 2016 and each group as a percentage of the total number eligible. It also provides the total population in each participant category and the eligibility rate, which is defined as the percentage of the total population in each category that is estimated to be eligible for WIC.

Table A.3a. Four-Year Accumulations of U.S. Census Bureau Estimates and CPS-ASEC Estimates for Infants and Children by Single-Year Age Group, Race, and Gender: March 2014–March 2017

This table provides more detail on the adjustment of sampling weights for infants and children in the CPS-ASEC data (as referenced in the second row of table A.1; (NBER, n.d.b.). For each year of age (ages 0, 1, 2, 3, and 4) and each of four racial/ethnic groups (White-Only Non-Hispanic, Black-Only Non-Hispanic, Other Non-Hispanic, and Hispanic), the table shows the 4-year accumulation of U.S. Census Bureau population estimates (U.S. Census Bureau, n.d.a), the 4-year accumulation of the March CPS-ASEC total weighted population (NBER, n.d.b.), and the ratio of those two figures. That ratio was used as the weight adjustment when the direction of the difference between the March 2017 Census Bureau population estimate and the CPS weighted count (see table A.3b) was the same as for the 4-year accumulations (i.e., if the Census Bureau figure was either greater or smaller in both cases). If the direction of the difference was not the same for a particular group, no weight adjustment was performed (i.e., the weight adjustment factor was 1.0).

Table A.3b. U.S. Census Bureau Estimates and CPS-ASEC Estimates for Infants and Children by Single-Year Age Group, Race, and Gender: March 2017

¹ The following terms are used in table A.1 and appear again in this volume: Supplemental Nutrition Assistance Program (SNAP); Temporary Assistance for Needy Families (TANF).

This table shows the Census Bureau population estimates and CPS weighted population figures by single-year age groups, race, and gender, and the ratio of Census Bureau estimates to CPS figures, for March 2017 (U.S. Census Bureau, n.d.a.; NBER, n.d.b.; see the description of table A.3a for an explanation of how this information was used in the weight-adjustment process.)

Table A.3c. Effects of Applying Population Adjustment Factors to Population Counts for Infants and Children in the 2017 CPS-ASEC by Single-Year Age Group, Race, and Gender

This table shows the results of applying the population adjustment factors (computed based on the information in tables A.3a and A.3b) to the weights for infants and children in the March CPS-ASEC data.

Table A.4. Breastfeeding Adjustment Factor Calculations for WIC-Eligible Postpartum Women: 2005–2016

This table shows information on the computation of postpartum eligibility for breastfeeding and non-breastfeeding mothers. The first three sections of the table show three breastfeeding rates based on National Immunization Survey (NIS) data from the Centers for Disease Control and Prevention (CDC)—the percentage of new mothers breastfeeding their infants in the hospital after giving birth (ever-breastfed), at 6 months postpartum, and at 12 months postpartum—with variations by race and ethnicity.

The next section of the table shows three adjustment factors. The first factor adjusted for the fact that the number of mothers was slightly smaller than the number of infants because of the combined impact of multiple births and infant deaths; it was constant across the period. The second factor adjusted for the fact that (prior to 2014) the analysis assumed some breastfeeding mothers lost eligibility at the 6-month point because they were no longer income-eligible or adjunctively eligible; this factor changed gradually from 0.94 in 2005 to 1.0 for 2014 through 2016. The final factor was used to estimate average monthly breastfeeding rates; that is, the average monthly rate across the first 6 months was assumed to be equal to the mean of the ever-breastfed and 6-month rates multiplied by this factor. This factor, 0.87, was assumed to be constant across the period.

The last section of the table shows the final postpartum adjustment factors produced using the information in the prior portions of the table. For each year, the factors are shown for estimating breastfeeding and non-breastfeeding eligibility for each racial/ethnic group. For example, for Hispanic women in 2016, the estimated average monthly number of women eligible for WIC as breastfeeding mothers was computed as 0.483 times the estimated number of WIC-eligible Hispanic infants.

Table A.5. Step-by-Step Adjustments Applied to CPS-ASEC Data To Derive the Average Monthly Number of WIC-Eligible Individuals by Participant Category: CY 2016

This table shows the step-by-step adjustments made from the total number of infants and children to the final numbers of infants, children, and pregnant and postpartum women that were eligible for WIC in the United States in 2016; it also shows the total number eligible in Puerto Rico and each of the other four U.S. territories served by WIC. See tables B.7a and B.7b for the step-by-step adjustments made to derive the total number of individuals eligible for WIC in Puerto Rico and each of the other territories, respectively.

Tables A.6a and A.6b. Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC by Income and Adjunctive Eligibility in the 2016 CPS-ASEC by Demographic Characteristics: CY 2016

These tables show the estimates of WIC-eligible infants and children by demographic and income characteristics in the March CPS-ASEC. Note that these tables do not include infants and children in Puerto Rico and the other U.S. territories. Tables A.6a1 and A.6a2 show the characteristics of WIC-eligible infants and children in the data as determined by using unadjusted person weights, and tables A.6b1 and A.6b2 show these characteristics as

determined by using weights that have been fully adjusted, including adjustments for the CPS undercount/overcount (population adjustment), monthly income and certification periods (annual-to-monthly adjustment), and nutritional risk. A comparison of table A.6a and table A.6b shows the impact of the CPS weight adjustments on the national estimates of WIC-eligible infants and children.

Results are also shown in terms of counts (see tables A.6a1 and A.6b1) and percentage terms (see tables A.6a2 and A.6b2). For example, A.6b1 shows that with the adjusted weights, 1.004 million male infants and 1.122 female infants were eligible for WIC in March 2017; A.6b2 shows that among WIC-eligible infants, 47.2 percent were male, and 52.8 percent were female.

Table A.7. Changes in the Total Population, Total Number of Individuals Eligible for WIC, and WIC Eligibility Rate by Participant Category: CY 2015–CY 2016

This table shows the changes in the numbers of individuals in the total population and the WIC-eligible population by participant category, and the WIC eligibility rate, between 2015 and 2016.

Table A.8. Stepwise Comparison of Changes in Average Monthly Numbers of Infants and Children Eligible for WIC as Estimated in the March CPS-ASEC: CY 2015–CY 2016

This table shows the step-by-step percentage changes in the numbers of infants and children from CY 2015 to CY 2016 (excluding Puerto Rico and the other U.S. territories). For example, it shows that the number of infants and children eligible for WIC through adjunctive eligibility increased by 2.6 percent between CY 2015 and CY 2016.

Table A.9. Standard Error and Coefficient of Variation for 2016 National Estimates by Participant Category

This table presents the standard error of the estimate and coefficient of variance for the national estimates of the total population of women, infants, and children and the number of individuals eligible for WIC by participant category.

Table A.1. Steps, Data Sources, Methods, and Adjustment Factors Used for 2016 Estimates of WIC Eligibility

Step	Data Source(s)	Methods and Adjustment Factors	
Infants and Children			
Demographic eligibility	<ul style="list-style-type: none"> ● 2017 CPS-ASEC (National estimates) ● 2016 ACS (State estimates) ● 2016 PRCS (Puerto Rico estimates) ● 2016 IDB (Other U.S. territories estimates) 	Identify individuals aged 0, 1, 2, 3, and 4 in each survey.	
Weight adjustment	<ul style="list-style-type: none"> ● National estimates <ul style="list-style-type: none"> – 2016 “vintage” postcensal population estimates from U.S. Census Bureau; March CPS-ASEC data for 2014, 2015, 2016 and 2017 ● State and Puerto Rico estimates <ul style="list-style-type: none"> – 2016 “vintage” postcensal population estimates from U.S. Census Bureau for July 2016 	Adjust sampling weights to account for undercount or overcount in CPS estimates relative to U.S. Census Bureau estimates by year of age, gender, and four race/ethnic categories (White-Only Non-Hispanic, Black-Only Non-Hispanic, Other Non-Hispanic, and Hispanic).	
		Adjustment Factors for Females	Adjustment Factors for Males
		<ul style="list-style-type: none"> ● Infants <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.016 – Black-Only Non-Hispanic: 1.106 – Other Non-Hispanic: 1.099 – Hispanic: 1.000 ● Children aged 1 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.004 – Black-Only Non-Hispanic: 0.911 – Other Non-Hispanic: 0.901 – Hispanic: 0.979 ● Children aged 2 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.009 – Black-Only Non-Hispanic: 0.975 – Other Non-Hispanic: 0.920 – Hispanic: 1.012 ● Children aged 3 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.014 – Black-Only Non-Hispanic: 0.984 – Other Non-Hispanic: 0.972 – Hispanic: 1.000 ● Children aged 4 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.012 – Black-Only Non-Hispanic: 1.000 – Other Non-Hispanic: 1.000 – Hispanic: 1.012 	<ul style="list-style-type: none"> ● Infants <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.011 – Black-Only Non-Hispanic: 1.138 – Other Non-Hispanic: 1.000 – Hispanic: 1.013 ● Children aged 1 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.002 – Black-Only Non-Hispanic: 0.880 – Other Non-Hispanic: 0.973 – Hispanic: 1.000 ● Children aged 2 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.003 – Black-Only Non-Hispanic: 1.010 – Other Non-Hispanic: 1.000 – Hispanic: 1.000 ● Children aged 3 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.002 – Black-Only Non-Hispanic: 1.066 – Other Non-Hispanic: 0.954 – Hispanic: 1.000 ● Children aged 4 <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.002 – Black-Only Non-Hispanic: 0.949 – Other Non-Hispanic: 1.000 – Hispanic: 1.000

Step	Data Source(s)	Methods and Adjustment Factors
Income eligibility	<ul style="list-style-type: none"> ● 2017 CPS-ASEC (National estimates) ● 2016 ACS (State estimates) ● 2016 PRCS (Puerto Rico estimates) ● 2016 IDB (Other U.S. territories estimates) ● Blended FY 2015 and FY 2016 Federal Poverty Guidelines 	Count as eligible if prior year's annual income was \leq 185 percent of the Federal Poverty Guidelines.
Adjunctive eligibility	<ul style="list-style-type: none"> ● 2017 CPS-ASEC ● 2016 ACS ● 2016 PRCS 	Add in as eligible those infants and children in families who reported participating in Medicaid, SNAP, or TANF at any point during the prior calendar year.
Adjust for fluctuations in monthly income and certification periods	Average of factors for 2010, 2011, and 2012 as computed from 2008 Survey of Income and Program Participation (SIPP) panel	<p>Adjust estimates to account for impact of monthly fluctuations in income and program participation and for impact of 6- and 12-month certification periods.^a</p> <ul style="list-style-type: none"> ● Infants adjustment factor (used for estimates from PRCS and IDB data): 1.14 ● Infants adjustment factors by race and ethnicity (used for estimates from CPS-ASEC and ACS data) <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.20 – All others: 1.07 ● Children adjustment factor assuming 12-month certification periods (used for estimates from PRCS and IDB data): 1.05 ● Children adjustment factors by race and ethnicity (used for estimates from CPS-ASEC data) <ul style="list-style-type: none"> – White-Only Non-Hispanic: 1.09 – All others: 1.03
Adjust for nutritional risk	Committee on National Statistics (CNSTAT) panel	<p>Multiply infant and child estimates by factor to account for otherwise eligible infants and children who might not be at nutritional risk.</p> <ul style="list-style-type: none"> ● Adjustment factors <ul style="list-style-type: none"> – Infants: 0.97 – Children: 0.99

Step	Data Source(s)	Methods and Adjustment Factors
Pregnant and Postpartum Women		
Starting point	Infants as estimated using methods outlined earlier in table	Use as a starting point the final average monthly eligibility estimate for infants.
Adjust for multiple births and infant deaths	Data on multiple births and infant and fetal deaths from 2004 Vital Statistics data; March 2004 U.S. Census Bureau estimates for count of infants	Multiply by factor to account for impact of multiple births and infant deaths (so the number of pregnant women/mothers is not exactly equal to the number of infants). Adjustment factor: 0.9961
For pregnant women: Adjust for length of pregnancy and income during pregnancy	2001, 2004, and 2008 panels of SIPP data	Multiply by combined factor to account for (1) 9 months of pregnancy (0.75 factor) and (2) lower likelihood of financial eligibility during pregnancy versus after birth (0.9 factor). Combined adjustment factor: 0.675
For postpartum women: Adjust for breastfeeding status	CDC NIS breastfeeding rates computed for 2014 birth cohort (NIS survey years 2015 and 2016)	Multiply by factors to estimate average monthly women eligible for WIC as breastfeeding women (0 < 12 months postpartum) or non-breastfeeding women (< 6 months postpartum). Separate State-level breastfeeding adjustments are used for the ACS data. <ul style="list-style-type: none"> ● Breastfeeding (used for estimates from PRCS and IDB data): 0.442 ● Breastfeeding by race and ethnicity (used for estimates from CPS-ASEC) <ul style="list-style-type: none"> – White-Only Non-Hispanic: 0.442 – Black-Only Non-Hispanic: 0.369 – Other Non-Hispanic: 0.432 – Hispanic: 0.483 ● Non-breastfeeding (used for estimates from PRCS and IDB data): 0.236 ● Non-breastfeeding by race and ethnicity (used for estimates from CPS-ASEC) <ul style="list-style-type: none"> – White-Only Non-Hispanic: 0.239 – Black-Only Non-Hispanic: 0.273 – Other Non-Hispanic: 0.245 – Hispanic: 0.212
Adjust for nutritional risk	CNSTAT panel	Multiply pregnant and postpartum women estimates by factor to account for some otherwise eligible women who may not have been at nutritional risk. The estimates assume all postpartum women were at nutritional risk. Adjustment factors: Pregnant women: 0.97; Postpartum women: 1.0

Notes

^a An adjustment factor for the total number of children (1.04) was also calculated but not used for any adjustment. The separate adjustment factors by race and ethnicity were used for the estimates. The data sources listed in this table are as follows, in order of mention: for 2017 CPS-ASEC data, see NBER, n.d.b.; for 2016 ACS and PRCS data, see IPUMS-USA, n.d.; for 2016 IDB data, see U.S. Census Bureau, n.d.d; for March 2014, 2015, 2016, 2017 CPS-ASEC data, see NBER, n.d.b.; for July 2016 postcensal population estimate data, see U.S. Census Bureau, n.d.b, n.d.e; for 2015/2016 and 2016/2017 Federal Poverty Guidelines data, see Special Supplemental Nutrition Program for Women, Infants and Children (WIC): Income Eligibility Guidelines, 2015, 2016; for 2004 Vital Statistics data, see National Center for Health Statistics, 2004; for 2001, 2004, 2008 Survey of Income and Program Participation (SIPP) panel data, see U.S. Census Bureau, n.d.f; for the Committee on National Statistics panel data, see Ver Ploeg & Betson, 2003. CDC NIS breastfeeding rates are based on unpublished internal CDC data. Adjustment factors shown in this table were used to produce estimates of eligible individuals. When applicable, the same adjustment factors were used to produce estimates of the total population; as a result of differences in breastfeeding rates, adjustment factors differed for WIC-eligible mothers and the total population of mothers.

Table A.2. Estimated Average Monthly Number of WIC-Eligible Individuals by Participant Category: CY 2016

Participant Category	Number Eligible	Percent of Total Eligible	Total Population ^a	Eligibility Rate ^b (Percent)
Infants	2,159,041	15.5	3,966,090	54.4
Total children aged 1–4	8,907,712	63.9	16,193,444	55.0
Children aged 1	2,317,916	16.6	4,068,849	57.0
Children aged 2	2,222,568	16.0	4,080,801	54.5
Children aged 3	2,215,120	15.9	4,034,985	54.9
Children aged 4	2,152,108	15.4	4,008,809	53.7
Total women	2,867,042	20.6	6,913,589	41.5
Pregnant women	1,408,119	10.1	2,962,967	47.5
Total postpartum women	1,458,923	10.5	3,950,623	36.9
Breastfeeding women	949,592	6.8	2,241,095	42.4
Non-breastfeeding women	509,331	3.7	1,709,528	29.8
Total	13,933,795	100.0	27,073,124	51.5

Notes

^a The total population consists of individuals in the Nation, Puerto Rico, and the other U.S. territories served by WIC in each participant category.

^b The eligibility rate is the ratio of total individuals eligible for WIC to the total population in each participant category.

Sources: NBER, n.d.b; IPUMS-USA, n.d.; U.S. Census Bureau, n.d.d

Table A.3a. Four-Year Accumulations of U.S. Census Bureau Estimates and CPS-ASEC Estimates for Infants and Children by Single-Year Age Group, Race, and Gender: March 2014–March 2017

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Infants	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	3,841,692	1,071,950	826,590	2,003,185	7,743,417	4,044,973	1,106,569	867,891	2,088,458	8,107,891	7,886,665	2,178,519	1,694,481	4,091,643	15,851,308
CPS estimate	3,782,011	969,364	752,345	2,002,646	7,506,368	3,989,589	962,636	851,386	2,061,656	7,865,266	7,771,600	1,932,000	1,603,731	4,064,302	15,371,634
Ratio of Census estimate to CPS estimate	1.016	1.106	1.099	1.000	1.032	1.014	1.150	1.019	1.013	1.031	1.015	1.128	1.057	1.007	1.031
Children aged 1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	3,849,593	1,077,318	832,944	2,007,299	7,767,154	4,058,280	1,107,223	874,515	2,087,472	8,127,490	7,907,873	2,184,541	1,707,459	4,094,771	15,894,644
CPS estimate	3,832,880	1,182,879	924,413	2,060,291	8,000,461	4,050,398	1,309,462	899,212	2,103,361	8,362,431	7,883,278	2,492,341	1,823,625	4,163,652	16,362,892
Ratio of Census estimate to CPS estimate	1.004	0.911	0.901	0.974	0.971	1.002	0.846	0.973	0.992	0.972	1.003	0.877	0.936	0.983	0.971
Children aged 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	3,857,254	1,079,551	832,495	2,015,011	7,784,311	4,066,465	1,110,506	873,587	2,094,246	8,144,804	7,923,719	2,190,057	1,706,082	4,109,257	15,929,115
CPS estimate	3,824,022	1,106,709	905,319	1,990,702	7,826,752	4,055,393	1,040,263	850,848	2,095,194	8,041,696	7,879,415	2,146,972	1,756,167	4,085,896	15,868,448
Ratio of Census estimate to CPS estimate	1.009	0.975	0.920	1.012	0.995	1.003	1.068	1.027	1.000	1.013	1.006	1.020	0.971	1.006	1.004

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Children aged 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Census Bureau estimates	3,870,408	1,083,281	826,918	2,031,751	7,812,358	4,077,495	1,116,784	865,947	2,109,838	8,170,064	7,947,903	2,200,065	1,692,865	4,141,589	15,982,422
CPS estimate	3,817,847	1,100,761	880,374	2,023,297	7,822,279	4,060,406	1,047,276	935,350	2,110,127	8,153,158	7,878,253	2,148,037	1,815,724	4,133,424	15,975,437
Ratio of Census estimate to CPS estimate	1.014	0.984	0.939	1.004	0.999	1.004	1.066	0.926	1.000	1.002	1.009	1.024	0.932	1.002	1.000
Children aged 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Census Bureau estimates	3,885,215	1,085,037	830,790	2,039,856	7,840,898	4,088,885	1,117,933	866,004	2,114,576	8,187,398	7,974,100	2,202,970	1,696,794	4,154,432	16,028,296
CPS estimate	3,837,915	1,112,983	832,896	1,991,455	7,775,249	4,081,837	1,178,328	917,663	2,111,015	8,288,843	7,919,752	2,291,311	1,750,559	4,102,470	16,064,092
Ratio of Census estimate to CPS estimate	1.012	0.975	0.997	1.024	1.008	1.002	0.949	0.944	1.002	0.988	1.007	0.961	0.969	1.013	0.998
Total children aged 1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Census Bureau estimates	15,462,470	4,325,187	3,323,147	8,093,917	31,204,721	16,291,125	4,452,446	3,480,053	8,406,132	32,629,756	31,753,595	8,777,633	6,803,200	16,500,049	63,834,477
CPS estimate	15,312,664	4,503,332	3,543,002	8,065,745	31,424,741	16,248,034	4,575,329	3,603,073	8,419,697	32,846,128	31,560,698	9,078,661	7,146,075	16,485,442	64,270,869
Ratio of Census estimate to CPS estimate	1.010	0.960	0.938	1.003	0.993	1.003	0.973	0.966	0.998	0.993	1.006	0.967	0.952	1.001	0.993

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Total Infants and children aged 1–4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	19,304,162	5,397,137	4,149,737	10,097,102	38,948,138	20,336,098	5,559,015	4,347,944	10,494,590	40,737,647	39,640,260	10,956,152	8,497,681	20,591,692	79,685,785
CPS estimate	19,094,675	5,472,696	4,295,347	10,068,391	38,931,109	20,237,623	5,537,965	4,454,459	10,481,353	40,711,394	39,332,298	11,010,661	8,749,806	20,549,744	79,642,503
Ratio of Census estimate to CPS estimate	1.011	0.986	0.966	1.003	1.000	1.005	1.004	0.976	1.001	1.001	1.008	0.995	0.971	1.002	1.001

Notes
 To calculate WIC eligibility in the CPS data, the age/race/gender specific ratios were applied to the CPS weights by age/race/gender to adjust for the undercount/overcount of children in the CPS relative to the U.S. Census Bureau estimates.
 The ratios shown in the total columns (by age/race/gender) are for informational purposes only.
 This table does not include estimates for Puerto Rico and the other U.S. territories.
 “–” denotes blank cells.
 Sources: NBER, n.d.b; U.S. Census Bureau, n.d.a

Table A.3b. U.S. Census Bureau Estimates and CPS-ASEC Estimates for Infants and Children by Single-Year Age Group, Race, and Gender: CY 2016

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Infants	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	957,242	265,755	213,416	503,351	1,939,764	1,002,250	278,015	223,103	527,209	2,030,577	1,959,492	543,770	436,519	1,030,560	3,970,341
CPS estimate	941,476	217,140	178,825	506,634	1,844,075	990,897	244,340	234,208	508,755	1,978,200	1,932,373	461,480	413,033	1,015,389	3,822,275
Ratio of Census estimate to CPS estimate	1.017	1.224	1.193	0.994	1.052	1.011	1.138	0.953	1.036	1.026	1.014	1.178	1.057	1.015	1.039
Children aged 1	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	963,301	269,913	211,882	504,359	1,949,455	1,015,531	277,544	222,107	524,922	2,040,104	1,978,832	547,457	433,989	1,029,281	3,989,559
CPS estimate	950,447	337,750	240,126	515,417	2,043,739	1,009,311	315,272	242,970	523,537	2,091,089	1,959,758	653,022	483,096	1,038,954	4,134,828
Ratio of Census estimate to CPS estimate	1.014	0.799	0.882	0.979	0.954	1.006	0.880	0.914	1.003	0.976	1.010	0.838	0.898	0.991	0.965
Children aged 2	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	966,846	271,342	215,456	508,810	1,962,454	1,020,660	278,164	226,037	528,097	2,052,958	1,987,506	549,506	441,493	1,036,907	4,015,412
CPS estimate	956,470	298,388	247,722	494,928	1,997,508	1,010,621	275,405	229,552	536,604	2,052,182	1,967,091	573,793	477,274	1,031,532	4,049,690
Ratio of Census estimate to CPS estimate	1.011	0.909	0.870	1.028	0.982	1.010	1.010	0.985	0.984	1.000	1.010	0.958	0.925	1.005	0.992

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Children aged 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Census Bureau estimates	961,522	270,908	210,854	502,818	1,946,102	1,014,074	279,020	220,613	523,755	2,037,462	1,975,596	549,928	431,467	1,026,573	3,983,564
CPS estimate	940,850	282,546	216,866	507,878	1,948,140	1,011,741	260,084	231,279	532,468	2,035,571	1,952,591	542,630	448,145	1,040,346	3,983,711
Ratio of Census estimate to CPS estimate	1.022	0.959	0.972	0.990	0.999	1.002	1.073	0.954	0.984	1.001	1.012	1.013	0.963	0.987	1.000
Children aged 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Census Bureau estimates	965,127	270,872	214,790	506,264	1,957,053	1,015,184	278,757	224,929	524,190	2,043,060	1,980,311	549,629	439,719	1,030,454	4,000,113
CPS estimate	950,811	256,885	210,815	500,117	1,918,628	1,004,162	296,108	217,936	526,188	2,044,393	1,954,973	552,993	428,751	1,026,305	3,963,021
Ratio of Census estimate to CPS estimate	1.015	1.054	1.019	1.012	1.020	1.011	0.941	1.032	0.996	0.999	1.013	0.994	1.026	1.004	1.009
Total children aged 1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
U.S. Census Bureau estimates	3,856,796	1,083,035	852,982	2,022,251	7,815,064	4,065,449	1,113,485	893,686	2,100,964	8,173,584	7,922,245	2,196,520	1,746,668	4,123,215	15,988,648
CPS estimate	3,798,578	1,175,569	915,529	2,018,340	7,908,015	4,035,835	1,146,869	921,737	2,118,797	8,223,235	7,834,413	2,322,438	1,837,266	4,137,137	16,131,250
Ratio of Census estimate to CPS estimate	1.015	0.921	0.932	1.002	0.988	1.007	0.971	0.970	0.992	0.994	1.011	0.946	0.951	0.997	0.991

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Total Infants and children aged 1–4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
U.S. Census Bureau estimates	4,814,038	1,348,790	1,066,398	2,525,602	9,754,828	5,067,699	1,391,500	1,116,789	2,628,173	10,204,161	9,881,737	2,740,290	2,183,187	5,153,775	19,958,989
CPS estimate	4,740,054	1,392,709	1,094,354	2,524,974	9,752,090	5,026,732	1,391,209	1,155,945	2,627,552	10,201,435	9,766,786	2,783,918	2,250,299	5,152,526	19,953,525
Ratio of Census estimate to CPS estimate	1.016	0.968	0.974	1.000	1.000	1.008	1.000	0.966	1.000	1.000	1.012	0.984	0.970	1.000	1.000

Notes
 To calculate WIC eligibility in the CPS data, the age/race/gender specific ratios were applied to the CPS weights by age/race/gender to adjust for the undercount/overcount of children in the CPS relative to the U.S. Census Bureau estimates.
 The ratios shown in the total columns (by age/race/gender) are for informational purposes only.
 This table does not include estimates for Puerto Rico and the other U.S. territories.
 “–” denotes blank cells.
 Sources: NBER, n.d.b; U.S. Census Bureau, n.d.a

Table A.3c. Effects of Applying Population Adjustment Factors to Population Counts for Infants and Children in the 2017 CPS-ASEC by Single-Year Age Group, Race, and Gender

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Infants	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Population adjustment factor	1.016	1.106	1.099	1.000	N/A	1.011	1.138	1.000	1.013	N/A	N/A	N/A	N/A	N/A	N/A
Revised CPS estimate	956,351	240,114	196,475	506,634	1,899,574	1,002,292	278,010	234,208	515,369	2,029,879	1,958,643	518,123	430,683	1,022,003	3,929,453
Original CPS estimate	941,476	217,140	178,825	506,634	1,844,075	990,897	244,340	234,208	508,755	1,978,200	1,932,373	461,480	413,033	1,015,389	3,822,275
Percent relative change	1.6	10.6	9.9	0.0	3.0	1.1	13.8	0.0	1.3	2.6	1.4	12.3	4.3	0.7	2.8
Children aged 1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Population adjustment factor	1.004	0.911	0.901	0.979	N/A	1.002	0.880	0.973	1.000	N/A	N/A	N/A	N/A	N/A	N/A
Revised CPS estimate	954,628	307,623	216,377	504,335	1,982,964	1,011,228	277,534	236,288	523,537	2,048,587	1,965,857	585,156	452,665	1,027,873	4,031,551
Original CPS estimate	950,447	337,750	240,126	515,417	2,043,739	1,009,311	315,272	242,970	523,537	2,091,089	1,959,757	653,022	483,095	1,038,954	4,134,828
Percent relative change	0.4	-8.9	-9.9	-2.2	-3.0	0.2	-12.0	-2.7	0.0	-2.0	0.3	-10.4	-6.3	-1.1	-2.5
Children aged 2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Population adjustment factor	1.009	0.975	0.920	1.012	N/A	1.003	1.010	1.000	1.000	N/A	N/A	N/A	N/A	N/A	N/A
Revised CPS estimate	964,792	291,077	227,805	500,966	1,984,640	1,013,350	278,159	229,552	536,335	2,057,396	1,978,141	569,236	457,357	1,037,302	4,042,036
Original CPS estimate	956,470	298,388	247,722	494,928	1,997,508	1,010,621	275,405	229,552	536,604	2,052,182	1,967,091	573,792	477,274	1,031,532	4,049,690
Percent relative change	0.9	-2.5	-8.0	1.2	-0.6	0.3	1.0	0.0	0.0	0.3	0.6	-0.8	-4.2	0.6	-0.2

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Children aged 3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Population adjustment factor	1.014	0.984	0.972	1.000	N/A	1.002	1.066	0.954	1.000	N/A	N/A	N/A	N/A	N/A	N/A
Revised CPS estimate	953,834	278,054	210,859	507,878	1,950,624	1,014,068	277,354	220,617	532,415	2,044,453	1,967,902	555,407	431,476	1,040,292	3,995,077
Original CPS estimate	940,850	282,546	216,866	507,878	1,948,140	1,011,741	260,084	231,279	532,468	2,035,571	1,952,591	542,630	448,145	1,040,346	3,983,712
Percent relative change	1.4	-1.6	-2.8	0.0	0.1	0.2	6.6	-4.6	0.0	0.4	0.8	2.4	-3.7	0.0	0.3
Children aged 4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Population adjustment factor	1.012	1.000	1.000	1.012	N/A	1.002	0.949	1.000	1.000	N/A	N/A	N/A	N/A	N/A	N/A
Revised CPS estimate	962,506	256,885	210,815	506,268	1,936,474	1,005,869	280,917	217,936	526,188	2,030,910	1,968,375	537,803	428,751	1,032,456	3,967,384
Original CPS estimate	950,811	256,885	210,815	500,117	1,918,628	1,004,162	296,108	217,936	526,188	2,044,393	1,954,973	552,993	428,751	1,026,304	3,963,021
Percent relative change	1.2	0.0	0.0	1.2	0.9	0.2	-5.1	0.0	0.0	-0.7	0.7	-2.7	0.0	0.6	0.1
Total children aged 1-4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Population adjustment factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Revised CPS estimate	3,835,760	1,133,639	865,856	2,019,447	7,854,702	4,044,514	1,113,963	904,393	2,118,475	8,181,346	7,880,274	2,247,602	1,770,249	4,137,922	16,036,048
Original CPS estimate	3,798,578	1,175,569	915,528	2,018,339	7,908,015	4,035,834	1,146,868	921,737	2,118,797	8,223,235	7,834,412	2,322,437	1,837,265	4,137,136	16,131,250
Percent relative change	1.0	-3.6	-5.4	0.1	-0.7	0.2	-2.9	-1.9	0.0	-0.5	0.6	-3.2	-3.6	0.0	-0.6

Participant Category	Females					Males					Total				
	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total	White Non-Hispanic	Black Non-Hispanic	Other Non-Hispanic	Hispanic	Total
Total infants and children aged 1–4	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–
Population adjustment factor	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
Revised CPS estimate	4,792,111	1,373,753	1,062,331	2,526,081	9,754,276	5,046,806	1,391,973	1,138,601	2,633,844	10,211,225	9,838,918	2,765,726	2,200,932	5,159,926	19,965,501
Original CPS estimate	4,740,054	1,392,710	1,094,354	2,524,973	9,752,090	5,026,731	1,391,208	1,155,945	2,627,552	10,201,435	9,766,785	2,783,917	2,250,298	5,152,525	19,953,525
Percent relative change	1.1	-1.4	-2.9	0.0	0.0	0.4	0.1	-1.5	0.2	0.1	0.7	-0.7	-2.2	0.1	0.1

Notes
 To calculate WIC eligibility in the CPS data, the age/race/gender specific ratios were applied to the CPS weights by age/race/gender to adjust for the undercount/overcount of children in the CPS estimates relative to the U.S. Census Bureau estimates.
 The ratios shown in the total columns (by age/race/gender) are for informational purposes only.
 This table does not include estimates for Puerto Rico and the other U.S. territories.
 “–” denotes blank cells.
 Sources: NBER, n.d.b; U.S. Census Bureau, n.d.a

Table A.4. Breastfeeding Adjustment Factor Calculations for WIC-Eligible Postpartum Women: CY 2005–2016

Adjustments	Breastfeeding Rates Among WIC-Eligible Postpartum Women by Race and Ethnicity											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Breastfeeding in hospital	–	–	–	–	–	–	–	–	–	–	–	–
White-Only Non-Hispanic	0.647	0.629	0.636	0.616	0.655	0.633	0.668	0.677	0.716	0.751	0.744	0.762
Black-Only Non-Hispanic	0.497	0.477	0.537	0.500	0.517	0.531	0.576	0.609	0.576	0.635	0.636	0.659
Other Non-Hispanic	0.633	0.663	0.678	0.709	0.657	0.674	0.694	0.698	0.689	0.660	0.716	0.723
Hispanic	0.801	0.804	0.804	0.816	0.796	0.785	0.791	0.778	0.832	0.810	0.818	0.838
Breastfeeding at 6 months	–	–	–	–	–	–	–	–	–	–	–	–
White-Only Non-Hispanic	0.280	0.297	0.306	0.316	0.327	0.329	0.343	0.342	0.381	0.412	0.423	0.438
Black-Only Non-Hispanic	0.204	0.213	0.240	0.221	0.229	0.238	0.304	0.324	0.297	0.311	0.036	0.383
Other Non-Hispanic	0.307	0.349	0.341	0.336	0.333	0.352	0.398	0.410	0.412	0.364	0.430	0.450
Hispanic	0.400	0.441	0.474	0.472	0.439	0.443	0.458	0.458	0.460	0.487	0.414	0.488
Breastfeeding at 12 months	–	–	–	–	–	–	–	–	–	–	–	–
White-Only Non-Hispanic	0.149	0.141	0.137	0.155	0.180	0.181	0.186	0.187	0.209	0.240	0.259	0.284
Black-Only Non-Hispanic	0.092	0.092	0.121	0.087	0.100	0.081	0.140	0.119	0.126	0.137	0.174	0.186
Other Non-Hispanic	0.167	0.214	0.184	0.222	0.174	0.190	0.215	0.236	0.263	0.176	0.234	0.257
Hispanic	0.216	0.234	0.256	0.270	0.241	0.272	0.251	0.255	0.241	0.256	0.246	0.291
Other Adjustment Factors												
Multiple births/infant deaths	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996	0.996
Loss of eligibility at 6 months	0.940	0.947	0.953	0.960	0.967	0.973	0.980	0.987	0.993	1.000	1.000	1.000
Adjustment to average breastfeeding	0.870	0.870	0.870	0.870	0.870	0.870	0.870	0.870	0.870	0.870	0.870	0.870

Adjustments	Breastfeeding Rates Among WIC-Eligible Postpartum Women by Race and Ethnicity											
	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Final Adjustment Factors for Estimating Postpartum Eligibility From Estimate of Infant Eligibility												
Breastfeeding adjustment factor	–	–	–	–	–	–	–	–	–	–	–	–
White-Only Non-Hispanic	0.303	0.305	0.310	0.316	0.336	0.333	0.349	0.352	0.385	0.416	0.424	0.442
Black-Only Non-Hispanic	0.222	0.222	0.255	0.231	0.242	0.245	0.300	0.312	0.295	0.317	0.349	0.369
Other Non-Hispanic	0.316	0.353	0.347	0.361	0.338	0.355	0.388	0.400	0.407	0.358	0.416	0.432
Hispanic	0.406	0.431	0.452	0.458	0.433	0.441	0.445	0.445	0.455	0.468	0.438	0.483
Non-breastfeeding adjustment factor	–	–	–	–	–	–	–	–	–	–	–	–
White-Only Non-Hispanic	0.298	0.299	0.295	0.297	0.286	0.291	0.280	0.278	0.261	0.247	0.246	0.239
Black-Only Non-Hispanic	0.347	0.350	0.331	0.343	0.338	0.333	0.309	0.297	0.310	0.294	0.284	0.273
Other Non-Hispanic	0.296	0.280	0.278	0.273	0.285	0.277	0.263	0.259	0.260	0.277	0.252	0.245
Hispanic	0.239	0.229	0.222	0.220	0.232	0.233	0.228	0.231	0.219	0.218	0.228	0.212

Note

“–” denotes blank cells.

Sources: Unpublished internal CDC data

Table A.5. Step-by-Step Adjustments Applied to CPS-ASEC Data To Derive the Average Monthly Number of WIC-Eligible Individuals by Participant Category: CY 2016

Step	Infants	Children Aged 1	Children Aged 2	Children Aged 3	Children Aged 4	Total Children Aged 1-4	Pregnant Women	Postpartum Breastfeeding Women	Postpartum Non-Breastfeeding Women	Total
Total number of infants/children in CPS-ASEC data	3,822,275	4,134,828	4,049,690	3,983,712	3,963,021	16,131,250	–	–	–	19,953,525
Number after adjustment for CPS undercount/overcount	3,929,453	4,031,551	4,042,036	3,995,077	3,967,384	16,036,048	–	–	–	19,965,501
Number with annual income ≤ 185 percent of the Federal Poverty Guidelines	1,282,473	1,541,140	1,468,036	1,499,215	1,405,818	5,914,209	–	–	–	7,196,682
Number adjunctively eligible and with annual income > 185 percent of the Federal Poverty Guidelines ^a	674,832	653,447	633,283	595,390	624,960	2,507,080	–	–	–	3,181,912
Through SNAP	149,963	125,285	154,008	136,952	119,769	536,013	–	–	–	685,976
Through TANF	6,591	8,496	2,017	8,116	4,638	23,266	–	–	–	29,857
Through Medicaid	518,278	519,667	477,258	450,323	500,553	1,947,801	–	–	–	2,466,079
Total number income and adjunctively eligible	1,957,305	2,194,587	2,101,319	2,094,605	2,030,778	8,421,289	–	–	–	10,378,594
Number after adjustment for monthly income and certification periods	2,192,433	2,307,461	2,210,106	2,203,396	2,136,532	8,857,494	–	–	–	11,049,927
Total number eligible: Number after adjustment for nutritional risk (infants and children)	2,126,660	2,284,386	2,188,005	2,181,362	2,115,167	8,768,919	–	–	–	10,895,579
Starting point for estimates of women is number of fully eligible infants	–	–	–	–	–	–	2,126,660	2,126,660	2,126,660	6,379,980
Number after adjustment for length of pregnancy and income of woman during pregnancy	–	–	–	–	–	–	1,435,495	–	–	1,435,495

Step	Infants	Children Aged 1	Children Aged 2	Children Aged 3	Children Aged 4	Total Children Aged 1-4	Pregnant Women	Postpartum Breastfeeding Women	Postpartum Non-Breastfeeding Women	Total
Number after adjustment for multiple births and infant deaths	–	–	–	–	–	–	1,429,897	2,118,366	2,118,366	5,666,629
Number after adjustment for breastfeeding	–	–	–	–	–	–	–	935,335	501,719	1,437,054
Total number eligible: Number after adjustment for nutritional risk (pregnant and postpartum women)	–	–	–	–	–	–	1,387,000	935,335	501,719	2,824,054
Total number eligible in the Nation, excluding Puerto Rico and the other U.S. territories served by WIC	2,126,660	2,284,386	2,188,005	2,181,362	2,115,167	8,768,919	1,387,000	935,335	501,719	13,719,633
Total number eligible in Puerto Rico and the other U.S. territories served by WIC ^b	32,381	33,530	34,563	33,758	36,941	138,793	21,119	14,257	7,612	214,162
Total number eligible in the Nation, Puerto Rico, the other U.S. territories served by WIC	2,159,041	2,317,916	2,222,568	2,215,120	2,152,108	8,907,712	1,408,119	949,592	509,331	13,933,795

Notes

^a Adjunctive eligibility was counted by the first program that qualified the person for WIC, in this order: SNAP, TANF, Medicaid.

^b See appendix B for the derivation of WIC eligibility in Puerto Rico and the other U.S. territories.

“–” denotes blank cells.

Sources: NBER, n.d.b; IPUMS-USA, n.d.; U.S. Census Bureau, n.d.d; Thorn et al., 2018

Table A.6a1. Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC (Percentages) by Demographic and Income Characteristics and Adjunctive Eligibility: CY 2016 (Unadjusted Weights, Counts)

Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Total	1,239,852	656,389	1,896,241	1,597,876	668,783	2,266,658	1,473,422	633,719	2,107,142
Gender	–	–	–	–	–	–	–	–	–
Male	559,085	337,725	896,810	819,517	290,548	1,110,064	735,135	306,545	1,041,680
Female	680,767	318,664	999,431	778,359	378,235	1,156,594	738,287	327,174	1,065,462
Race	–	–	–	–	–	–	–	–	–
White	831,014	489,974	1,320,988	956,002	460,838	1,416,840	912,968	463,744	1,376,712
Black	240,457	97,899	338,356	429,422	106,428	535,850	352,957	79,908	432,865
Other	168,381	68,516	236,897	212,452	101,516	313,969	207,498	90,067	297,565
Ethnicity	–	–	–	–	–	–	–	–	–
Hispanic	431,644	214,003	645,647	517,913	219,206	737,119	503,172	199,630	702,801
Non-Hispanic	808,208	442,386	1,250,594	1,079,963	449,577	1,529,540	970,251	434,090	1,404,341
Living arrangement	–	–	–	–	–	–	–	–	–
Two-parent family	732,447	487,724	1,220,171	839,133	484,229	1,323,363	808,382	417,178	1,225,560
Single-parent family	446,314	151,411	597,725	664,194	165,762	829,956	572,711	183,497	756,209
No-parent family	61,091	17,255	78,345	94,549	18,791	113,340	92,329	33,044	125,373
Related nonparent caretaker	32,840	17,255	50,094	55,935	18,791	74,727	61,506	33,044	94,550
Unrelated nonparent caretaker	28,251	0	28,251	38,614	0	38,614	30,824	0	30,824
Military status of household members	–	–	–	–	–	–	–	–	–
Ever served in U.S. military	60,870	65,947	126,817	62,396	58,626	121,022	58,949	50,976	109,925
Serving in U.S. military in 2016	21,516	11,283	32,799	19,553	8,598	28,151	10,994	4,702	15,696
Number of people in household	–	–	–	–	–	–	–	–	–
2	86,038	17,659	103,697	101,712	4,746	106,458	71,319	19,218	90,537
3	249,208	197,331	446,539	311,053	149,670	460,723	267,148	160,718	427,866
4	346,259	171,682	517,941	406,208	206,445	612,652	397,456	193,168	590,625
5	229,826	114,762	344,588	318,612	138,008	456,620	333,552	133,812	467,364
6 or more	328,522	154,955	483,476	460,291	169,914	630,206	403,948	126,803	530,750

Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Mean	4.7	4.5	4.6	4.7	4.7	4.7	4.8	4.5	4.7
Number with working parent(s)	779,823	555,049	1,334,872	1,072,424	577,542	1,649,966	1,025,061	552,198	1,577,259
Annual family income relative to FPG	–	–	–	–	–	–	–	–	–
No income	78,274	0	78,274	114,254	0	114,254	92,340	0	92,340
Up to 50% FPG	196,263	0	196,263	284,449	0	284,449	269,368	0	269,368
More than 50% up to 100% FPG	303,304	0	303,304	417,043	0	417,043	379,549	0	379,549
More than 100% up to 130% FPG	246,390	0	246,390	314,991	0	314,991	291,539	0	291,539
More than 130% up to 150% FPG	163,055	0	163,055	176,295	0	176,295	170,360	0	170,360
More than 150% up to 185% FPG	252,565	0	252,565	290,844	0	290,844	270,265	0	270,265
More than 185% up to 200% FPG	0	63,872	63,872	0	73,426	73,426	0	78,059	78,059
More than 200% FPG	0	592,517	592,517	0	595,357	595,357	0	555,661	555,661
Receipt of other benefits	–	–	–	–	–	–	–	–	–
No benefit receipt	210,630	0	210,630	335,232	0	335,232	316,700	0	316,700
Medicaid, SNAP, and TANF	84,716	7,810	92,526	88,548	9,022	97,570	105,543	6,981	112,524
SNAP and TANF only	0	0	0	223	0	223	985	0	985
Medicaid and SNAP only	472,047	100,432	572,479	619,603	100,820	720,423	579,901	107,278	687,179
Medicaid and TANF only	3,019	6,478	9,497	1,469	8,948	10,416	6,467	2,043	8,510
SNAP only	75,167	35,930	111,098	122,334	19,295	141,628	65,403	40,614	106,017
TANF only	0	0	0	0	0	0	0	0	0
Medicaid only	394,272	505,738	900,010	430,468	530,698	961,166	398,423	476,804	875,227

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the unadjusted person weights for the CPS-ASEC data. They are not adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

“–” denotes blank cells.

Source: NBER, n.d.b

Table A.6a1 (continued). Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC (Percentages) by Demographic and Income Characteristics and Adjunctive Eligibility: CY 2016 (Unadjusted Weights, Counts)

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1-4		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Total	1,492,590	593,638	2,086,228	1,408,106	624,492	2,032,598	5,971,995	2,520,632	8,492,627
Gender	-	-	-	-	-	-	-	-	-
Male	738,527	313,857	1,052,383	668,743	313,138	981,880	2,961,921	1,224,087	4,186,009
Female	754,064	279,781	1,033,845	739,364	311,354	1,050,718	3,010,073	1,296,545	4,306,618
Race	-	-	-	-	-	-	-	-	-
White	954,647	439,189	1,393,835	943,267	432,131	1,375,398	3,766,883	1,795,902	5,562,785
Black	361,671	80,398	442,069	328,159	115,487	443,646	1,472,208	382,222	1,854,430
Other	176,272	74,052	250,324	136,681	76,873	213,554	732,904	342,507	1,075,411
Ethnicity	-	-	-	-	-	-	-	-	-
Hispanic	561,123	183,191	744,314	511,540	212,703	724,242	2,093,747	814,730	2,908,476
Non-Hispanic	931,467	410,447	1,341,914	896,567	411,789	1,308,356	3,878,248	1,705,902	5,584,150
Living arrangement	-	-	-	-	-	-	-	-	-
Two-parent family	780,768	398,963	1,179,731	716,095	437,818	1,153,913	3,144,377	1,738,189	4,882,566
Single-parent family	624,869	164,176	789,045	604,315	165,318	769,633	2,466,089	678,753	3,144,842
No-parent family	86,953	30,499	117,452	87,697	21,356	109,053	361,528	103,691	465,218
Related nonparent caretaker	44,122	30,499	74,622	64,204	21,356	85,560	225,767	103,691	329,458
Unrelated nonparent caretaker	42,831	0	42,831	23,493	0	23,493	135,760	0	135,760
Military status of household members	-	-	-	-	-	-	-	-	-
Ever served in U.S. military	80,530	77,656	158,186	70,874	55,198	126,072	272,749	242,455	515,204
Serving in U.S. military in 2016	17,306	2,488	19,793	21,513	4,768	26,281	69,365	20,556	89,921
Number of people in household	-	-	-	-	-	-	-	-	-
2	97,835	13,853	111,688	88,965	17,477	106,442	359,831	55,293	415,124
3	246,030	130,397	376,427	281,481	120,157	401,639	1,105,712	560,943	1,666,655
4	389,891	177,415	567,306	380,403	193,948	574,351	1,573,959	770,975	2,344,934
5	326,139	141,202	467,341	325,441	137,033	462,474	1,303,743	550,055	1,853,798
6 or more	432,694	130,772	563,467	331,817	155,877	487,693	1,628,750	583,366	2,212,116

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1-4		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Mean	4.8	4.6	4.7	4.6	4.7	4.6	4.7	4.6	4.7
Number with working parent(s)	1,043,272	509,418	1,552,690	974,384	575,717	1,550,100	4,115,140	2,214,875	6,330,016
Annual family income relative to poverty	-	-	-	-	-	-	-	-	-
No income	87,613	0	87,613	95,459	0	95,459	389,665	0	389,665
Up to 50% FPG	223,068	0	223,068	204,825	0	204,825	981,712	0	981,712
More than 50% up to 100% FPG	427,478	0	427,478	392,092	0	392,092	1,616,162	0	1,616,162
More than 100% up to 130% FPG	292,759	0	292,759	250,880	0	250,880	1,150,170	0	1,150,170
More than 130% up to 150% FPG	163,982	0	163,982	143,546	0	143,546	654,183	0	654,183
More than 150% up to 185% FPG	297,690	0	297,690	321,304	0	321,304	1,180,102	0	1,180,102
More than 185% up to 200% FPG	0	82,938	82,938	0	73,810	73,810	0	308,233	308,233
More than 200% FPG	0	510,700	510,700	0	550,681	550,681	0	2,212,399	2,212,399
Receipt of other benefits	-	-	-	-	-	-	-	-	-
No benefit receipt	341,872	0	341,872	280,663	0	280,663	1,274,466	0	1,274,466
Medicaid, SNAP, and TANF	92,116	7,454	99,570	63,724	10,613	74,337	349,931	34,071	384,002
SNAP and TANF only	295	0	295	0	0	0	1,502	0	1,502
Medicaid and SNAP only	577,131	90,930	668,061	492,805	88,462	581,267	2,269,440	387,490	2,656,930
Medicaid and TANF only	817	8,173	8,990	3,066	4,638	7,704	11,820	23,801	35,621
SNAP only	79,968	37,696	117,664	79,100	20,941	100,041	346,805	118,546	465,351
TANF only	0	0	0	0	0	0	0	0	0
Medicaid only	400,391	449,385	849,776	488,749	499,837	988,586	1,718,030	1,956,725	3,674,755

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the unadjusted person weights for the CPS-ASEC data. They are not adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

"-" denotes blank cells.

Source: NBER, n.d.b

Table A.6a2. Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC by Income and Adjunctive Eligibility in the 2017 CPS-ASEC by Demographic Characteristics: CY 2016 (Unadjusted Weights, Percentages)

Demographic Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Total	1,239,852	656,389	1,896,241	1,597,876	668,783	2,266,658	1,473,422	633,719	2,107,142
Gender	–	–	–	–	–	–	–	–	–
Male	45.1	51.5	47.3	51.3	43.4	49.0	49.9	48.4	49.4
Female	54.9	48.5	52.7	48.7	56.6	51.0	50.1	51.6	50.6
Race	–	–	–	–	–	–	–	–	–
White	67.0	74.6	69.7	59.8	68.9	62.5	62.0	73.2	65.3
Black	19.4	14.9	17.8	26.9	15.9	23.6	24.0	12.6	20.5
Other	13.6	10.4	12.5	13.3	15.2	13.9	14.1	14.2	14.1
Ethnicity	–	–	–	–	–	–	–	–	–
Hispanic	34.8	32.6	34.0	32.4	32.8	32.5	34.1	31.5	33.4
Non-Hispanic	65.2	67.4	66.0	67.6	67.2	67.5	65.9	68.5	66.6
Living arrangement	–	–	–	–	–	–	–	–	–
Two-parent family	59.1	74.3	64.3	52.5	72.4	58.4	54.9	65.8	58.2
Single-parent family	36.0	23.1	31.5	41.6	24.8	36.6	38.9	29.0	35.9
No-parent family	4.9	2.6	4.1	5.9	2.8	5.0	6.3	5.2	5.9
Related nonparent caretaker	2.6	2.6	2.6	3.5	2.8	3.3	4.2	5.2	4.5
Unrelated nonparent caretaker	2.3	0.0	1.5	2.4	0.0	1.7	2.1	0.0	1.5
Military status of household members	–	–	–	–	–	–	–	–	–
Ever served in U.S. military	4.9	10.0	6.7	3.9	8.8	5.3	4.0	8.0	5.2
Serving in U.S. military in 2016	1.7	1.7	1.7	1.2	1.3	1.2	0.7	0.7	0.7
Number of people in household	–	–	–	–	–	–	–	–	–
2	6.9	2.7	5.5	6.4	0.7	4.7	4.8	3.0	4.3
3	20.1	30.1	23.5	19.5	22.4	20.3	18.1	25.4	20.3
4	27.9	26.2	27.3	25.4	30.9	27.0	27.0	30.5	28.0
5	18.5	17.5	18.2	19.9	20.6	20.1	22.6	21.1	22.2
6 or more	26.5	23.6	25.5	28.8	25.4	27.8	27.4	20.0	25.2

Demographic Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Percent with working parent(s)	62.9	84.6	70.4	67.1	86.4	72.8	69.6	87.1	74.9
Annual family income relative to FPG	–	–	–	–	–	–	–	–	–
No income	6.3	0.0	4.1	7.2	0.0	5.0	6.3	0.0	4.4
Up to 50% FPG	15.8	0.0	10.4	17.8	0.0	12.5	18.3	0.0	12.8
More than 50% up to 100% FPG	24.5	0.0	16.0	26.1	0.0	18.4	25.8	0.0	18.0
More than 100% up to 130% FPG	19.9	0.0	13.0	19.7	0.0	13.9	19.8	0.0	13.8
More than 130% up to 150% FPG	13.2	0.0	8.6	11.0	0.0	7.8	11.6	0.0	8.1
More than 150% up to 185% FPG	20.4	0.0	13.3	18.2	0.0	12.8	18.3	0.0	12.8
More than 185% up to 200% FPG	0.0	9.7	3.4	0.0	11.0	3.2	0.0	12.3	3.7
More than 200% FPG	0.0	90.3	31.2	0.0	89.0	26.3	0.0	87.7	26.4
Receipt of other benefits	–	–	–	–	–	–	–	–	–
No benefit receipt	17.0	0.0	11.1	21.0	0.0	14.8	21.5	0.0	15.0
SNAP, TANF, and Medicaid	6.8	1.2	4.9	5.5	1.3	4.3	7.2	1.1	5.3
SNAP and TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
SNAP and Medicaid only	38.1	15.3	30.2	38.8	15.1	31.8	39.4	16.9	32.6
TANF and Medicaid only	0.2	1.0	0.5	0.1	1.3	0.5	0.4	0.3	0.4
SNAP only	6.1	5.5	5.9	7.7	2.9	6.2	4.4	6.4	5.0
TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid only	31.8	77.0	47.5	26.9	79.4	42.4	27.0	75.2	41.5

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the unadjusted person weights for the CPS-ASEC data. They are not adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

“–” denotes blank cells.

Source: NBER, n.d.b

Table A.6a2 (continued). Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC by Income and Adjunctive Eligibility in the 2017 CPS-ASEC by Demographic Characteristics: CY 2016 (Unadjusted Weights, Percentages)

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1–4		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Total	1,492,590	593,638	2,086,228	1,408,106	624,492	2,032,598	5,971,995	2,520,632	8,492,627
Gender	–	–	–	–	–	–	–	–	–
Male	49.5	52.9	50.4	47.5	50.1	48.3	49.6	48.6	49.3
Female	50.5	47.1	49.6	52.5	49.9	51.7	50.4	51.4	50.7
Race	–	–	–	–	–	–	–	–	–
White	64.0	74.0	66.8	67.0	69.2	67.7	63.1	71.2	65.5
Black	24.2	13.5	21.2	23.3	18.5	21.8	24.7	15.2	21.8
Other	11.8	12.5	12.0	9.7	12.3	10.5	12.3	13.6	12.7
Ethnicity	–	–	–	–	–	–	–	–	–
Hispanic	37.6	30.9	35.7	36.3	34.1	35.6	35.1	32.3	34.2
Non-Hispanic	62.4	69.1	64.3	63.7	65.9	64.4	64.9	67.7	65.8
Living arrangement	–	–	–	–	–	–	–	–	–
Two-parent family	52.3	67.2	56.5	50.9	70.1	56.8	52.7	69.0	57.5
Single-parent family	41.9	27.7	37.8	42.9	26.5	37.9	41.3	26.9	37.0
No-parent family	5.8	5.1	5.6	6.2	3.4	5.4	6.1	4.1	5.5
Related nonparent caretaker	3.0	5.1	3.6	4.6	3.4	4.2	3.8	4.1	3.9
Unrelated nonparent caretaker	2.9	0.0	2.1	1.7	0.0	1.2	2.3	0.0	1.6
Military status of household members	–	–	–	–	–	–	–	–	–
Ever served in U.S. military	5.4	13.1	7.6	5.0	8.8	6.2	4.6	9.6	6.1
Serving in U.S. military in 2016	1.2	0.4	0.9	1.5	0.8	1.3	1.2	0.8	1.1
Number of people in household	–	–	–	–	–	–	–	–	–
2	6.6	2.3	5.4	6.3	2.8	5.2	6.0	2.2	4.9
3	16.5	22.0	18.0	20.0	19.2	19.8	18.5	22.3	19.6
4	26.1	29.9	27.2	27.0	31.1	28.3	26.4	30.6	27.6
5	21.9	23.8	22.4	23.1	21.9	22.8	21.8	21.8	21.8
6 or more	29.0	22.0	27.0	23.6	25.0	24.0	27.3	23.1	26.0

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1-4		
	Family Income	Adjunctively Eligible	Total	Family Income	Adjunctively Eligible	Total	Family Income	Adjunctively Eligible	Total
	≤ 185% FPG ^a	>185% FPG ^b		≤ 185% FPG ^a	>185% FPG ^b		≤ 185% FPG ^a	>185% FPG ^b	
Percent with working parent(s)	69.9	85.8	74.4	69.2	92.2	76.3	68.9	87.9	74.5
Annual family income relative to poverty	–	–	–	–	–	–	–	–	–
No income	5.9	0.0	4.2	6.8	0.0	4.7	6.5	0.0	4.6
Up to 50% FPG	14.9	0.0	10.7	14.5	0.0	10.1	16.4	0.0	11.6
More than 50% up to 100% FPG	28.6	0.0	20.5	27.8	0.0	19.3	27.1	0.0	19.0
More than 100% up to 130% FPG	19.6	0.0	14.0	17.8	0.0	12.3	19.3	0.0	13.5
More than 130% up to 150% FPG	11.0	0.0	7.9	10.2	0.0	7.1	11.0	0.0	7.7
More than 150% up to 185% FPG	19.9	0.0	14.3	22.8	0.0	15.8	19.8	0.0	13.9
More than 185% up to 200% FPG	0.0	14.0	4.0	0.0	11.8	3.6	0.0	12.2	3.6
More than 200% FPG	0.0	86.0	24.5	0.0	88.2	27.1	0.0	87.8	26.1
Benefit receipt (percent distribution)	–	–	–	–	–	–	–	–	–
No benefit receipt	22.9	0.0	16.4	19.9	0.0	13.8	21.3	0.0	15.0
Medicaid, SNAP, and TANF	6.2	1.3	4.8	4.5	1.7	3.7	5.9	1.4	4.5
SNAP and TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid and SNAP only	38.7	15.3	32.0	35.0	14.2	28.6	38.0	15.4	31.3
Medicaid and TANF only	0.1	1.4	0.4	0.2	0.7	0.4	0.2	0.9	0.4
SNAP only	5.4	6.4	5.6	5.6	3.4	4.9	5.8	4.7	5.5
TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid only	26.8	75.7	40.7	34.7	80.0	48.6	28.8	77.6	43.3

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the unadjusted person weights for the CPS-ASEC data. They are not adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

“–” denotes blank cells.

Source: NBER, n.d.b

Table A.6b1. Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC by Income and Adjunctive Eligibility in the 2017 CPS-ASEC by Demographic Characteristics: CY 2016 (Fully Adjusted Weights, Counts)

Demographic Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Total	1,387,649	739,011	2,126,660	1,601,201	683,186	2,284,386	1,524,613	663,392	2,188,005
Gender	–	–	–	–	–	–	–	–	–
Male	626,826	377,638	1,004,463	819,796	292,905	1,112,701	754,942	320,382	1,075,324
Female	760,823	361,373	1,122,196	781,404	390,280	1,171,685	769,671	343,009	1,112,680
Race	–	–	–	–	–	–	–	–	–
White	928,119	552,330	1,480,449	1,000,862	485,653	1,486,514	963,874	493,142	1,457,016
Black	279,029	112,245	391,274	393,993	98,945	492,939	357,188	80,959	438,148
Other	180,501	74,436	254,937	206,346	98,587	304,933	203,550	89,290	292,840
Ethnicity	–	–	–	–	–	–	–	–	–
Hispanic	451,178	223,224	674,402	521,968	221,241	743,209	515,968	204,597	720,565
Non-Hispanic	936,471	515,787	1,452,258	1,079,233	461,944	1,541,177	1,008,645	458,795	1,467,439
Living arrangement	–	–	–	–	–	–	–	–	–
Two-parent family	818,091	549,565	1,367,656	859,510	496,979	1,356,489	841,745	439,041	1,280,786
Single-parent family	500,099	169,972	670,071	648,916	166,894	815,810	587,121	190,221	777,342
No-parent family	69,459	19,474	88,933	92,774	19,312	112,087	95,747	34,129	129,877
Related nonparent caretaker	37,053	19,474	56,528	54,041	19,312	73,353	63,246	34,129	97,375
Unrelated nonparent caretaker	32,406	0	32,406	38,733	0	38,733	32,501	0	32,501
Military status of household members	–	–	–	–	–	–	–	–	–
Ever served in U.S. military	69,759	73,776	143,535	63,796	60,979	124,775	61,752	52,774	114,525
Serving in U.S. military in 2016	24,046	13,031	37,077	20,989	8,722	29,711	11,308	4,591	15,899
Number of people in household	–	–	–	–	–	–	–	–	–
2	98,150	19,513	117,663	97,555	4,661	102,215	73,769	19,979	93,748
3	280,101	224,457	504,558	313,328	154,259	467,587	275,705	168,939	444,644
4	388,594	193,993	582,587	408,944	212,328	621,272	412,264	203,145	615,409
5	255,349	128,515	383,864	321,234	140,256	461,490	344,726	140,703	485,428
6 or more	365,455	172,533	537,987	460,140	171,681	631,822	418,148	130,626	548,775

Demographic Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Mean	4.7	4.5	4.6	4.7	4.7	4.7	4.8	4.5	4.7
Number with working parent(s)	872,595	625,491	1,498,086	1,080,275	589,783	1,670,058	1,062,233	578,513	1,640,746
Annual family income relative to poverty	–	–	–	–	–	–	–	–	–
No income	87,746	0	87,746	112,276	0	112,276	95,525	0	95,525
Up to 50% FPG	220,446	0	220,446	276,985	0	276,985	276,596	0	276,596
More than 50% up to 100% FPG	338,352	0	338,352	417,551	0	417,551	390,852	0	390,852
More than 100% up to 130% FPG	274,040	0	274,040	319,600	0	319,600	302,794	0	302,794
More than 130% up to 150% FPG	181,802	0	181,802	179,075	0	179,075	176,812	0	176,812
More than 150% up to 185% FPG	285,264	0	285,264	295,714	0	295,714	282,033	0	282,033
More than 185% up to 200% FPG	0	71,008	71,008	0	74,702	74,702	0	81,349	81,349
More than 200% FPG	0	668,003	668,003	0	608,484	608,484	0	582,043	582,043
Benefit receipt	–	–	–	–	–	–	–	–	–
No benefit receipt	237,319	0	237,319	340,808	0	340,808	329,274	0	329,274
Medicaid, SNAP, and TANF	93,984	9,120	103,104	85,582	8,545	94,127	107,265	7,079	114,344
SNAP and TANF only	0	0	0	221	0	221	1,004	0	1,004
Medicaid and SNAP only	529,391	112,690	642,082	618,583	102,477	721,060	600,435	111,614	712,049
Medicaid and TANF only	3,555	7,290	10,845	1,465	8,784	10,249	7,029	2,142	9,170
SNAP only	84,254	40,196	124,451	121,249	19,607	140,855	66,667	41,552	108,219
TANF only	0	0	0	0	0	0	0	0	0
Medicaid only	439,145	569,715	1,008,859	433,293	543,773	977,066	412,939	501,004	913,944

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the fully adjusted person weights for the CPS-ASEC data. They were adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

“–” denotes blank cells.

Source: NBER, n.d.b

Table A.6b1 (continued). Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC by Income and Adjunctive Eligibility in the 2017 CPS-ASEC by Demographic Characteristics: CY 2016 (Fully Adjusted Weights, Counts)

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1-4		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Total	1,557,666	623,695	2,181,362	1,462,483	652,684	2,115,167	6,145,962	2,622,957	8,768,919
Gender	–	–	–	–	–	–	–	–	–
Male	766,782	328,547	1,095,329	702,066	329,531	1,031,597	3,043,587	1,271,365	4,314,952
Female	790,884	295,149	1,086,033	760,417	323,154	1,083,570	3,102,375	1,351,592	4,453,968
Race	–	–	–	–	–	–	–	–	–
White	1,006,298	466,655	1,472,953	996,955	459,133	1,456,088	3,967,989	1,904,582	5,872,571
Black	376,562	83,688	460,250	325,911	115,090	441,001	1,453,655	378,682	1,832,337
Other	174,807	73,353	248,160	139,616	78,462	218,078	724,319	339,692	1,064,011
Ethnicity	–	–	–	–	–	–	–	–	–
Hispanic	572,149	186,792	758,941	524,655	218,493	743,147	2,134,739	831,123	2,965,862
Non-Hispanic	985,518	436,903	1,422,421	937,828	434,192	1,372,019	4,011,224	1,791,834	5,803,057
Living arrangement	–	–	–	–	–	–	–	–	–
Two-parent family	815,711	418,923	1,234,634	747,016	459,151	1,206,167	3,263,982	1,814,093	5,078,076
Single-parent family	651,074	173,197	824,270	623,601	171,005	794,606	2,510,711	701,317	3,212,029
No-parent family	90,882	31,576	122,458	91,865	22,528	114,394	371,269	107,546	478,815
Related nonparent caretaker	45,738	31,576	77,314	67,054	22,528	89,582	230,079	107,546	337,625
Unrelated nonparent caretaker	45,143	0	45,143	24,811	0	24,811	141,190	0	141,190
Military status of household members	–	–	–	–	–	–	–	–	–
Ever served in U.S. military	84,931	81,851	166,782	74,401	58,384	132,785	284,879	253,988	538,867
Serving in U.S. military in 2016	18,105	2,577	20,681	22,628	4,926	27,554	73,030	20,816	93,845
Number of people in household	–	–	–	–	–	–	–	–	–
2	103,607	14,590	118,197	92,963	17,575	110,538	367,894	56,805	424,699
3	257,828	138,280	396,108	290,366	124,801	415,167	1,137,226	586,279	1,723,506
4	405,836	186,397	592,233	397,036	204,863	601,899	1,624,080	806,733	2,430,813
5	340,478	147,888	488,366	337,584	143,782	481,366	1,344,022	572,629	1,916,651
6 or more	449,918	136,540	586,458	344,534	161,663	506,197	1,672,740	600,511	2,273,251

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1-4		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Mean	4.8	4.6	4.7	4.6	4.7	4.6	4.7	4.6	4.7
Number with working parent(s)	1,089,552	534,754	1,624,306	1,012,519	601,951	1,614,469	4,244,578	2,305,001	6,549,579
Annual family income relative to poverty	–	–	–	–	–	–	–	–	–
No income	91,977	0	91,977	99,500	0	99,500	399,278	0	399,278
Up to 50% FPG	231,674	0	231,674	210,947	0	210,947	996,202	0	996,202
More than 50% up to 100% FPG	443,585	0	443,585	405,898	0	405,898	1,657,886	0	1,657,886
More than 100% up to 130% FPG	306,102	0	306,102	261,502	0	261,502	1,189,998	0	1,189,998
More than 130% up to 150% FPG	170,686	0	170,686	149,922	0	149,922	676,495	0	676,495
More than 150% up to 185% FPG	313,641	0	313,641	334,714	0	334,714	1,226,103	0	1,226,103
More than 185% up to 200% FPG	0	87,277	87,277	0	76,221	76,221	0	319,548	319,548
More than 200% FPG	0	536,418	536,418	0	576,464	576,464	0	2,303,409	2,303,409
Benefit receipt	–	–	–	–	–	–	–	–	–
No benefit receipt	358,856	0	358,856	294,043	0	294,043	1,322,980	0	1,322,980
Medicaid, SNAP, and TANF	94,899	7,852	102,751	66,097	10,836	76,933	353,843	34,312	388,155
SNAP and TANF only	293	0	293	0	0	0	1,517	0	1,517
Medicaid and SNAP only	601,583	96,250	697,832	510,013	92,465	602,478	2,330,614	402,806	2,733,420
Medicaid and TANF only	795	8,345	9,140	3,155	4,729	7,884	12,444	23,999	36,444
SNAP only	83,735	39,771	123,506	81,703	21,161	102,863	353,353	122,091	475,444
TANF only	0	0	0	0	0	0	0	0	0
Medicaid only	417,506	471,477	888,984	507,473	523,493	1,030,966	1,771,211	2,039,748	3,810,959

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the fully adjusted person weights for the CPS-ASEC data. They were adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

“–” denotes blank cells.

Source: NBER, n.d.b

Table A.6b2. Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC by Income and Adjunctive Eligibility in the 2017 CPS-ASEC by Demographic Characteristics: CY 2016 (Fully Adjusted Weights, Percentages)

Demographic Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^{b b}	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^{b b}	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^{b b}	Total
Total	1,387,649	739,011	2,126,660	1,601,201	683,186	2,284,386	1,524,613	663,392	2,188,005
Gender	–	–	–	–	–	–	–	–	–
Male	45.2	51.1	47.2	51.2	42.9	48.7	49.5	48.3	49.1
Female	54.8	48.9	52.8	48.8	57.1	51.3	50.5	51.7	50.9
Race	–	–	–	–	–	–	–	–	–
White	66.9	74.7	69.6	62.5	71.1	65.1	63.2	74.3	66.6
Black	20.1	15.2	18.4	24.6	14.5	21.6	23.4	12.2	20.0
Other	13.0	10.1	12.0	12.9	14.4	13.3	13.4	13.5	13.4
Ethnicity	–	–	–	–	–	–	–	–	–
Hispanic	32.5	30.2	31.7	32.6	32.4	32.5	33.8	30.8	32.9
Non-Hispanic	67.5	69.8	68.3	67.4	67.6	67.5	66.2	69.2	67.1
Living arrangement	–	–	–	–	–	–	–	–	–
Two-parent family	59.0	74.4	64.3	53.7	72.7	59.4	55.2	66.2	58.5
Single-parent family	36.0	23.0	31.5	40.5	24.4	35.7	38.5	28.7	35.5
No-parent family	5.0	2.6	4.2	5.8	2.8	4.9	6.3	5.1	5.9
Related nonparent caretaker	2.7	2.6	2.7	3.4	2.8	3.2	4.1	5.1	4.5
Unrelated nonparent caretaker	2.3	0.0	1.5	2.4	0.0	1.7	2.1	0.0	1.5
Military status of household members	–	–	–	–	–	–	–	–	–
Ever served in U.S. military	5.0	10.0	6.7	4.0	8.9	5.5	4.1	8.0	5.2
Serving in U.S. military in 2016	1.7	1.8	1.7	1.3	1.3	1.3	0.7	0.7	0.7
Number of people in household	–	–	–	–	–	–	–	–	–
2	7.1	2.6	5.5	6.1	0.7	4.5	4.8	3.0	4.3
3	20.2	30.4	23.7	19.6	22.6	20.5	18.1	25.5	20.3
4	28.0	26.3	27.4	25.5	31.1	27.2	27.0	30.6	28.1
5	18.4	17.4	18.1	20.1	20.5	20.2	22.6	21.2	22.2
6 or more	26.3	23.3	25.3	28.7	25.1	27.7	27.4	19.7	25.1

Demographic Characteristics	WIC-Eligible Infants			WIC-Eligible Children Aged 1			WIC-Eligible Children Aged 2		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Percent with working parent(s)	62.9	84.6	70.4	67.5	86.3	73.1	69.7	87.2	75.0
Annual family income relative to poverty	–	–	–	–	–	–	–	–	–
No income	6.3	0.0	4.1	7.0	0.0	4.9	6.3	0.0	4.4
Up to 50% FPG	15.9	0.0	10.4	17.3	0.0	12.1	18.1	0.0	12.6
More than 50% up to 100% FPG	24.4	0.0	15.9	26.1	0.0	18.3	25.6	0.0	17.9
More than 100% up to 130% FPG	19.7	0.0	12.9	20.0	0.0	14.0	19.9	0.0	13.8
More than 130% up to 150% FPG	13.1	0.0	8.5	11.2	0.0	7.8	11.6	0.0	8.1
More than 150% up to 185% FPG	20.6	0.0	13.4	18.5	0.0	12.9	18.5	0.0	12.9
More than 185% up to 200% FPG	0.0	9.6	3.3	0.0	10.9	3.3	0.0	12.3	3.7
More than 200% FPG	0.0	90.4	31.4	0.0	89.1	26.6	0.0	87.7	26.6
Benefit receipt	–	–	–	–	–	–	–	–	–
No benefit receipt	17.1	0.0	11.2	21.3	0.0	14.9	21.6	0.0	15.0
Medicaid, SNAP, and TANF	6.8	1.2	4.8	5.3	1.3	4.1	7.0	1.1	5.2
SNAP and TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.1	0.0	0.0
Medicaid and SNAP only	38.2	15.2	30.2	38.6	15.0	31.6	39.4	16.8	32.5
Medicaid and TANF only	0.3	1.0	0.5	0.1	1.3	0.4	0.5	0.3	0.4
SNAP only	6.1	5.4	5.9	7.6	2.9	6.2	4.4	6.3	4.9
TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid only	31.6	77.1	47.4	27.1	79.6	42.8	27.1	75.5	41.8

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the fully adjusted person weights for the CPS-ASEC data. They were adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

“–” denotes blank cells.

Source: NBER, n.d.^b

Table A.6b2 (continued). Estimated Average Monthly Numbers of Infants, and Children by Year of Age, Eligible for WIC by Income and Adjunctive Eligibility in the 2017 CPS-ASEC by Demographic Characteristics: CY 2016 (Fully Adjusted Weights, Percentages)

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1-4		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Total	1,557,666	623,695	2,181,362	1,462,483	652,684	2,115,167	6,145,962	2,622,957	8,768,919
Gender	–	–	–	–	–	–	–	–	–
Male	49.2	52.7	50.2	48.0	50.5	48.8	49.5	48.5	49.2
Female	50.8	47.3	49.8	52.0	49.5	51.2	50.5	51.5	50.8
Race	–	–	–	–	–	–	–	–	–
White	64.6	74.8	67.5	68.2	70.3	68.8	64.6	72.6	67.0
Black	24.2	13.4	21.1	22.3	17.6	20.8	23.7	14.4	20.9
Other	11.2	11.8	11.4	9.5	12.0	10.3	11.8	13.0	12.1
Ethnicity	–	–	–	–	–	–	–	–	–
Hispanic	36.7	29.9	34.8	35.9	33.5	35.1	34.7	31.7	33.8
Non-Hispanic	63.3	70.1	65.2	64.1	66.5	64.9	65.3	68.3	66.2
Living arrangement	–	–	–	–	–	–	–	–	–
Two-parent family	52.4	67.2	56.6	51.1	70.3	57.0	53.1	69.2	57.9
Single-parent family	41.8	27.8	37.8	42.6	26.2	37.6	40.9	26.7	36.6
No-parent family	5.8	5.1	5.6	6.3	3.5	5.4	6.0	4.1	5.5
Related nonparent caretaker	2.9	5.1	3.5	4.6	3.5	4.2	3.7	4.1	3.9
Unrelated nonparent caretaker	2.9	0.0	2.1	1.7	0.0	1.2	2.3	0.0	1.6
Military status of household members	–	–	–	–	–	–	–	–	–
Ever served in U.S. military	5.5	13.1	7.6	5.1	8.9	6.3	4.6	9.7	6.1
Serving in U.S. military in 2016	1.2	0.4	0.9	1.5	0.8	1.3	1.2	0.8	1.1
Number of people in household	–	–	–	–	–	–	–	–	–
2	6.7	2.3	5.4	6.4	2.7	5.2	6.0	2.2	4.8
3	16.6	22.2	18.2	19.9	19.1	19.6	18.5	22.4	19.7
4	26.1	29.9	27.1	27.1	31.4	28.5	26.4	30.8	27.7
5	21.9	23.7	22.4	23.1	22.0	22.8	21.9	21.8	21.9
6 or more	28.9	21.9	26.9	23.6	24.8	23.9	27.2	22.9	25.9

Demographic Characteristics	WIC-Eligible Children Aged 3			WIC-Eligible Children Aged 4			WIC-Eligible Children Aged 1-4		
	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total	Family Income ≤ 185% FPG ^a	Adjunctively Eligible >185% FPG ^b	Total
Percent with working parent(s)	69.9	85.7	74.5	69.2	92.2	76.3	69.1	87.9	74.7
Annual family income relative to poverty	–	–	–	–	–	–	–	–	–
No income	5.9	0.0	4.2	6.8	0.0	4.7	6.5	0.0	4.6
Up to 50% FPG	14.9	0.0	10.6	14.4	0.0	10.0	16.2	0.0	11.4
More than 50% up to 100% FPG	28.5	0.0	20.3	27.8	0.0	19.2	27.0	0.0	18.9
More than 100% up to 130% FPG	19.7	0.0	14.0	17.9	0.0	12.4	19.4	0.0	13.6
More than 130% up to 150% FPG	11.0	0.0	7.8	10.3	0.0	7.1	11.0	0.0	7.7
More than 150% up to 185% FPG	20.1	0.0	14.4	22.9	0.0	15.8	19.9	0.0	14.0
More than 185% up to 200% FPG	0.0	14.0	4.0	0.0	11.7	3.6	0.0	12.2	3.6
More than 200% FPG	0.0	86.0	24.6	0.0	88.3	27.3	0.0	87.8	26.3
Benefit receipt (percent distribution)	–	–	–	–	–	–	–	–	–
No benefit receipt	23.0	0.0	16.5	20.1	0.0	13.9	21.5	0.0	15.1
Medicaid, SNAP, and TANF	6.1	1.3	4.7	4.5	1.7	3.6	5.8	1.3	4.4
SNAP and TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid and SNAP only	38.6	15.4	32.0	34.9	14.2	28.5	37.9	15.4	31.2
Medicaid and TANF only	0.1	1.3	0.4	0.2	0.7	0.4	0.2	0.9	0.4
SNAP only	5.4	6.4	5.7	5.6	3.2	4.9	5.7	4.7	5.4
TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid only	26.8	75.6	40.8	34.7	80.2	48.7	28.8	77.8	43.5

Notes

^a The WIC economic unit is defined as all persons in the CPS-ASEC household who are related by blood, marriage, or adoption, plus the unmarried partner of any family member as well as that partner's dependents. Infants and children in economic units with annual income less than or equal to 185 percent of the Federal Poverty Guidelines for the unit's size are income-eligible for WIC.

^b Adjunctively income-eligible infants and children were in economic units that reported participating in Medicaid, SNAP, or TANF during the prior year and had annual income exceeding 185 percent of the Federal Poverty Guidelines for the unit's size.

These estimates were tabulated from the fully adjusted person weights for the CPS-ASEC data. They were adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.

This table does not include estimates for Puerto Rico and the other U.S. territories.

FPG = Federal Poverty Guidelines

“–” denotes blank cells.

Source: NBER, n.d.b

Table A.7. Changes in the Total Population, Total Number of Individuals Eligible for WIC, and WIC Eligibility Rate by Participant Category: CY 2015–CY 2016

Participant Category	Total Population		Percent Change	Total WIC Eligibility		Percent Change	WIC Eligibility Rate		Percent Change
	2015	2016		2015	2016		2015	2016	
Infants	3,998,800	3,966,090	-0.8	2,506,686	2,159,041	-13.9*	62.7	54.4	-13.2*
Total children aged 1–4	16,142,707	16,193,444	0.3	9,268,848	8,907,712	-3.9*	57.4	55.0	-4.2*
Children aged 1	4,044,481	4,068,849	0.6	2,274,986	2,317,916	1.9	56.2	57.0	1.3
Children aged 2	4,034,206	4,080,801	1.2	2,321,950	2,222,568	-4.3	57.6	54.5	-5.4*
Children aged 3	4,031,844	4,034,985	0.1	2,340,558	2,215,120	-5.4*	58.1	54.9	-5.4*
Children aged 4	4,032,176	4,008,809	-0.6	2,331,355	2,152,108	-7.7*	57.8	53.7	-7.2*
Pregnant women	2,987,403	3,950,623	-0.8	1,634,852	1,408,119	-13.9*	54.7	47.5	-13.2*
All postpartum women	3,983,205	2,241,095	-0.8	1,652,116	1,458,923	-11.7*	41.5	36.9	-11.0*
Breastfeeding women	2,147,025	1,709,528	4.4*	1,034,333	949,592	-8.2*	48.2	42.4	-12.0*
Non-breastfeeding women	1,836,179	3,966,090	-6.9*	617,783	509,331	-17.6*	33.6	29.8	-11.4*
Total	27,112,115	27,073,124	-0.1	15,062,503	13,933,795	-7.5*	55.6	51.5	-7.4*

Note

* indicates a statistically significant difference between the estimate of WIC-eligible individuals and WIC eligibility rates in 2015 and 2016 at the 95-percent confidence level.

Sources: NBER, n.d.b; IPUMS-USA, n.d.; U.S. Census Bureau, n.d.d

Table A.8. Stepwise Comparison of Changes in Average Monthly Numbers of Infants and Children Eligible for WIC as Estimated in the March CPS-ASEC: CY 2015–CY 2016

Step	2015			2016			Percent Change		
	Infants	Children Aged 1–4	Total	Infants	Children Aged 1–4	Total	Infants	Children Aged 1–4	Total
Total number of infants/children in the March CPS	3,876,774	16,045,983	19,922,757	3,822,275	16,131,250	19,953,525	-1.4	0.5	0.2
Number (non-U.S. territory) after adjustment for CPS undercount/overcount	3,959,291	15,978,073	19,937,364	3,929,453	16,036,048	19,965,501	-0.8	0.4	0.1
Number with annual income < 185% FPG	1,654,704	6,315,836	7,970,540	1,282,473	5,914,209	7,196,682	-22.5	-6.4	-9.7
Number with adjunctive eligibility	621,483	2,478,408	3,099,891	674,832	2,507,080	3,181,912	8.6	1.2	2.6
Through SNAP	110,205	600,043	710,248	149,963	536,013	685,976	36.1	-10.7	-3.4
Through TANF	6,897	9,745	16,642	6,591	23,266	29,857	-4.4	138.8	79.4
Through Medicaid	504,382	1,868,619	2,373,001	518,278	1,947,801	2,466,079	2.8	4.2	3.9
Number before monthly income adjustment	2,276,187	8,794,243	11,070,431	1,957,305	8,421,289	10,378,594	-14.0	-4.2	-6.2
Number after monthly income adjustment	2,545,826	9,224,611	11,770,437	2,192,433	8,857,494	11,049,927	-13.9	-4.0	-6.1
Total eligibility: Number after adjustment for nutritional risk (infants and children)	2,469,451	9,132,365	11,601,816	2,126,660	8,768,919	10,895,579	-13.9	-4.0	-6.1

Note

This table does not include estimates for Puerto Rico or the other U.S. territories.

Sources: NBER, n.d.b; IPUMS-USA, n.d.; U.S. Census Bureau, n.d.d; Thorn et al., 2018

Table A.9. Standard Error and Coefficient of Variation for 2016 National Estimates by Participant Category

Participant Category	2016					
	Estimate		Standard Error		Coefficient of Variation (Percent)	
	Total Population	Eligible for WIC	Total Population	Eligible for WIC	Total Population	Eligible for WIC
Infants	3,929,453	2,126,660	43,398	68,762	1.1	3.2
Total children aged 1–4	16,036,048	8,768,919	37,624	101,446	0.2	1.2
Children aged 1	4,031,551	2,284,386	37,483	51,865	0.9	2.3
Children aged 2	4,042,036	2,188,005	43,854	56,170	1.1	2.6
Children aged 3	3,995,077	2,181,362	42,699	55,351	1.1	2.5
Children aged 4	3,967,384	2,115,167	38,639	50,020	1.0	2.4
Pregnant women	2,935,596	1,387,000	32,422	44,847	1.1	3.2
Postpartum breastfeeding women	2,220,403	935,335	21,753	29,748	1.0	3.2
Postpartum non-breastfeeding women	1,693,726	501,719	21,891	16,584	1.3	3.3
Total	26,815,226	13,719,633	81,832	199,585	0.3	1.5

Note

This table does not include estimates for Puerto Rico or the other U.S. territories.

Sources: NBER, n.d.a, n.d.b

Appendix B. Detailed Tables for State and Regional WIC Estimates: CY 2016

The tables in this appendix present detailed estimates of WIC-eligible individuals and coverage rates by State and FNS region for CY 2016. A list of the seven FNS regions and the States included in each region follows. Note that the District of Columbia and U.S. territories are included in references to States unless otherwise indicated.

FNS Regions and the States Within Each Region

▶ Northeast

- Connecticut
- Maine
- Massachusetts
- New Hampshire
- New York
- Rhode Island
- Vermont

▶ Mid-Atlantic

- Delaware
- District of Columbia
- Maryland
- New Jersey
- Pennsylvania
- Puerto Rico
- U.S. Virgin Islands
- Virginia
- West Virginia

▶ Southeast

- Alabama
- Florida
- Georgia
- Kentucky
- Mississippi
- North Carolina
- South Carolina
- Tennessee

▶ Midwest

- Illinois
- Indiana
- Michigan
- Minnesota
- Ohio
- Wisconsin

▶ Southwest

- Arkansas
- Louisiana
- New Mexico
- Oklahoma
- Texas

▶ Mountain Plains

- Colorado
- Iowa
- Kansas
- Missouri
- Montana
- Nebraska
- North Dakota
- South Dakota
- Utah
- Wyoming

▶ Western

- Alaska
- American Samoa
- Arizona
- California
- Guam
- Hawaii
- Idaho
- Nevada
- Northern Mariana Islands
- Oregon
- Washington

Table B.1. WIC Eligibility and Coverage Rates by State and FNS Region: CY 2016

This table shows the estimated number of WIC eligibility, participants, and the resulting coverage rates by State and FNS region.

Table B.2. WIC Eligibility and Coverage Rates by FNS Region and States in Each Region: CY 2016

This table shows the estimated number of WIC eligibility, participants, and the resulting coverage rates by FNS region and the States within each region.

Table B.3. WIC Eligibility, Participants, and Coverage Rates by FNS Region and Participant Category: CY 2016

This table shows the estimated number of WIC eligibility, participants, and the resulting coverage rates by FNS region and participant category.

Table B.4. WIC Eligibility Standard Errors by State and FNS Region: CY 2016

This table shows the estimated number of WIC eligibility and the associated standard errors and coefficients of variation by State and FNS region.

Table B.5. WIC Eligibility Standard Errors by FNS Region and States in Each Region: CY 2016

This table shows the estimated number of WIC eligibility and the associated standard errors and coefficients of variation by FNS region and the States within each region.

Table B.6. Standard Errors for WIC Eligibility by FNS Region and Participant Category: CY 2016

This table shows the estimated number of WIC eligibility and the associated standard errors and coefficients of variance by FNS region and participant category.

Table B.7. Adjustments for Calculating the Average Monthly Number of WIC-Eligible Individuals in Puerto Rico and the Other U.S. Territories by Participant Category: CY 2016

Analogous to table A.5 of the national estimates, this table shows the step-by-step adjustments made to calculate the final numbers of infants, children, and pregnant and postpartum women who were eligible for WIC in Puerto Rico and the other U.S. territories based on the PRCS data for Puerto Rico (IPUMS-USA, n.d.) and the U.S. Census Bureau population estimates for the other territories (U.S. Census Bureau, n.d.d).

Table B.8. Regional Estimates of the Average Monthly Numbers of Infants and Children Eligible for WIC by Demographic and Income Characteristics: CY 2016

This table presents estimates of the numbers of WIC-eligible infants and children by demographic and income characteristics in the CPS-ASEC data by FNS region (NBER, n.d.b.). It is similar to table A.6a but shows the data by region and does not show results for children by year of age. Note that this table does not include infants and children from Puerto Rico or the other U.S. territories. This table shows these characteristics using weights that have been fully adjusted, including adjustments for the undercount/overcount in the CPS (population adjustment), monthly income and certification periods (annual-to-monthly adjustment), and nutritional risk.

Table B.9. WIC Coverage Rates by State: CY 2005–CY 2016

This table shows WIC coverage rates by State and year.

Table B.10. WIC Coverage Rates (Percentages) by State and Participant Category With Margins of Error for 95-Percent Confidence Intervals: CY 2016

This table shows the coverage rates by State and participant category and the associated margins of error (MOEs). The MOE is a measure of the estimate’s variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 95-percent confidence interval. This is a new table; it did not appear in earlier reports.

Table B.11. State-Level WIC Coverage Rates (Percentages) by Race and Ethnicity With Margins of Error for 95-Percent Confidence Intervals: CY 2016

This table shows the State-level coverage rates by race and ethnicity and the associated MOEs.

Table B.1. WIC Eligibility and Coverage Rates by State and FNS Region: CY 2016

State ^a	Number Eligible	Participants	Coverage Rate (Percent)
Alabama	226,565	128,074	56.5
Alaska	43,626	18,961	43.5
Arizona	319,905	160,911	50.3
Arkansas	161,219	79,436	49.3
California	1,756,442	1,151,406	65.6
Colorado	197,505	85,912	43.5
Connecticut	98,891	48,688	49.2
Delaware	33,905	17,722	52.3
District of Columbia	26,439	14,285	54.0
Florida	886,846	477,553	53.8
Georgia	519,109	250,204	48.2
Hawaii	55,569	29,662	53.4
Idaho	88,551	38,451	43.4
Illinois	492,054	221,821	45.1
Indiana	285,090	146,401	51.4
Iowa	131,077	61,293	46.8
Kansas	111,192	57,836	52.0
Kentucky	207,541	110,610	53.3
Louisiana	241,154	125,356	52.0
Maine	38,733	20,485	52.9
Maryland	202,145	138,117	68.3
Massachusetts	207,255	114,368	55.2
Michigan	414,846	231,991	55.9
Minnesota	190,548	114,907	60.3
Mississippi	162,315	83,973	51.7
Missouri	246,818	125,399	50.8
Montana	47,704	18,216	38.2
Nebraska	72,331	38,210	52.8
Nevada	126,079	69,550	55.2
New Hampshire	29,508	13,841	46.9

State ^a	Number Eligible	Participants	Coverage Rate (Percent)
New Jersey	285,123	153,406	53.8
New Mexico	114,603	51,355	44.8
New York	811,495	453,753	55.9
North Carolina	441,863	237,905	53.8
North Dakota	25,859	12,966	50.1
Ohio	450,501	231,315	51.3
Oklahoma	200,425	110,155	55.0
Oregon	162,750	91,694	56.3
Pennsylvania	452,683	233,531	51.6
Puerto Rico	179,890	151,371	84.1
Rhode Island	32,490	20,202	62.2
South Carolina	226,362	105,084	46.4
South Dakota	38,918	18,962	48.7
Tennessee	330,965	142,264	43.0
Texas	1,481,540	851,340	57.5
Utah	142,377	56,073	39.4
Vermont	22,472	12,353	55.0
Virginia	271,453	129,875	47.8
Washington	303,182	166,628	55.0
West Virginia	79,584	40,054	50.3
Wisconsin	204,177	98,949	48.5
Wyoming	19,850	10,705	53.9
FNS Region			
Northeast	1,240,844	683,690	55.1
Mid-Atlantic	1,538,596	882,447	57.4
Southeast	3,001,566	1,535,667	51.2
Midwest	2,037,216	1,045,383	51.3
Southwest	2,198,940	1,217,641	55.4
Mountain Plains	1,033,631	485,571	47.0
Western	2,883,001	1,743,582	60.5
Total	13,933,795	7,593,981	54.5

Notes

^a State and regional eligibility estimates and participant data include individuals in Indian Tribal Organizations who were eligible for WIC.

Estimates for the U.S. territories other than Puerto Rico are included in regional totals but not shown separately because of small sample constraints.

Sources: IPUMS-USA, n.d.; NBER, n.d.b; U.S. Census Bureau, n.d.d; unpublished internal WIC administrative data

Table B.2. WIC Eligibility and Coverage Rates by FNS Region and States in Each Region: CY 2016

Region and State	Eligible	Participants	Coverage Rate
Northeast	1,240,844	683,690	55.1
Connecticut	98,891	48,688	49.2
Maine	38,733	20,485	52.9
Massachusetts	207,255	114,368	55.2
New Hampshire	29,508	13,841	46.9
New York	811,495	453,753	55.9
Rhode Island	32,490	20,202	62.2
Vermont	22,472	12,353	55.0
Mid-Atlantic	1,538,596	882,447	57.4
Delaware	33,905	17,722	52.3
District of Columbia	26,439	14,285	54.0
Maryland	202,145	138,117	68.3
New Jersey	285,123	153,406	53.8
Pennsylvania	452,683	233,531	51.6
Puerto Rico	179,890	151,371	84.1
Virginia	271,453	129,875	47.8
West Virginia	79,584	40,054	50.3
Southeast	3,001,566	1,535,667	51.2
Alabama	226,565	128,074	56.5
Florida	886,846	477,553	53.8
Georgia	519,109	250,204	48.2
Kentucky	207,541	110,610	53.3
Mississippi	162,315	83,973	51.7
North Carolina	441,863	237,905	53.8
South Carolina	226,362	105,084	46.4
Tennessee	330,965	142,264	43.0
Midwest	2,037,216	1,045,383	51.3
Illinois	492,054	221,821	45.1
Indiana	285,090	146,401	51.4
Michigan	414,846	231,991	55.9
Minnesota	190,548	114,907	60.3
Ohio	450,501	231,315	51.3
Wisconsin	204,177	98,949	48.5
Southwest	2,198,940	1,217,641	55.4
Arkansas	161,219	79,436	49.3
Louisiana	241,154	125,356	52.0
New Mexico	114,603	51,355	44.8
Oklahoma	200,425	110,155	55.0
Texas	1,481,540	851,340	57.5

Region and State	Eligible	Participants	Coverage Rate
Mountain Plains	1,033,631	485,571	47.0
Colorado	197,505	85,912	43.5
Iowa	131,077	61,293	46.8
Kansas	111,192	57,836	52.0
Missouri	246,818	125,399	50.8
Montana	47,704	18,216	38.2
Nebraska	72,331	38,210	52.8
North Dakota	25,859	12,966	50.1
South Dakota	38,918	18,962	48.7
Utah	142,377	56,073	39.4
Wyoming	19,850	10,705	53.9
Western	2,883,001	1,743,582	60.5
Alaska	43,626	18,961	43.5
Arizona	319,905	160,911	50.3
California	1,756,442	1,151,406	65.6
Hawaii	55,569	29,662	53.4
Idaho	88,551	38,451	43.4
Nevada	126,079	69,550	55.2
Oregon	162,750	91,694	56.3
Washington	303,182	166,628	55.0
Total	13,933,795	7,593,981	54.5

Notes

State and regional eligibility estimates and participant data include individuals in Indian Tribal Organizations who were eligible for WIC and/or receiving WIC. Estimates for the U.S. territories other than Puerto Rico are included in regional totals but not shown separately because of small sample constraints.

Sources: IPUMS-USA, n.d.; NBER, n.d.b; U.S. Census Bureau, n.d.d; unpublished internal WIC administrative data

Table B.3. WIC Eligibility, Participants, and Coverage Rates by FNS Region and Participant Category: CY 2016

Region	Infants	Children Aged 1-4	Pregnant Women	All Postpartum Women	Total
Number Eligible					
Northeast	193,078	785,648	125,925	136,194	1,240,844
Mid-Atlantic	234,319	993,438	152,822	158,016	1,538,596
Southeast	469,018	1,923,067	305,892	303,590	3,001,566
Midwest	316,849	1,306,013	206,648	207,707	2,037,216
Southwest	346,977	1,402,260	226,297	223,406	2,198,940
Mountain Plains	165,844	644,758	108,163	114,867	1,033,631
Western	432,957	1,852,529	282,373	315,142	2,883,001
Total	2,159,041	8,907,712	1,408,119	1,458,923	13,933,795
Number Participating					
Northeast	157,503	368,421	61,040	96,725	683,690
Mid-Atlantic	211,689	470,990	83,364	116,403	882,447
Southeast	390,961	763,961	149,600	231,146	1,535,667
Midwest	282,019	522,341	99,854	141,169	1,045,383
Southwest	312,523	585,269	117,807	202,043	1,217,641
Mountain Plains	122,204	246,375	44,907	72,086	485,571
Western	376,836	968,950	151,176	246,620	1,743,582
Total	1,853,735	3,926,307	707,748	1,106,191	7,593,981
Coverage Rate (Percent)					
Northeast	81.6	46.9	48.5	71.0	55.1
Mid-Atlantic	90.3	47.4	54.5	73.7	57.4
Southeast	83.4	39.7	48.9	76.1	51.2
Midwest	89.0	40.0	48.3	68.0	51.3
Southwest	90.1	41.7	52.1	90.4	55.4
Mountain Plains	73.7	38.2	41.5	62.8	47.0
Western	87.0	52.3	53.5	78.3	60.5
Total	85.9	44.1	50.3	75.8	54.5

Sources: IPUMS-USA, n.d.; NBER, n.d.b; U.S. Census Bureau, n.d.d; unpublished internal WIC administrative data

Table B.4. WIC Eligibility Standard Errors by State and FNS Region: CY 2016

State ^a	Eligible	Standard Error	Coefficient of Variation ^b (Percent)
Alabama	226,565	7,409	3.3
Alaska	43,626	3,443	7.9
Arizona	319,905	7,952	2.5
Arkansas	161,219	5,139	3.2
California	1,756,442	30,048	1.7
Colorado	197,505	6,645	3.4
Connecticut	98,891	4,073	4.1
Delaware	33,905	2,863	8.4
District of Columbia	26,439	1,840	7.0
Florida	886,846	16,530	1.9
Georgia	519,109	12,006	2.3
Hawaii	55,569	2,770	5.0
Idaho	88,551	3,892	4.4
Illinois	492,054	10,940	2.2
Indiana	285,090	8,081	2.8
Iowa	131,077	6,617	5.0
Kansas	111,192	4,643	4.2
Kentucky	207,541	6,550	3.2
Louisiana	241,154	6,419	2.7
Maine	38,733	3,453	8.9
Maryland	202,145	7,650	3.8
Massachusetts	207,255	6,489	3.1
Michigan	414,846	9,618	2.3
Minnesota	190,548	6,755	3.5
Mississippi	162,315	4,554	2.8
Missouri	246,818	7,892	3.2
Montana	47,704	3,217	6.7
Nebraska	72,331	3,767	5.2
Nevada	126,079	5,391	4.3
New Hampshire	29,508	2,623	8.9
New Jersey	285,123	8,280	2.9
New Mexico	114,603	3,933	3.4
New York	811,495	16,087	2.0
North Carolina	441,863	9,942	2.2
North Dakota	25,859	3,358	13.0
Ohio	450,501	10,560	2.3
Oklahoma	200,425	6,044	3.0
Oregon	162,750	5,674	3.5
Pennsylvania	452,683	11,123	2.5
Puerto Rico	179,890	4,328	2.4
Rhode Island	32,490	2,513	7.7

State ^a	Eligible	Standard Error	Coefficient of Variation ^b (Percent)
South Carolina	226,362	5,834	2.6
South Dakota	38,918	3,325	8.5
Tennessee	330,965	8,496	2.6
Texas	1,481,540	25,701	1.7
Utah	142,377	6,802	4.8
Vermont	22,472	2,590	11.5
Virginia	271,453	8,646	3.2
Washington	303,182	8,224	2.7
West Virginia	79,584	3,861	4.9
Wisconsin	204,177	6,916	3.4
Wyoming	19,850	2,481	12.5
FNS Region^c			
Northeast	1,240,844	24,477	2.0
Mid-Atlantic	1,351,331	29,602	2.2
Southeast	3,001,566	52,595	1.8
Midwest	2,037,216	35,873	1.8
Southwest	2,198,940	39,394	1.8
Mountain Plains	1,033,631	25,916	2.5
Western	2,856,104	48,441	1.7
Total	13,719,633	199,585	1.5

Notes

^a State and regional eligibility estimates include individuals in Indian Tribal Organizations who were eligible for WIC.

^b The coefficient of variation is defined as the ratio of the standard error to the eligibility estimate.

^c Estimates for Puerto Rico or the other U.S. territories are not included in regional totals or standard errors.

Sources: IPUMS-USA, n.d.; NBER, n.d.a, n.d.b

Table B.5. WIC Eligibility Standard Errors by FNS Region and States in Each Region: CY 2016

Region and State	Eligible	Standard Error	Coefficient of Variation
Northeast	1,240,844	24,477	2.0
Connecticut	98,891	4,073	4.1
Maine	38,733	3,453	8.9
Massachusetts	207,255	6,489	3.1
New Hampshire	29,508	2,623	8.9
New York	811,495	16,087	2.0
Rhode Island	32,490	2,513	7.7
Vermont	22,472	2,590	11.5
Mid-Atlantic	1,351,331	29,602	2.2
Delaware	33,905	2,863	8.4
District of Columbia	26,439	1,840	7.0
Maryland	202,145	7,650	3.8
New Jersey	285,123	8,280	2.9
Pennsylvania	452,683	11,123	2.5
Puerto Rico	179,890	4,328	2.4
Virginia	271,453	8,646	3.2
West Virginia	79,584	3,861	4.9
Southeast	3,001,566	52,595	1.8
Alabama	226,565	7,409	3.3
Florida	886,846	16,530	1.9
Georgia	519,109	12,006	2.3
Kentucky	207,541	6,550	3.2
Mississippi	162,315	4,554	2.8
North Carolina	441,863	9,942	2.2
South Carolina	226,362	5,834	2.6
Tennessee	330,965	8,496	2.6
Midwest	2,037,216	35,873	1.8
Illinois	492,054	10,940	2.2
Indiana	285,090	8,081	2.8
Michigan	414,846	9,618	2.3
Minnesota	190,548	6,755	3.5
Ohio	450,501	10,560	2.3
Wisconsin	204,177	6,916	3.4
Southwest	2,198,940	39,394	1.8
Arkansas	161,219	5,139	3.2
Louisiana	241,154	6,419	2.7
New Mexico	114,603	3,933	3.4
Oklahoma	200,425	6,044	3.0
Texas	1,481,540	25,701	1.7

Region and State	Eligible	Standard Error	Coefficient of Variation
Mountain Plains	1,033,631	25,916	2.5
Colorado	197,505	6,645	3.4
Iowa	131,077	6,617	5.0
Kansas	111,192	4,643	4.2
Missouri	246,818	7,892	3.2
Montana	47,704	3,217	6.7
Nebraska	72,331	3,767	5.2
North Dakota	25,859	3,358	13.0
South Dakota	38,918	3,325	8.5
Utah	142,377	6,802	4.8
Wyoming	19,850	2,481	12.5
Western	2,856,104	48,441	1.7
Alaska	43,626	3,443	7.9
Arizona	319,905	7,952	2.5
California	1,756,442	30,048	1.7
Hawaii	55,569	2,770	5.0
Idaho	88,551	3,892	4.4
Nevada	126,079	5,391	4.3
Oregon	162,750	5,674	3.5
Washington	303,182	8,224	2.7
Total	13,719,633	199,585	1.5

Notes

State and regional eligibility estimates include individuals in Indian Tribal Organizations who were eligible for WIC.

Estimates for Puerto Rico and the other U.S. territories are not included in regional totals or standard errors.

The coefficient of variation is defined as the ratio of the standard error to the eligibility estimate.

Sources: IPUMS-USA, n.d.; NBER, n.d.a; NBER n.d.b

Table B.6. Standard Errors for WIC Eligibility by FNS Region and Participant Category: CY 2016

Region	Infants	Children Aged 1-4	Pregnant Women	All Postpartum Women	Total
Number Eligible^a					
Northeast	193,078	785,648	125,925	136,194	1,240,844
Mid-Atlantic	206,376	871,212	134,598	139,145	1,351,331
Southeast	469,018	1,923,067	305,892	303,590	3,001,566
Midwest	316,849	1,306,013	206,648	207,707	2,037,216
Southwest	346,977	1,402,260	226,297	223,406	2,198,940
Mountain Plains	165,844	644,758	108,163	114,867	1,033,631
Western	428,519	1,835,962	279,478	312,145	2,856,104
Total	2,126,660	8,768,919	1,387,000	1,437,054	13,719,633
Standard Error^a					
Northeast	9,796	15,675	6,389	6,863	24,477
Mid-Atlantic	10,020	17,837	6,535	6,743	29,602
Southeast	19,129	28,944	12,476	12,401	52,595
Midwest	13,930	21,835	9,085	9,110	35,873
Southwest	13,949	23,205	9,098	8,987	39,394
Mountain Plains	9,060	16,393	5,909	6,283	25,916
Western	16,826	27,799	10,974	12,084	48,441
Total	68,762	101,446	44,847	46,204	199,585
Coefficient of Variation^b (Percent)					
Northeast	5.1	2.0	5.1	5.0	2.0
Mid-Atlantic	4.9	2.0	4.9	4.8	2.2
Southeast	4.1	1.5	4.1	4.1	1.8
Midwest	4.4	1.7	4.4	4.4	1.8
Southwest	4.0	1.7	4.0	4.0	1.8
Mountain Plains	5.5	2.5	5.5	5.5	2.5
Western	3.9	1.5	3.9	3.9	1.7
Total	3.2	1.2	3.2	3.2	1.5

Notes

^a Estimates for Puerto Rico and the other U.S. territories are not included in regional totals or standard errors.

^b The coefficient of variation is defined as the ratio of the standard error to the eligibility estimate.

Sources: IPUMS-USA, n.d.; NBER, n.d.a, n.d.b; Thorn et al., 2018; unpublished internal WIC administrative data

Table B.7a. Adjustments for Calculating the Average Monthly Number of WIC-Eligible Individuals in Puerto Rico by Participant Category: CY 2016

Puerto Rico	Infants	Children Aged 1	Children Aged 2	Children Aged 3	Children Aged 4	Total Children Aged 1-4	Pregnant Women	Postpartum Breastfeeding Women	Postpartum Non-Breastfeeding Women	Total
Total number of infants/children in the PRCS	25,382	32,179	33,863	29,724	38,601	134,367	–	–	–	159,749
Number after adjustment for PRCS undercount/overcount	30,122	30,801	32,334	33,380	34,877	131,392	–	–	–	161,514
Number with annual income < 185 percent of the Federal Poverty Guidelines	23,361	25,953	27,443	26,472	28,017	107,886	–	–	–	131,247
Number adjunctively eligible and with annual income > 185 percent of the Federal Poverty Guidelines ^a	812	1,227	782	903	2,404	5,316	–	–	–	6,128
Through SNAP	496	751	186	199	850	1,987	–	–	–	2,483
Through TANF	0	0	0	76	0	76	–	–	–	76
Through Medicaid	316	476	596	628	1,554	3,253	–	–	–	3,569
Total number income and adjunctively eligible	24,173	27,180	28,225	27,375	30,422	113,202	–	–	–	137,375
Number after adjustment for monthly income and certification periods	27,557	27,557	27,557	27,557	27,557	110,228	–	–	–	137,785
Total number eligible: Number after adjustment for nutritional risk (infants and children)	26,730	28,254	29,340	28,457	31,623	117,674	–	–	–	144,404
Starting point for estimates of women is fully eligible infants	–	–	–	–	–	–	26,730	26,730	26,730	80,191
Number after adjustment for length of pregnancy and income of woman during pregnancy	–	–	–	–	–	–	18,043	–	–	18,043
Number after adjustment for multiple births and infant deaths	–	–	–	–	–	–	17,973	26,626	26,626	71,225
Number after adjustment for breastfeeding	–	–	–	–	–	–	–	11,769	6,284	18,052
Total number eligible: Number after adjustment for nutritional risk (pregnant and postpartum women)	–	–	–	–	–	–	17,433	11,769	6,284	35,486
Total number eligible in Puerto Rico	26,730	28,254	29,340	28,457	31,623	117,674	17,433	11,769	6,284	179,890

Notes

^a Adjunctive eligibility was counted by the first program that qualified the person for WIC, in this order: SNAP, TANF, Medicaid.

“–” denotes blank cells.

Source: IPUMS-USA, n.d.

Table B.7b. Adjustments for Calculating the Average Monthly Number of WIC-Eligible Individuals in the U.S. Territories Other Than Puerto Rico by Participant Category: CY 2016

Other U.S. Territories	Infants	Children Aged 1	Children Aged 2	Children Aged 3	Children Aged 4	Total Children Aged 1-4	Pregnant Women	Postpartum Breastfeeding Women	Postpartum Non-Breastfeeding Women	Total
Total number of infants and children aged 0-4 in the other U.S. territories	6,515	6,497	6,431	6,528	6,548	26,004	-	-	-	32,519
Number after the other territories' full-eligibility factor	5,110	5,076	5,024	5,100	5,116	20,317	-	-	-	25,427
Number after monthly income adjustment	5,826	5,330	5,276	5,355	5,372	21,332	-	-	-	27,158
Total number eligible: Number after adjustment for nutritional risk (infants and children)	5,651	5,277	5,223	5,302	5,318	21,119	-	-	-	26,770
Starting point for estimates of women is number of fully eligible infants	-	-	-	-	-	-	5,651	5,651	5,651	16,953
Number after adjustment for length of pregnancy and income of woman during pregnancy	-	-	-	-	-	-	3,814	-	-	3,814
Number after adjustment for multiple births and infant deaths	-	-	-	-	-	-	3,800	5,629	5,629	15,058
Number after adjustment for breastfeeding	-	-	-	-	-	-	-	2,488	1,328	3,816
Total number eligible: Number after adjustment for nutritional risk (pregnant and postpartum women)	-	-	-	-	-	-	3,686	2,488	1,328	7,502
Total number eligible in U.S. Territories other than Puerto Rico	5,651	5,277	5,223	5,302	5,318	21,119	3,686	2,488	1,328	34,272
Total eligibility for Puerto Rico and other U.S. territories	32,381	33,530	34,563	33,758	36,941	138,793	21,119	14,257	7,612	214,162

Note

"-" denotes blank cells.

Source: U.S. Census Bureau, n.d.d

Table B.8a. Regional Estimates of the Average Monthly Numbers of Infants and Children Eligible for WIC by Demographic and Income Characteristics: CY 2016 (Fully Adjusted Weights, Percentages)

Characteristics	Northeast			Mid-Atlantic			Southeast			Midwest		
	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children
Total	161,990	740,460	902,451	215,512	901,552	1,117,064	419,165	1,986,957	2,406,122	369,061	1,367,165	1,736,226
Gender	–	–	–	–	–	–	–	–	–	–	–	–
Male	41.5	47.9	46.8	40.7	50.1	48.3	47.7	47.3	47.4	58.4	44.8	47.7
Female	58.5	52.1	53.2	59.3	49.9	51.7	52.3	52.7	52.6	41.6	55.2	52.3
Race	–	–	–	–	–	–	–	–	–	–	–	–
White	68.7	64.0	64.8	73.3	60.4	62.9	64.8	56.7	58.1	69.2	66.2	66.9
Black	19.1	21.9	21.4	14.7	26.3	24.0	27.3	35.9	34.4	19.4	22.6	21.9
Other	12.2	14.1	13.8	12.0	13.3	13.1	7.9	7.4	7.5	11.4	11.2	11.2
Ethnicity	–	–	–	–	–	–	–	–	–	–	–	–
Hispanic	27.7	29.8	29.4	24.9	23.6	23.8	19.4	20.6	20.4	14.3	19.5	18.4
Non-Hispanic	72.3	70.2	70.6	75.1	76.4	76.2	80.6	79.4	79.6	85.7	80.5	81.6
Living arrangement	–	–	–	–	–	–	–	–	–	–	–	–
Two-parent family	59.0	63.9	63.1	66.0	56.8	58.6	62.5	51.9	53.8	62.9	55.0	56.7
Single parent family	38.0	31.4	32.6	29.2	37.8	36.1	32.2	42.0	40.3	32.8	40.3	38.7
No parent family	3.0	4.7	4.4	4.8	5.5	5.3	5.3	6.1	5.9	4.3	4.7	4.7
Related nonparent caretaker	2.4	2.5	2.5	3.4	2.1	2.3	3.9	4.3	4.3	1.4	3.14	27
Unrelated nonparent caretaker	0.6	2.2	1.9	1.4	3.4	3.0	1.4	1.7	1.7	2.9	1.6	1.9
Military status of household members												
Ever served in U.S. military	14.1	4.8	6.4	5.4	4.3	4.5	6.8	6.8	6.8	4.2	5.6	5.3
Serving in U.S. military in 2016	1.3	1.7	1.6	1.9	1.2	1.3	2.4	1.0	1.2	0.0	0.6	0.4

Characteristics	Northeast			Mid-Atlantic			Southeast			Midwest		
	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children
Number of people in household	-	-	-	-	-	-	-	-	-	-	-	-
2	2.6	2.9	2.8	10.2	5.3	6.2	3.4	5.8	5.4	7.7	6.3	6.6
3	27.6	20.3	21.6	22.9	20.7	21.1	24.4	22.7	23.0	23.4	19.9	20.7
4	38.4	31.8	33.0	30.0	26.4	27.1	31.1	29.7	29.9	26.6	28.7	28.3
5	17.2	26.4	24.8	16.7	22.4	21.3	12.8	19.4	18.3	22.0	19.6	20.1
6 or more	14.1	18.5	17.7	20.1	25.3	24.3	28.3	22.4	23.4	20.3	25.4	24.3
Percent with working parent(s)	75.8	77.1	76.9	60.0	74.1	71.4	74.2	73.1	73.3	76.0	74.4	74.8
Annual family income relative to FPG	-	-	-	-	-	-	-	-	-	-	-	-
No income	8.1	4.0	4.8	3.8	6.2	5.7	6.2	7.1	7.0	4.4	4.0	4.0
Up to 50% FPG	5.9	10.4	9.6	11.7	11.6	11.6	12.5	13.8	13.6	10.0	12.6	12.0
More than 50% up to 100% FPG	12.9	15.1	14.7	12.7	17.8	16.8	15.7	19.0	18.4	16.3	16.9	16.8
More than 100% up to 130% FPG	13.1	14.6	14.3	20.6	14.4	15.6	8.9	14.1	13.2	9.1	9.5	9.4
More than 130% up to 150% FPG	2.4	6.2	5.5	9.0	5.9	6.5	7.2	7.7	7.6	9.5	7.8	8.2
More than 150% up to 185% FPG	10.9	12.7	12.4	14.9	14.2	14.4	14.5	12.6	13.0	12.6	16.8	16.0
More than 185% up to 200% FPG	0.9	3.9	3.3	0.0	4.5	3.7	0.0	2.7	2.2	5.8	4.1	4.4
More than 200% FPG	45.8	33.1	35.4	27.4	25.3	25.7	35.0	23.0	25.1	32.4	28.3	29.2

Characteristics	Northeast			Mid-Atlantic			Southeast			Midwest		
	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children
Benefit receipt	-	-	-	-	-	-	-	-	-	-	-	-
No benefit receipt	14.4	13.9	14.0	11.0	14.2	13.6	8.0	16.4	14.9	13.3	13.8	13.7
Medicaid, SNAP and TANF	4.2	5.9	5.6	7.6	3.6	4.3	2.7	3.9	3.7	6.3	2.8	3
SNAP and TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid and SNAP only	24.5	24.0	24.1	26.3	33.0	31.7	29.0	34.5	33.5	27.6	32.3	31.3
Medicaid and TANF only	0.2	1.4	1.2	0.4	0.5	0.5	1.4	0.5	0.6	0.0	0.0	0.0
SNAP only	4.6	5.5	5.3	8.5	5.6	6.2	3.4	4.7	4.5	4.8	6.9	6.5
TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid only	52.3	49.3	49.9	46.2	43.1	43.7	55.6	40.0	42.7	48.0	44.2	45.0

Notes
 These estimates were tabulated from the fully adjusted person weights for the CPS-ASEC data. They were adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.
 This table does not include estimates for Puerto Rico or the other U.S. territories.
 FPG = Federal Poverty Guidelines
 “-” denotes blank cells.
 Sources: IPUMS-USA, n.d.; NBER, n.d.b

Table B.8a (continued). Regional Estimates of the Average Monthly Numbers of Infants and Children Eligible for WIC by Demographic and Income Characteristics: CY 2016 (Fully Adjusted Weights, Percentages)

Demographic Characteristics	Southwest			Mountain Plains			Western			Total		
	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children
Total	384,025	1,380,993	1,765,018	203,216	633,895	837,111	373,691	1,757,896	2,131,587	2,126,660	8,768,919	10,895,579
Gender	-	-	-	-	-	-	-	-	-	-	-	-
Male	45.7	53.5	51.8	38.2	50.2	47.3	48.3	51.1	50.6	47.2	49.2	48.8
Female	54.3	46.5	48.2	61.8	49.8	52.7	51.7	48.9	49.4	52.8	50.8	51.2
Race												
White	64.6	71.1	69.7	73.4	76.5	75.8	76.8	77.1	77.0	69.6	67.0	67.5
Black	26.2	17.0	19.0	9.1	10.1	9.8	6.3	6.5	6.4	18.4	20.9	20.4
Other	9.3	11.9	11.3	17.5	13.4	14.4	16.9	16.5	16.6	12.0	12.1	12.1
Ethnicity	-	-	-	-	-	-	-	-	-	-	-	-
Hispanic	44.4	49.2	48.1	29.3	22.0	23.7	56.7	59.0	58.6	31.7	33.8	33.4
Non-Hispanic	55.6	50.8	51.9	70.7	78.0	76.3	43.3	41.0	41.4	68.3	66.2	66.6
Living arrangement	-	-	-	-	-	-	-	-	-	-	-	-
Two-parent family	57.5	55.9	56.3	71.4	60.4	63.1	72.1	65.7	66.8	64.3	57.9	59.2
Single-parent family	40.0	38.3	38.6	24.4	35.1	32.5	23.2	28.6	27.6	31.5	36.6	35.6
No-parent family	2.5	5.8	5.1	4.2	4.4	4.4	4.7	5.8	5.6	4.2	5.5	5.2
Related nonparent caretaker	1.8	5.4	4.6	2.2	3.2	3.0	3.3	4.4	4.2	2.7	3.9	3.6
Unrelated nonparent caretaker	0.7	0.4	0.5	2.0	1.3	1.4	1.4	1.4	1.4	1.5	1.6	1.6
Military status of household members												
Ever served in U.S. military	6.7	8.1	7.8	8.6	8.1	8.2	5.8	5.2	5.3	6.7	6.1	6.3
Serving in U.S. military in 2016	1.0	1.6	1.4	1.3	1.1	1.2	3.8	0.9	1.4	1.7	1.1	1.2

Demographic Characteristics	Southwest			Mountain Plains			Western			Total		
	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children
Number of people in household	-	-	-	-	-	-	-	-	-	-	-	-
2	7.3	5.1	5.6	5.4	5.5	5.5	2.7	2.7	2.7	5.5	4.8	5.0
3	24.9	18.9	20.2	20.5	21.0	20.9	22.7	15.3	16.6	23.7	19.7	20.4
4	27.5	26.2	26.5	22.6	25.5	24.8	20.2	25.7	24.7	27.4	27.7	27.7
5	17.3	26.0	24.1	22.6	23.5	23.3	19.4	20.3	20.2	18.1	21.9	21.1
6 or more	23.1	23.8	23.6	28.9	24.5	25.6	35.1	36.0	35.8	25.3	25.9	25.8
Number with working parent(s)	68.7	76.6	74.9	76.1	74.5	74.9	63.1	74.5	72.5	70.4	74.7	73.9
Annual family income relative to FPG	-	-	-	-	-	-	-	-	-	-	-	-
No income	3.3	2.5	2.6	2.2	5.4	4.6	1.9	2.8	2.7	4.1	4.6	4.5
Up to 50% FPG	8.1	11.4	10.7	10.1	12.5	11.9	12.0	7.5	8.3	10.4	11.4	11.2
More than 50% up to 100% FPG	16.3	21.0	20.0	23.0	15.1	17.0	14.7	22.2	20.9	15.9	18.9	18.3
More than 100% up to 130% FPG	16.9	13.6	14.3	8.5	12.1	11.2	14.9	15.9	15.7	12.9	13.6	13.4
More than 130% up to 150% FPG	7.6	8.2	8.0	9.7	8.7	8.9	11.9	8.5	9.1	8.5	7.7	7.9
More than 150% up to 185% FPG	13.8	12.7	12.9	14.6	16.9	16.3	12.1	13.7	13.4	13.4	14.0	13.9
More than 185% up to 200% FPG	6.3	3.6	4.2	2.9	4.1	3.8	4.9	3.7	3.9	3.3	3.6	3.6
More than 200% FPG	27.8	27.1	27.3	29.0	25.1	26.1	27.5	25.7	26.0	31.4	26.3	27.3

Demographic Characteristics	Southwest			Mountain Plains			Western			Total		
	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children	WIC-Eligible Infants	WIC-Eligible Children Aged 1-4	WIC-Eligible Infants and Children
Benefit receipt	–	–	–	–	–	–	–	–	–	–	–	–
No benefit receipt	9.2	12.7	12.0	14.4	16.9	16.3	11.5	16.8	15.9	11.2	15.1	14.3
Medicaid, SNAP and TANF	1.9	2.8	2.6	2.8	4.0	3.7	8.7	7.5	7.7	4.8	4.4	4.5
SNAP and TANF only	0.0	0.1	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid and SNAP only	37.1	33.9	34.6	31.5	28.3	29.1	31.0	27.5	28.1	30.2	31.2	31.0
Medicaid and TANF only	0.8	0.4	0.4	0.4	0.9	0.8	0.0	0.1	0.1	0.5	0.4	0.4
SNAP only	7.2	5.7	6.0	10.7	5.3	6.6	4.7	4.7	4.7	5.9	5.4	5.5
TANF only	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Medicaid only	43.8	44.5	44.4	40.3	44.6	43.5	44.1	43.3	43.4	47.4	43.5	44.2

Notes
 These estimates were tabulated from the fully adjusted person weights for the CPS-ASEC data. They were adjusted to account for the undercount/overcount of infants and children in the CPS relative to U.S. Census Bureau estimates, monthly income, or nutritional risk.
 This table does not include estimates for Puerto Rico or the other U.S. territories.
 FPG = Federal Poverty Guidelines
 “–” denotes blank cells.
 Sources: IPUMS-USA, n.d.; NBER, n.d.b

Table B.9. WIC Coverage Rates by State: CY 2005–CY 2016

State	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Total	56.5	58.1	60.6	62.4	62.9	61.6	63.5	63.2	59.3	54.8	52.7	54.5
Alabama	50.9	54.7	56.4	59.8	59.3	62.6	62.1	63.2	61.3	53.5	54.1	56.5
Alaska	66.0	64.5	68.6	69.0	61.6	69.1	60.6	60.7	64.1	44.3	49.1	43.5
Arizona	49.2	49.6	53.1	54.0	58.0	56.0	61.3	57.8	54.9	51.1	50.8	50.3
Arkansas	50.4	49.9	50.7	52.5	56.8	57.1	60.0	61.7	56.0	48.0	48.1	49.3
California	69.3	73.2	75.8	75.9	77.7	78.0	82.5	80.1	74.1	71.0	65.0	65.6
Colorado	40.0	42.5	41.5	47.9	50.3	53.8	50.0	48.5	47.2	41.0	40.8	43.5
Connecticut	51.6	52.9	55.7	56.2	59.2	50.7	51.2	52.9	49.5	43.1	47.0	49.2
Delaware	54.4	60.5	56.6	68.9	64.5	59.7	66.0	58.8	58.2	51.7	51.6	52.3
District of Columbia	70.2	65.9	74.0	75.1	79.5	69.3	67.0	63.0	54.9	47.2	50.8	54.0
Florida	47.9	50.2	58.7	61.7	61.8	60.9	61.0	56.9	54.0	51.4	51.2	53.8
Georgia	54.9	54.8	57.7	59.6	59.6	56.5	59.6	59.6	54.9	48.8	48.7	48.2
Hawaii	64.9	61.6	63.7	66.7	60.3	62.5	64.8	59.1	57.3	51.6	56.2	53.4
Idaho	40.7	44.9	46.7	48.5	51.5	48.2	47.5	53.7	48.7	47.6	45.4	43.4
Illinois	50.7	52.8	53.4	54.0	53.4	52.2	52.4	54.5	52.0	48.1	43.5	45.1
Indiana	46.6	49.8	52.4	54.5	55.2	54.8	55.8	55.6	52.9	48.4	48.7	51.4
Iowa	53.5	54.3	58.6	64.2	61.7	61.0	59.1	62.0	52.4	47.2	44.1	46.8
Kansas	51.4	56.6	56.0	61.1	60.6	56.3	56.5	56.8	51.9	46.2	46.7	52.0
Kentucky	59.1	66.3	65.3	64.9	65.2	63.7	67.0	69.8	64.5	53.4	53.5	53.3
Louisiana	51.2	46.6	52.8	53.2	57.8	57.6	61.3	59.0	56.9	50.8	51.2	52.0
Maine	48.5	48.1	55.4	56.7	50.4	54.6	56.0	53.5	49.8	51.3	50.9	52.9
Maryland	59.8	65.9	71.6	73.5	71.2	70.0	72.8	71.8	66.9	63.5	59.8	68.3
Massachusetts	65.5	67.4	71.3	67.1	66.7	63.1	61.0	68.2	57.8	56.8	53.8	55.2
Michigan	57.1	57.3	59.7	57.5	57.3	57.7	61.0	63.3	59.8	56.3	55.3	55.9
Minnesota	69.4	76.3	81.9	80.2	73.1	73.5	69.1	73.7	69.6	63.4	56.7	60.3
Mississippi	53.7	54.0	60.3	62.3	57.2	51.7	56.5	56.0	54.2	52.3	47.2	51.7
Missouri	49.4	49.7	52.7	54.5	54.0	52.2	57.1	57.6	55.2	51.5	46.9	50.8
Montana	51.0	52.5	48.7	49.2	45.1	46.1	41.8	45.7	40.7	39.1	39.3	38.2
Nebraska	51.4	54.2	57.1	57.8	54.3	51.8	54.3	57.0	49.1	51.5	43.1	52.8

State	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Nevada	43.6	50.8	49.5	55.4	56.5	57.4	59.4	57.7	61.2	53.6	51.1	55.2
New Hampshire	44.3	43.6	51.6	53.2	61.6	51.2	53.9	45.2	41.1	42.7	41.3	46.9
New Jersey	54.3	57.9	57.9	59.9	58.8	60.4	60.3	58.7	56.1	52.4	50.7	53.8
New Mexico	47.0	48.1	50.4	51.1	51.9	49.0	51.3	52.1	47.0	45.7	42.4	44.8
New York	63.3	63.5	64.5	66.2	66.1	63.2	66.0	65.4	61.7	54.7	53.5	55.9
North Carolina	51.1	52.0	53.5	56.8	56.3	55.2	56.2	58.5	55.1	51.1	51.5	53.8
North Dakota	62.7	65.6	62.1	56.5	62.4	53.2	48.4	75.4	47.4	39.7	47.1	50.1
Ohio	55.7	59.4	61.5	65.2	61.9	57.2	58.9	59.4	54.0	50.2	47.7	51.3
Oklahoma	55.5	55.5	55.8	60.0	62.9	59.3	60.6	60.7	52.3	53.1	48.8	55.0
Oregon	62.6	63.2	67.4	65.0	65.8	65.6	63.6	65.0	63.1	53.0	53.5	56.3
Pennsylvania	54.4	54.8	57.0	56.9	58.2	55.8	58.0	55.8	55.2	51.9	49.9	51.6
Puerto Rico	70.5	73.1	76.1	78.0	77.7	78.7	84.6	86.7	85.5	83.1	85.0	84.1
Rhode Island	62.5	63.3	69.3	77.6	64.5	71.1	66.1	69.5	61.3	53.6	55.2	62.2
South Carolina	52.2	52.9	55.7	57.6	56.7	54.8	56.5	58.7	51.9	47.8	49.2	46.4
South Dakota	49.6	65.9	59.9	63.3	51.8	56.5	63.0	60.8	49.3	45.0	48.6	48.7
Tennessee	53.3	51.7	54.3	54.3	55.4	52.2	54.3	56.8	50.3	45.8	43.3	43.0
Texas	57.3	57.1	58.2	61.2	65.9	66.4	66.5	64.3	62.1	58.9	55.4	57.5
Utah	43.9	39.3	43.0	46.2	48.4	45.4	47.2	45.5	43.3	40.2	37.1	39.4
Vermont	64.0	71.3	73.9	82.1	80.1	66.8	84.7	69.4	60.3	64.6	64.5	55.0
Virginia	52.4	58.5	59.3	61.4	59.4	54.5	59.7	59.1	55.4	47.7	45.1	47.8
Washington	56.4	57.9	60.6	65.9	64.4	60.7	64.4	64.4	62.2	56.9	53.5	55.0
West Virginia	57.8	55.9	58.9	66.4	62.9	65.3	66.0	73.6	54.8	51.9	48.7	50.3
Wisconsin	54.2	56.9	61.3	61.4	60.8	54.6	53.2	59.7	55.4	47.2	48.5	48.5
Wyoming	53.6	56.8	54.2	55.4	51.1	52.1	53.5	52.6	52.3	44.1	45.2	53.9

Sources: IPUMS-USA, n.d.; NBER, n.d.b; U.S. Census Bureau, n.d.d; unpublished internal WIC administrative data

Table B.10. WIC Coverage Rates (Percentages) by State and Participant Category With Margins of Error for 95-Percent Confidence Intervals: CY 2016

State	Infants		Children Aged 1		Children Aged 2		Children Aged 3		Children Aged 4		Total Children Aged 1-4		Pregnant Women		Postpartum Women		Total	
	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE
Alabama	93.2	15.7	57.8	8.8	47.7	7.3	37.8	4.5	28.5	4.0	43.1	2.3	63.6	10.7	75.8	12.7	56.5	3.6
Alaska	56.8	18.7	56.7	15.6	38.5	14.7	36.1	14.7	27.7	10.7	40.0	5.6	37.8	12.4	45.9	15.2	43.5	6.7
Arizona	85.9	11.3	54.8	6.7	42.4	4.7	37.5	4.4	21.9	2.5	39.6	1.9	41.6	5.5	75.2	9.9	50.3	2.5
Arkansas	87.8	13.8	53.8	10.2	33.3	5.0	31.2	5.1	20.1	3.4	35.0	2.3	53.6	8.4	73.6	11.6	49.3	3.1
California	92.6	7.1	68.3	4.1	59.9	3.7	55.8	3.5	44.7	2.8	57.2	1.7	59.2	4.6	83.8	6.4	65.6	2.2
Colorado	69.2	11.2	54.4	8.0	37.5	6.0	29.9	4.3	18.9	2.8	34.6	2.5	40.2	6.5	62.0	10.0	43.5	2.9
Connecticut	89.9	19.5	58.4	15.0	35.2	6.7	36.1	7.4	23.4	4.2	38.1	3.2	58.4	12.7	57.3	12.4	49.2	4.0
Delaware	94.0	35.0	55.5	25.7	41.2	13.7	44.9	20.0	16.5	5.5	39.7	6.2	53.9	20.1	66.8	25.0	52.3	8.6
District of Columbia	100.0	48.9	56.4	23.4	43.9	16.6	26.0	9.1	13.6	4.4	34.7	4.7	51.9	22.2	100.0	47.8	54.0	7.4
Florida	84.7	7.6	60.5	4.5	48.7	4.0	37.6	2.8	23.2	2.0	42.9	1.3	50.6	4.6	77.6	7.0	53.8	2.0
Georgia	68.7	7.6	51.7	5.1	44.5	4.5	38.3	3.8	22.7	2.5	39.6	1.8	33.5	3.7	85.1	9.4	48.2	2.2
Hawaii	81.2	18.0	52.8	14.4	46.4	11.3	40.1	10.3	37.5	10.3	44.3	5.2	46.1	10.2	71.7	15.8	53.4	5.2
Idaho	63.4	13.5	54.8	12.1	42.2	8.1	33.4	6.5	17.1	3.1	37.3	2.9	37.1	7.9	53.7	11.5	43.4	3.7
Illinois	84.7	9.1	42.3	4.0	35.4	3.6	31.8	3.4	21.6	2.1	33.0	1.4	45.7	4.9	64.1	6.9	45.1	2.0
Indiana	85.6	11.1	57.8	6.7	51.9	6.2	35.6	4.4	16.0	1.6	40.5	2.3	44.5	5.8	75.7	9.8	51.4	2.9
Iowa	64.9	13.0	62.9	13.1	45.2	9.0	34.3	7.5	21.6	4.3	41.2	4.1	34.2	6.8	59.5	11.9	46.8	4.6
Kansas	89.9	14.7	60.2	11.5	55.1	10.5	37.7	8.2	16.6	2.9	40.7	3.6	53.0	8.7	71.9	11.8	52.0	4.3
Kentucky	89.4	13.5	56.2	7.9	44.2	6.6	37.4	5.0	28.8	4.1	41.8	2.7	54.7	8.2	68.4	10.3	53.3	3.3
Louisiana	97.5	12.0	51.0	6.4	37.3	5.8	31.6	5.0	21.6	2.7	35.9	1.8	55.3	6.8	83.3	10.3	52.0	2.7
Maine	92.6	42.5	54.4	16.4	51.2	17.8	36.4	10.2	28.9	9.4	42.4	5.9	51.8	23.8	73.5	33.9	52.9	9.2
Maryland	100.0	20.7	64.9	9.2	65.2	10.2	51.7	7.7	29.8	4.1	53.2	3.7	73.9	13.1	98.5	17.4	68.3	5.1
Massachusetts	81.6	12.6	65.7	8.7	53.5	8.4	48.1	6.3	24.3	3.6	47.4	3.1	50.6	7.8	69.2	10.8	55.2	3.4

State	Infants		Children Aged 1		Children Aged 2		Children Aged 3		Children Aged 4		Total Children Aged 1-4		Pregnant Women		Postpartum Women		Total	
	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE
Michigan	87.8	10.2	61.9	7.2	50.5	4.8	50.5	5.0	21.1	2.5	46.7	2.1	54.5	6.3	65.1	7.6	55.9	2.5
Minnesota	84.1	13.4	63.9	10.3	56.0	10.3	54.9	7.8	36.1	5.1	53.2	3.9	48.9	7.8	75.9	12.1	60.3	4.2
Mississippi	92.8	13.2	48.3	7.1	38.6	6.3	39.0	6.1	23.0	4.1	37.9	2.4	48.8	6.9	76.4	10.8	51.7	2.8
Missouri	87.2	12.1	55.5	7.9	43.0	6.0	32.3	3.8	21.5	2.9	38.4	2.3	50.6	7.0	70.1	9.7	50.8	3.2
Montana	64.5	21.7	37.0	10.4	31.1	7.6	27.6	8.3	22.1	6.2	30.2	4.4	37.1	12.5	51.3	17.3	38.2	5.0
Nebraska	85.8	20.6	57.5	13.7	42.1	9.1	40.9	9.3	31.2	7.3	43.2	4.5	45.2	10.9	73.0	17.6	52.8	5.4
Nevada	94.3	19.6	55.0	9.9	43.5	7.1	38.3	5.7	35.6	5.8	43.3	3.2	47.1	9.8	85.1	17.6	55.2	4.6
New Hampshire	73.8	27.2	48.6	17.9	48.2	14.9	37.9	14.1	21.7	7.3	39.7	7.0	42.0	15.5	57.3	21.1	46.9	8.2
New Jersey	76.2	9.8	64.1	7.6	47.1	5.3	41.4	5.3	33.6	4.2	46.7	2.5	44.2	5.7	69.9	9.0	53.8	3.1
New Mexico	72.5	14.2	50.1	8.6	38.3	7.1	31.8	6.0	19.5	4.0	35.4	2.5	41.3	8.1	66.9	13.1	44.8	3.0
New York	80.6	7.4	66.7	5.5	49.6	4.8	45.8	3.9	28.6	2.3	47.9	1.8	47.0	4.3	73.7	6.7	55.9	2.2
North Carolina	86.9	9.9	52.8	5.2	49.5	4.4	41.4	4.1	24.0	2.2	42.4	1.7	51.3	5.8	78.9	9.0	53.8	2.4
North Dakota	70.7	34.3	79.9	28.7	61.4	22.8	32.0	17.8	22.0	7.6	44.8	10.1	38.5	18.7	58.0	28.3	50.1	12.8
Ohio	100.0	11.9	45.8	4.1	37.8	4.1	33.1	3.8	24.9	2.6	35.7	1.5	51.4	5.8	67.0	7.6	51.3	2.4
Oklahoma	94.1	13.8	49.8	6.5	52.8	7.6	38.7	5.2	27.0	3.6	42.2	2.6	61.9	9.0	74.6	10.9	55.0	3.2
Oregon	77.6	12.6	58.3	9.5	52.6	8.3	51.8	8.7	36.3	5.7	49.9	3.2	49.3	8.0	68.3	11.0	56.3	3.8
Pennsylvania	93.2	11.2	58.8	6.2	43.5	5.6	38.1	4.2	20.9	2.3	40.1	1.9	51.9	6.2	65.7	7.9	51.6	2.5
Rhode Island	100.0	36.8	66.6	26.0	55.5	22.4	58.2	24.3	27.2	8.8	51.2	9.3	59.1	21.3	75.7	27.3	62.2	9.4
South Carolina	89.4	12.9	51.3	7.3	30.7	4.3	29.4	4.3	12.1	1.6	31.9	1.8	51.9	7.5	76.0	11.0	46.4	2.3
South Dakota	65.2	20.9	61.2	17.6	47.9	14.6	42.8	14.5	25.7	7.4	45.2	7.0	33.4	10.7	55.9	18.0	48.7	8.2
Tennessee	78.1	9.8	41.1	4.9	32.8	3.5	31.7	3.5	14.7	1.8	30.4	1.5	49.1	6.2	60.1	7.6	43.0	2.2
Texas	89.9	7.1	64.8	4.3	45.6	3.3	41.9	3.2	20.4	1.3	43.9	1.3	50.9	4.0	97.0	7.7	57.5	2.0
Utah	53.9	10.6	45.2	8.7	39.1	6.6	32.6	5.3	20.8	3.4	34.8	3.2	30.1	5.9	49.8	9.8	39.4	3.7
Vermont	54.5	24.3	76.2	38.0	67.3	29.0	58.2	22.7	43.4	19.7	61.2	11.4	33.7	15.0	51.8	23.1	55.0	12.4
Virginia	81.6	12.0	46.6	6.2	42.3	6.1	34.2	4.4	22.5	3.0	36.7	2.0	46.4	6.8	64.8	9.5	47.8	3.0
Washington	73.8	9.9	59.8	7.7	48.7	5.5	50.3	6.1	36.6	4.6	48.9	2.3	49.4	6.6	67.9	9.1	55.0	2.9

State	Infants		Children Aged 1		Children Aged 2		Children Aged 3		Children Aged 4		Total Children Aged 1-4		Pregnant Women		Postpartum Women		Total	
	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE
West Virginia	77.8	16.9	55.0	12.9	45.6	10.7	38.5	8.3	24.6	5.6	40.6	3.7	46.0	10.0	69.0	14.9	50.3	4.8
Wisconsin	75.5	11.3	61.4	9.9	38.9	5.7	39.9	6.4	22.4	3.9	40.5	2.9	39.5	5.9	66.2	9.9	48.5	3.2
Wyoming	86.9	41.9	65.0	25.9	50.7	24.4	43.5	19.7	21.7	8.8	43.2	9.3	46.0	22.2	75.8	36.4	53.9	13.2
Total	85.9	5.4	59.2	2.6	47.4	2.4	42.1	2.1	26.5	1.2	44.1	1.0	50.3	3.2	75.8	4.8	54.5	1.5

Notes
The estimated coverage rates exceed 100 percent for infants in the District of Columbia, Maryland, Ohio, and Rhode Island, and for postpartum women in the District of Columbia. This is likely a result of sampling variability in the CPS-ASEC survey data used to estimate the number of eligible individuals in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding these rates is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates.

MOE = margin of error

The MOE is a measure of the estimate’s variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 95-percent confidence interval. MOEs for the Total row are for the 50 States and the District of Columbia. MOEs for a 95-percent confidence interval can be interpreted to mean there is a 95-percent chance that the true value—that is, the true coverage rate—falls within the estimated bounds determined by the MOE. For example, although the best estimate of Michigan’s coverage rate for infants was 87.8 percent in CY 2016, the true rate may have been higher or lower. The chances are 95 in 100 that the true coverage rate was within 10.2 percentage points higher or 10.2 percentage points lower than 87.8 percent, or between 77.6 percent and 98.0 percent.

Sources: IPUMS-USA, n.d.; NBER, n.d.a, n.d.b; Thorn et al., 2018; unpublished internal WIC administrative data

Table B.11. State-Level WIC Coverage Rates (Percentages) by Race and Ethnicity With Margins of Error for 95-Percent Confidence Intervals: CY 2016

State	All Races		White-Only Non-Hispanic		Black-Only and Other Non-Hispanic ^a		Hispanic	
	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE
Alabama	56.5	3.6	50.2	4.9	60.3	5.5	67.5	15.6
Alaska	43.5	6.7	32.9	11.1	55.0	10.1	35.0	18.2
Arizona	50.3	2.5	40.7	3.8	60.8	7.1	51.7	3.4
Arkansas	49.3	3.1	47.0	4.2	48.2	4.8	61.2	9.5
California	65.6	2.2	35.2	2.7	59.1	4.2	75.4	3.1
Colorado	43.5	2.9	34.3	3.6	39.5	6.2	53.7	5.1
Connecticut	49.2	4.0	33.7	5.9	48.7	9.0	61.6	7.8
Delaware	52.3	8.6	43.0	15.4	54.3	12.3	61.4	18.8
District of Columbia	54.0	7.4	31.5	32.7	51.0	7.5	70.0	30.9
Florida	53.8	2.0	38.8	2.7	58.9	4.0	63.9	3.2
Georgia	48.2	2.2	40.3	3.3	51.2	3.5	55.6	4.8
Hawaii	53.4	5.2	43.5	13.8	62.7	9.1	37.5	7.3
Idaho	43.4	3.7	38.6	4.4	54.8	21.8	53.4	10.0
Illinois	45.1	2.0	38.6	2.9	45.2	3.6	51.7	3.6
Indiana	51.4	2.9	46.6	4.0	57.5	6.3	61.4	6.5
Iowa	46.8	4.6	40.7	5.3	57.6	11.9	60.9	15.4
Kansas	52.0	4.3	44.9	5.4	51.8	10.1	66.1	7.7
Kentucky	53.3	3.3	54.3	4.1	51.5	6.7	48.9	11.3
Louisiana	52.0	2.7	46.1	4.9	55.4	4.3	57.6	9.5
Maine	52.9	9.2	51.3	10.1	57.7	20.1	75.5	73.4
Maryland	68.3	5.1	47.7	6.6	72.1	7.6	81.5	10.0
Massachusetts	55.2	3.4	43.0	4.9	54.3	6.6	71.3	6.8
Michigan	55.9	2.5	49.9	3.6	62.9	5.2	66.0	7.8
Minnesota	60.3	4.2	44.7	4.4	76.1	9.8	86.0	18.8
Mississippi	51.7	2.8	47.7	5.4	52.3	3.9	76.7	17.6

State	All Races		White-Only Non-Hispanic		Black-Only and Other Non-Hispanic ^a		Hispanic	
	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE
Missouri	50.8	3.2	48.7	3.8	4.4	6.5	55.2	8.8
Montana	38.2	5.0	31.5	5.0	64.7	14.5	45.2	26.2
Nebraska	52.8	5.4	35.8	5.0	73.5	18.5	81.9	14.8
Nevada	55.2	4.6	55.4	12.0	47.5	6.7	59.3	6.1
New Hampshire	46.9	8.2	43.4	8.9	40.0	20.9	100.0	76.1
New Jersey	53.8	3.1	36.0	3.5	52.2	5.6	67.9	5.2
New Mexico	44.8	3.0	32.8	7.5	40.1	5.3	49.2	3.9
New York	55.9	2.2	41.8	3.0	64.6	4.7	63.4	3.9
North Carolina	53.8	2.4	45.2	3.5	52.6	3.8	71.8	5.4
North Dakota	50.1	12.8	36.6	13.3	77.6	21.6	52.8	40.2
Ohio	51.3	2.4	47.2	3.2	57.9	4.6	55.3	7.9
Oklahoma	55.0	3.2	48.0	5.1	57.8	5.6	65.2	7.9
Oregon	56.3	3.8	52.2	5.3	49.4	9.2	67.3	6.4
Pennsylvania	51.6	2.5	42.6	3.0	62.5	6.3	63.4	6.3
Rhode Island	62.2	9.4	50.4	14.8	59.8	16.8	75.2	16.5
South Carolina	46.4	2.3	39.2	3.8	50.9	4.2	56.3	8.0
South Dakota	48.7	8.2	38.5	8.7	66.8	12.9	38.3	17.1
Tennessee	43.0	2.2	42.1	3.2	40.4	3.6	54.2	6.6
Texas	57.5	2.0	35.5	2.4	52.0	3.7	66.6	2.9
Utah	39.4	3.7	32.6	4.1	35.3	8.9	56.9	8.9
Vermont	55.0	12.4	53.7	12.6	100.0	66.9	22.5	25.4
Virginia	47.8	3.0	41.3	4.2	48.0	4.4	60.4	6.9
Washington	55.0	2.9	42.1	3.6	64.9	6.9	69.1	4.9
West Virginia	50.3	4.8	52.2	5.3	38.9	11.7	50.8	29.0

State	All Races		White-Only Non-Hispanic		Black-Only and Other Non-Hispanic ^a		Hispanic	
	Rate	MOE	Rate	MOE	Rate	MOE	Rate	MOE
Wisconsin	48.5	3.2	37.2	3.6	59.3	8.1	65.5	10.3
Wyoming	53.9	13.2	50.1	13.9	41.0	29.4	83.5	50.9
Total	54.5	1.5	42.6	2.0	56.0	3.0	66.7	2.5

Notes
 Coverage rate estimates for Puerto Rico and the other U.S. territories are included in the totals but are not shown separately.
 The estimated coverage rates in New Hampshire for Hispanic individuals and in Vermont for Black-Only and Other Non-Hispanic individuals exceed 100 percent. This is likely a result of sampling variability in the CPS survey data used to estimate the number of eligible individuals in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding these rates is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates.

^a The Black-Only Non-Hispanic and Other Non-Hispanic categories were combined because of sample size concerns.

MOE = margin of error

The MOE is a measure of the estimate’s variability. The larger the MOE in relation to the size of the estimate, the less reliable the estimate. This number, when added to and subtracted from the estimate, forms the 95-percent confidence interval. MOEs for the Total row are for the 50 States and the District of Columbia. MOEs for a 95-percent confidence interval can be interpreted to mean there is a 95-percent chance that the true value—that is, the true coverage rate—falls within the estimated bounds determined by the MOE. For example, although the best estimate generated for this study was that Michigan’s coverage rate for Hispanic individuals was 66.0 percent in CY 2016, the true rate may have been higher or lower. The chances are 95 in 100 that the true coverage rate was within 7.8 percentage points higher or lower than 66.0 percent, or between 58.2 percent and 73.8 percent.

Sources: IPUMS-USA, n.d.; NBER, n.d.a, n.d.b; Thorn et al., 2018; unpublished internal WIC administrative data

Appendix C. Coverage Rate Maps

This appendix provides maps of WIC coverage rates at the State and regional levels. The coverage rate is defined as the number of individuals participating in WIC divided by the number estimated to be eligible. This appendix includes maps that show coverage rates for all eligible individuals and for each of four participant categories—infants, children, pregnant women, and postpartum women. This appendix also includes maps that show State-level coverage rates for three race and ethnicity categories: White-Only Non-Hispanic, Black-Only and Other Non-Hispanic, and Hispanic. A list of the maps by number and participant or race and ethnicity category follows:

FNS Region-Level Coverage Rates

- ▶ C.1. Total
- ▶ C.2. Infants
- ▶ C.3. Children (aged 1–4)
- ▶ C.4. Pregnant women
- ▶ C.5. Postpartum women

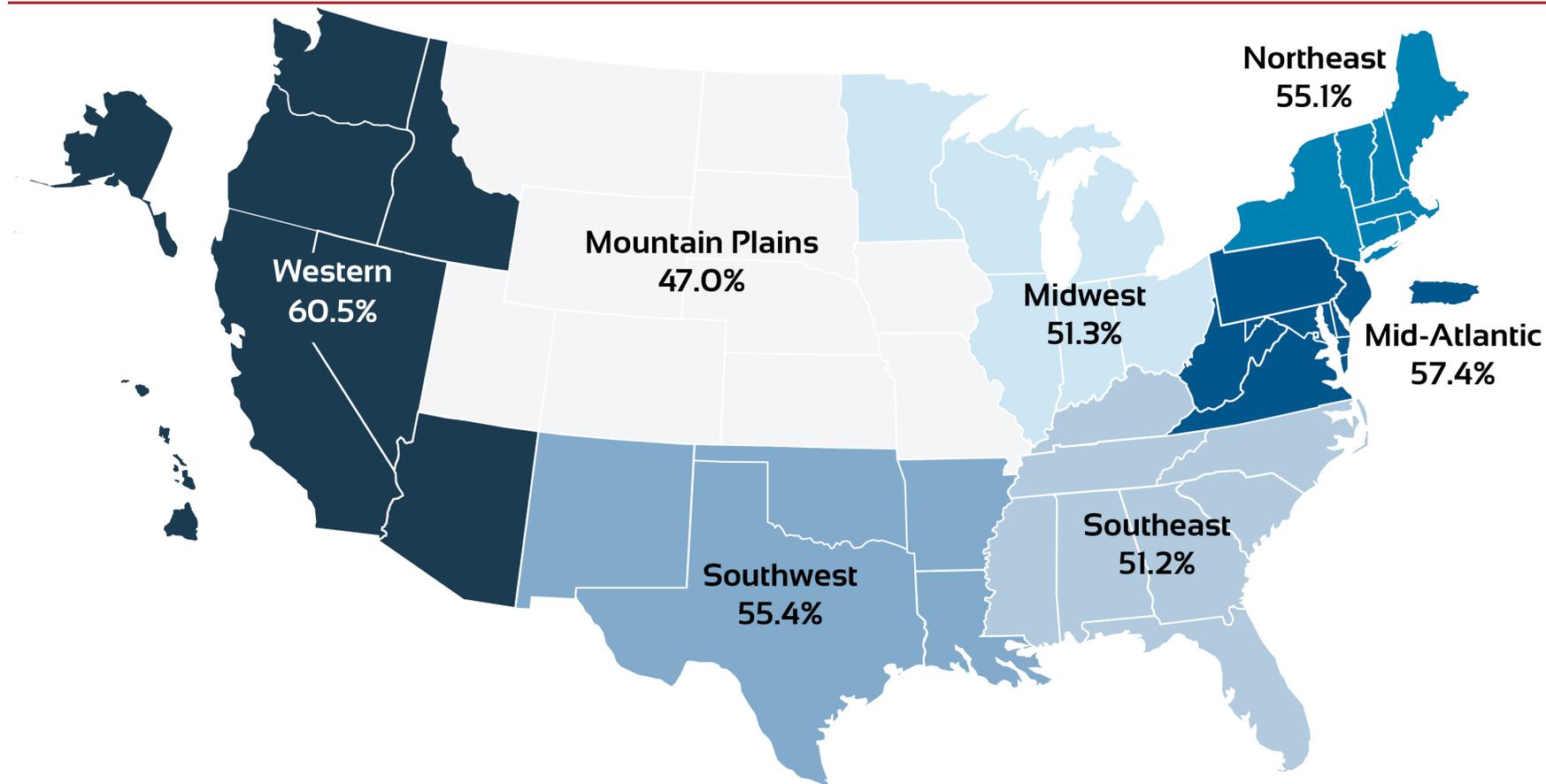
State-Level Coverage Rates by Participant Category

- ▶ C.6. Total
- ▶ C.7. Infants
- ▶ C.8. Children (aged 1–4)
- ▶ C.9. Pregnant women
- ▶ C.10. Postpartum women

State-Level Coverage Rates by Race and Ethnicity

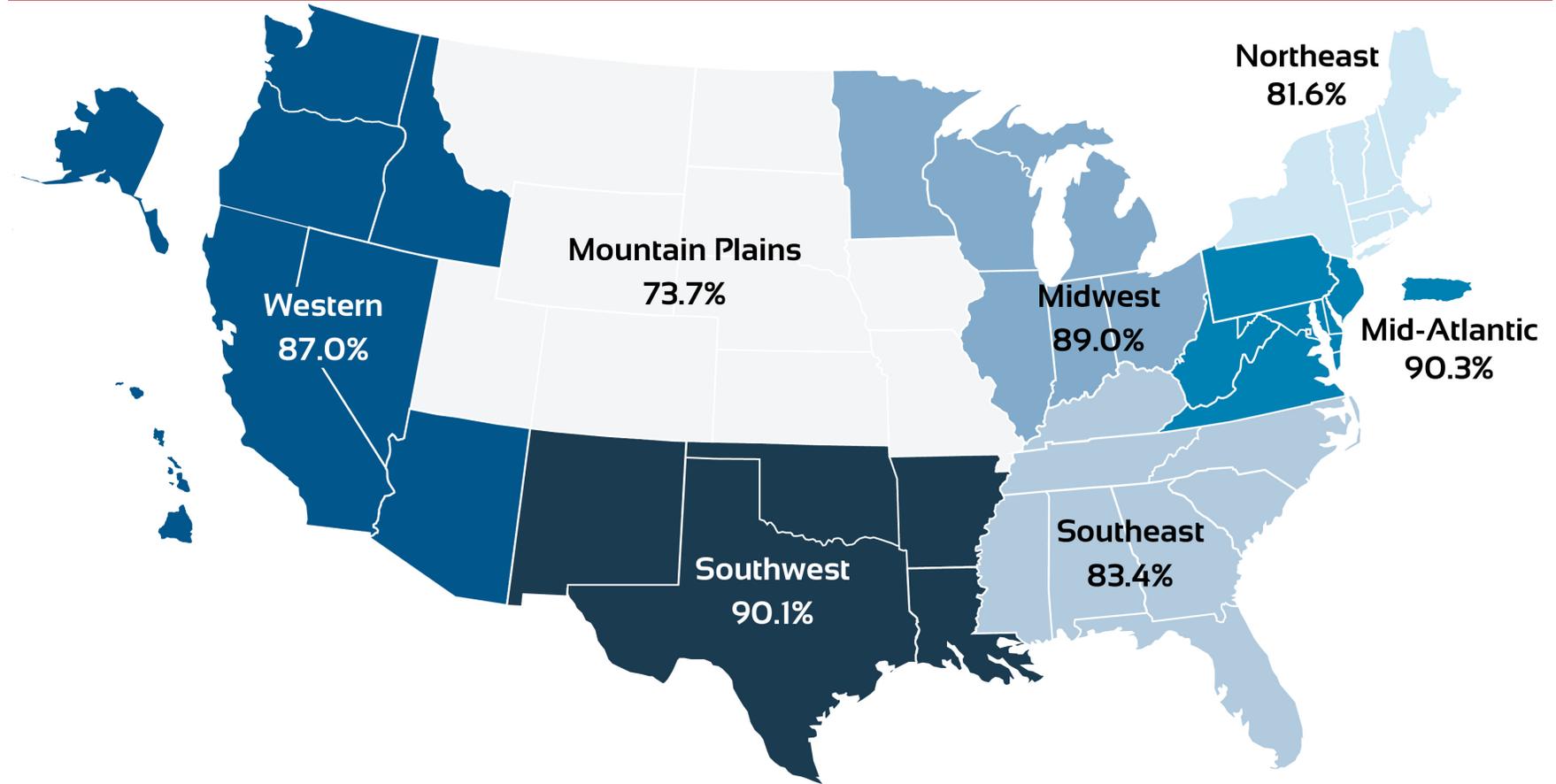
- ▶ C.11. White-Only Non-Hispanic
- ▶ C.12. Black-Only and Other Non-Hispanic
- ▶ C.13. Hispanic

Figure C.1. WIC Coverage Rate for Total Eligible Individuals by FNS Region: CY 2016
National Coverage Rate: 54.5 Percent



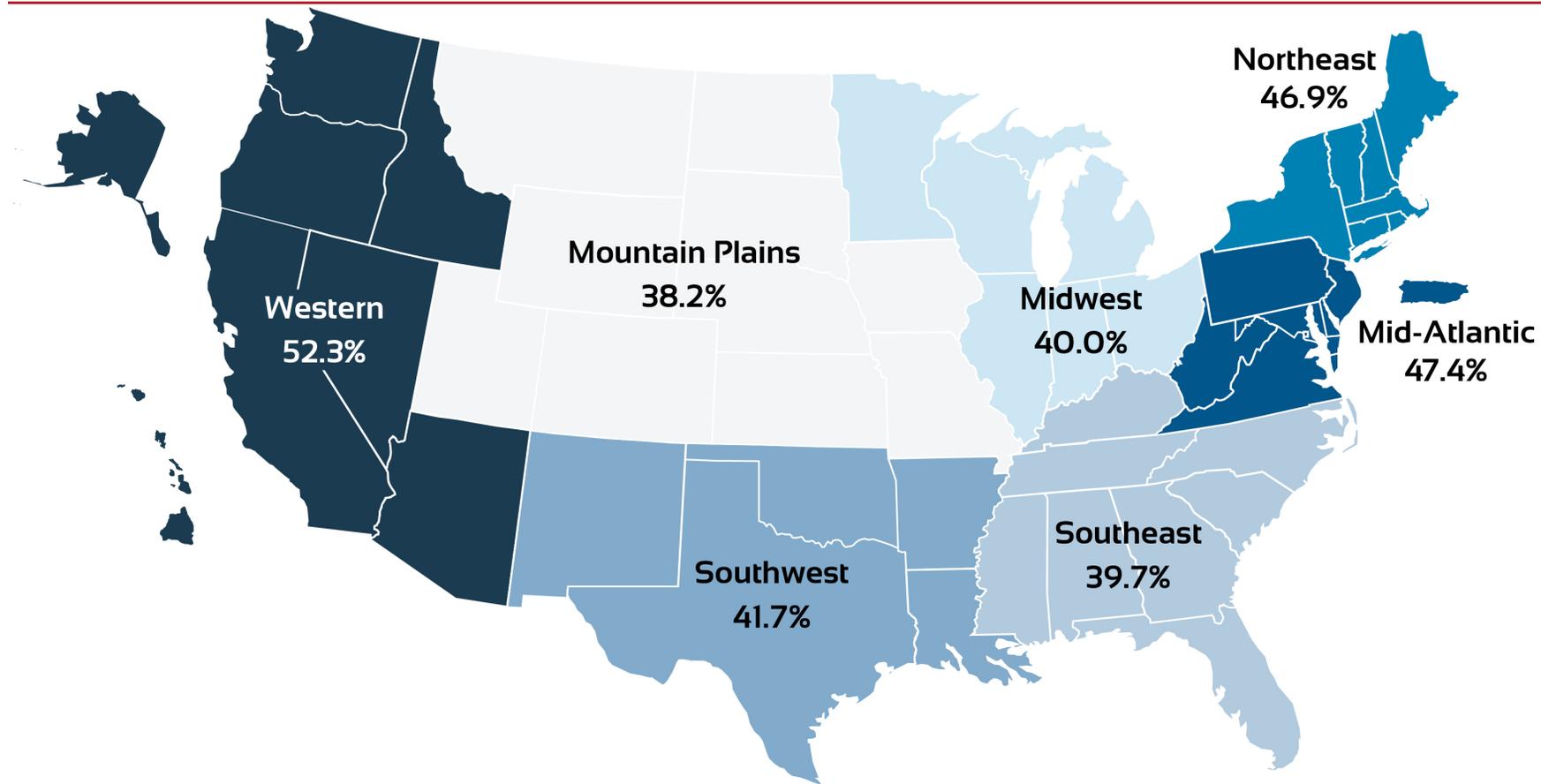
Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.2. WIC Coverage Rate for Infants by FNS Region: CY 2016
National Coverage Rate for Infants: 85.9 Percent



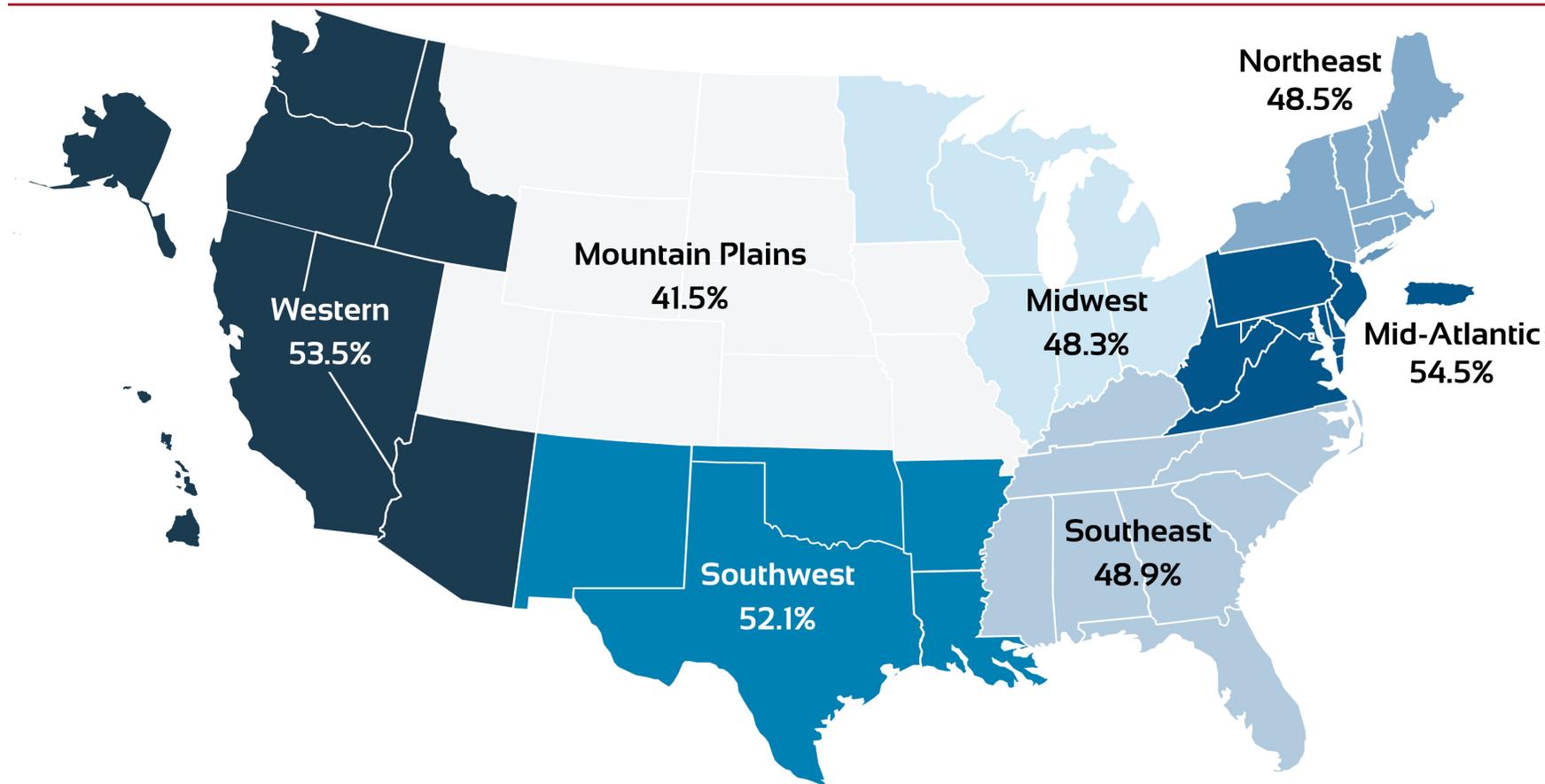
Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.3. WIC Coverage Rate for Children (Aged 1–4) by FNS Region: CY 2016
National Coverage Rate for Children: 44.1 Percent



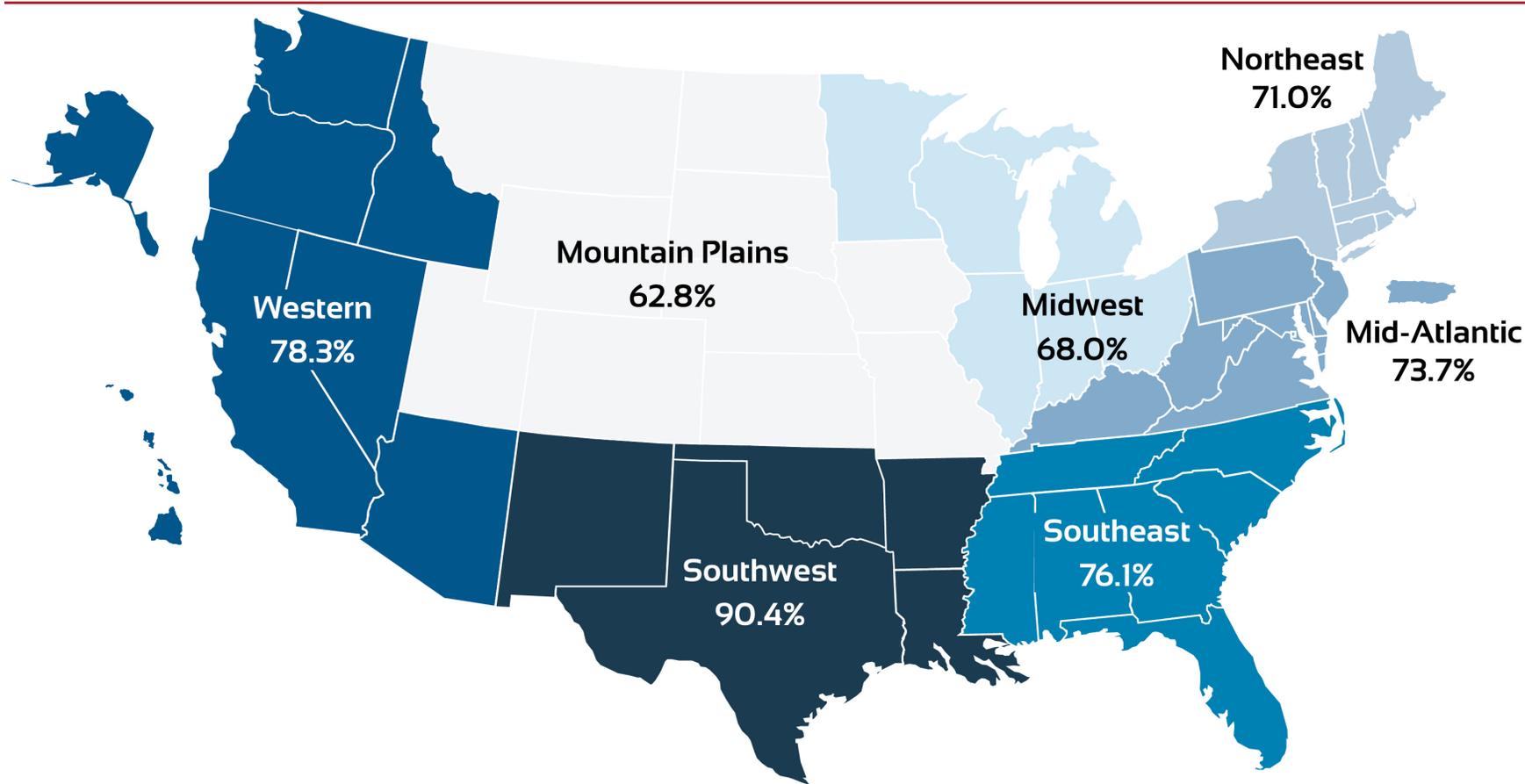
Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.4. WIC Coverage Rate for Pregnant Women by FNS Region: CY 2016
National Coverage Rate for Pregnant Women: 50.3 Percent



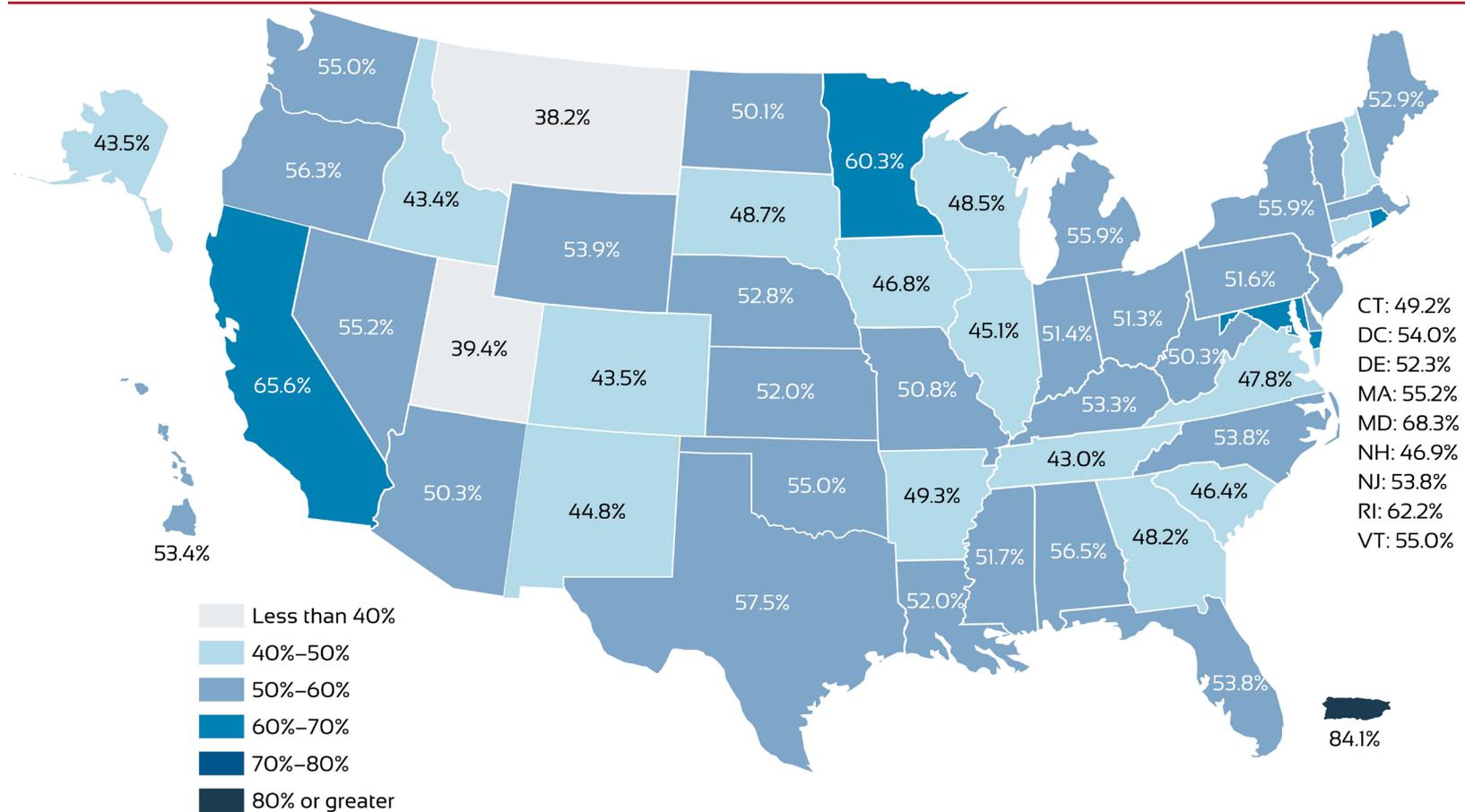
Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.5. WIC Coverage Rate for Postpartum Women by FNS Region: CY 2016
National Coverage Rate for Postpartum Women: 75.8 Percent



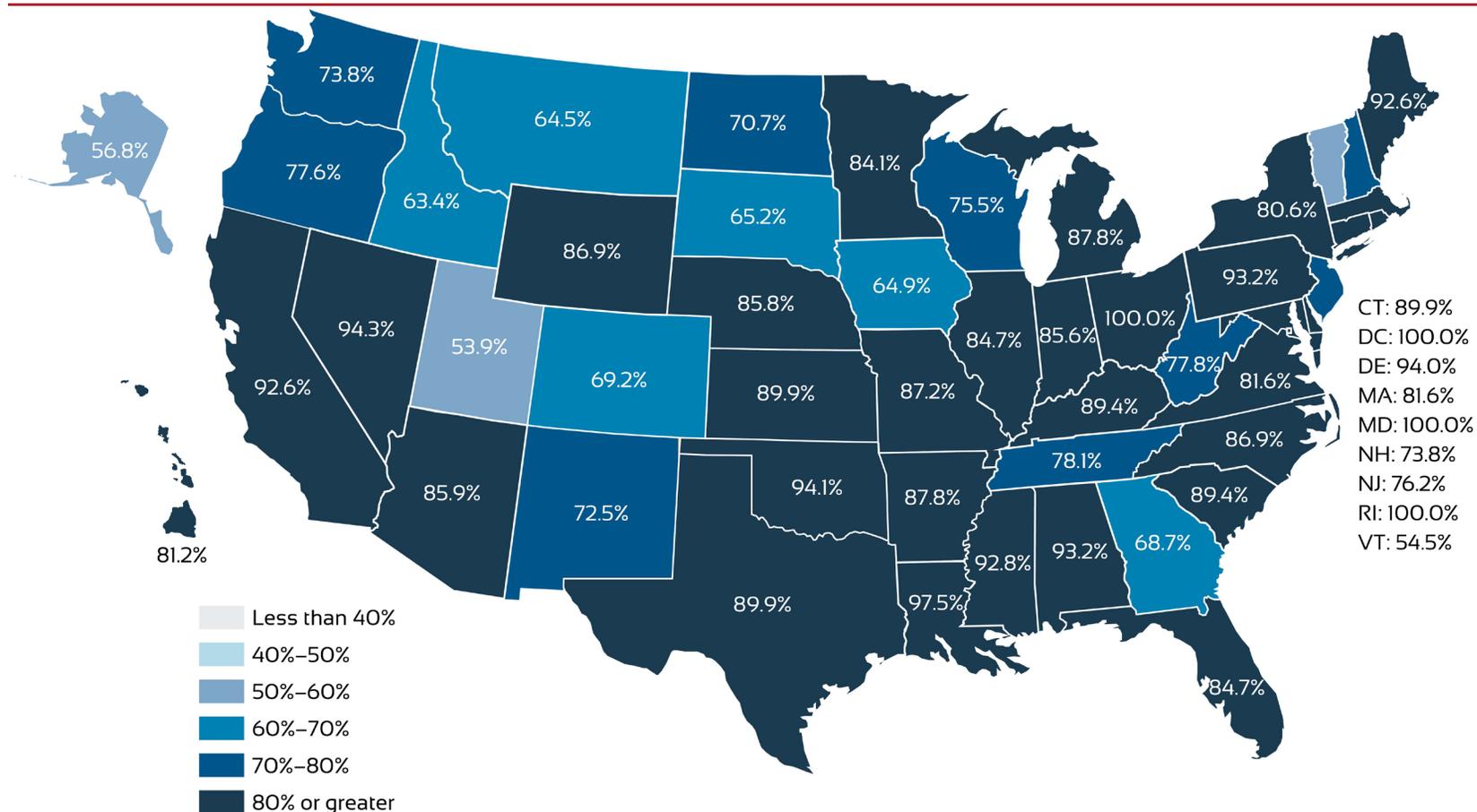
Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.6. WIC Coverage Rate for Total Eligible Individuals by State: CY 2016
National Coverage Rate: 54.5 Percent



Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.7. WIC Coverage Rate for Infants by State: CY 2016
National Coverage Rate for Infants: 85.9 Percent

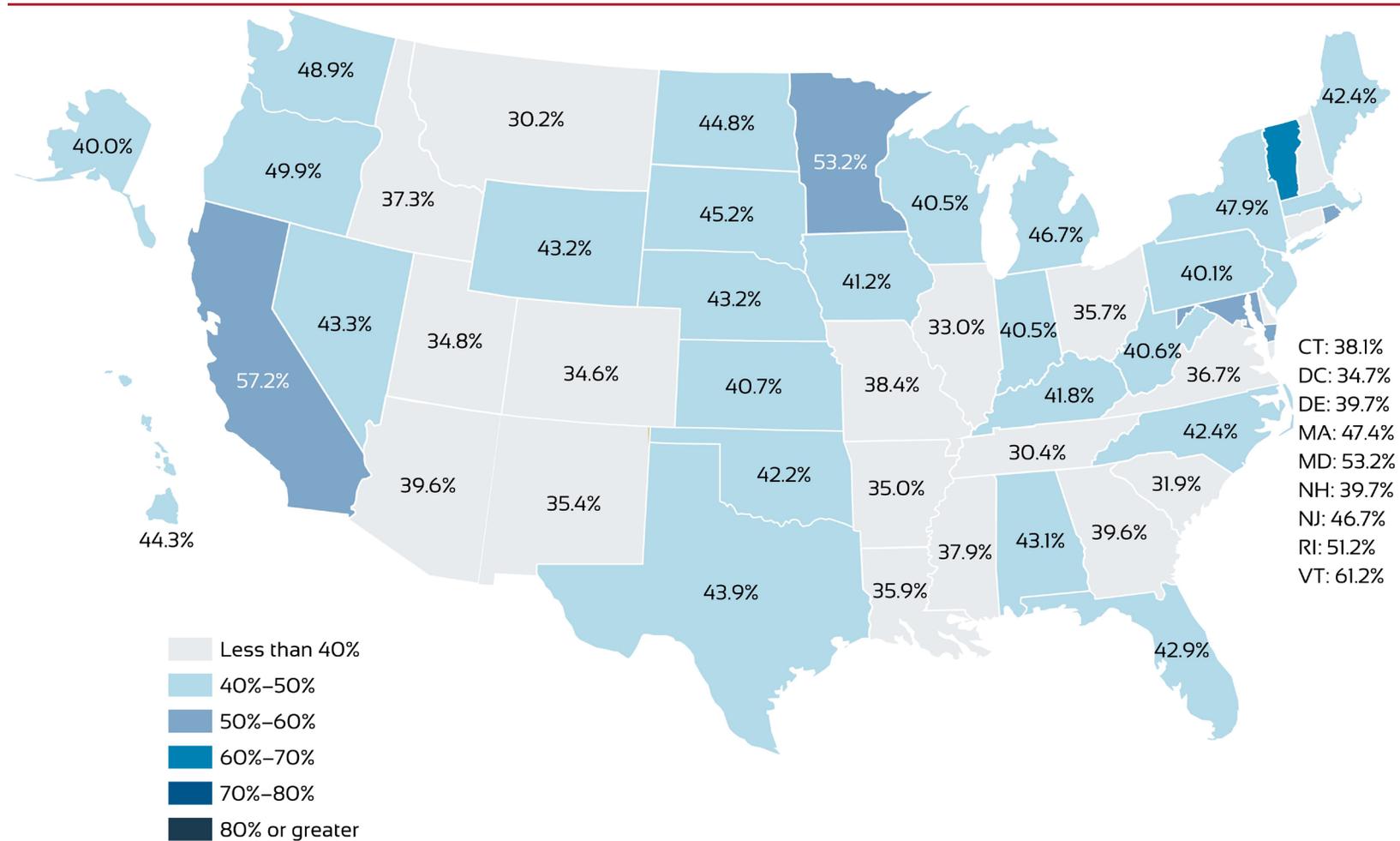


Note

The estimated coverage rates exceed 100 percent for infants in the District of Columbia, Maryland, Ohio, and Rhode Island. This is likely a result of sampling variability in the CPS-ASEC survey data used to estimate the number of eligible individuals in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding these rates is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates.

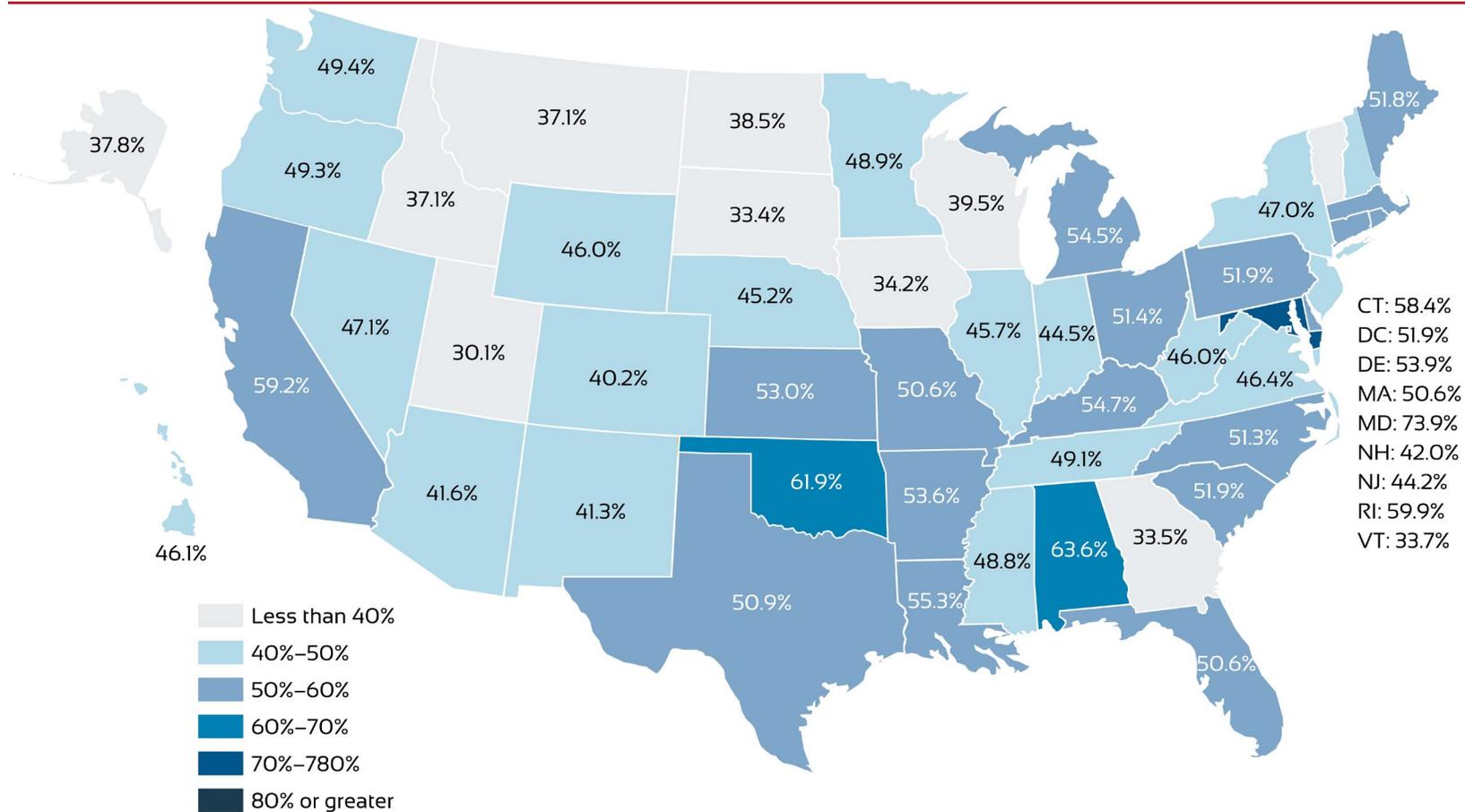
Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.8. WIC Coverage Rate for Children by State: CY 2016
National Coverage Rate for Children: 44.1 Percent



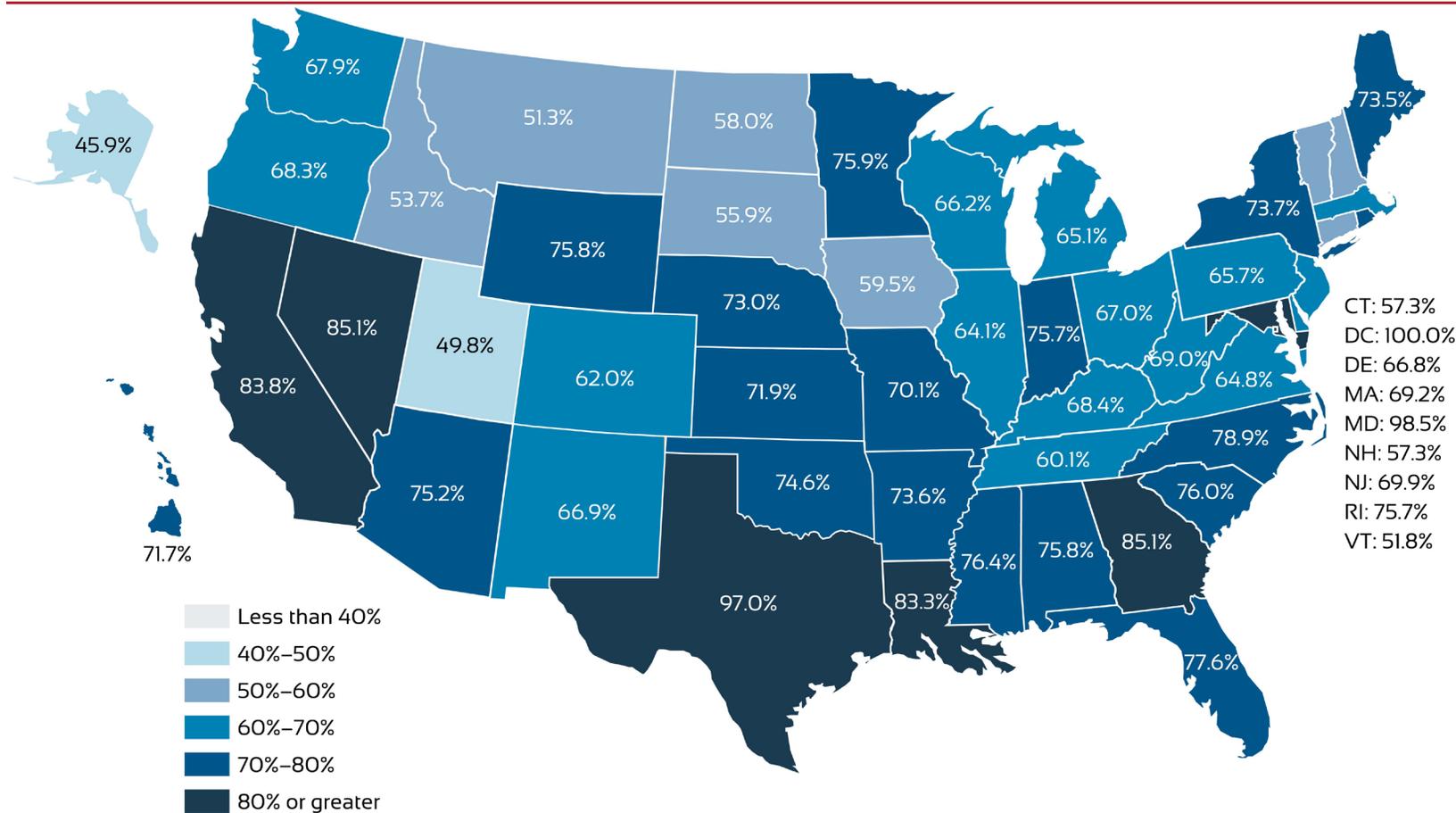
Sources: IPUMS-USA, n.d.b; NBER, n.d.; unpublished internal WIC administrative data

Figure C.9. WIC Coverage Rate for Pregnant Women by State: CY 2016
National Coverage Rate for Pregnant Women: 50.3 Percent



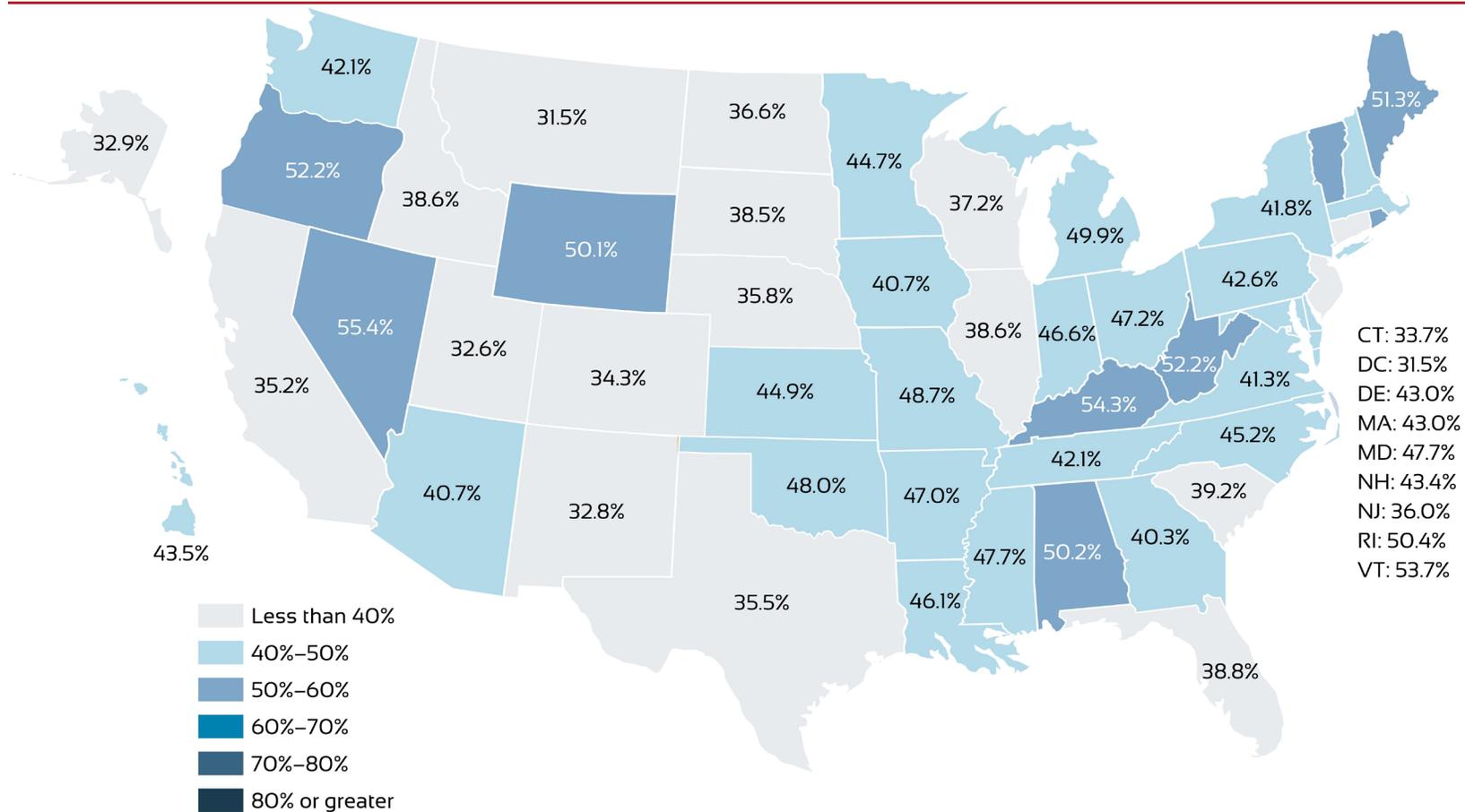
Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.10. WIC Coverage Rate for Postpartum Women by State: CY 2016
National Coverage Rate for Postpartum Women: 75.8 Percent



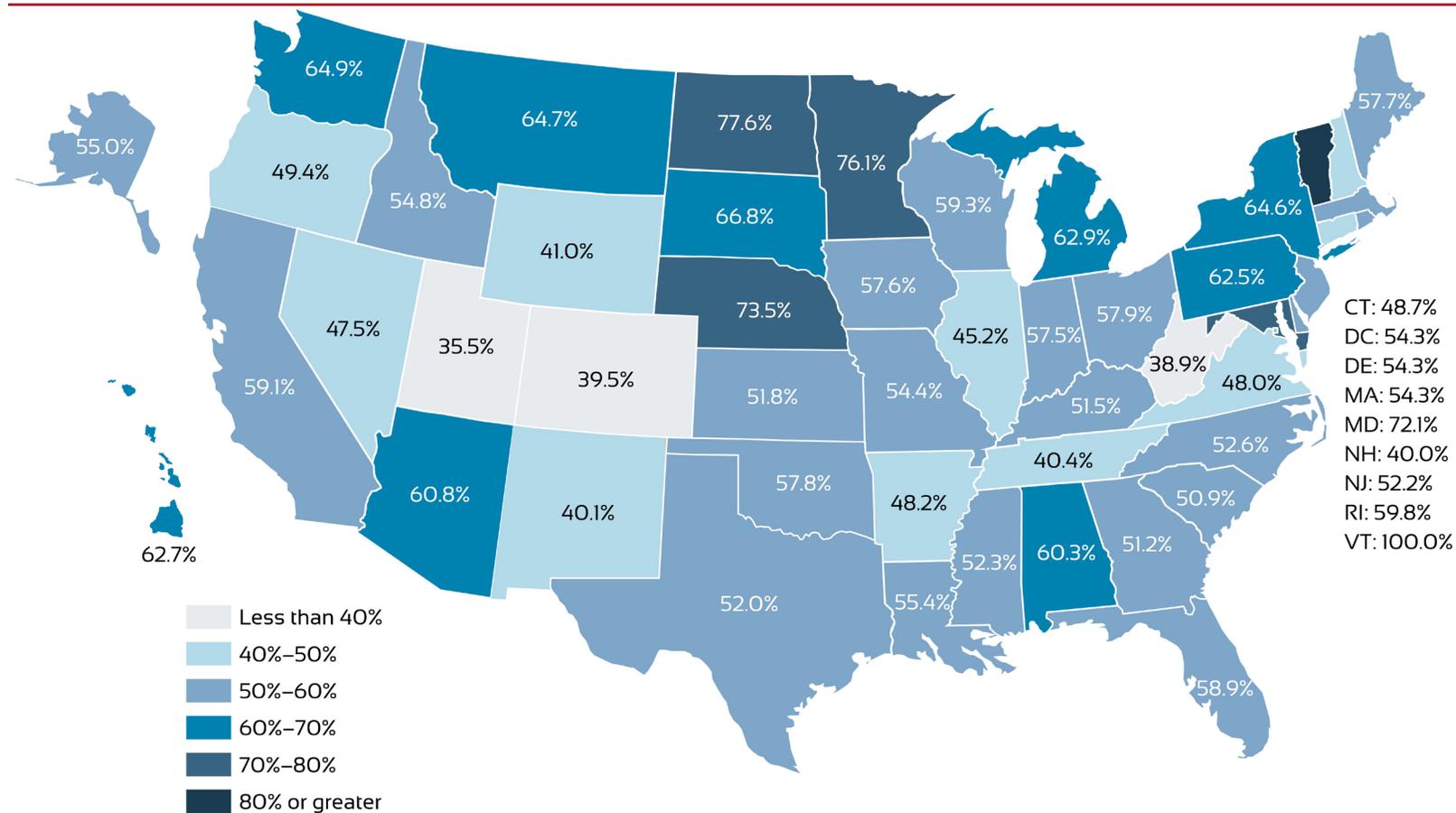
Note
 The estimated coverage rate exceeds 100 percent for postpartum women in the District of Columbia. This is likely a result of sampling variability in the CPS-ASEC survey data used to estimate the number of eligible individuals in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding this rate is below 100 percent. See chapter 6 in volume I or more information on measures of statistical uncertainty for the eligibility estimates.
 Sources: IPUMS-USA, n.d.; NBER, n.d.b; unpublished internal WIC administrative data

Figure C.11. WIC Coverage Rate for White-Only Non-Hispanic Individuals by State: CY 2016
National Coverage Rate for White-Only Non-Hispanic Individuals: 42.6 Percent



Sources: IPUMS-USA, n.d.; NBER, n.d.b; Thorn et al., 2018; unpublished internal WIC administrative data

Figure C.12. WIC Coverage Rate for Black-Only and Other Non-Hispanic Individuals by State: CY 2016
National Coverage Rate for Black-Only and Other Non-Hispanic Individuals: 56.0 Percent



Notes
 The estimated coverage rate exceeds 100 percent for Black-only and Other Non-Hispanic individuals in Vermont. This is likely a result of sampling variability in the CPS-ASEC survey data used to estimate the number of eligible individuals in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding this rate is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates.
 The Black-Only Non-Hispanic and Other Non-Hispanic categories were combined because of sample size concerns.
 Sources: IPUMS-USA, n.d.; NBER, n.d.b; Thorn et al., 2018; unpublished internal WIC administrative data

Appendix D. Method for Calculating the Annual-to-Monthly Adjustment Factors Applied to Children for CY 2016

The Healthy, Hunger-Free Kids Act of 2010 (Pub. L. 111–296) gave States the option of adopting a 12-month certification period for WIC-eligible children rather than recertifying children every 6 months. Whether and when a State has adopted this option affects WIC eligibility for children. This consideration was taken into account for not only the 2016 estimates but also the estimates for prior years when the policy was in effect.

Procedures for the 2016 Estimates

To incorporate the impact of 12-month certification on children’s WIC eligibility, the study team first created State-specific annual-to-monthly factors—which varied by whether and when the State had adopted the 12-month certification option—and then created a type of weighted average across the State-level estimates. Separate factors were created for race and ethnicity, both for the States and for the Nation: one for White-Only Non-Hispanic children and one for children who were either non-White or Hispanic.

The study team developed two sets of factors: one for 6-month certification and one for 12-month certification. When a 6-month certification length for children was assumed for all States, annual-to-monthly adjustment factors for children were 1.03 for White-Only Non-Hispanic children and 1.0 for all other children. In contrast, when a 12-month certification for children was assumed for all States, the annual-to-monthly factors were 1.10 for White-Only Non-Hispanic children and 1.03 for non-White or Hispanic children.

The State-specific factors used for the 2016 estimates are shown in table D.1. Implementation of the 12-month certification option affected eligibility in a nonretroactive manner. When a State adopts the longer certification period, the certification period shifts from 6 months to 12 months only for those children who first became eligible after the extension’s adoption. For 2016, this meant 12-month certification affected WIC eligibility in 2016 only if it was adopted before July 2016. If the policy was adopted after that date, any child covered by the new policy (i.e., a child who first became eligible for WIC in July 2016 or later) would have been certified eligible for the remainder of the year regardless of whether 6-month or 12-month certification was in place at the time he/she became eligible.

The fact that the new policy is not applied retroactively also means that even if the policy was adopted before July 2016, not all months of the year may have been affected by the longer certification period. Eligibility in all months of the year would have been affected only if the policy was adopted by February of the prior year. Although adoption of the policy as late as July of the prior year would increase eligibility in each month of the following year (versus what eligibility would be if certification was only for 6 months), the increase would not be as great as if 12-month certification had been in place in February of the prior year.

Therefore, if a State adopted 12-month certification in February 2015 or earlier, adjustment factors assuming 12-month certification length for all States were used (1.10 for White-Only Non-Hispanic, 1.03 for all other children). If a State did not adopt 12-month certification by January 2017, or did not adopt the policy before July 2016, adjustment factors assuming 6-month certification length for all States were used (1.03 for White-Only Non-Hispanic, 1.0 for all other children). Any State that adopted 12-month certification between March 2015 and June 2016 used adjustment factors that varied linearly between the 12- and 6-month bounds as described in table D.1.

Table D.1. Annual-to-Monthly Adjustment Factors Based on Month of Adoption of 12-Month Certification

	Implementation Month	White-Only Non-Hispanic	Other
2015	March	1.096	1.028
	April	1.092	1.026
	May	1.088	1.025
	June	1.084	1.023
	July	1.079	1.021
	August	1.075	1.019
	September	1.071	1.018
	October	1.067	1.016
	November	1.063	1.014
	December	1.059	1.012
2016	January	1.055	1.011
	February	1.051	1.009
	March	1.046	1.007
	April	1.042	1.005
	May	1.038	1.004
	June	1.034	1.002

A summary of the assignment of various adjustment factors by State as shown in table D.2 follows:

1. Nine States had not adopted the 12-month certification policy by the end of 2016. For these States, the factors used for 2016 were the national 6-month factors (1.03 for White-Only Non-Hispanic children, 1.0 for all other children).
2. One State that adopted the policy in 2016 had not implemented it early enough (i.e., in July 2016 or later) to affect eligibility in 2016. For this State, the national 6-month factors were also used.
3. Thirty-eight States (and the District of Columbia) had adopted the policy early enough (i.e., in February 2015 or earlier) to affect eligibility for all months of 2016. For these States, the factors used for 2016 were the national 12-month factors (1.10 for White-Only Non-Hispanic children, 1.03 for all other children).
4. The remaining three States adopted the policy early enough (i.e., between March 2015 and June 2016) to affect eligibility in only some months of 2016. For these States, adjustment factors between 1.03 and 1.10 for White-Only Non-Hispanic children and between 1.0 and 1.03 for all other children were used based on the implementation month.

Table D.2. State-Level Annual-to-Monthly Adjustment Factors Used for the 2016 Estimates of WIC-Eligible Children

State	Implementation Date (as of February 6, 2018)	Annual-to-Monthly Factors Used for 2016 Estimates	
		White-Only Non-Hispanic	Other
Alabama	October 1, 2017	1.030	1.000
Alaska	January 19, 2014	1.100	1.030
Arizona	December 14, 2014	1.100	1.030
Arkansas	N/A	1.030	1.000
California	March 1, 2012	1.100	1.030
Colorado	September 1, 2013	1.100	1.030
Connecticut	October 1, 2012	1.100	1.030
Delaware	January 14, 2013	1.100	1.030
District of Columbia	March 1, 2014	1.100	1.030
Florida	October 1, 2011	1.100	1.030
Georgia	October 1, 2012	1.100	1.030
Hawaii	May 26, 2017	1.030	1.000
Idaho	January 5, 2015	1.100	1.030
Illinois	July 1, 2012	1.100	1.030
Indiana	January 20, 2014	1.100	1.030
Iowa	July 1, 2012	1.100	1.030
Kansas	June 1, 2014	1.100	1.030
Kentucky	N/A	1.030	1.000
Louisiana	N/A	1.030	1.000
Maine	January 1, 2012	1.100	1.030
Maryland	October 1, 2012	1.100	1.030
Massachusetts	January 1, 2012	1.100	1.030
Michigan	April 1, 2013	1.100	1.030
Minnesota	November 1, 2012	1.100	1.030
Mississippi	March 1, 2014	1.100	1.030
Missouri	December 1, 2013	1.100	1.030
Montana	October 1, 2011	1.100	1.030
Nebraska	N/A	1.030	1.000
Nevada	July 1, 2012	1.100	1.030
New Hampshire	July 1, 2014	1.100	1.030
New Jersey	N/A	1.030	1.000
New Mexico	October 1, 2012	1.100	1.030
New York	January 1, 2012	1.100	1.030
North Carolina	October 1, 2011	1.100	1.030
North Dakota	January 1, 2011	1.100	1.030
Ohio	N/A	1.030	1.000
Oklahoma	October 1, 2012	1.100	1.030

State	Implementation Date (as of February 6, 2018)	Annual-to-Monthly Factors Used for 2016 Estimates	
		White-Only Non-Hispanic	Other
Oregon	October 1, 2016	1.030	1.000
Pennsylvania	September 1, 2013	1.100	1.030
Rhode Island	January 1, 2015	1.100	1.030
South Carolina	October 1, 2015	1.067	1.016
South Dakota	April 1, 2011	1.100	1.030
Tennessee	October 1, 2013	1.100	1.030
Texas	March 1, 2012	1.100	1.030
Utah	October 1, 2013	1.100	1.030
Vermont	October 1, 2015	1.067	1.016
Virginia	January 1, 2013	1.100	1.030
Washington	November 1, 2011	1.100	1.030
West Virginia	N/A	1.030	1.000
Wisconsin	October 1, 2013	1.100	1.030
Wyoming	March 1, 2016	1.046	1.007

Note

Implementation dates were provided by FNS as of February 6, 2018. If no date is listed, the State does not plan to adopt 12-month certification.

After calculating appropriate factors for each State, it was also necessary to estimate a national-level factor. As described in volume I of this report, the State-level eligibility estimates were not calculated directly from the CPS-ASEC data. Instead, the national estimates were calculated using CPS-ASEC data that was apportioned to States based on State shares calculated using ACS data. Whereas the State-specific factors described earlier in this section were applied to each State when processing the ACS data, a national-level factor was required when processing the CPS-ASEC data. To do this, a weighted average of the State-specific factors was developed that weighted each State's factor by its share of eligible individuals before applying any annual-to-monthly adjustment factor. This resulted in a national annual-to-monthly adjustment factor of 1.085 for White-Only Non-Hispanic children and 1.026 for all other children (see table D.3).

The new certification policy option was also considered for the purposes of estimating children's WIC eligibility in Puerto Rico and the other U.S. territories. However, neither Puerto Rico nor any of the other territories implemented 12-month certification any earlier than January 2015. Therefore, a single factor (1.01 for children with 6-month certifications) rather than separate factors for race and ethnicity was applied for all children in the territories.

Table D.3. Calculation of the National-Level Annual-to-Monthly Adjustment Factor Used for the National 2016 Estimates of WIC-Eligible Children

State	State-Specific Annual-to-Monthly Factor		State Share of National Estimate of WIC-Eligible Children		State-Specific Factor Weighted by Share	
	White-Only Non-Hispanic	Other	White-Only Non-Hispanic	Other	White-Only Non-Hispanic	Other
Alabama	1.030	1.000	0.020	0.015	0.021	0.015
Alaska	1.100	1.030	0.002	0.003	0.003	0.003
Arizona	1.100	1.030	0.017	0.028	0.019	0.029
Arkansas	1.030	1.000	0.018	0.009	0.018	0.009
California	1.100	1.030	0.056	0.175	0.061	0.181
Colorado	1.100	1.030	0.015	0.014	0.017	0.014
Connecticut	1.100	1.030	0.006	0.008	0.007	0.008
Delaware	1.100	1.030	0.002	0.003	0.002	0.003
District of Columbia	1.100	1.030	0.000	0.003	0.000	0.003
Florida	1.100	1.030	0.054	0.069	0.060	0.071
Georgia	1.100	1.030	0.032	0.041	0.035	0.042
Hawaii	1.030	1.000	0.001	0.006	0.001	0.006
Idaho	1.100	1.030	0.011	0.003	0.012	0.003
Illinois	1.100	1.030	0.034	0.038	0.037	0.039
Indiana	1.100	1.030	0.034	0.013	0.038	0.013
Iowa	1.100	1.030	0.016	0.004	0.017	0.005
Kansas	1.100	1.030	0.011	0.007	0.012	0.007
Kentucky	1.030	1.000	0.030	0.007	0.031	0.007
Louisiana	1.030	1.000	0.018	0.018	0.019	0.018
Maine	1.100	1.030	0.006	0.001	0.007	0.001
Maryland	1.100	1.030	0.010	0.018	0.011	0.019
Massachusetts	1.100	1.030	0.016	0.014	0.018	0.015
Michigan	1.100	1.030	0.045	0.021	0.049	0.021
Minnesota	1.100	1.030	0.019	0.010	0.021	0.010
Mississippi	1.100	1.030	0.010	0.012	0.011	0.013
Missouri	1.100	1.030	0.029	0.011	0.031	0.011
Montana	1.100	1.030	0.007	0.002	0.007	0.002
Nebraska	1.030	1.000	0.009	0.004	0.009	0.004
Nevada	1.100	1.030	0.006	0.012	0.006	0.012
New Hampshire	1.100	1.030	0.004	0.001	0.005	0.001
New Jersey	1.030	1.000	0.015	0.024	0.016	0.024
New Mexico	1.100	1.030	0.003	0.012	0.004	0.012
New York	1.100	1.030	0.052	0.061	0.057	0.063
North Carolina	1.100	1.030	0.034	0.031	0.037	0.032
North Dakota	1.100	1.030	0.002	0.002	0.002	0.002
Ohio	1.030	1.000	0.053	0.022	0.055	0.022
Oklahoma	1.100	1.030	0.017	0.014	0.019	0.014
Oregon	1.030	1.000	0.017	0.009	0.018	0.009

State	State-Specific Annual-to-Monthly Factor		State Share of National Estimate of WIC-Eligible Children		State-Specific Factor Weighted by Share	
	White-Only Non-Hispanic	Other	White-Only Non-Hispanic	Other	White-Only Non-Hispanic	Other
Pennsylvania	1.100	1.030	0.050	0.024	0.055	0.024
Rhode Island	1.100	1.030	0.002	0.003	0.002	0.003
South Carolina	1.067	1.016	0.019	0.016	0.020	0.016
South Dakota	1.100	1.030	0.004	0.002	0.004	0.002
Tennessee	1.100	1.030	0.034	0.017	0.038	0.018
Texas	1.100	1.030	0.054	0.138	0.060	0.142
Utah	1.100	1.030	0.016	0.006	0.017	0.006
Vermont	1.067	1.016	0.003	0.000	0.004	0.000
Virginia	1.100	1.030	0.019	0.019	0.021	0.020
Washington	1.100	1.030	0.028	0.018	0.031	0.019
West Virginia	1.030	1.000	0.014	0.001	0.014	0.001
Wisconsin	1.100	1.030	0.021	0.011	0.023	0.012
Wyoming	1.046	1.007	0.003	0.001	0.003	0.001
U.S. Total	–	–	–	–	1.085	1.026

Notes

State shares are based on State eligibility before applying the annual-to-monthly adjustment factors.

“–” denotes blank cells.

Appendix E. Replicate Weight Methodology Used for Calculating Standard Errors

The purpose of this appendix is to describe the replicate weight methodology used for calculating the standard errors of the 2016 WIC eligibility and coverage rate estimates presented in this report. The CPS-ASEC, ACS, and PRCS data files provided data on individuals from a sampled population. Each individual's data was weighted to allow reporting of estimates for the total population. Because these estimates were derived from a sample, they were subject to sampling variability and sampling error. To address this, standard errors were calculated for each estimate to inform the magnitude of potential variation in the observed estimate.

For prior reports in this series, Generalized Variance Functions (GVFs) were used to calculate the standard errors. This method uses preconstructed factors based on sets of assumed similar characteristics that may be of interest during analysis. For the CPS-ASEC and ACS, the combination of potentially reported results is so large that standard errors are not constructed and published for each result individually. GVFs use certain groups of estimates that have historically shown similar relationships between their variances and expected values. These groups of estimates are used in a simple model that expresses the variance as a function of the expected value of the survey estimate. The parameters of these GVF models produce approximate standard errors for numerous characteristics potentially reported. These parameters have been provided in CPS technical documentation (U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics, n.d.).

For this report, replicate weights were used to calculate direct estimates of variation, which improved the accuracy of the standard errors compared with those calculated using GVFs. Furthermore, the Census Bureau has recommended replicate weights be used to calculate standard errors and coefficients of variation of estimates from data sources such as the CPS-ASEC, ACS, and PRCS (U.S. Census Bureau & U.S. Department of Labor, Bureau of Labor Statistics, n.d.). When restricted to a single sample, replicate weights simulate repeated sampling of the same population; this results in multiple weights for each individual. These simulated samples generate more informed standard error estimates that mimic the theoretical bases of standard errors but also retain all information about the complex sample design.

Obtaining Replicate Weights

Replicate weights are constructed by the Census Bureau during the development of public use files. For the CPS-ASEC data, replicate weights were provided as a separate data file. Unique identification numbers composed of information on each household and person were used to merge the weights into the main file. For the ACS and PRCS data, replicate weights were added directly to the raw data files. For each observation, the CPS-ASEC file contained 160 weights, and the ACS and PRCS files each contained 80 weights.

Incorporation of Replicate Weights Into Data Processing

To calculate standard errors, the methodology used to produce estimates for WIC-eligible individuals was also applied to each replicate weight. For example, adjustment factors such as the nutritional risk adjustment, annual-to-monthly adjustment, and population adjustment were applied to the 160 CPS-ASEC replicate weights and 80 ACS/PRSC replicate weights in the same manner that they were applied to the person-level weights used to create the final estimates in the report.

As described in the methodology chapter of volume I (chapter 2), once all the adjustment factors were applied to counts of infants and children, the ACS-based counts were adjusted so State totals reflected national CPS-based totals. This process applied each State’s share of the ACS-based national-level estimate to the CPS-ASEC total.² The same process was used for each of the 80 ACS replicate weights. However, because these 80 replicate weights could not be assumed to align with any particular CPS-ASEC replicate weight, they were adjusted using the final CPS-based national total. For example, the first set of replicate weights in the ACS data were summed, and their State shares were determined. This State share was then applied to the CPS-based final adjusted total (rather than the total determined by any particular replicate weight) to calculate the fully adjusted first replicate weight values.

Calculations of Standard Errors and Coefficients of Variation

For all the calculations of standard errors and coefficients of variation throughout this report, the study team used the formulas provided in CPS-ASEC and ACS technical documentation (U.S. Census Bureau & IPUMS-USA, n.d.; U.S. Census Bureau, n.d.c). The 160 CPS-based replicate weights and the following two formulas were used to calculate the variation in the national estimates:

$$SE(X) = \sqrt{\frac{4}{160} \sum_{r=1}^{160} (X_r - X)^2} \quad (1)$$

$$CV(X) = SE(X)/X \quad (2)$$

In equations 1 and 2, X is the estimate of interest, and X_r is the estimate based on the r^{th} replicate weight.

aBecause ACS-based data was adjusted to CPS-based totals for consistency as described previously, the calculation of variation in State and regional estimates utilized the following formulas:

$$CV(Y_s) = \sqrt{CV^2(X) + CV^2(P_s)} \quad (3)$$

$$P_s = Y_s/Y \quad (4)$$

In equation 3, X is the CPS-based national-level estimate of interest, Y is the ACS-based national-level estimate of interest, and Y_s is the ACS estimate of interest for State s . When calculating the coefficient of variation for a State’s share of the ACS-based national-level estimate P_s , the study team utilized the 80 ACS-based replicate weights and the following two formulas:

$$SE(P_s) = \sqrt{\frac{4}{80} \sum_{r=1}^{80} (P_{s,r} - P_s)^2} \quad (5)$$

² This adjustment was made for only the 50 States and the District of Columbia because the CPS-ASEC data did not contain information on Puerto Rico.

$$CV(P_s) = SE(P_s) / P_s \quad (6)$$

In equations 5 and 6, similar to equations 3 and 4, P_s is the state share of the estimate of interest, and $P_{s,r}$ is the state share of the estimate based on the r^{th} replicate weight.

For example, table 6.2 in volume I of the report provides standard errors and coefficients of variation for WIC-eligible individuals state. These standard errors were calculated using equations 3 and 4 as described above with the CPS-based 160 replicate weights and ACS-based 80 replicate weights. Because data for Puerto Rico were not included in the CPS-ASEC data and did not have the same 160 replicate weights, it was not included in the calculations for totals in table 6.2. Moreover, because the data for the other U.S. territories were collected through a census and, therefore, not subject to sampling variability, they also were not included in the calculations of totals for the table.

Appendix F. Data for Figures in Volumes I and II

This section includes additional data used for figures or maps of this report.

Table F.1. Trends in WIC Eligibility by Participant Category: CY 2005–CY 2016

Participant Category	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Infants	2,558,198	2,547,352	2,469,895	2,444,907	2,450,486	2,492,692	2,369,335	2,293,360	2,383,446	2,451,750	2,506,686	2,159,041
Total children (aged 1–4)	8,438,790	8,199,817	8,189,922	8,565,160	9,025,534	9,100,231	8,675,794	8,752,082	8,929,389	9,347,672	9,268,848	8,907,712
Children aged 1	2,254,002	2,153,096	2,132,181	2,243,777	2,317,085	2,203,653	2,251,413	2,160,352	2,246,216	2,312,140	2,274,986	2,317,916
Children aged 2	2,115,499	2,047,789	2,052,056	2,087,040	2,267,648	2,275,554	2,097,521	2,176,383	2,210,997	2,318,334	2,321,950	2,222,568
Children aged 3	2,021,426	1,999,006	2,032,293	2,119,326	2,264,937	2,358,306	2,142,043	2,223,216	2,189,298	2,357,342	2,340,558	2,215,120
Children aged 4	2,047,864	1,999,926	1,973,393	2,115,017	2,175,865	2,262,718	2,184,818	2,192,131	2,282,879	2,359,857	2,331,355	2,152,108
Pregnant women	1,668,448	1,661,374	1,610,857	1,594,559	1,598,198	1,625,725	1,545,272	1,495,721	1,554,475	1,599,023	1,634,852	1,408,119
Total postpartum women	1,555,282	1,571,818	1,544,977	1,537,912	1,535,907	1,570,531	1,515,309	1,475,700	1,544,490	1,606,863	1,652,116	1,458,923
Postpartum breastfeeding women	822,301	853,615	870,455	867,826	860,220	879,159	886,444	876,592	938,157	998,025	1,034,333	949,592
Postpartum non-breastfeeding women	732,981	718,203	674,522	670,086	675,687	691,372	628,865	599,108	606,333	608,838	617,783	509,331
Total	14,220,718	13,980,361	13,815,651	14,142,538	14,610,125	14,789,179	14,105,710	14,016,863	14,411,800	15,005,308	15,062,503	13,933,795

Table F.2. Regional-Level WIC Eligibility by Participant Category: CY 2005–CY 2016

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Infants												
Northeast	206,365	206,379	199,728	199,727	201,618	212,157	209,890	196,252	211,248	218,523	216,978	193,078
Mid-Atlantic	283,563	280,232	267,317	261,435	278,918	276,393	263,384	261,129	270,095	272,098	281,006	234,319
Southeast	516,939	533,067	513,546	510,633	520,664	525,034	497,781	482,812	493,328	526,362	539,363	469,018
Midwest	379,646	371,990	359,711	366,835	373,180	380,165	367,236	339,373	350,952	368,281	370,624	316,849
Southwest	431,129	425,727	423,067	404,434	396,202	402,943	381,018	364,505	380,903	381,902	399,527	346,977
Mountain Plains	196,868	195,657	187,271	184,598	188,713	188,501	176,474	168,178	182,119	193,883	197,829	165,844
Western	543,689	534,299	519,254	517,245	491,190	507,500	473,552	481,110	494,800	490,700	501,360	432,957
Total	2,558,198	2,547,352	2,469,895	2,444,907	2,450,486	2,492,692	2,369,335	2,293,360	2,383,446	2,451,750	2,506,686	2,159,041
Children												
Northeast	714,354	704,637	695,870	722,369	760,385	771,076	733,634	773,993	797,138	837,926	818,395	785,648
Mid-Atlantic	966,344	918,016	924,422	969,897	1,003,801	1,023,130	962,006	976,797	1,004,838	1,053,757	1,049,675	993,438
Southeast	1,692,528	1,661,879	1,653,911	1,780,460	1,894,699	1,894,494	1,820,166	1,830,151	1,896,838	1,992,652	1,951,240	1,923,067
Midwest	1,257,607	1,212,287	1,208,928	1,269,807	1,383,542	1,411,935	1,335,646	1,279,045	1,314,508	1,392,932	1,384,142	1,306,013
Southwest	1,389,898	1,386,648	1,367,724	1,414,712	1,425,242	1,433,611	1,356,633	1,396,436	1,405,210	1,452,577	1,457,684	1,402,260
Mountain Plains	650,739	625,462	632,189	628,839	681,760	694,702	675,421	661,621	660,008	700,741	698,992	644,758
Western	1,767,321	1,690,888	1,706,880	1,779,075	1,876,103	1,871,283	1,792,286	1,834,037	1,850,849	1,917,087	1,908,721	1,852,529
Total	8,438,791	8,199,817	8,189,923	8,565,160	9,025,535	9,100,231	8,675,795	8,752,082	8,929,390	9,347,672	9,268,848	8,907,712
Pregnant Women												
Northeast	134,590	134,600	130,262	130,261	131,495	138,368	136,889	127,995	137,775	142,520	141,512	125,925
Mid-Atlantic	184,939	182,766	174,343	170,507	181,909	180,263	171,778	170,307	176,155	177,461	183,271	152,822
Southeast	337,146	347,664	334,933	333,033	339,575	342,425	324,651	314,889	321,747	343,292	351,771	305,892
Midwest	247,604	242,611	234,603	239,248	243,387	247,943	239,510	221,338	228,890	240,192	241,719	206,648
Southwest	281,181	277,657	275,923	263,770	258,401	262,798	248,498	237,729	248,424	249,075	260,570	226,297
Mountain Plains	128,396	127,607	122,138	120,394	123,078	122,940	115,096	109,685	118,778	126,450	129,023	108,163
Western	354,592	348,468	338,656	337,345	320,352	330,990	308,849	313,778	322,707	320,033	326,985	282,373
Total	1,668,448	1,661,374	1,610,857	1,594,559	1,598,198	1,625,725	1,545,272	1,495,721	1,554,475	1,599,023	1,634,852	1,408,119

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Postpartum Breastfeeding Women												
Northeast	70,293	70,678	72,681	77,266	76,480	81,879	83,151	78,465	88,338	91,014	105,604	95,268
Mid-Atlantic	81,178	81,195	75,852	71,147	76,440	79,267	84,612	88,259	93,957	98,000	112,923	100,775
Southeast	122,844	136,106	141,397	144,392	146,087	144,819	147,675	146,471	156,611	179,626	188,515	180,210
Midwest	104,109	101,991	106,315	109,024	119,252	117,730	121,204	118,923	128,764	143,764	136,173	126,885
Southwest	125,150	132,844	142,511	133,905	121,533	126,259	125,602	125,880	130,375	139,157	149,931	135,292
Mountain Plains	73,575	80,137	84,457	83,357	85,457	79,430	78,011	69,076	76,076	84,196	86,719	78,428
Western	245,152	250,664	247,243	248,735	234,970	249,775	246,191	249,519	264,037	262,268	254,467	232,734
Total	822,301	853,615	870,455	867,826	860,220	879,159	886,444	876,592	938,157	998,025	1,034,333	949,592
Postpartum Non-Breastfeeding Women												
Northeast	58,369	58,200	54,251	53,559	54,233	57,068	54,595	50,502	52,542	54,248	48,905	40,926
Mid-Atlantic	86,592	85,060	80,243	79,088	84,391	83,668	75,566	73,141	74,234	72,953	71,414	57,241
Southeast	168,296	169,633	157,207	156,456	159,068	161,775	147,511	141,982	142,929	146,004	145,581	123,381
Midwest	116,944	114,162	105,929	108,426	107,456	111,315	102,786	92,661	92,612	93,732	97,430	80,822
Southwest	126,047	120,511	114,584	110,745	111,313	113,839	103,895	98,794	102,438	100,313	100,966	88,114
Mountain Plains	51,952	50,048	46,110	45,956	46,780	48,281	42,800	41,215	43,400	45,114	47,166	36,439
Western	124,780	120,587	116,197	115,856	112,446	115,426	101,711	100,814	98,180	96,475	106,322	82,408
Total	732,981	718,203	674,522	670,086	675,687	691,372	628,865	599,108	606,333	608,838	617,783	509,331

Table F.3. WIC Coverage Rates by State and Participant Category: CY 2016

State ^a	Infants	Children Aged 1	Children Aged 2	Children Aged 3	Children Aged 4	All Children Aged 1–4	Pregnant Women	Postpartum Women	All Participants
Alabama	93.2	57.8	47.7	37.8	28.5	43.1	63.6	75.8	56.5
Alaska	56.8	56.7	38.5	36.1	27.7	40.0	37.8	45.9	43.5
Arizona	85.9	54.8	42.4	37.5	21.9	39.6	41.6	75.2	50.3
Arkansas	87.8	53.8	33.3	31.2	20.1	35.0	53.6	73.6	49.3
California	92.6	68.3	59.9	55.8	44.7	57.2	59.2	83.8	65.6
Colorado	69.2	54.4	37.5	29.9	18.9	34.6	40.2	62.0	43.5
Connecticut	89.9	58.4	35.2	36.1	23.4	38.1	58.4	57.3	49.2
Delaware	94.0	55.5	41.2	44.9	16.5	39.7	53.9	66.8	52.3
District of Columbia	100.0	56.4	43.9	26.0	13.6	34.7	51.9	100.0	54.0
Florida	84.7	60.5	48.7	37.6	23.2	42.9	50.6	77.6	53.8
Georgia	68.7	51.7	44.5	38.3	22.7	39.6	33.5	85.1	48.2
Hawaii	81.2	52.8	46.4	40.1	37.5	44.3	46.1	71.7	53.4
Idaho	63.4	54.8	42.2	33.4	17.1	37.3	37.1	53.7	43.4
Illinois	84.7	42.3	35.4	31.8	21.6	33.0	45.7	64.1	45.1
Indiana	85.6	57.8	51.9	35.6	16.0	40.5	44.5	75.7	51.4
Iowa	64.9	62.9	45.2	34.3	21.6	41.2	34.2	59.5	46.8
Kansas	89.9	60.2	55.1	37.7	16.6	40.7	53.0	71.9	52.0
Kentucky	89.4	56.2	44.2	37.4	28.8	41.8	54.7	68.4	53.3
Louisiana	97.5	51.0	37.3	31.6	21.6	35.9	55.3	83.3	52.0
Maine	92.6	54.4	51.2	36.4	28.9	42.4	51.8	73.5	52.9
Maryland	100.0	64.9	65.2	51.7	29.8	53.2	73.9	98.5	68.3
Massachusetts	81.6	65.7	53.5	48.1	24.3	47.4	50.6	69.2	55.2
Michigan	87.8	61.9	50.5	50.5	21.1	46.7	54.5	65.1	55.9
Minnesota	84.1	63.9	56.0	54.9	36.1	53.2	48.9	75.9	60.3
Mississippi	92.8	48.3	38.6	39.0	23.0	37.9	48.8	76.4	51.7
Missouri	87.2	55.5	43.0	32.3	21.5	38.4	50.6	70.1	50.8
Montana	64.5	37.0	31.1	27.6	22.1	30.2	37.1	51.3	38.2
Nebraska	85.8	57.5	42.1	40.9	31.2	43.2	45.2	73.0	52.8
Nevada	94.3	55.0	43.5	38.3	35.6	43.3	47.1	85.1	55.2

State ^a	Infants	Children Aged 1	Children Aged 2	Children Aged 3	Children Aged 4	All Children Aged 1-4	Pregnant Women	Postpartum Women	All Participants
New Hampshire	73.8	48.6	48.2	37.9	21.7	39.7	42.0	57.3	46.9
New Jersey	76.2	64.1	47.1	41.4	33.6	46.7	44.2	69.9	53.8
New Mexico	72.5	50.1	38.3	31.8	19.5	35.4	41.3	66.9	44.8
New York	80.6	66.7	49.6	45.8	28.6	47.9	47.0	73.7	55.9
North Carolina	86.9	52.8	49.5	41.4	24.0	42.4	51.3	78.9	53.8
North Dakota	70.7	79.9	61.4	32.0	22.0	44.8	38.5	58.0	50.1
Ohio	100.0	45.8	37.8	33.1	24.9	35.7	51.4	67.0	51.3
Oklahoma	94.1	49.8	52.8	38.7	27.0	42.2	61.9	74.6	55.0
Oregon	77.6	58.3	52.6	51.8	36.3	49.9	49.3	68.3	56.3
Pennsylvania	93.2	58.8	43.5	38.1	20.9	40.1	51.9	65.7	51.6
Rhode Island	100.0	66.6	55.5	58.2	27.2	51.2	59.1	75.7	62.2
South Carolina	89.4	51.3	30.7	29.4	12.1	31.9	51.9	76.0	46.4
South Dakota	65.2	61.2	47.9	42.8	25.7	45.2	33.4	55.9	48.7
Tennessee	78.1	41.1	32.8	31.7	14.7	30.4	49.1	60.1	43.0
Texas	89.9	64.8	45.6	41.9	20.4	43.9	50.9	97.0	57.5
Utah	53.9	45.2	39.1	32.6	20.8	34.8	30.1	49.8	39.4
Vermont	54.5	76.2	67.3	58.2	43.4	61.2	33.7	51.8	55.0
Virginia	81.6	46.6	42.3	34.2	22.5	36.7	46.4	64.8	47.8
Washington	73.8	59.8	48.7	50.3	36.6	48.9	49.4	67.9	55.0
West Virginia	77.8	55.0	45.6	38.5	24.6	40.6	46.0	69.0	50.3
Wisconsin	75.5	61.4	38.9	39.9	22.4	40.5	39.5	66.2	48.5
Wyoming	86.9	65.0	50.7	43.5	21.7	43.2	46.0	75.8	53.9

State ^a	Infants	Children Aged 1	Children Aged 2	Children Aged 3	Children Aged 4	All Children Aged 1–4	Pregnant Women	Postpartum Women	All Participants
FNS Region									
Northeast	81.6	65.2	49.3	45.2	27.5	46.9	48.5	71.0	55.1
Mid-Atlantic	90.3	66.0	52.0	45.8	25.5	47.4	54.5	73.7	57.4
Southeast	83.4	53.8	43.8	37.1	22.3	39.7	48.9	76.1	51.2
Midwest	89.0	53.1	43.4	39.4	22.7	40.0	48.3	68.0	51.3
Southwest	90.1	60.3	43.9	39.1	21.1	41.7	52.1	90.4	55.4
Mountain Plains	73.7	55.2	43.0	33.6	21.1	38.2	41.5	62.8	47.0
Western	87.0	63.9	54.5	50.9	39.4	52.3	53.5	78.3	60.5
Total	85.9	59.2	47.4	42.1	26.5	44.1	50.3	75.8	54.5

Notes
The estimated coverage rates exceed 100 percent for infants in the District of Columbia, Maryland, Ohio, and Rhode Island, and for postpartum women in the District of Columbia. This is likely a result of sampling variability in the CPS-ASEC survey data used to estimate the number of eligible individuals in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding these rates is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates.

^a State and regional eligibility estimates and participant data include individuals in Indian Tribal Organizations who were eligible for WIC and/or receiving WIC.

^b Estimates for Puerto Rico and other U.S. territories are included in the total but not shown separately because of small sample sizes.

Sources: IPUMS-USA, n.d.; NBER, n.d.b; U.S. Census Bureau, n.d.d; Thorn et al., 2018; unpublished internal WIC administrative data

Table F.4. WIC Coverage Rates by Participant Category: CY 2005–2016

Participant Category	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
All	56.5	58.1	60.6	62.4	62.9	61.6	63.5	63.2	59.3	54.8	52.7	54.5
Infants	80.3	82.2	88.5	91.1	90.5	86.3	88.5	89.8	84.6	80.0	76.9	85.9
Total children (aged 1–4)	47.4	48.6	49.8	51.7	53.1	53.2	54.8	53.9	50.5	46.0	44.4	44.1
Children aged 1	62.0	65.8	67.9	72.0	75.4	76.5	73.6	76.1	70.0	68.2	62.8	59.2
Children aged 2	49.0	50.2	51.3	54.2	54.0	55.7	59.5	54.9	51.6	48.1	47.0	47.4
Children aged 3	45.1	44.5	44.7	46.0	46.5	46.8	50.7	49.5	48.0	42.2	41.8	42.1
Children aged 4	32.0	32.7	33.9	33.4	35.2	34.5	35.1	35.5	32.6	25.9	26.3	26.5
Pregnant women	52.4	54.1	56.5	58.1	59.0	56.8	57.9	59.0	54.0	50.2	46.4	50.3
Total postpartum women	70.8	72.9	77.7	80.3	80.5	76.3	79.3	81.6	76.6	72.6	69.2	75.8
Postpartum breastfeeding women	61.4	62.1	64.1	67.2	68.4	64.4	65.1	67.5	63.3	59.5	57.4	62.2
Postpartum non-breastfeeding women	81.3	85.8	95.3	97.4	95.8	91.4	99.4	100.0	97.2	94.1	88.9	100.0

Note

The estimated coverage rates for postpartum non-breastfeeding women exceed 100 percent in 2012 and 2016. This is likely a result of sampling variability in the CPS survey data used to estimate the number of postpartum women in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding these rates is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates.

Table F.5. Coverage Rates by Region and Participant Category: CY 2005–2016

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
All Participants												
United States	56.5	58.1	60.6	62.4	62.9	61.6	63.5	63.2	59.3	54.8	52.7	54.5
Northeast	61.4	62.1	64.3	65.4	65.0	61.7	63.4	63.9	58.9	53.7	52.8	55.1
Mid-Atlantic	58.1	60.8	62.9	64.8	64.0	62.5	65.4	64.4	61.1	56.6	54.6	57.4
Southeast	51.9	53.3	57.4	59.6	59.2	57.6	59.2	59.0	55.0	50.4	50.0	51.2
Midwest	54.4	57.2	59.4	60.1	58.7	56.7	57.5	59.6	55.9	51.5	49.2	51.3
Southwest	55.3	54.7	56.4	58.9	63.2	63.1	64.1	62.5	59.3	55.9	53.1	55.4
Mountain Plains	48.1	49.4	50.7	54.2	53.8	52.8	53.5	54.1	49.8	45.5	43.5	47.0
Western	63.3	66.3	68.9	69.8	71.2	70.8	74.4	72.7	68.5	64.0	60.1	60.5
Infants												
United States	80.3	82.2	88.5	91.1	90.5	86.3	88.5	89.8	84.6	80.0	76.9	85.9
Northeast	88.0	88.7	94.4	96.4	93.4	86.1	86.2	91.0	82.3	75.8	74.9	81.6
Mid-Atlantic	82.8	85.5	91.6	94.4	88.3	87.5	90.2	90.6	86.1	82.1	79.0	90.3
Southeast	78.0	79.0	88.0	91.2	88.4	84.1	87.6	88.4	84.4	77.7	76.2	83.4
Midwest	83.0	86.7	92.5	91.7	88.3	84.8	84.3	89.5	85.2	79.1	77.0	89.0
Southwest	77.6	78.2	81.7	87.1	91.8	88.6	89.5	91.8	86.7	85.2	80.3	90.1
Mountain Plains	69.7	70.0	75.6	79.6	80.6	79.1	79.9	80.9	72.6	67.6	64.5	73.7
Western	82.1	85.7	92.4	94.2	97.0	89.9	95.0	92.1	87.2	84.8	79.5	87.0
Children (Aged 1–4)												
United States	47.4	48.6	49.8	51.7	53.1	53.2	54.8	53.9	50.5	46.0	44.4	44.1
Northeast	51.3	51.5	52.5	53.7	54.8	53.3	55.6	54.6	51.4	46.3	46.1	46.9
Mid-Atlantic	49.3	51.9	52.0	53.7	55.4	54.2	57.1	55.6	53.0	48.5	47.2	47.4
Southeast	41.1	42.3	44.5	47.2	48.4	48.0	48.9	48.2	44.2	40.0	40.1	39.7
Midwest	44.0	45.9	47.2	48.9	48.8	47.6	48.7	49.6	46.3	42.5	40.3	40.0
Southwest	46.6	45.1	46.2	48.0	51.9	52.7	53.4	50.3	47.5	43.7	41.5	41.7
Mountain Plains	39.9	41.4	41.7	45.6	45.2	44.5	45.1	44.9	41.7	37.8	36.4	38.2
Western	56.8	59.5	60.4	61.4	62.8	65.5	68.6	67.3	63.6	57.9	54.4	52.3

Region	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Pregnant Women												
United States	52.4	54.1	56.5	58.1	59.0	56.8	57.9	59.0	54.0	50.2	46.4	50.3
Northeast	57.4	58.7	60.8	61.2	60.7	56.1	55.4	58.8	50.7	47.0	45.1	48.5
Mid-Atlantic	52.0	54.3	56.9	59.6	56.9	55.8	56.5	56.0	53.2	49.8	49.4	54.5
Southeast	49.8	50.7	53.8	55.8	55.3	54.6	55.7	56.8	53.1	47.9	45.0	48.9
Midwest	52.0	55.0	57.3	57.1	57.8	55.3	54.7	58.5	53.7	49.0	44.2	48.3
Southwest	51.2	51.9	52.7	57.1	61.0	58.8	59.5	61.6	56.3	53.6	48.1	52.1
Mountain Plains	46.0	43.7	45.7	48.0	50.2	47.8	49.8	50.9	44.2	41.0	37.3	41.5
Western	56.7	60.3	63.7	63.6	66.1	62.8	66.5	64.3	59.0	56.3	50.5	53.5
All Postpartum Women												
United States	70.8	72.9	77.7	80.3	80.5	76.3	79.3	81.6	76.6	72.6	69.2	75.8
Northeast	79.0	80.6	85.5	86.3	85.3	76.6	78.1	83.2	74.6	69.7	64.6	71.0
Mid-Atlantic	73.7	75.9	85.2	90.5	83.8	79.6	84.0	83.8	77.6	73.8	65.0	73.7
Southeast	71.0	72.0	79.6	83.4	81.0	74.7	78.8	81.0	77.5	72.0	70.8	76.1
Midwest	67.6	72.2	75.7	75.6	71.6	67.8	68.9	73.2	69.2	63.7	63.1	68.0
Southwest	70.1	70.8	72.6	77.4	86.9	86.5	89.6	92.3	88.9	86.0	81.9	90.4
Mountain Plains	58.9	62.2	63.4	66.0	63.5	64.4	65.6	71.8	64.8	58.8	55.6	62.8
Western	72.9	75.2	80.1	81.5	84.5	78.7	82.8	81.6	76.8	75.6	71.9	78.3

Table F.6. WIC Eligibility, Participants, and Coverage Rates by Participant Category and by Race and Ethnicity: CY 2016

Participant Category	White-Only Non-Hispanic	Black-Only Non-Hispanic	Other Non-Hispanic	Hispanic	All Races
Number Eligible					
Infants	878,522	363,486	210,351	701,031	2,153,390
Children aged 1–4	3,302,134	1,684,186	817,874	3,082,399	8,886,593
Pregnant women	572,969	237,064	137,191	457,210	140,443
Postpartum women	595,940	232,448	141,853	484,866	1,455,106
Total	5,349,564	2,517,185	1,307,269	4,725,506	13,899,523
Number Participating					
Infants	574,657	398,615	166,806	709,360	1,849,438
Children aged 1–4	1,097,137	723,936	357,032	1,736,356	3,914,462
Pregnant women	245,790	137,394	50,040	273,039	706,264
Postpartum women	361,110	227,197	81,101	434,001	1,103,410
Total	2,278,695	1,487,143	654,979	3,152,757	7,573,574
Coverage Rates (Percent)					
Infants	65.4	100.0	79.3	100.0	85.9
Children aged 1–4	33.2	43.0	43.7	56.3	44.1
Pregnant women	42.9	58.0	36.5	59.7	50.3
Postpartum women	60.6	97.7	57.2	89.5	75.8
Total	42.6	59.1	50.1	66.7	54.5

Note

Estimated coverage rates exceed 100 percent for Black-Only Non-Hispanic and Hispanic infants. This is likely a result of sampling variability in the CPS-ASEC survey data used to estimate the number of WIC-eligible infants (denominator of the rate). The lower-bound range of the 95-percent confidence intervals surrounding these rates is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates.

Sources: IPUMS-USA, n.d.; NBER, n.d.b; Thorn et al., 2018; unpublished internal WIC administrative data

Table F.7. State-Level WIC Coverage Rates (Percentages) by Race and Ethnicity

State	All Races	White-Only Non-Hispanic	Black-Only and Other Non-Hispanic ^a	Hispanic
Alabama	56.5	50.2	60.3	67.5
Alaska	43.5	32.9	55.0	35.0
Arizona	50.3	40.7	60.8	51.7
Arkansas	49.3	47.0	48.2	61.2
California	65.6	35.2	59.1	75.4
Colorado	43.5	34.3	39.5	53.7
Connecticut	49.2	33.7	48.7	61.6
Delaware	52.3	43.0	54.3	61.4
District of Columbia	54.0	31.5	51.0	70.0
Florida	53.8	38.8	58.9	63.9
Georgia	48.2	40.3	51.2	55.6
Hawaii	53.4	43.5	62.7	37.5
Idaho	43.4	38.6	54.8	53.4
Illinois	45.1	38.6	45.2	51.7
Indiana	51.4	46.6	57.5	61.4
Iowa	46.8	40.7	57.6	60.9
Kansas	52.0	44.9	51.8	66.1
Kentucky	53.3	54.3	51.5	48.9
Louisiana	52.0	46.1	55.4	57.6
Maine	52.9	51.3	57.7	75.5
Maryland	68.3	47.7	72.1	81.5
Massachusetts	55.2	43.0	54.3	71.3
Michigan	55.9	49.9	62.9	66.0
Minnesota	60.3	44.7	76.1	86.0
Mississippi	51.7	47.7	52.3	76.7
Missouri	50.8	48.7	54.4	55.2
Montana	38.2	31.5	64.7	45.2
Nebraska	52.8	35.8	73.5	81.9
Nevada	55.2	55.4	47.5	59.3
New Hampshire	46.9	43.4	40.0	100.0
New Jersey	53.8	36.0	52.2	67.9
New Mexico	44.8	32.8	40.1	49.2
New York	55.9	41.8	64.6	63.4
North Carolina	53.8	45.2	52.6	71.8
North Dakota	50.1	36.6	77.6	52.8
Ohio	51.3	47.2	57.9	55.3
Oklahoma	55.0	48.0	57.8	65.2
Oregon	56.3	52.2	49.4	67.3
Pennsylvania	56.5	50.2	60.3	67.5

State	All Races	White-Only Non-Hispanic	Black-Only and Other Non-Hispanic ^a	Hispanic
Rhode Island	62.2	50.4	59.8	75.2
South Carolina	46.4	39.2	50.9	56.3
South Dakota	48.7	38.5	66.8	38.3
Tennessee	43.0	42.1	40.4	54.2
Texas	57.5	35.5	52.0	66.6
Utah	39.4	32.6	35.3	56.9
Vermont	55.0	53.7	100.0	22.5
Virginia	47.8	41.3	48.0	60.4
Washington	55.0	42.1	64.9	69.1
West Virginia	50.3	52.2	38.9	50.8
Wisconsin	48.5	37.2	59.3	65.5
Wyoming	53.9	50.1	41.0	83.5
Total	54.5	42.6	56.0	66.7

Notes

The estimated coverage rates in New Hampshire for Hispanic individuals and in Vermont for Black-Only and Other Non-Hispanic individuals exceed 100 percent. This is likely a result of sampling variability in the CPS survey data used to estimate the number of eligible individuals in those States (denominator of the rate). The lower-bound range of the 95-percent confidence interval surrounding these rates is below 100 percent. See chapter 6 in volume I for more information on measures of statistical uncertainty for the eligibility estimates

^a The Black-Only Non-Hispanic and Other Non-Hispanic categories were combined because of sample size concerns.

Estimates for Puerto Rico are included in the totals but not shown separately because of small sample sizes. Estimates for U.S. territories other than Puerto Rico are not included in the totals because the IDB data did not include information on race and ethnicity.

Sources: IPUMS-USA, n.d.; NBER, n.d.b; Thorn et al., 2018; unpublished internal WIC administrative data

Table F.8. WIC Eligibility, Participants, and Coverage Rates by Region and Participant Category: CY 2016

Region	Infants	Children (Aged 1–4)	Pregnant Women	All Postpartum Women	Total
Number Eligible					
Northeast	193,078	785,648	125,925	136,194	1,240,844
Mid-Atlantic	234,319	993,438	152,822	158,016	1,538,596
Southeast	469,018	1,923,067	305,892	303,590	3,001,566
Midwest	316,849	1,306,013	206,648	207,707	2,037,216
Southwest	346,977	1,402,260	226,297	223,406	2,198,940
Mountain Plains	165,844	644,758	108,163	114,867	1,033,631
Western	432,957	1,852,529	282,373	315,142	2,883,001
Total	2,159,041	8,907,712	1,408,119	1,458,923	13,933,795
Number Participating					
Northeast	157,503	368,421	61,040	96,725	683,690
Mid-Atlantic	211,689	470,990	83,364	116,403	882,447
Southeast	390,961	763,961	149,600	231,146	1,535,667
Midwest	282,019	522,341	99,854	141,169	1,045,383
Southwest	312,523	585,269	117,807	202,043	1,217,641
Mountain Plains	122,204	246,375	44,907	72,086	485,571
Western	376,836	968,950	151,176	246,620	1,743,582
Total	1,853,735	3,926,307	707,748	1,106,191	7,593,981
Coverage Rate (Percent)					
Northeast	81.6	46.9	48.5	71.0	55.1
Mid-Atlantic	90.3	47.4	54.5	73.7	57.4
Southeast	83.4	39.7	48.9	76.1	51.2
Midwest	89.0	40.0	48.3	68.0	51.3
Southwest	90.1	41.7	52.1	90.4	55.4
Mountain Plains	73.7	38.2	41.5	62.8	47.0
Western	87.0	52.3	53.5	78.3	60.5
Total	85.9	44.1	50.3	75.8	54.5

Sources: IPUMS-USA, n.d.; NBER, n.d.b; U.S. Census Bureau, n.d.d; unpublished internal WIC administrative data