

SUPPLEMENTARY TABLE 2. Estimated vaccination coverage with selected individual vaccines and a combined vaccine series* among children aged 19–35 months, overall and by U.S. Department of Health and Human Services (HHS) region, state and local area — National Immunization Survey-Child, United States, 2017†

National, HHS region, state, and local area	Vaccine/Vaccine series										Combined 7-vaccine series	
	MMR (≥1 dose) %	(95% CI)	DTaP (≥4 doses) [§] %	(95% CI)	Hep B (birth dose) [¶] %	(95% CI)	HepA (≥2 doses) %	(95% CI)	Rotavirus** %	(95% CI)	%	(95% CI)
US National	91.5	(90.6–92.3)	83.2	(82.0–84.3)	73.6	(72.0–75.2)^{††}	59.7	(58.2–61.3)	73.2	(71.6–74.7)	70.4	(68.9–71.9)
HHS REGION I	96.3	(94.6–97.4)	90.2	(87.1–92.6)	73.4	(69.2–77.2)	62.8	(58.2–67.3)	81.3	(77.0–84.9)	78.5	(74.4–82.1)
Connecticut	94.6	(89.8–97.3)	86.8	(79.8–91.6)	78.5	(71.9–83.9)	73.0	(65.9–79.1)	84.0	(77.7–88.8)	75.3	(67.6–81.7)
Maine	93.7	(89.8–96.2)	90.3	(85.7–93.6)	63.1	(56.2–69.6)	61.0	(54.0–67.5)	75.6	(69.2–81.0)	72.7	(66.3–78.3)
Massachusetts	98.3	(94.9–99.4)	92.6	(86.2–96.1)	75.0	(66.8–81.7)	56.9	(48.2–65.3)	80.1	(71.5–86.6)	82.1	(74.0–88.2)
New Hampshire	94.1	(89.5–96.8)	89.8	(84.5–93.4)	67.2	(59.9–73.7)	64.9	(57.7–71.5)	84.5	(78.2–89.2) ^{††}	78.9	(72.4–84.1)
Rhode Island	95.3	(91.2–97.5)	89.2	(84.3–92.8)	75.7	(69.3–81.2)	69.0	(62.1–75.1)	85.1	(78.8–89.7)	74.4	(67.9–79.9)
Vermont	93.7	(89.1–96.4)	85.5	(79.8–89.9)	52.4	(45.2–59.5)	58.1	(50.9–65.0)	75.8	(69.0–81.4)	74.0	(67.5–79.5)
HHS REGION II	91.4	(89.1–93.3)	83.1	(79.9–86.0)	67.8	(63.9–71.5)	54.1	(50.0–58.1)	73.1	(69.3–76.5)	68.0	(64.1–71.7)
New Jersey	89.0	(84.1–92.5)	82.8	(76.9–87.4)	60.0	(53.4–66.3)	49.5	(43.0–55.9)	70.2	(63.9–75.9)	69.3	(62.8–75.1)
New York	92.5	(89.8–94.6)	83.3	(79.3–86.7)	71.3	(66.4–75.7)	56.2	(51.1–61.1)	74.3	(69.6–78.5)	67.5	(62.4–72.1)
NY-City of New York	91.9	(87.7–94.8)	79.5	(73.1–84.6)	67.1	(59.7–73.7)	54.0	(46.6–61.2)	67.9	(60.6–74.5)	61.8	(54.3–68.8)
NY-Rest of State	93.1	(89.2–95.7)	87.2	(81.7–91.2)	75.5	(69.0–81.0)	58.3	(51.3–65.0)	80.7	(74.6–85.6)	73.1	(66.5–78.8)
HHS REGION III	93.5	(90.9–95.4)	86.1	(82.7–88.9)	75.1	(71.1–78.8)	59.7	(55.4–64.0)	76.9	(72.8–80.6)	73.9	(69.7–77.6)
Delaware	92.9	(88.0–95.8)	88.9	(83.6–92.6)	72.9	(65.6–79.1)	69.6	(62.3–76.0)	84.3	(78.3–88.8)	77.1	(70.2–82.8)
Dist. of Columbia	94.1	(88.0–97.2)	85.3	(78.3–90.3)	69.8	(61.8–76.7)	72.9	(65.1–79.6)	77.3	(69.6–83.5)	74.0	(66.2–80.5)
Maryland	92.4	(84.9–96.3)	82.4	(73.5–88.7)	76.0	(67.5–82.9)	59.3	(50.1–67.9)	74.6	(65.7–81.9)	75.2	(66.3–82.4)
Pennsylvania	91.7	(85.9–95.3)	83.1	(76.4–88.3)	78.9	(72.1–84.4)	57.8	(50.6–64.8)	74.4	(67.0–80.7)	70.4	(63.1–76.8)
PA-Philadelphia	95.4	(90.4–97.9)	86.4	(79.4–91.2)	76.2	(67.9–82.9)	61.4	(52.9–69.3)	69.7	(61.0–77.3)	70.4	(61.8–77.8) ^{§§}
PA-Rest of State	91.0	(84.0–95.1)	82.5	(74.5–88.4)	79.4	(71.4–85.7)	57.2	(48.7–65.2)	75.3	(66.5–82.4)	70.4	(61.8–77.8)
Virginia	97.6	(94.8–98.9) ^{††}	92.8	(87.5–95.9)	71.0	(61.6–78.9)	58.4	(49.1–67.2)	81.2	(72.2–87.7)	77.1	(68.2–84.1)
West Virginia	89.9	(84.8–93.4)	85.3	(80.0–89.4)	69.7	(63.2–75.5)	70.3	(63.8–76.0) ^{††}	77.4	(71.1–82.6) ^{††}	74.7	(68.3–80.1) ^{††}
HHS REGION IV	91.6	(89.6–93.2)	84.2	(81.8–86.4)	73.0	(70.0–75.8)	58.4	(55.1–61.6)	73.1	(70.0–76.0)	72.0	(69.1–74.8)
Alabama	92.3	(87.5–95.4)	81.4	(74.5–86.8)	77.6	(70.7–83.2) ^{§§}	61.1	(53.7–68.0)	74.2	(66.9–80.4)	71.2	(64.0–77.6)
Florida	91.9	(86.4–95.3)	85.3	(79.0–89.9)	66.0	(58.1–73.1)	53.6	(45.3–61.6)	69.1	(61.2–76.0)	76.2	(68.8–82.2)
Georgia	90.7	(85.2–94.3)	80.1	(73.1–85.6) ^{§§}	74.6	(67.4–80.7)	64.3	(56.9–71.2)	71.2	(63.6–77.8)	65.6	(58.0–72.4) ^{§§}
Kentucky	92.7	(87.1–96.0)	84.6	(78.0–89.4)	84.1	(77.7–88.9)	58.6	(50.8–66.0)	80.4	(73.5–85.8) ^{††}	71.0	(63.5–77.6)
Mississippi	91.8	(86.7–95.1)	82.9	(76.4–87.9)	71.0	(63.1–77.9)	49.8	(42.1–57.5)	75.6	(68.5–81.6)	68.7	(61.0–75.5)
North Carolina	92.2	(87.2–95.3)	86.7	(80.3–91.3)	77.7	(70.4–83.6)	56.1	(48.8–63.2)	79.1	(72.2–84.6)	70.9	(63.7–77.3)
South Carolina	88.0	(81.6–92.4)	81.4	(73.8–87.2)	72.4	(64.0–79.4)	58.3	(49.9–66.2)	67.2	(58.5–74.9)	66.0	(57.5–73.5)
Tennessee	92.3	(87.0–95.6)	88.5	(83.1–92.4)	73.9	(66.8–79.9) ^{††}	67.2	(59.5–74.1)	75.6	(67.6–82.2)	79.3	(72.8–84.6) ^{††}
HHS REGION V	90.6	(88.7–92.1)	82.3	(79.9–84.5)	76.8	(74.2–79.2)	58.0	(55.0–60.9)	73.9	(71.1–76.6)	69.5	(66.6–72.3)
Illinois	91.9	(88.4–94.4)	84.4	(79.8–88.0)	73.4	(68.4–77.9)	60.0	(54.6–65.1)	75.4	(70.3–80.0)	75.4	(70.5–79.8)
IL-City of Chicago	94.0	(83.8–97.9)	81.8	(71.5–89.0)	79.9	(70.0–87.1)	57.8	(47.3–67.6)	77.6	(67.0–85.6)	75.3	(64.9–83.4)
IL-Rest of State	91.2	(87.2–94.0)	85.2	(80.0–89.3)	71.2	(65.3–76.5)	60.7	(54.5–66.6)	74.7	(68.6–79.9)	75.5	(69.7–80.4)
Indiana	87.0	(87.0–91.4)	82.1	(75.4–87.3)	78.0	(71.3–83.6)	63.9	(56.0–71.2)	77.6	(70.4–83.4)	66.3	(58.4–73.4)
Michigan	92.2	(87.1–95.4)	81.3	(74.7–86.4)	81.2	(74.8–86.3)	61.4	(53.5–68.8)	76.0	(68.3–82.4)	69.9	(62.0–76.7)
Minnesota	94.3	(89.9–96.8)	83.3	(75.9–88.8)	72.1	(64.1–78.9)	56.1	(47.6–64.2)	70.9	(62.4–78.2)	66.1	(57.7–73.7)
Ohio	88.3	(83.0–92.1)	81.1	(75.0–85.9)	76.5	(69.2–82.6)	51.0	(43.8–58.1)	67.2	(59.8–73.9)	66.4	(58.9–73.1)
Wisconsin	89.9	(83.7–93.9)	81.1	(73.7–86.7)	80.9	(74.6–85.9)	56.6	(48.7–64.1)	79.1	(71.9–84.8)	69.2	(61.4–76.1) ^{§§}
HHS REGION VI	90.7	(88.8–92.3)	81.2	(78.8–83.3)	76.8	(74.2–79.2)	61.7	(58.8–64.4)	74.5	(72.0–76.9)	68.3	(65.5–70.9)

Arkansas	92.6	(87.7–95.7)	80.0	(72.9–85.7)	80.2	(73.5–85.5)	58.9	(51.2–66.1)	70.7	(63.1–77.3)	69.4	(61.8–76.1)
Louisiana	91.3	(85.7–94.9)	80.7	(73.5–86.4)	78.6	(71.5–84.3)	53.2	(45.3–61.0)	72.4	(64.9–78.8)	70.0	(62.3–76.8)
New Mexico	89.3	(83.2–93.4)	88.1	(82.4–92.1)	71.7	(64.4–78.0)	67.3	(59.6–74.2)	76.4	(68.9–82.6)	71.9	(64.4–78.4)
Oklahoma	91.7	(86.9–94.9)	78.5	(71.1–84.3)	78.8	(71.3–84.7)	62.7	(54.8–69.9)	67.3	(59.4–74.3)	67.3	(59.4–74.3)
Texas	90.3	(87.8–92.4)	81.2	(78.1–84.0)	76.3	(72.9–79.4)	62.7	(59.0–66.3)	76.0	(72.7–79.0)	67.8	(64.2–71.2)
TX-Bexar County	96.1	(92.5–98.0)	84.8	(78.6–89.4)	76.6	(70.2–82.0)	65.5	(58.1–72.1)	75.0	(68.0–80.9)	75.6	(68.5–81.6)
TX-City of Houston	87.8	(79.3–93.2)	81.6	(72.6–88.1)	78.8	(68.3–86.5)	65.5	(55.1–74.5)	78.7	(69.1–85.9)	74.3	(64.2–82.4)
TX-Dallas County	93.2	(87.0–96.6)	81.9	(73.4–88.1)	76.0	(67.2–83.1)	67.0	(58.1–74.9)	74.9	(66.1–82.1)	65.6	(56.3–73.9)
TX-El Paso County	89.3	(82.7–93.5)	84.2	(77.1–89.4)	75.8	(67.7–82.4)	66.4	(58.2–73.7)	77.2	(69.5–83.5)	66.2	(57.9–73.7)
TX-Travis County ^{¶¶}	92.1	(87.1–95.3)	81.5	(74.8–86.7)	75.9	(69.3–81.4)	69.6	(62.4–75.9)	72.7	(65.6–78.9)	66.7	(59.5–73.2)
TX-Rest of State ^{¶¶}	89.7	(85.9–92.6)	80.5	(75.9–84.4)	75.8	(71.0–80.1)	60.4	(55.2–65.4)	75.8	(71.1–80.0)	66.0	(60.9–70.8)
HHS REGION VII	89.1	(85.7–91.7) ^{§§}	80.2	(76.4–83.6)	79.5	(75.9–82.7)	56.2	(51.9–60.3)	75.8	(71.9–79.4)	72.2	(68.1–75.9)
Iowa	91.5	(86.0–95.0)	83.9	(77.4–88.8)	82.3	(75.1–87.8) ^{††}	64.4	(56.9–71.2)	76.4	(69.0–82.4)	72.8	(65.6–79.0)
Kansas	89.8	(82.9–94.1)	78.5	(70.1–85.0)	72.6	(63.9–79.9)	63.2	(54.3–71.2)	75.5	(67.2–82.3)	69.5	(60.6–77.2)
Missouri	85.8	(78.7–90.8)	77.0	(69.4–83.1)	80.4	(73.9–85.6)	43.9	(36.5–51.7)	74.7	(67.3–80.9)	71.2	(63.5–77.9)
Nebraska	93.7	(89.1–96.4)	86.4	(80.7–90.7)	83.1	(76.6–88.1)	68.3	(61.2–74.6)	78.7	(72.4–83.9)	77.9	(71.4–83.2)
HHS REGION VIII	89.0	(86.2–91.2)	80.6	(77.1–83.7)	76.1	(72.5–79.3)	58.7	(54.6–62.6)	75.7	(71.9–79.2)	70.6	(66.6–74.3)
Colorado	87.2	(81.5–91.3)	79.9	(72.7–85.5)	73.9	(67.0–79.9)	57.0	(49.3–64.4)	73.7	(66.0–80.1)	71.0	(63.2–77.8)
Montana	92.3	(87.1–95.5)	80.1	(72.6–85.9)	72.7	(64.9–79.4)	52.8	(44.5–61.0)	73.2	(65.1–80.0)	66.2	(58.0–73.6)
North Dakota	95.7	(92.1–97.7) ^{††}	86.1	(79.8–90.6)	84.0	(77.1–89.1)	73.3	(66.3–79.3)	83.1	(76.7–88.1)	78.8	(71.9–84.4) ^{††}
South Dakota	89.9	(84.2–93.7)	81.8	(75.0–87.1)	80.2	(73.6–85.5)	62.3	(54.7–69.4)	75.9	(68.9–81.7)	74.7	(67.5–80.8)
Utah	88.7	(83.5–92.5)	80.6	(74.1–85.7)	78.2	(71.5–83.7)	59.6	(52.2–66.5)	77.0	(70.2–82.5)	67.9	(60.6–74.5)
Wyoming	89.1	(84.0–92.8)	77.6	(71.1–83.0)	65.8	(59.0–72.0)	46.4	(39.4–53.5)	78.2	(72.1–83.3) ^{††}	72.0	(65.2–77.9)
HHS REGION IX	92.7	(88.0–95.6)	83.5	(77.6–88.1)	69.1	(61.1–76.0)	64.6	(57.4–71.1)	65.8	(58.1–72.8)	68.5	(61.4–74.8)
Arizona	91.7	(87.0–94.8)	82.2	(75.9–87.1)	80.0	(73.9–85.0)	62.9	(55.5–69.7)	70.6	(63.2–77.0)	66.5	(59.2–73.1)
California	92.9	(86.6–96.4)	83.9	(76.1–89.5)	66.1	(56.1–74.8)	65.0	(55.9–73.2)	64.7	(54.9–73.5)	68.6	(59.5–76.4)
Hawaii	90.5	(85.3–94.0)	82.3	(76.1–87.2)	76.3	(69.0–82.3)	56.2	(48.8–63.3)	73.2	(65.9–79.5)	69.8	(62.7–76.1)
Nevada	92.4	(87.7–95.4)	82.0	(75.7–86.9)	80.6	(73.8–86.0)	66.4	(58.8–73.4)	66.0	(58.2–73.1)	71.3	(64.3–77.4)
HHS REGION X	89.5	(86.2–92.1)	80.4	(76.3–84.0)	71.1	(66.6–75.2)	60.6	(55.8–65.3)	74.3	(69.8–78.4)	69.9	(65.3–74.1)
Alaska	89.3	(84.6–92.7)	75.1	(68.6–80.6)	70.8	(64.2–76.7)	53.6	(46.5–60.5)	72.4	(66.0–78.0)	69.5	(62.9–75.4)
Idaho	92.2	(86.5–95.7)	82.3	(74.9–87.9)	75.6	(68.0–81.9)	66.0	(58.0–73.2)	78.5	(71.1–84.4)	69.2	(61.2–76.3)
Oregon	90.3	(85.2–93.7)	79.7	(72.8–85.1)	76.4	(69.6–82.0)	59.3	(51.7–66.5)	74.1	(66.8–80.3)	70.3	(62.9–76.7) ^{††}
Washington	88.5	(82.6–92.6)	81.0	(74.1–86.4)	67.4	(59.8–74.1) ^{§§}	60.8	(52.8–68.3)	73.6	(66.0–80.1)	69.9	(62.2–76.6)
Range Territory		(85.8–98.3)		(75.1–92.8)		(52.4–84.1)		(43.9–73.3)		(64.7–85.1)		(65.6–82.1)
Guam ^{***}	82.5	(76.6–87.2) ^{§§}	67.1	(60.5–73.0)	91.6	(87.5–94.5) ^{††}	50.2	(43.4–57.0)	51.8	(45.3–58.3)	49.1	(42.6–55.6)

Abbreviations: CI = confidence interval; DTaP = diphtheria, tetanus toxoids, and acellular pertussis vaccine; HepA = hepatitis A vaccine; HepB = hepatitis B vaccine; Hib = *Haemophilus influenzae* type b conjugate vaccine; MMR = measles, mumps, and rubella vaccine; PCV = pneumococcal conjugate vaccine.

* The combined 7-vaccine series (4:3:1:3*:3:1:4) includes ≥4 doses of DTaP, ≥3 doses of poliovirus vaccine, ≥1 dose of measles-containing vaccine, full series of Hib vaccine (≥3 or ≥4 doses, depending on product type), ≥3 doses of HepB, ≥1 dose of varicella vaccine, and ≥4 doses of PCV.

† Children in the 2017 National Immunization Survey were born January 2014–May 2016.

§ Includes children who might have been vaccinated with diphtheria and tetanus toxoids vaccine or diphtheria, tetanus toxoids and pertussis vaccine.

¶ One dose HepB administered from birth through age 3 days.

** Either ≥2 or ≥3 doses of rotavirus vaccine, depending on product type received (≥2 doses for Rotarix [RV1] or ≥3 doses for RotaTeq [RV5]).

†† Statistically significant increase in coverage compared to 2016 (p<0.05).

§§ Statistically significant decrease in coverage compared to 2016 (p<0.05).

¶¶ No comparison was made to coverage in 2016; Travis County was not sampled in 2016 and “rest of state” is not comparable between the 2 years.

*** Children from Guam (n = 440 total, 266 with adequate provider data) were excluded from the national estimates.