

SUPPLEMENTARY TABLE. COVID-19 vaccination coverage* before or during pregnancy by disaggregated race and ethnicity^{†,§} among completed pregnancies resulting in live birth — Massachusetts May 1, 2021–October 31, 2022

Race and Ethnicity	No.	Receipt of ≥1 dose, % (95% CI)
Hispanic[†] Overall	21,096	26.7 (26.1–27.3)
and Chinese	18	61.1 (38.6–83.6)
and Asian	51	51.0 (37.3–64.7)
and Cambodian	14	50.0 (23.8–76.2)
and Japanese	12	50.0 (21.7–78.3)
and Refused**	23	47.8 (27.4–68.2)
and European	398	44.0 (39.1–48.9)
and Filipino	20	40.0 (18.5–61.5)
and White	450	37.8 (33.3–42.3)
and African	24	37.5 (18.1–56.9)
and Cuban	202	36.6 (30.0–43.3)
and Laotian	14	35.7 (10.6–60.8)
and Mexican	790	35.8 (32.5–39.2)
and Colombian	675	35.6 (31.9–39.2)
and Other Central American	240	35.4 (29.4–41.5)
and Middle Eastern	37	35.1 (19.8–50.5)
and Haitian	55	34.6 (22.0–47.1)
and Caribbean	54	33.3 (20.8–45.9)
and American	2,355	31.3 (29.4–33.1)
and Salvadoran	1,813	29.6 (27.5–31.7)
and Honduran	682	29.5 (26.1–32.9)
and Other South American	923	29.5 (26.5–32.4)
and Black	218	29.4 (23.3–35.4)
and AI/AN (Race) _{††}	40	27.5 (13.7–37.5)
and African American	413	27.1 (22.8–31.4)
and Other Tribe	19	26.3 (6.5–46.1)
and Portuguese	246	26.0 (20.5–31.5)
and Brazilian	2,450	25.6 (23.9–27.4)
and Dominican	4,782	25.5 (24.2–26.7)
and Guatemalan	1,961	24.4 (22.5–26.3)
and Puerto Rican	6,169	23.8 (22.8–24.9)
and Other Ethnicity	177	23.2 (17.0–29.4)
and Cape Verdean	139	20.9 (14.1–27.6)
and Native American (Ethnicity) _{††}	38	20.8 (9.3–32.3)
AI/AN^{§§} Overall	314	28.3 (23.4–33.3)
and Hispanic/Latina/White	21	38.1 (17.3–58.9)
and Cape Verdean	17	35.3 (12.6–58.0)
and Other Tribe	84	34.5 (24.4–44.7)
and White	141	34.0 (26.2–41.9)
and European	63	33.3 (21.7–45.0)
and Blackfoot Tribe	22	31.8 (12.4–51.3)
and Cherokee Tribe	48	31.3 (18.1–44.4)
and Native American (Ethnicity) _{††}	231	29.9 (24.0–35.8)
and American	141	29.1 (21.6–36.6)
and Black	64	26.6 (15.7–37.4)
and African American	73	26.0 (16.0–36.1)
and Portuguese	29	20.7 (6.0–35.4)
Asian^{¶¶} Overall	8,690	55.0 (54.0–56.1)
and Hispanic/Latina/Other	20	65.0 (44.1–85.9)
and Japanese	214	63.1 (56.6–70.0)
and Asian Indian	2,690	59.1 (57.3–61.0)
and Mexican	12	58.3 (30.4–86.2)
and Other Race	16	56.3 (31.9–80.6)

and Chinese	2,356	55.7 (53.7–57.7)
and European	141	55.3 (47.1–63.5)
and Other Asian	1,056	54.6 (51.6–57.6)
and Korean	460	53.9 (49.4–58.5)
and American	575	53.0 (49.0–57.1)
and Colombian	17	52.9 (29.2–76.7)
and Other Ethnicity	84	51.2 (40.5–61.9)
and Cambodian	659	51.0 (47.2–54.8)
and Vietnamese	811	50.6 (47.1–54.0)
and White	312	48.7 (43.2–54.3)
and Caribbean	27	48.2 (29.3–67.0)
and Puerto Rican	25	48.0 (28.4–67.6)
and Hispanic/Latina/White	26	46.2 (27.0–65.3)
and Black	59	45.8 (33.1–58.5)
and Dominican	11	45.5 (16.0–74.9)
and Filipino	297	42.4 (36.8–48.1)
and African American	34	41.2 (24.6–57.7)
and Laotian	73	39.7 (28.5–51.0)
and Middle Eastern	101	38.6 (29.1–48.1)
NHOPI*** Overall	128	38.3 (29.9–46.7)
and American	46	41.3 (27.1–55.5)
and White	33	39.4 (22.7–56.1)
and European	16	37.5 (13.8–61.2)
and Other Race	16	31.3 (8.5–54.0)
and Filipino	25	28.0 (10.4–45.6)
and Other Pacific Islander (Ethnicity)***	31	25.8 (10.4–41.2)
Black^{SSS} Overall	11,349	29.9 (29.1–30.8)
and Other South American	28	50.0 (31.5–68.5)
and Mexican	16	50.0 (25.5–74.5)
and Asian Indian	24	50.0 (30.0–70.0)
and Asian	59	45.8 (33.1–58.5)
and Chinese	22	45.5 (24.7–66.3)
and Middle Eastern	31	41.9 (24.6–59.3)
and Blackfoot Tribe	17	41.2 (17.8–64.6)
and African	2,129	40.7 (38.6–42.8)
and Hispanic/Latina/White	39	38.5 (23.2–53.7)
and European	220	37.7 (31.3–44.1)
and Other Tribe	32	34.4 (17.9–50.8)
and Filipino	16	31.3 (8.5–54.0)
and Hispanic/Latina/Other	42	31.0 (17.0–44.9)
and African American	4,409	30.7 (29.3–32.0)
and White	669	30.3 (26.9–33.8)
and American	809	29.1 (25.9–32.2)
and Caribbean	721	29.0 (25.7–32.3)
and Puerto Rican	218	27.5 (21.6–33.5)
and Haitian	2,430	26.7 (24.9–28.4)
and Hispanic/Latina/Black	150	26.7 (19.6–33.7)
and AI/AN (Race) ^{††}	64	26.6 (15.7–37.4)
and Native American (Ethnicity) ^{††}	104	26.0 (17.5–34.4)
and Dominican	106	23.6 (15.5–31.7)
and Portuguese	171	23.4 (17.1–29.7)
and Honduran	40	22.5 (9.6–35.4)
and Other Race	23	21.7 (4.9–38.6)
and Other Ethnicity	79	21.5 (12.5–30.6)
and Cape Verdean	1,564	21.4 (19.3–23.4)
and Brazilian	202	19.3 (13.9–24.8)
and Cherokee Tribe	35	17.1 (4.7–29.6)
White^{†††} Overall	60,117	47.5 (47.1–47.9)

and Other Pacific Islander (Ethnicity) ⁺⁺⁺	20	65.0 (44.1–85.9)
and Chinese	139	57.6 (49.3–65.8)
and European	13,249	55.1 (54.3–56.0)
and Asian Indian	75	52.0 (40.7–63.3)
and Korean	50	52.0 (38.2–65.9)
and Refused**	406	51.7 (46.9–56.6)
and Other South American	126	51.6 (42.9–60.3)
and Other Ethnicity	1,531	51.5 (49.0–54.0)
and Japanese	79	49.4 (38.3–60.4)
and American	43,558	49.0 (48.6–49.5)
and Asian	312	48.7 (43.2–54.3)
and Other Central American	25	48.0 (28.4–67.6)
and Filipino	88	47.7 (37.3–58.2)
and Middle Eastern	1,426	47.6 (45.0–50.1)
and Other Asian	103	47.6 (37.9–57.2)
and Honduran	17	47.1 (23.3–70.8)
and Russian	876	43.7 (40.4–47.0)
and Hispanic/Latina/White	286	43.4 (37.6–49.1)
and Other Race	107	43.0 (33.6–52.4)
and African	415	42.7 (37.9–47.4)
and Mexican	130	42.3 (33.8–50.8)
and Cuban	69	42.0 (30.4–53.7)
and Micmac Tribe	22	40.9 (20.4–61.5)
and Colombian	52	40.4 (27.1–53.7)
and Other Pacific Islander (Race) ⁺⁺⁺	15	40.0 (15.2–64.8)
and Unknown Ethnicity	28	39.3 (21.2–57.4)
and Cherokee Tribe	58	37.9 (25.4–50.4)
and Dominican	106	36.8 (27.6–46.0)
and Portuguese	2,542	34.9 (33.1–36.8)
and African American	640	34.8 (31.2–38.5)
and Native American (Ethnicity) ₊₊	267	34.5 (28.8–40.2)
and AI/AN (Race) ₊₊	141	34.0 (26.2–41.9)
and Other Tribe	84	33.3 (23.3–43.4)
and Caribbean	58	32.8 (20.7–44.8)
and Vietnamese	34	32.4 (16.6–48.1)
and Guatemalan	23	30.4 (11.6–49.2)
and Hispanic/Latina/Other	132	30.3 (22.5–38.1)
and Black	669	30.3 (26.9–33.8)
and Other Portuguese	30	30.0 (13.6–46.4)
and Cambodian	21	28.6 (9.3–47.9)
and Puerto Rican	440	28.2 (24.0–32.4)
and Haitian	36	27.8 (13.2–42.4)
and Cape Verdean	236	25.0 (19.5–30.5)
and Salvadoran	28	25.0 (9.0–41.0)
and Blackfoot Tribe	28	25.0 (9.0–41.0)
and Brazilian	1,476	24.3 (22.1–26.5)
and Hispanic/Latina/Black	41	22.0 (9.3–34.6)
"Another" Race**** Overall	2,458	33.7 (31.8–35.5)
and Other Asian	33	57.6 (40.7–74.4)
and Asian Indian	40	57.5 (42.2–72.8)
and Asian	16	56.3 (31.9–80.6)
and European	91	50.6 (40.3–60.8)
and Middle Eastern	188	45.2 (38.1–52.3)
and American	173	44.5 (37.1–51.9)
and White	107	43.0 (33.6–52.4)
and Refused**	953	40.7 (37.6–43.8)
and Other Ethnicity	115	39.1 (30.2–48.1)
and African	91	35.2 (25.4–45.0)

and African American	60	33.3 (21.4–45.3)
and Other Pacific Islander (Race) ^{†††}	15	33.3 (9.5–57.2)
and Filipino	21	33.3 (13.2–53.5)
and Unknown Ethnicity	49	30.6 (17.7–43.5)
and Cape Verdean	142	24.7 (17.6–31.7)
and Haitian	41	24.4 (11.3–37.5)
and Portuguese	46	21.7 (9.8–33.7)
and Black	23	21.7 (4.9–38.6)
and Brazilian	288	18.8 (14.2–23.3)
and Salvadoran	27	18.5 (3.9–33.2)
and Guatemalan	59	17.0 (7.4–26.5)
and Dominican	36	16.7 (4.5–28.8)

Abbreviations: AI/AN = American Indian or Alaska Native; NHOPI = Native Hawaiian or Other Pacific Islander

*Receipt of ≥1 dose of a COVID-19 vaccine (primary series or any subsequent dose).

[†]To maintain confidentiality, rates of COVID-19 vaccine uptake among racial and ethnic groups were not reported when the denominator was less than ten or the numerator would allow for the calculation of any other cells with values 1–4.

[§]Race and ethnicity subgroupings are not mutually exclusive.

[¶]The Hispanic overarching category includes persons who selected one or more of the following races on the birth certificate: Hispanic/Latina/Black, Hispanic/Latina/White, or Hispanic/Latina/Other.

** If the parents tell the birth registrar that they will not fill out the parent worksheet and refuse to give information about ethnicity, the birth registrar records “refused”.

⁺⁺Massachusetts birth certificates include an AI/AN option for race and a Native American option for ethnicity. Whereas the AI/AN overarching race category includes those who identify as being racially AI/AN, there are also persons who identify as ethnically Native American (and who may or may not identify as racially AI/AN).

^{§§}The AI/AN overarching category includes persons who selected AI/AN as their race (or one of their races) on the birth certificate.

^{¶¶}The Asian overarching category includes persons who selected Asian as their race (or one of their races) on the birth certificate.

^{***}The NHOPI overarching category reflects persons who selected one or more of the following races on the birth certificate: Guamanian or Chamorro, Native Hawaiian, Samoan, or Other Pacific Islander.

^{†††}Massachusetts birth certificates include Other Pacific Islander as both race and ethnicity categories. Whereas the NHOPI overarching category includes those who identify as being racially Other Pacific Islander, there are also persons who identify as ethnically Other Pacific Islander (and who may or may not identify as racially Other Pacific Islander).

^{§§§}The Black overarching category includes persons who selected Black as their race (or one of their races) on the birth certificate.

^{¶¶¶}The White overarching category includes persons who selected White as their race (or one of their races) on the birth certificate.

^{****}The “another” race category includes persons who selected ‘Other race not listed’ on the birth certificate as one of their races or for whom no race category was selected or who opted not to identify their race and so the birth registrar indicated this as a refusal.