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# Dengue Incidence, Seroprevalence, and Expansion Factors from Active Surveillance, Brazil, 2016–2021

## Appendix

**Appendix Table 1.** Incidence of febrile episodes and VCD by demographic characteristics, yellow fever vaccination status and baseline serostatus among DEN-03-IB placebo recipients\*

Characteristic	Person-years	Pyrexia episodes	Pyrexia episodes incidence (Pe/Py)×100 (95% CI)	VCD cases overall†	VCD incidence overall (VCD/Py)×100 (95% CI)	% of VCD among pyrexia episodes (95% CI)
Overall	22,028.4	13,297	60.363 (59.341–61.398)	228/5,946	1.035 (0.905–1.178)	1.715 (1.499–1.952)
Age at event						
2-6	1,376.3	1,812	131.657 (125.664–137.862)	32/516	2.325 (1.590–3.282)	1.766 (1.208–2.493)
7-17	8,052.7	6,784	84.245 (82.252–86.274)	111/2,382	1.378 (1.134–1.660)	1.636 (1.346–1.970)
18-65	12,599.4	4,701	37.311 (36.252–38.393)	85/3,048	0.675 (0.539–0.834)	1.808 (1.444–2.236)
Age at event, median (range)	18.0 (2–65)	13.0 (2–65)	-	13.0 (2–62)	-	-
Sex						
Female	12,045.9	7,053	58.551 (57.192–59.934)	103/3,200	0.855 (0.698–1.037)	1.460 (1.192–1.771)
Male	9,982.4	6,244	62.550 (61.008–64.121)	125/2,746	1.252 (1.042–1.492)	2.002 (1.666–2.385)
Geographic location‡						
North	6,523.4	5,268	80.755 (78.589–82.966)	54/1,713	0.828 (0.622–1.080)	1.025 (0.770–1.337)
Northeast	5,826.6	4,210	72.255 (70.089–74.471)	55/1,624	0.944 (0.711–1.229)	1.306 (0.984–1.700)
Center-West	4,147.9	1,864	44.938 (42.921–47.026)	68/1,132	1.639 (1.273–2.078)	3.648 (2.833–4.625)
South	522.2	166	31.789 (27.137–37.009)	0/136	0.000 (0.000–0.706)	0.000 (0.000–2.222)
Southeast	5,008.3	1,789	35.721 (34.084–37.415)	51/1,341	1.018 (0.758–1.339)	2.851 (2.123–3.748)
Baseline serostatus						
Seronegative	9,096.6	6,877	75.600 (73.823–77.408)	111/2,689	1.220 (1.004–1.469)	1.614 (1.328–1.944)
Seropositive	11,922.6	5,944	49.855 (48.595–51.139)	113/3,023	0.948 (0.781–1.139)	1.901 (1.567–2.286)
Unknown or missing	1,009.2	476	47.166 (43.024–51.600)	4/234	0.396 (0.108–1.015)	0.840 (0.229–2.152)
Year						
2016	303.7	77	25.354 (20.009–31.688)	0/1,364	0.000 (0.000–1.215)	0.000 (0.000–4.791)
2017	3,075.0	1641	53.366 (50.815–56.012)	1/4,321	0.033 (0.001–0.181)	0.061 (0.002–0.340)
2018	5,061.8	3,191	63.041 (60.872–65.267)	6/5,636	0.119 (0.043–0.258)	0.188 (0.069–0.409)
2019	5,783.5	4,675	80.833 (78.533–83.184)	148/5,946	2.559 (2.163–3.006)	3.166 (2.676–3.719)
2020	5,919.2	2,503	42.286 (40.646–43.976)	32/5,946	0.541 (0.370–0.763)	1.278 (0.874–1.805)
2021	3,130.1	1,210	38.657 (36.509–40.898)	41/5,946	1.310 (0.940–1.777)	3.388 (2.432–4.597)

\*py, person-year; VCD, virologically confirmed dengue (RT-PCR) occurring more than 28 days after treatment through data cutoff on 13-JUL-2021.

†One subject was infected by two virus types sequentially; one subject was infected by two virus types simultaneously.

‡Municipalities included in each region. (1) Northeast: C5-Laranjeiras; C6-Recife; C7-Fortaleza; C15-Salvador. (2) North: C8-Manaus; C9-Boa Vista; C11-Porto Velho. (3) Center-West: C10-Brasília; C12-Cuiabá; C13-Campo Grande. (4) South: C14-Porto Alegre. (5) Southeast: C1-ICHC, Sao Paulo; C2-Santa Casa; C3-Rio Preto, Sao Jose; C4-Belo Horizonte; C16-Rio de Janeiro.

**Appendix Table 2.** Incidence of VCD by serotype by demographic characteristics, geographic location, yellow fever vaccination status, baseline serostatus and year, among DEN-03-IB placebo recipients\*

Characteristic	Person-years (DENV-1)	VCD episodes (DENV-1)	VCD (DENV-1) incidence (VCD/py)×100 (95% CI)	Person-years (DENV-2)	VCD episodes (DENV-2)	VCD (DENV-2)	Overall number of VCD cases†
						incidence (VCD/py)×100 (95% CI)	
Overall	22,231.5	111/5,946	0.499 (0.411–0.601)	22,198.6	119/5,946	0.536 (0.444–0.641)	228/5,946
Age at event							
2-6	1,388.8	23/516	1.656 (1.050–2.485)	1,415.8	10/516	0.706 (0.339–1.299)	32/516
7-17	8,126.3	64/2,382	0.788 (0.607–1.006)	8,154.6	48/2,382	0.589 (0.434–0.780)	111/2,382
18-65	12,716.3	24/3,048	0.189 (0.121–0.281)	12,628.1	61/3,048	0.483 (0.369–0.620)	85/3,048
Age at event, median (range)	18.0 (2–65)	11.0 (2–61)	-	18.0 (2–65)	18.0 (3–62)	-	13.0 (2–62)
Sex							
Female	12,139.1	48/3,200	0.395 (0.292–0.524)	12,127.4	55/3,200	0.454 (0.342–0.590)	103/3,200
Male	10,092.4	63/2,746	0.624 (0.480–0.799)	10,071.2	64/2,746	0.635 (0.489–0.811)	125/2,746
Geographic location‡							
North	6,543.7	38/1,713	0.581 (0.411–0.797)	6,589.0	16/1,713	0.243 (0.139–0.394)	54/1,713
Northeast	5,843.5	45/1,624	0.770 (0.562–1.030)	5,913.3	12/1,624	0.203 (0.105–0.354)	55/1,624
Center-West	4,235.2	17/1,132	0.401 (0.234–0.643)	4,160.3	51/1,132	1.226 (0.913–1.612)	68/1,132
South	522.2	0/136	0.000 (0.000–0.706)	522.2	0/136	0.000 (0.000–0.706)	0/136
Southeast	5,086.8	11/1,341	0.216 (0.108–0.387)	5,013.7	40/1,341	0.798 (0.570–1.086)	51/1,341
Baseline serostatus							
Seronegative	9,176.8	65/2,689	0.708 (0.547–0.903)	9,193.5	48/2,689	0.522 (0.385–0.692)	111/2,689
Seropositive	12,044.2	44/3,023	0.365 (0.265–0.490)	11,994.1	69/3,023	0.575 (0.448–0.728)	113/3,023
Unknown or missing	1,010.5	2/234	0.198 (0.024–0.715)	1,011.0	2/234	0.198 (0.024–0.715)	4/234
Year							
2016	303.7	0/1,364	0.000 (0.000–1.215)	303.7	0/1,364	0.000 (0.000–1.215)	0/1,364
2017	3,075.0	1/4,321	0.033 (0.001–0.181)	3,075.6	0/4,321	0.000 (0.000–0.120)	1/4,321
2018	5,062.2	3/5,636	0.059 (0.012–0.173)	5,063.1	3/5,636	0.059 (0.012–0.173)	6/5,636
2019	5,835.6	68/5,946	1.165 (0.905–1.477)	5,812.5	82/5,946	1.411 (1.122–1.751)	148/5,946
2020	5,930.3	17/5,946	0.287 (0.167–0.459)	5,931.0	15/5,946	0.253 (0.142–0.417)	32/5,946
2021	3,135.7	22/5,946	0.702 (0.440, 1.062)	3,136.4	19/5,946	0.606 (0.365–0.946)	41/5,946

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