

Supplementary Table 3: Percent reduction and probability of an increased burden from continual vaccination for an annual vaccination campaign in the baseline scenario, 60% of vaccinees delaying SARS CoV-2

Measure	Population	Baseline		28-day delay		Summer peak is largest		Single peak occurring in winter	
		Single-dose	Two-doses 50+	Single-dose	Two-doses 50+	Single-dose	Two-doses 50+	Single-dose	Two-doses 50+
Percent reduction from status-quo	Incidence	Total	-1.1% (-8.4%–1.4%)	-0.5% (-6.0%–3.1%)	-0.1% (-0.5%–1.2%)	-0.5% (-10.3%–6.1%)	-0.1% (-5.7%–12.9%)	0.5% (-1.7%–3.3%)	0.6% (-1.5%–3.4%)
		0–49	0.0% (-7.2%–3.0%)	0.4% (-5.4%–4.0%)	-0.1% (-0.4%–1.4%)	0.5% (-8.5%–8.2%)	0.8% (-5.2%–13.3%)	1.4% (-0.9%–4.4%)	1.4% (-0.8%–4.5%)
		50–64	-2.4% (-9.1%–0.5%)	-1.5% (-6.4%–1.1%)	-0.1% (-0.5%–0.9%)	-1.6% (-10.9%–3.6%)	-1.0% (-5.5%–11.3%)	-0.8% (-2.0%–1.4%)	-0.7% (-1.8%–1.5%)
		65+	-5.8% (-15.2%–1.8%)	-3.4% (-9.8%–2.5%)	-0.1% (-1.1%–1.1%)	-5.3% (-20.1%–0.7%)	-3.1% (-10.3%–12.1%)	-1.8% (-5.7%–2.3%)	-1.4% (-5.2%–2.6%)
	Hospitalizati	Total	1.3% (-5.8%–7.6%)	2.9% (-2.9%–10.0%)	-0.9% (-2.8%–0.3%)	1.0% (-8.2%–10.4%)	2.5% (-3.2%–17.7%)	5.6% (-0.1%–12.3%)	5.9% (0.1%–12.5%)
		0–49	6.4% (-1.2%–12.4%)	6.9% (0.2%–13.0%)	-0.6% (-1.6%–0.7%)	6.4% (-1.9%–15.5%)	6.8% (0.5%–19.8%)	9.0% (3.7%–15.1%)	9.1% (3.8%–15.1%)
		50–64	0.3% (-5.5%–5.8%)	1.2% (-3.2%–7.2%)	-0.9% (-2.5%–0.1%)	0.0% (-7.1%–8.5%)	0.9% (-2.9%–15.0%)	3.5% (0.1%–9.8%)	3.6% (0.3%–9.9%)
		65+	-2.9% (-11.8%–5.6%)	-0.0% (-6.8%–9.9%)	-1.2% (-4.1%–0.3%)	-3.4% (-16.6%–6.6%)	-0.7% (-7.9%–16.2%)	3.1% (-3.6%–12.4%)	3.5% (-3.0%–12.9%)
	Deaths	Total	3.5% (-4.2%–12.3%)	5.7% (-1.7%–14.9%)	-2.4% (-5.8%–0.6%)	1.9% (-7.6%–13.0%)	4.2% (-3.6%–21.1%)	10.8% (3.8%–19.6%)	11.2% (4.2%–19.9%)
		0–49	8.6% (1.6%–15.6%)	9.1% (2.8%–16.0%)	-1.0% (-2.3%–0.2%)	8.2% (1.2%–18.3%)	8.7% (2.8%–21.9%)	12.0% (6.4%–19.2%)	12.0% (6.5%–19.2%)
		50–64	3.0% (-2.9%–9.8%)	3.9% (-1.4%–11.5%)	-1.6% (-3.9%–0.5%)	1.9% (-4.1%–12.1%)	2.9% (-2.1%–18.4%)	8.2% (3.1%–15.6%)	8.2% (3.2%–15.7%)
		65+	2.4% (-7.4%–14.2%)	5.4% (-4.1%–18.3%)	-3.0% (-7.5%–0.8%)	0.2% (-12.0%–13.6%)	3.4% (-6.5%–22.1%)	11.4% (2.0%–22.6%)	11.8% (2.5%–23.0%)
	Direct costs	Total	2.6% (-5.0%–16.1%)	2.6% (-5.0%–16.1%)	-7.7% (-17.0%–2.1%)	5.0% (-3.3%–13.9%)	5.0% (-3.3%–13.9%)	0.7% (-3.4%–10.3%)	0.7% (-3.4%–10.3%)
		0–49	6.4% (-1.2%–12.4%)	6.9% (0.2%–13.0%)	-0.6% (-1.6%–0.7%)	6.4% (-1.9%–15.5%)	6.8% (0.5%–19.8%)	9.0% (3.7%–15.1%)	9.1% (3.8%–15.1%)
		50–64	0.3% (-5.5%–5.8%)	1.2% (-3.2%–7.2%)	-0.9% (-2.5%–0.1%)	0.1% (-7.1%–8.5%)	0.9% (-2.9%–15.0%)	3.5% (0.1%–9.8%)	3.6% (0.3%–9.9%)
		65+	-2.8% (-11.7%–5.7%)	0.0% (-6.7%–9.9%)	-1.2% (-4.2%–0.3%)	-3.4% (-16.4%–6.6%)	-0.6% (-7.9%–16.2%)	3.2% (-3.5%–12.5%)	3.6% (-2.8%–13.0%)
Probability of increase from status-quo	Incidence	Total	0.77	0.62	0.69	0.69	0.52	0.33	0.29
		0–49	0.49	0.41	0.68	0.35	0.28	0.13	0.12
		50–64	0.99	0.94	0.78	0.95	0.86	0.84	0.81
		65+	0.99	0.93	0.63	0.97	0.88	0.87	0.81
	Hospitalizati	Total	0.32	0.14	0.95	0.35	0.17	0.03	0.02
		0–49	0.04	0.02	0.91	0.04	0.02	0.00	0.00
		50–64	0.44	0.29	0.97	0.49	0.33	0.02	0.01
		65+	0.77	0.50	0.95	0.82	0.57	0.20	0.15
	Deaths	Total	0.20	0.07	0.99	0.33	0.16	0.00	0.00
		0–49	0.01	0.00	0.96	0.02	0.01	0.00	0.00
		50–64	0.16	0.09	0.99	0.25	0.14	0.00	0.00
		65+	0.35	0.17	0.99	0.48	0.28	0.00	0.00
	Direct costs	Total	0.31	0.14	0.95	0.34	0.16	0.02	0.01
		0–49	0.04	0.02	0.91	0.04	0.02	0.00	0.00
		50–64	0.44	0.29	0.97	0.49	0.33	0.02	0.01
		65+	0.77	0.50	0.95	0.81	0.56	0.19	0.13